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FOURTH SESSION

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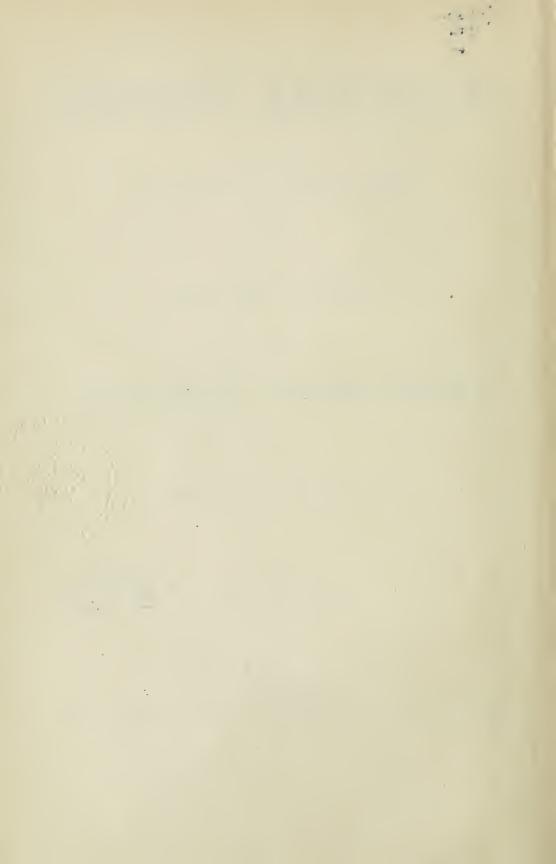
PROVINCE OF ONTARIO

SESSION 1948

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TORONTO

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REPORTS

LIQUOR CONTROL BOARD

MINISTER OF AGRICULTURE

ONTARIO NORTHLAND TRANSPORTATION COMMISSION

ONTARIO MUNICIPAL BOARD

ONTARIO TRAINING SCHOOLS

HYDRO-ELECTRIC POWER COMMISSION



TWENTY-FIRST REPORT

OF THE

LIQUOR CONTROL BOARD

OF

ONTARIO

From April 1st, 1946 to March 31st, 1947

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY OF ONTARIO SESSIONAL PAPER No. 20, 1948



TORONTO

Printed and Published by

Baptist Johnston, Printer to the King's Most Excellent Majesty

1948

MARCH 4, 1948.

TO HIS HONOUR,

The Lieutenant-Governor-in-Council.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to transmit to Your Honour the Twenty-first Report of The Liquor Control Board of Ontario for the year ending 31st of March, 1947.

Respectfully submitted,

W. GRIESINGER,

Minister.

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Liquor Control Board of Ontario

454 University Avenue TORONTO 2, Ontario, September 15th, 1947.

30,619.89

TO THE HONOURABLE GEORGE A. DREW, K.C.

The Prime Minister of Ontario,

Parliament Buildings, Queen's Park Toronto 5, Ontario

Sir .-

I have the honour to submit herewith the Twenty First Report of the Board for the twelve months' fiscal period which ended the 31st of March, 1947.

FINANCIAL STATEMENT

The Balance Sheet, certified to by Messrs. Robertson, Robinson, McCannell & Dick, Chartered Accountants, shows the amount of fixed assets to be \$102,177.00. This amount represents the value of the Board's real estate, consisting of the land and buildings situated at 154 Wellington Street West, Toronto,; 210 Victoria Avenue. Fort William, and 28 Silver Street, Cobalt, occupied as warehouses and stores, and the value of all furniture, equipment and alterations in the various premises of the Board, less depreciation, which, since the commencement of operations in June, 1927, has been provided to an extent of \$1,248,475.00.

Other assets totalled \$22,921,580.28 being comprised of the following items:

Cash on hand and in transit from branch banks	\$16,146,366.86
Accounts Receivable—hospital charges sales, beer levies, duty recoverable items, freight claims, fines, etc	763,084.95
Inventories of liquors and supplies	5,974,200.85
Prepaid items	37,927.62
Liabilities amounted to \$1,121,572.00 as follows:	
Accounts Payable—for liquors and supplies, accrued charges, etc	\$1,090,952.11

The item of \$30,619.89 represents a balance due for forfeited liquor which was purchased by the Board after careful examination and in accordance with the provisions of Section 132(2) of the Act.

Due Provincial Treasurer-Confiscated Stock

A reserve account was set up on March 31st, 1947, for insurance and

other contingencies to the extent of \$200,000.00.

Contingent liabilities amounted to \$6,439,528.02. These items comprise the value of undelivered orders and also the amount of Customs and Excise duties which will have to be paid on the goods which were in bond on our premises March 31st, when the same are cleared. These items are not chargeable against, nor do they affect the operations of the Board for the period under review.

The Profit and Loss Account shows sales for the twelve months from

Liquor Control Board stores of \$73,983,727.38.

The same account shows a gross trading profit of \$29,145,776.13, with total expenses including depreciation and items written off, of \$3,812,642.90 which produced a net trading profit of \$25,333,133.23. This latter sum, together with other revenue derived from permit sales, fees and taxes on brewers and wine manufacturers and their products, as well as from authority holders and licencees, and from fines which amounted to \$9,841,428.40 resulted in a total net income of \$35,174,561.63. The expenses incurred by The Liquor Licence Board amounted to \$176,509.64. This item is chargeable against the profits of The Liquor Control Board as provided by Section 10 of The Liquor Licence Act, 1946. The net income of the Board was reduced thereby to \$34,998,051.99 which is carried to the Surplus Account.

For the purpose of comparison, the percentage that the cost of stock sold, miscellaneous earnings and expenses and other revenue bear to the sales are given for the fiscal year 1945-46 and the twelve months' period herewith

reported upon.

The Surplus Account shows a balance at the commencement of the period of \$12,901,084.18, this being the amount carried forward from the previous year's operations which had not been transferred to The Provincial Treasurer. After the addition of \$3,049.11 which represented sundry adjustments and the deduction of \$200,000.00 for the aforementioned insurance reserve account, the twelve months net income of \$34,998,051.99 is added to produce a total amount of \$47,702,185.28. From this sum \$26,000,000.00 was remitted to The Provincial Treasurer.

Besides the Balance Sheet, Profit and Loss Account and the Surplus Account, a statement showing the expenses of Administration and Operation for the twelve months is also attached. Individual percentages which these bear to the total sales are given for the twelve months and also for the preceding fiscal period. On March 31st, 1947, the staff comprised 1173 employees, 72 of these being part-time or seasonally employed, as against 969 permanent and 315 part-time at the previous year-end.

All Liquor Control Board Stores, Brewers' Retail Stores, Breweries and Wineries from which alcoholic beverages are sold in Ontario, as of March 31st, 1947, are set forth on Schdule II and a classification of permits and licenses

issued appears on Schedule III.

SALES

The sale of spirits, beer and wine from liquor stores during the twelve months amounted to \$73,983,727.38. The net value of beer sold from breweries and brewers' retail stores, exclusive of any charge for containers, totalled \$76,633,622.86. Sales of Ontario wine made direct to customers from licensed Ontario Wine Sales Offices and where permitted, from winery premises, amounted to \$4,951,696.63.

The use of wine and beer ration coupons was discontinued on January 31st, 1947, consequently, commencing February 1st, purchases of Ontario wine through the Board's stores and winery retail outlets and beer through the Board's stores and from brewery and brewers' retail stores were made by the

public without the necessity of the presentation of ration coupons.

The restrictions which had previously been in effect on all brands of spirits was lifted on February 28th, 1947, so that, subsequent to that date, all liquors were in free supply with the exception of the sale of imported whisky which, on account of the limited exporting power of the Scottish and Irish distillers was compelled to remain restrictive.

Although licences for the sale of liquor by hotels and clubs, in certain localities were issued by The Liquor Licence Board prior to March 31st, they did not become operative until April 1st, consequently, no sales or purchasing

statistics of licencees appear in this report.

The following comparative sales statistics are given for the fiscal year under review and also for the preceding twelve months:

VALUE

	ending	Twelve months ending March 31, 1947	Increase or Decrease	Percentage
Domestic Spirits Imported Spritis Domestic Wines Domestic Beers Imported Beers	3,003,845.30 1,228,843.35 1,327,433.87	\$47,771,707.79 18,543,040.65 3,550,704.72 2,492,868.89 1,587,781.43 37,623.90	\$ 4,011,228.83 3,831,631.25 546,859.42 1,264,025.54 260,347.56 46,675.71	9.2 Inc. 26.0 Inc. 18.2 Inc. 102.8 Inc. 19.6 Inc. 55.4 Dec.
Total Sales from Liquor Stores B. & B.R.S. Sales-Domestic Beer (exclusive of con-	64,116,310,49	73,983,727,38	9,867,416.89	55.4 Inc.
tainer value)	66,879,189.66	76,633,622.86	9,754,433.20	14.6 Inc.
Wines	4,780,567.98	4,951,696.63	171,128.65	3.6 Inc.
Total	135,776,068.13	155,569,046.87	19,792,978.74	14.6 Inc.

GALLONAGE

	ending	Twelve months ending March 31, 1947	Increase or Decrease	Percentage
Domestic Spirits	2,076,130 584,904	2,256,362 733,886	180,232 148,982	8.7 Inc.
Domestic Wines		834,320	3.755	25.5 Inc. .5 Dec.
Imported Wines	105,462	219,130	113,668	107.7 Inc.
Domestic Beers		933,988	153,145	19.6 Inc.
Imported Beers	20,944	9,683	11,261	53.8 Dec.
Total Sales from Liquor				
Stores B. & B.R.S. Sales	4,406,358	4,987,369	581,011	13.2 Inc.
(Domestic Beer)	50,248,243	57,963,901	7,715,658	15.4 Inc.
Wines)	1,195,109	1,169,434	25,675	2.1 Dec.
Total	55,849,710	64,120,704	8,270,994	14.8 Inc.

As shown in this report, the Board paid to The Provincial Treasurer the sum of \$26,000,000.00 on account of Profits, License Fees, etc. The Board also set aside for payment to the various municipalities a proportion of the fees received from Licencees, such amount totalling \$497,234.25 which was distributed to 321 municipalities.

Additional to the above substantial payments made by the Board, the Dominion Government received \$28,445,223.91 during the course of the year in Customs and Excise duties and Sales and Excise taxes on spirits, wines and imported beers purchased by the Board. There was also paid to the Dominion Government approximately \$26,000,000.00 for malt duties and taxes on domestic beers and wines sold in Ontario, making a total of about \$54,500,000.00.

Therefore, the grand total of revenue payments received by the respective Dominion, Provincial and Municipal Governments was approximately \$81,000,000.00 as a result of levies on alcoholic beverages sold in Ontario during the year. This amount was exclusive of Dominion and Provincial corporation and municipal realty taxes paid by the respective manufacturers and authority

holders.

STORES

The number of liquor stores in operation on March 31st, 1947, was one hundred and thirty-four, two stores having been opened during the year at the following locations:

November 9th, 1946 Store No. 134 Government Road, Larder Lake December 11th, 1946 Store No. 135 Russell St. Madoc

BREWERIES AND BREWERS' RETAIL STORES

On March 31st, 1947, there were twenty-two Ontario and four Quebec breweries licensed to sell their products in Ontario, an addition of one since the previous year-end and being The Peller Brewery Company, Limited, Burlington Street East, Hamilton, which opened on October 18th, 1946.

The corporate name of one brewery was changed twice during the year as follows:

Copland Brewing Company, Limited—to Copland Breweries Limited, on June 15th, 1946.

Copland Breweries Limited—to
John Labatt Limited, on September 1st, 1946.

During the year four brewers' retail stores were opened at:

122W	Market Street	Port Dover	October 1st,	1946
129W	218 Vaughan Road	Toronto	October 1st,	1946
131W	379 McDonnell Street	Peterborough	December 20th,	1946
130VV	Ridge Rd. & Cutler St.	Ridgeway	March 15th,	1946

Two brewers' retail stores were closed at:

122VV	977 King Street East	Hamilton	June 29th,	1946
124W	333 Davenport Road	Toronto	January 15th,	1947

A summer brewers' retail store operated at:

		*	
1WS	Lakeshore Road	Jackson's Point	From June 1st, 1946, to
			September 15th, 1946

Five brewers' retail stores moved to new locations:

93W	Nelson Street	to	Dufferin & Selkirk	Wallaceburg	August 16,	1946
120W	2133 Wyandotte	to	2135 Wyandotte E.	Windsor	November 1,	1946
50W	East Side Pond St.	to	West Side Pond St.	Simcoe	January 27,	1947
7W	2160 Dundas W.	to	2135 Dundas W.	Toronto	March 5,	1947
73\V	Main St.	to	York St.	Ridgetown	March 28th,	1947

The total number of brewers' retail stores in operation on March 31st, 1947, was one hundred and thirty.

The gallonage of domestic beer sold in Ontario during the years 1943 to 1947 inclusive, as computed from the sales records of the Board and with respect to sales to destinations outside of Ontario, from monthly reports of the Ontario brewers, was as follows:

	1943 (12 months) Gallons	1944 (12 months) Gallons	1945 (12 months) Gallons	1946 (12 months) Gallons	1947 (12 months) Gallons
Sales from liquor Stores' Stock Beer orders taken at Liquor Stores for delivery by breweries and brew-	933,142	678,044	1,366,886	780,808	933,988
ers' retail stores	5,636	267	57	35	_
Sales from breweries and brewers' retail stores	40,650,522	37,807,947	45,785,337	50,248,243	57,963,901
Total Ontario sale of					
domestic Beer	41,589,300	38,486,258	47,152,280	51,029,086	58,897,889
Sales to other provinces Export Sales	3,269,717 1,280,491	3,460,560 2,071,002	3,874,106 1,704,639	4,251,807 1,401,483	5,068,504 1,784,058
Total	4,550,208	5,531,562	5,578,745	5,653,290	6,852,562

As mentioned in previous reports, the policy of The Liquor Control Board has been to have periodical analyses made by the Chief Provincial Analyst of all brands of beer produced by Ontario brewers as well as the products of the Quebec breweries which are licensed to sell in the province. The analyses of last year indicated that all the samples examined conformed to the requirements of the Regulations passed pursuant to The Food and Drugs Act of Canada.

WINERIES

277 analyses of the products of all Ontario licensed wineries were carried out during the year for the Board by the Provincial Department of Health in order to ensure that they conformed to Board's regulations with respect to Ontario wine. In addition 9 wineries availed themselves of the facilities of The Provincial Board of Health Laboratories and procured 27 cultures of yeast for wine-making.

On March 31st, 1947, there were 20 wineries operating in Ontario. Sales were conducted direct from the premises of 5 wineries and from 43 branch retail sales offices. The reduction in the number of wineries from the previous year-end was caused by The Cooksville Wine Vaults being purchased by The

London Winery Limited on July 30th, 1946.

The following statistics of gallons of Ontario wine sold have been compiled from the monthly reports to the Board by the respective wineries:

	1943	1944	1945	1946	1947
	(12 months)				
	Gallons	Gallons	Gallons	Gallons	Gallons
Sales at Wineries	1,040,949	864,060	880,883	1,195,109	1,169,434
Sales to the Board	856,741	614,675	681,371	817,770	861,486
Total Ontario Sales	1,897,690	1,478,735	1,562,254	2,012,879	2,030,920
	1,806,083	1,542,432	1,554,265	1,850,650	2,240,527
	5,315	61,602	49,769	58,581	28,190
Total	3,709,088	3,082,769	3,166,288	3,922,110	4,299,637

The tonnage of grapes and cherries used by the various wineries during the past four years was as follows:

	12 mos. ended March 31st, 1944	12 mos. ended March 31st, 1945		12 mos. ended March 31st, 1947
Grapes used in the manufacture of wine	9,780 tons	12,436 tons	12,573 tons	16,365 tons
Grapes used in the manufacture of concentrates Grapes used in the manu-	2,268 tons	2,703 tons	2,634 tons	4,566 tons
facture of brandy	491 tons	930 tons		
manufacture of wine	9 tons	8 tons	4 tons	13 tons
Total	12,548 tons	16,077 tons	15,211 tons	20,944 tons

Last year 372,504 gallons of Ontario wine were distilled into grape-spirit for wine fortification while during the year under review 246,525 gallons were used for such purpose.

HOME-MADE WINE PERMITS

Since the regulations became effective on January 1st, 1940, which required that any person manufacturing more than 100 gallons of home--made wines must obtain a permit from the Board, 1486 Home-Made Wine Permits had been issued up to March 31, 1946.

During the fiscal year herein reviewed, a further 11 Home-Made Wine Wine Permits have been issued, thus bringing the total to 1497.

Since January 1st, 1940, 37 Home-Made Wine Permits have been cancelled for failure on the part of the permittee to comply with these regulations or other provisions of The Liquor Control Act.

PERMITS

1,220,149 Individual Annual Liquor Permits were issued for the year ending March 31st, 1947 Individual Permits sold to non-residents valid for a period not exceeding one month numbered 145,100. In addition 5250 Special Permits were issued to physicians, druggists, hospitals, etc.

In accordance with the requirements of the Act, the Board deemed it advisable during the year to issue 4,862 Prohibitory Orders. Such action followed either notification relative to conviction for violation of the Act or the receipt of a request or recommendation from some interested party such as a relative, friend, magistrate, police officer, physician, relief officer, etc. These Prohibitory Orders comprised 1,400 full Board Orders which precluded the individual concerned from purchasing alcoholic beverages from any source, of which 36 resulted from Judges' Orders of Interdiction and 955 were the result of convictions having been registered under The Criminal Code of Canada for intoxication while in charge of a motor vehicle.

Of the remaining 3,462 Orders which varied in degree of restriction, 1,315 followed the conviction of the individual for violations of The Liquor Control Act and the premises of 641 of these were declared a "Public Place" within the meaning of the Act. The other Orders were issued as being in the best interest of all concerned according to the judgment of the Board.

During the year, after full investigation and consideration, it was decided to fully revoke 493 and partially revoke 79 of the Prohibitory Orders which had been made effective at some prior date. Application for the revocation of 460 Prohibitory Orders was refused.

1602 Special Permits were issued to druggists, 3 of which were suspended during the year. These Special Permits allowed the druggist to purchase liquor in limited quantities for compounding medicine or for use as a solvent or preservative. It also accorded him the privilege of buying rubbing alcohol for resale. The premises of all holders of Druggists' Special Permits were subject to periodical inspections and, in addition, druggists were required to maintain an accurate record of each purchase for sale of rubbing alcohol.

L.C.A. INFRACTIONS

Classification of the Offences against The Liquor Control Act according to the monthly certificate received from Ontario Magistrates from April 1st, 1946, to March 31st, 1947.

	No. of Fines	No. Com. to Gaol	No. S. S. and Remanded for Sentence	Total Convictions
Sec. 42 L.C.A. Possession of more than one permit	158	148	5	311
liquor in an illegal place Sec. 87 (1) L.C.A. Selling liquor illegally or keeping	5,216	504	14	5,734
for sale	3	134		137
dence	730 14,435	23 10,755	3,8 7 9	755 29,069
der Suspended Permit, false name or false address	297	269	6	572
Possession Sec. 108 (a) L.C.A. Illegal Possession Sec. 108 (a) L.C.A. Persons	722	101		823
found-in	716	36		752
beer in an illegal place	1,640 974	73 538	2 11	1,715 1,523
	24,891	12,581	3,919	41,391

GENERAL

I would like to express my appreciation of the loyalty and co-operation extended to me by the entire staff of the Board.

I have the honour to be, Sir Your obedient servent,

W. GRIESINGER,

Chief Commissioner.

BALANCE SHEET

As at March 31st, 1947

ASSETS

Land, Buildings, Furniture, Equipment, Fixtures and Alterations to Rented Premises, less amounts written off		\$	102,177.00
Cash on Hand, in Transit and in Banks	\$16,146,366.86		
Accounts Receivable	763,084.95		
Inventories of Liquor and Supplies in warehouses and Stores (Valued at Cost)	5,974,200.85	22	2,883,652.66
Prepaid Charges			37,927.62
			3,023,757.28
LIABILITIES			
Accounts Payable, Accrued Charges, Deferred Revenue, etc.		\$ 1	1,090,952.11
Due Provincial Treasurer for Confiscated Liquor Stock			30,619.89
Reserve for Insurance and Other Contingencies			200,000.00
Surplus: Balance carried from Surplus Account	\$47,702,185.28		
Less: Paid to Provincial Treasurer during the year ended March 31st, 1947	26,000,000,00		
Balance March 31st, 1947		2	1,702,185.28
Contingent Liabilities: Duty on Stocks in Bond			
Liquors ordered but not delivered (including duty, freight, etc.) 3,851,602.04		\$23	3,023,757.28

AUDITORS' CERTIFICATE

We hereby certify that, in our opinion, the above Balance Sheet exhibits a true and correct view of the affairs of the Liquor Control Board of Ontario as at March 31st, 1947, and that the records and accounts of the same date conform thereto.

ROBERTSON, ROBINSON, McCANNELL & DICK,

PROFIT AND LOSS ACCOUNT

For the	Year Ende	d March 31st	, 1947	D	t. Calar
Sales by Vendors: Store Counter and Mail Order Sales of Wines, Spirits and				1946-1947	
Beer Stock on Hand March 31st, 1946 \$ Purchases	2,776,011.54	\$73,983,727.38		100.00%	100.00%
Less: Stock on Hand March 31st 1947 Cost of Sales by Vendors	5,893,028.41	44,935,466.95		60.74%	61.44%
Gross Profit on Sales Miscellaneous Earnings		(\$29,048,260.45 97,515.68	39.26% .13%	38.56% .07%
			29,145,776.13	39.39%	38.63%
Expenses: Administration and Operating Expenses, Head Office, Warehouses and Stores Items written off Deprecation on Furniture, Equipment, Fixtures and Alterations to Rented prem-		3,668,066.47 35.52			
ises written off and reserved for		144,540.91	3,812,642.90	5.15%	4.94%
			25,333,133.23		
Other Revenue: Brewers' Retail Store License Fees Brewers' License Fees Gallonage Tax on Beer Production (Ontario Breweries) Gallonage Tax on Beer Sales (Extra Provincial Breweries) Authority Holders' Fees April 1st, 1946 to December 31st, 1946 (Net after deducting Municipalities' Share) Licenses and Fees (The Liquor License Act, 1946) January 1st, 1947 to March 31st, 1947 (Net after deducting Municipalities' Share) Miscellaneous Licenses		116,283.21 104,875.00 4,428,394.99 4,428,394.99 1,541,479.04			
Miscellaneous Licenses Fines (Net) Ontario Wine Tax and Licenses		437,534.97 1,376,797.50			
Permit Sales Banquet Permits		2,142.00	9,841,428.40	13.30%	13.92%
Less: Liquor Authority Control Board Expenses (Section 10, The Liquor Authority Control Act, 1944) Liquor License Board Expenses (Section 10, The Liquor License Act, 1946		121,402.03 55,107.61	35,174,561.63 176,509.64		
Net Income for Year carried to Surplus Account			\$34,998,051.99	47.30%	
		=			

SURPLUS ACCOUNT

For the year ended March 31st, 1947

Balance as at March 31st, 1946	
D. L. etc. Proc. Sci., for January and Other	12,904,133.29
Deduct: Provision for Insurance and Other Contingencies	. 200,000.00
	12,704,133.29
Add Net Income for the year ended March 31st, 1947	. 34,998,051.99
Balance carried to Balance Sheet	.\$47,702,185.28

ADMINISTRATION AND OPERATING EXPENSES HEAD OFFICE, WAREHOUSES AND STORES

For the year ended March 31st, 1947

and

Number of Employees on the Staff at March 31st, 1947

		Percentage 1946—1947	to Total Sales
Salaries	¢2 382 425 16	3,22%	3.28%
		.02%	.02%
Legal and Audit	., .,		
Rents paid, less received	,	.26%	.30%
Travelling		.04%	.04%
Superannuation	/	.07%	.07%
Insurance	, ,	.03%	.03%
Postage	27,866.65	.04%	.03%
Stationery	60,127.40	.08%	.07%
Telephone and Telegraph	15,753.71	.02%	.02%
Protection Service	5,343.25	.01%	.01%
Breakage	8,353.47	.01%	.01%
Rationing Expense	61,489.73	.08%	.06%
Light, Heat and Power	41,233.12	.06%	.05%
Repairs and Maintenance	115,747.15	.16%	.11%
Sundries		.08%	.03%
Freight and Cartage	221,748.54	.30%	.32%
Terminal Warehouse Charges	132,488.16	.18%	.16%
Taxes - Business	25,741.10	.04%	.04%
Discounts to Hospitals, etc	3,454.03	.01%	.01%
Truck Maintenance		.06%	.05%
Packing Materials	42,512.11	.06%	.07%
Permit Expense	97,429.44	.13%	.08%
	\$3,668,066.47	4.95%	4.86%

NUMBER OF EMPLOYEES ON THE STAFF

(Including Seventy-two Temporary Employees Whose Services are either Part-Time or Seasonal)

Commissioners Staff	. 2
Personnel Department	. 3
Comptroller's Staff	11
Legal Department	1
Accounting Department	54
Beer and Wine Department	. 33
Permit Department	
Purchasing and Supply Department	
Traffic Department	
Customs Department	4
Stock Supervision Department	
Brewery Inspection Department	
Winery Inspection Department	
Wine Permits and Licenses	
Store Inspection Department	23
Head Office Maintenance Staff	
Garage	3
	227
Stores	221
Warehouses	
	946
1	1,173

Store No.

SCHEDULE II

LIQUOR STORES, LICENSED BREWERS' RETAIL STORES, BREWERIES AND WINERIES IN ONTARIO AT 31st MARCH, 1947

LIQUOR STORES

Store No.	G1 1 0 T 1 1 C4	Т
1	Church & Lombard Streets	Loronto
2	122 Wellington Street West	Toronto
3	1271 Dundas Street West	Toronto
4	170 Danforth Avenue	Toronto
4 5	1881 Ougen Street Fast	Toronto
6	1271 Owen Street West	Toronto
	1271 Queen Street West 2223 Dundas Street West	Toronto
7	2223 Dundas Street West	I oronto
8	928 St. Clair Avenue West	Loronto
9	959 Bloor Street West	Toronto
10	1121 Yonge Street	Toronto
11	949 Gerrard Street East	Toronto
12	402 Parliament Street	Toronto
13	1448 Danforth Avenue	Toronto
	1448 Daniorth Avenue	T
14	454 Spadina Avenue	I oronto
15	292 Dupont Street	Toronto
16	106 Richmond Street West	Toronto
18	Midland Avenue and Kingtson Road	Scarboro Bluffs
19	Rogers Road and Blackthorn Avenue	Toronto
20	802 Lake Shore Road	New Toronto
	20 Ct 1 C.	II
21	29 Charles Street	riamilton
22	673 King Street East	Hamilton
23	1057 Barton Street East	Hamilton
24	215 King Street 81 King Street West	Port Colborne
25	81 King Street West	Dundas
26	419 Talbot Street	London
27	629 Dundas Street	London
28	12 Canal Street	Dunnville
29	Berford Street	
30	82 Durham Street	Walkerton
31	47 Hurontario Street	Collingwood
32	94 Wyandotte Street East	Windsor
33	241 Drouillard Road	Windsor
	1204 06 Ott	337*
34	1284-86 Ottawa Street	vv indsor
35	3236 Sandwich Street West	Windsor
36	272 Queen Street	Ottawa
37	685 Bank Street	Ottawa
38	188 Rideau Street	
39	King Street East	Cohoura
40	42-46 Princess Street	Vingston
	42-40 Princess Street	Kingston
41	209 Victoria Avenue	Fort William
42	101 King Street West	Brockville
43	137 King Street East	Kitchener
44	69 Dalhousie Street Brock and Water Streets	Brantford
45	Brock and Water Streets	Peterborough
46	224 Front Street North	Sarnia
47	23 Ontario Street	Ct Catharina
	937 Victoria Avenue	St. Catharines
48		
49	66 Pitt Street	Cornwall
50	Cedar and Elgin Streets	Sudbury
51	71 Carden Street	Guelph
52	24-26 Cross Street	
53	66 Cumberland Street South	Port Arthur
54		
	224 Main Street East	North Bay
55	32 Pembroke Street West	Pembroke
56	King Street	Prescott
57	King Street 37 Bridge Street East	Belleville
58	8½ Balsam Street North	Timmins
59	72 Collier Street	
60	88 Ontario Street	Stratford
	210 Iting Charlet Work	Chathan
61	210 King Street West	Chatham
62	314 Talbot Street	St. Thomas

LIQUOR STORES-Continued

63	343 Queen Street East	Sault Ste. Marie
64	516 Dundas Street	VV OOGSTOCK
65	Front Street	Trenton
66	6th Avenue North	Cochrane
67	Main and Ferguson Streets	Haileybury
	214 Main Street South	Kenora
68	Church Street and Mowat Avenue	Fort Frances
69	22 Beckwith Street	Smithe Falle
70	22 Beckwith Street	Commogano
71	King and Main Streets	Gananoqque
72	34 Gore Street	Pertn
73	610 King Street	Preston
74	61 Pohinson Street	Simcoe
75	226 Devonshire Avenue	Iroquois Falis
76	28 Silver Street	Cobalt
77	121 Main Street	Penetang
78	Wellington Street and Whitewood Avenue	New Liskeard
79	79 Walton Street	Port Hope
	Parry Sound Road	Parry Sound
80	Parry Sound Road	Sturgeon Falls
81	King and Queen Streets	Lindson Lindson
82	79 Kent Street	Lindsay
83	31 Main Street East	Hawkesbury
84	Main Street	Picton
85	Daniel and Floin Streets	Arnprior
86	Owen and White Streets	Dryden
87	Fourth Avenue	Sioux Lookout
88	52 Grand River Street North	Paris
89	Pembroke and Mattawa Road	Mattawa
	90 Simcoe Street North	Oshawa
90	4 Kirkland Street	Kirkland Lake
91	4 Kirkland Street	Englehart
92	Third Street	End Dais
93	Gilmour Road	FOR ERIE
94	Bridge Street North	Eganville
95	21 Water Street North	Galt
96	112 Main Street	Deseronto
97	Dundas Street	Napanee
98	22 Main Street	Alexandria
99	Emard Street	Embrun
	25 Albert Street	Thorold
100	48 Main Street West	Grimshy
101	48 Main Street West	Cravenhuret
102	Muskoka Street	Econolo
103	Tudhope Street	The seed on
104	Main Street East	I nessaion
105	Concession Street and Bridge Street	Tamwortn
106	Main Street	Huntsville
107	Main Street	Palmerston
108	Woodward Avenue	Blind River
109	Murray and Bathurst Streets	Antherstburg
110	46 Wallace Street	Wallaceburg
111	Bedford Street	Westport
112	37 Government Road	Kanuskasing
113	Opongo Street	Barry's Bay
110	Cor. Fourth Street and Broadway	Rainy River
114	Cor. Fourth Street and Broadway	Waterlee
115	36-38 King Street South	Telmino
116	26 Arthur Street	Elimira
117	17 Birch Street	Chapleau
118	114 Voung Street	Capreol
119	0 Main Street	Merrickville
120	West Dock	Pelee Island
121	1008 Wellington Street West	Ottawa
122	Front Street	Hearst
123	Main Street	Lancaster
123	Corner Picton and Queen Streets	Niagara-onthe-Lake
	99 Laurier Street	Rockland
125	99 Laurier Street.	Tilbury
126	Queen Street	Morrishura
127	Main Street	Courts Domestics
128	Bruce Avenue	Consider Forcupine
129	Main Street	Geraldton
130	Manitoba Street	Bracebridge

LIQUOR STORES—Continued

131	Erie Street South	Ridgetown
132	Bridge Street	Carleton Place
133	Petrolia Street	Petrolia
134	Government Road	
	Russell Street	

BREWERS' RETAIL STORES

1 W	572½ Church Street	Toronto
2W	194 Oneen Street East	Toronto
3W	614 Öueen Street West	Toronto
4W	398 College Street	Toronto
5W	955 Bloor Street West	Toronto
6W	1257 Queen Street West	Toronto
7 W	2135 Dundas Street West	Toronto
8W	1083 St. Clair Avenue West	Toronto
9W	440 Danforth Avenue	
10W	2149 Danforth Avenue	
11W	150 Barton Street East	Hamilton
12W	1080 Barton Street East	Hamilton
13W	83 Carling Street	London
13 W	594 Dundas Street	London
	413 Hamilton Road	
15W	413 Hamilton Road	Marin de en
16W	1573 McDougall Street	. Windsor
17W	1246 Ottawa Street	windsor
18W	4281 Wyandotte Street East	Windsor
19W	268 Queen Street West	Ottawa
20W	Broad and Wellington Street	Ottawa
21W	208 Wellington Street	Kingston
22\V	670 Bridge Street	Niagara Falls
23W	78 Niagara Street	St. Catharines
24W	11 College Street	Kitchener
25W	217 Talbot Street	St. Thomas
26W	211 Pearl Street	Port Arthur
27 W	269 Water Street	Peterborough
28W	131 Wellington Street	Brantford
29W	113 Ouebec Street East	Guelph
30W	East Market and Water Streets	Brockville
31W	6 Dover Street	
32W	221 Sherman Avenue North	
33W	155 Front Street	
34W	68-72 Pitt Street	
35W	110 University	Cohourg
36W	177 Main Street	Prescott
37 W	22 Lorne Street	
38W	210 Maxwell Street	
39W	107 Oak Street West	North Roy
40W	2 King Street East	Lindson
41 W	193 Railway Street	Cooking
41 W	215 Des Standard Street	Cochrane
42 W	215 Bay Street	Sault Ste. Marie
	16 Victoria Street North	Smiths Falls
44W	Front Street 15 Riverbank Street	Trenton
45\V	15 Riverbank Street	Welland
46W	36-38 Reeve Street	
47\V	32 Erie Street	Strattord
48W	Killally Street	Port Colborne
49\V	1 Second Street	Timmins
50W	Pond Street	
51W	269 Mill Street	
52W	19 Main Street	
53W	182 Victoria Street	
54W	553 King Street	Preston
55W	27 Cockburn Street	
56W	Railway Street	
57 W	624 Mowat Street	

BREWERS' RETAIL STORES-Continued

58 W	187 King Street	Gananoque
59W	5 Gilmour Road	Fort Erie
60W	16 Bayfield Street	Barrie
61W	330 Catherin Street Brunel and Main Streets	Untawa
62W 63W	82 Amwell Street.	Hailarhuer
64W	First Avenue and Second Street N.	Caraldton
65W	Elgin and Harriett Streets	Armerior
66W	156 Lake Shore Road	Mimico
67W	Ross Street	Picton
68W	Murray and Bathurst Streets	Amherstburg
69W	North Cayuga Street	Dunnville
70W	Main Street	Belle River
71W	Main Street	
72W	Champagne Street	Parry Sound
73\V	York Street	Ridgetown
74W	Oueen Street South	Tilbury
75W	55-57 First Avenue	Schumacher
76W	1087 Queen Street East	Toronto
77\V	59 King Street West	Dundas
78W	499 James Street North	Hamilton
79W	1 Queen's Avenue	Leamington
80W	269 Dalhousie Street	
81W	161 King Street West	
82W	24 St. Paul Street	St. Catharines
83W	9 Market Street	
84W	4 Dunn Street	
85\V	Front Street	Sloux Loukout
86W	Berford Street	Wintston J. Dates
87 W	35 Prospect Avenue Durham ad Peter Streets	Mallanton
88W 88W	Durham and Peter Streets	
90VV	Muskoka Road and Main Street	Gravenhurst
91W	Mill Street	Mananee
92W	Mill Street 162 Wyandotte Street East	Windsor
93W	Dufferin & Selkirk Streets	Wallacehurg
94\V	1393 Gerrard Street East	
95W	Goderich and Green Streets	
96W	6 Marlborough Street South	East Cornwall
97W	Locke Street	Morrisburg
98W	2422 Dufferin Street	York Township
99W	1133 Yonge Street	Toronto
100W	Norman Street	Palmerston
101W	Elgin and Simcoe Streets	Collingwood
102W	591-3 Bayview Avenue	Leaside
103 VV	Government Road	Kapuskasing
104VV	Nation Street	
105W	325 Simpson Street	Fort William
106W	13 Water Street	Burlington
107W	Broadway and London Streets	Tillsonburg
108 VV	149 West Frederika Street	West Fort William
109W	Durham Road Market and Mill Street	Canada
110W 111W		
111VV 112VV	Main and Thomas Streets	
	Main Street	Planhaim
113W 114W	123 Brock Street North	Whithy
115W	326 Silverthorn Avenue	Vork Township
116W	Main Street West	
117W	Main Street	
118W	2107 Main Street South	Niagara Falls
119W	1856 Drouillard Road	Windsor
120W	2135 Wyandotte Street West	Windsor
121W	208 Locke Street	Hamilton
122W	Market Street	Port Dover
123W	1199 Wellington Street	.Ottawa
125W	Gilbert and Main Streets	
126W	Bridge and William Streets	Carleton Place

BREWERS' RETAIL STORES-Continued

127W	Petrolia StreetPetrolia
128W	Main Street
129W	218 Vaughan RoadToronto
130VV	Ridge Road and Cutler StreetRidgeway
131 W	379 McDonnell StreetPeterborough

BREWERIES

Bradings Breweries, Limited
British American Brewing Company, Limited
Carlings Breweries, LimitedWaterloo
Carlings Breweries, Limited
Formosa Springs Brewery Limited Formosa
Fort Frances Brewing Company, LimitedFort Frances
Kakabeka Falls Brewing Company, Limited Fort William
John Labatt Limited
John Labatt, LimitedLondon
Lake of the Woods Brewing Company, Limited
O'Keefe's Ale Brewery Limited Toronto
O'Keefe's Brewing Company, LimitedToronto
O'Keefe's Brewery (West Toronto) LimitedToronto
O'Keefe's Brewery (East Toronto) Limited
Peller Brewing Company, Limited
Perth Brewery Stratford
Port Arthur Beverage Company, Limited Port Arthur
Soo Falls Brewing Company, Limited
Sudbury Brewing and Malting Company, Limited
Union Brewery, LimitedTimmins

LICENSED BREWING COMPANIES LOCATED OUTSIDE THE PROVINCE OF ONTARIO, THE PRODUCTS OF WHICH ARE SOLD THROUGH ONTARIO BREWERS' RETAIL STORES

Molson's Brewery, Limited		
National Breweries, Limited	Montreal,	Que.
(Wm. Dow & Co.—Montreal)		
(Dawes Black Horse Breweries-Montreal)		
(Frontenac Breweries, Ltd.—Montreal)		

WINERIES	SALES OFFICE
Acme Wines Ltd. 889 Queen St. W., Toronto Barnes Wines Ltd. Grantham Twp., St. Catharines	708 Danforth Ave., Toronto 703 Yonge St., Toronto 118 Main St. E., North Bay 189 Front St., Belleville
Bordeaux Wines Ltd. R.R. No. 2, Stone Road, Niagara-on-the-Lake Bright's Wines, Ltd Dorchester Road, Niagara Falls, Stamford Township	771 Queen St. E., Toronto 186 Sparks St., Ottawa 91 King St. E., Hamilton 31-33 Elm St., Sudbury 513 St. Clair Ave. W., Toronto 591 Ouellette Ave., Windsor 187 Dundas St., London 520 Bloor St. W., Toronto 261 Coxwell Ave., Toronto

Chateau Gai Wines Ltd	26 Queen St. E., Toronto 26 Queen St. E., Toronto 2091 Danforth Ave., Toronto 1426 Yonge St., Toronto427 Spadina Ave., Toronto44-46 Dalhousie St., Brantford169 Sparks St., Ottawa 1314 Bloor St. W., Toronto180 King St. W., Kitchener
London Winery Ltd. Lambeth Highway, Westminster Twp., London	1548 Bloor St. W., Toronto 174 King St. W., Chatham
Fred Marsh Winery Ltd	73 Bank St., Ottawa 31 Second St. W., Cornwall 27 Brock Ave., Toronto
Old Battlefield Wine Co. Bertrand Sanderson, Prop., R. R. No. 5. Hamilton	
The Parkdale Wines Ltd. 181-185 Bathurst St., Toronto	1157 St. Clair Ave. W., Toronto 42 Government Rd. W., Kirkland Lake 501 Church St. Toronto
Peerless Wine Mfgrs. Ltd. 448 Queen St. E., Toronto	-448 Queen St. E., Toronto
St. Catharines Wine Co. of Canada Ltd. Woodburn Ave., St. Catharines Turner Wine Company Mrs. H. Padden Robinson, Prop.,	497 Parliament St. Toronto
102-106 Front St. E., Toronto Twin City Wine Co. 514 McTavish St., Fort William	287 Bay St., Port Arthur
Welland Winery Louis Banko, Estate, 268 King St., Welland	272 King St., Welland

SCHEDULE III

STATEMENT SHOWING THE NUMBER OF PERMITS AND LICENSES WHICH WERE ISSUED DURING THE TWELVE MONTHS' PERIOD ENDING MARCH 31st, 1947

PERMITS

Resident	1,220,149
Temporary	145,100
Duplicate	10,075
Hospitals	276
Physicians	767
Druggists	1,602
Dentists and Veterinarians	447
Manufacturers	183
Mechanical and Scientific	180
Duplicate Special	. 27
Military Mess	159
First Aid	60
Sacramental or Mass Wine	1,576
LICENSES	
Brewers'	26
Brewers' Retail Stores	1,268
Ontario Wine	20
Sacramental Wine Vendorships	5
Non-Potable Alcohol Storage Warehouses	5





Ontario Department of Agriculture

REPORT

OF THE

Minister of Agriculture

Province of Ontario

FOR THE YEAR ENDING MARCH 31st, 1947

Printed by Order of THE LEGISLATIVE ASSEMBLY OF ONTARIO (Sessional Paper No. 21)



TORONTO

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DEPARTMENT OF AGRICULTURE

PROVINCE OF ONTARIO

To The Honourable Ray Lawson, O.B.E., Lieutenant-Governor of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit the Report of the Department of Agriculture for the year 1946-1947.

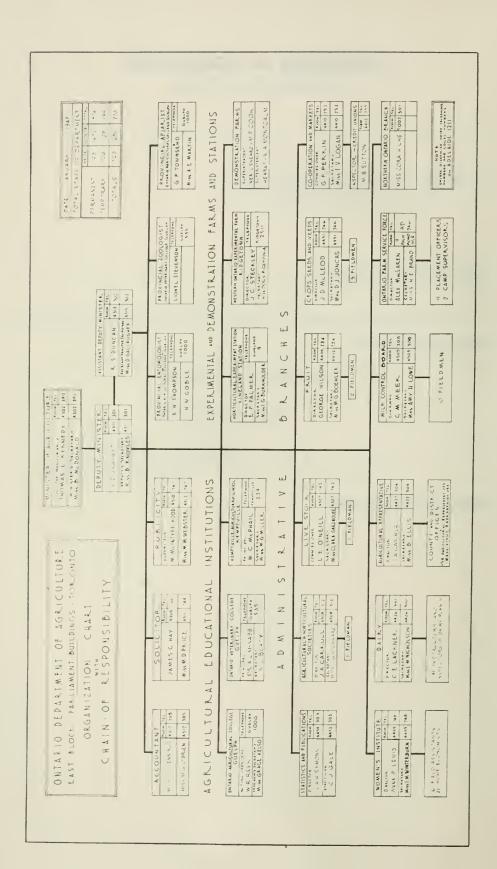
I have the honour to be, sir,

Your obedient servant,

THOMAS L. KENNEDY,

Minister of Agriculture.

Toronto, March 31st, 1947.



ONTARIO AGRICULTURAL COLLEGE

INTRODUCTION

At the end of the fiscal year it is gratifying to be able to report that the various activities of the College have been carried out in a reasonably satisfactory manner. To meet the needs of the increased student body, additions have been made to the staff, new equipment has been obtained, and a number of buildings have been completed under decidedly difficult conditions. Despite the great increase in enrolment, accommodation and instruction have been arranged which have been adequate if not ideal. The academic work of the various classes has, on the whole, been very satisfactory and standards set by some years have been extremely high. Research and extension activities have been carried on in co-operation with other groups engaged in agricultural work, and in some cases these activities have been extended in scope over those of previous years. Increasing numbers of visiting groups have used the College for their meetings, and it is becoming more and more a centre of activity for various agricultural organizations.

Class Room Accommodation

The additional space for class rooms, laboratories, and offices provided in the Soils building and in the additions to the Chemistry and Physics buildings has made it possible to accommodate the largest classes in the history of the College. Delay in the completion of buildings made the fall term a very difficult one for some departments. The added rooms, together with additions to the teaching staff, have made possible the subdivision of large classes into groups which, although still too large for the best results in teaching, are at least manageable. A problem for next year will be the handling of the very large option groups of Year '49.

Residential Accommodation

One thousand students of the Ontario Agricultural College, Ontario Veterinary College, and Macdonald Institute, were housed in seven residences during the college year as follows: Administration Building, 425; Mills Hall, 225; Macdonald Hall, 125; Maids' Dormitory, 75; Watson Hall, 75; Horticulture Building, 40; Bursar Hall, 35. A number of the men had to be placed in double-decked beds owing to the lack of more adequate space.

In addition to the above, accommodation was made available for 2,500 people in short courses, conferences, and conventions.

The common rooms in all men's residences were converted into recreation rooms. A snack bar was opened to supplement the cafeteria during the evenings.

Public Health Nurse

A public health nurse was employed more adequately to prevent and take care of illness in the overcrowded residences. In the College infirmary there is now room for about a dozen beds. One of the great advantages of the present arrangement is that minor ailments are prevented from developing into more serious illness.

New Sports Field

Extensive work has been done on the preparation of a new sports field located behind the Veterinary College. This will be used for football. soccer, track meets, and other athletic events.

COURSES AND ATTENDANCE

Ontario Agricultural College

The total attendance for the year was 1,931, enrolment in the regular courses in Agriculture being 835 in addition to three special students. The Freshman class consisted of 238 students, of whom 122 were veterans of the armed services. In the Two-Year Course, 57 students were enrolled, of whom 36 were veterans of the armed services. The graduating class had an enrolment of 60.

Of the 835 students enrolled in the regular course in Agriculture, 798 are from the province of Ontario; 30 are from the provinces of the Dominion; and 7 are from other countries.

From Other Provinces of the Dominion

Alberta 2	Nova Scotia	4
British Columbia 5	Prince Edward Island	2
Manitoba 4	Saskatchewan	. 9
New Brunswick 4	l e	
TYCW Dianswick		

From Other Countries

British Guiana 1	Newfoundland 1
Colombia 1	British West Indies 2
Malta 2	

Summer courses for teachers were given in July and August with an enrolment of 104. Other short courses, varying in length from a few days to three months, were held at different periods throughout the year. Included in these were regular and special short courses in the Poultry Department with an enrolment of 95, and regular and special short courses in the Dairy Department with an enrolment of 188. Special courses were given in Agricultural Economics, Beekeeping, Farm Mechanics, Horticulture, Live Stock, Soils and Crops with an enrolment of 559; miscellaneous courses given were: a Mould Count School, a Special Horticulture Course for Women, a Course for Commercial Florists, a Course for Commercial Gladiolus Growers, and a Soldier Settlement and Veterans' Land Act Course, with a total enrolment of 147. The grand total attendance in special and short courses was 1.093.

Macdonald Institute

The total attendance for the year at Macdonald Institute was 108: of this number 105 students are from the province of Ontario, two are from other provinces of the Dominion, and one is from British Guiana.

New Two Year Course

In consideration of the fact that there are at present some 300.000 junior farmers in the Province who will soon be taking over the major responsibility for operating Ontario farms, it was felt that more should be done to assist them in preparing to meet the complex and difficult problems with which they will be faced, and that the Ontario Agricultural College has a definite responsibility to render what help it can. In order to discharge this responsibility, plans are being made for the opening of a new Two Year Course in the fall of 1947.

Discussions have been held by members of the staff in conference with groups of practical farmers and agricultural representatives who were invited to lend their assistance in considering the problem.

As a result of the views and information presented at these meetings, a new course has been planned by the staff of the College. This course will have no connection with the Degree Course, but will be a complete unit in itself. It will replace the present Two Year Course, but students who have already begun the present course will be allowed to complete it next year.

Other Changes in Courses

With the reopening of the Macdonald Institute a revised one year course in Homemaking was given. New options in Agricultural Engineering and Agricultural Economics were opened to the students of the Third Year, and an option in Poultry Husbandry has been arranged in which students may register next year. New or expanded courses for students of the Ontario Veterinary College have been given by several departments.

IMPORTANT EVENTS OF THE COLLEGE YEAR

Farm and Home Week

Farmers' Week, held from June 10 to 14, 1946, was attended with greater enthusiasm and in larger numbers than ever. Approximately 22,000 farmers and their families drove to the College for an interesting and profitable day.

Great emphasis was laid on exhibits and visual demonstrations. All departments of the College contributed to the program and seventeen separate exhibits were set up in the various College buildings. The National Film Board also had an exhibit and the Ontario Veterinary College prepared a special display dealing with the control of animal diseases.

Alumni Reunion

The annual reunion for the alumni of the Ontario Agricultural College and the alumnae of Macdonald Institute was held at the College on June 15, 1946. Approximately 800 former students of both O.A.C. and Macdonald Institute attended.

Junior Farmers' Field Day

On June 29, 1946, nearly 2,400 young people from 19 counties of the central section of Western Ontario took part in the second annual Regional Field Day of the Ontario Junior Farmers' Association at the Ontario Agricultural College.

The softball games were the feature event of the day with 19 boys' teams and 11 girls' teams competing. Other features of the day were the track and field events and the live stock parade.

Annual Meeting of the Junior Farmers' Association

Over 500 delegates, officials, and guests, including groups from New York State, Michigan, and the province of Quebec, attended the annual meeting of the Ontario Junior Farmers' Association held at the Ontario Agricultural College on April 25 and 26.

For the first time, two representatives of Junior Institutes were appointed to the Provincial Board of the Federated Women's Institutes of Ontario.

Junior Farmers' Judging Contests

One hundred and seventy boys from Hastings County Junior Farmers travelled to the Ontario Agricultural College by bus on May 31. They held

their County Live Stock Judging Competitions the next day with 79 contestants in the Senior classes and 81 in the Junior. The College live stock was used for the judging.

On October 25, 1946, 160 Junior Farmers assembled at the Ontario Agricultural College for the Ontario Inter-County Junior Farmer Competitions. The visiting group was made up of 34 teams and their coaches from various parts of the province — from Glengarry to Lambton County, and as far north as Sudbury. Mr. A. H. Martin, Associate Director of Extension, and T. R. Hilliard, Field man for junior work, were in charge of the group. All arrangements for the event were made by Prof. R. G. Knox, head of the Animal Husbandry Department.

Animal Nutrition Conference

An interested group of over 500 feed manufacturers, feed merchants, Agricultural scientists and technicians, and scientists of Veterinary Medicine held their second annual Nutrition Conference at the Ontario Agricultural College on September 17 and 18, 1946. Among those who presented discussions and briefs were Dr. K. L. Turk, Department of Animal Husbandry, Cornell University, U.S.A., members of the Ontario Veterinary College, and seven members of the faculty of the O.A.C.

Visitors from Great Britain

Dr. G. Watts Padwick, of Imperial Chemical Industries Ltd., London, England, and Miss A. Hortig of the Federation of Irish Beekeepers' Association, Dublin, Ireland, visited the College on October 2 and 3 respectively. Dr. Padwick's chief interests at the O.A.C. were the pullorum work conducted by the Bacteriology Department and experiments with DDT carried on by the Entomology and Botany Departments. Miss Hortig's primary interest at the O.A.C. was in collecting all available material on beekeeping for her association's new library.

Three distinguished guests who were touring the American continent visited the Macdonald Institute and the Ontario Agricultural College on November 23, 1946. They were Miss G. F. Summers, H.M. Inspector, Ministry of Education; Miss K. J. Harrison, H.M. Inspector, Ministry of Education; and Miss D. Hollingsworth, a dietitian of the Ministry of Food, London. The three were sent by their government to investigate home economics work on this continent with a view to incorporating new ideas into the British system of home economics instruction. They toured the Macdonald Institute kitchens and were impressed with their convenience and labour-saving devices. They were also interested in discussing nutrition work and research with the head of the Animal Nutrition Department.

Indian Students at O.A.C.

One of the most striking groups among the new students at the Ontario Agricultural College this year was that of eight post-graduate students from India. The eight are part of a larger group of 200 students sent over by the Indian Government to take post-graduate work in American and Canadian Universities.

On October 31, 1946, the Indian students received a distinguished visitor, Mr. P. Kodanda Rao, author, editor, lecturer, social reformer, and secretary of the Servants of India Society, India.

Visitor from Nigeria

On October 12, 1946, Rev. Kenneth H. Prior, of Nigeria, Africa, paid a visit to the Ontario Agricultural College. In 1920, Rev. Mr. Prior spent a year

at O.A.C. and in 1926 graduated from the University of Alberta. For the last twenty years he has been pioneering in agricultural missionary work in Africa. At present he is in Canada looking for recruits, particularly college graduates in agriculture, to carry on and extend the program of agricultural reform in Nigeria.

Visitors from Mexico

A party of eight Mexicans, two of them delegates from the Dairy League Association of Milk Producers in the State of Mexico, paid an official visit to the College on October 31, 1946. The group was making a one-month tour of the United States and Canada. Their primary interest at the O.A.C. was in learning the most modern approved methods and techniques in dairying. Mexico plans to modernize its dairy industry in order to increase production.

Entomologists Meet at O.A.C.

About sixty members of the Ontario Entomological Society held their 83rd annual meeting in the Faculty Lounge at the Ontario Agricultural College, November 5 and 6, 1946. After a brief business meeting, the two-day session was taken up with the presentation of papers by various members.

National Dairy Congress Judging Contest

A live stock judging team from the Ontario Agricultural College attended the National Dairy Congress held at Waterloo, Iowa. Teams from eleven colleges, ten of them in the United States, were in competition.

The team from O.A.C. placed second in the competition, only one point behind the winning team from Iowa State College. The team was made up of the following Fourth Year students: A. Stewart, who was high man in the entire contest and also first in Holstein judging; C. Rennie, who was third highest in the entire contest and also first in the judging of Jerseys; T. Conover; and J. F. Neill. The team was coached by Prof. A. D. Runions.

Course Held for Supervisors of Veteran Farmers

Thirty-seven veteran representatives of the staff of supervisors for the Toronto Branch office of the Veterans' Land Act were given a special refresher course during the week March 10 to March 14, 1947, in order to acquaint them with the newest developments in agriculture.

Queen Wilhelmina Honours Dr. Branion

Dr. H. D. Branion, M.A., Ph.D., M.C.I.C., head of the Department of Animal Nutrition, O.A.C., received military honours for his overseas service from Queen Wilhelmina of Holland. Dr. Branion was made an Officer of the Orange-Nassau Order. Dr. Branion received the award for the work his section in the 1st Canadian Corps did in supplying, distributing, and checking rations and supplies in Holland after the German surrender.

Honoured for Quarter-Century Service

Just previous to Christmas, 1946, forty-five men and women who have been in the service of the Ontario Government at the Ontario Agricultural College or Ontario Veterinary College for 25 years or more were presented with medals. The Hon. T. L. Kennedy, Minister of Agriculture, made the presentation. Prof. J. Eaton Howitt, who has the longest term of service of any one on the teaching staff, having joined the Botany Department in September, 1906, replied to the Minister, expressing appreciation for the awards.

Dr. V. A. Rice Visits College

On March 18, 1947, by kind arrangement of the Breeders' Association, Dr. V. A. Rice, Dean of Agriculture, Massachusetts State College of Agriculture, Amherst, addressed a gathering of more than 500 students and faculty of the Ontario Agricultural College and the Ontario Veterinary College. Dr. Rice is a leading scientist and noted animal geneticist in the United States. His address was an intensely interesting discussion of the science of breeding.

COLLEGE FUNCTIONS

Baccalaureate Service

The annual Baccalaureate Service for the graduating classes of the Ontario Agricultural College and the Ontario Veterinary College was held in War Memorial Hall on Sunday, March 30, 1947.

Dr. G. P. Gilmour, Chancellor of McMaster University, Hamilton, delivered the sermon.

Convocation for Students in Agriculture

On Tuesday, May 14, 1946, Convocation for the Class of 1946 was held in War Memorial Hall. Fifty-eight graduates received the degree of Bachelor of Science in Agriculture from the Chancellor of the University of Toronto. the Honourable and Reverend H. J. Cody.

Addresses were delivered by Chancellor Cody and Dr. Sidney Smith. President of the University of Toronto.

SCHOLARSHIPS, PRIZES AND GIFTS

Foreman Poultry Library Fund

Mr. E. C. Foreman of Lowell, Michigan, a graduate of the Ontario Agricultural College of 1922, presented a gift of \$1000.00 in appreciation of the instruction, assistance, and guidance he received while a student at the College and after graduation from the Poultry department; this, he stated, contributed largely to his later success in the poultry field. The gift is to be used for the establishment of a reference library in the Poultry Department for the use of graduate and special students and the Department staff members.

Canadian Fishing Company Gift

The Canadian Fishing Company, Limited, of Vancouver, B.C.. presented the College with the sum of \$725.00 to assist in research work carried on jointly by the Departments of Animal Nutrition and Poultry Husbandry on a project dealing with Dry A and D mixture.

Brampton Jersey Fellowship

B. H. Bull and Son, of Brampton, Ontario, have presented the College with \$1000.00 for the establishment of a fellowship for studies in pasture improvement. A detailed program for this work is being arranged.

Nutrition Conference Scholarship

A scholarship of \$150.00 will be awarded annually to a Canadian student graduating from the Ontario Agricultural College or the Ontario Veterinary College who is proceeding to post-graduate work in Animal Nutrition. This scholarship was established by the Ontario Division of the Canadian Feed Mnaufacturers' Association. The funds are taken from the balances accumulated from the Annual Nutrition Conference held at the Ontario Agricultural College.

Greenhouse Chrysanthemum Research Fund

The firm of Delworth and Campbell of Lorne Park, Ontario, has presented the College with the sum of \$500.00 to be used in research on greenhouse chrysanthemums. The firm proposes to continue this fund from year to year.

Soybean Research Fund

The Victory Mills of Toronto and the Toronto Elevators have contributed \$1000.00 each for the establishment of a scholarship or fellowship involving a series of investigations in connection with soybeans.

Contributions to Student Union House Building

From the Veterans' Land Field Course the sum of \$30.00 was received, to be used in connection with the proposed Student Union Building.

Year '45 Trophy

In order to encourage inter-year competition in sports the members of Year '45 have donated to the College a large trophy for the year accumulating the greatest number of points, according to the intramural scoring system recently adopted. They have also donated a small individual trophy to be given to the student in any year who is considered to have contributed the most to intramural sports.

CHANGES IN SENIOR STAFF

Superannuations

- April 1, 1946 Miss Mayme C. Kay, Assistant Directress, Macdonald Institute.
- Sept. 12, 1946 Professor E. W. Kendall, Associate Professor, Department of Agricultural Engineering.
- Sept. 30, 1946 Professor W. C. Blackwood, Professor and Head of Department of Agricultural Engineering.

Deaths

July 25, 1946 — Professor A. H. Tomlinson, Professor, Department of Horticulture.

Resignations

April 30, 1946 — Mr. Frederick G. Baldwin, Physical Director.

Sept. 13, 1946 — Dr. C. A. Rowles, Associate Professor, Department of Soils.

Appointments

- April 1, 1946 Mr. John A. Eccles, B.S.A., Dean of Men and Student Counsellor, Department of Public Relations.
- May 1, 1946 James Sheldon Shoemaker, B.S.A., M.Sc., Ph.D., Professor and Head of Department of Horticulture.
- July 1, 1946 R. Stewart Brown, B.A., M.A., Ph.D., Professor and Head of the Department of Chemistry.
- Aug. 1, 1946 Miss Dorothy M. Lindsley, B.A., M.A., Assistant Professor, and Acting Directress, Macdonald Institute.
- Aug. 1, 1946 Mr. W. F. Mitchell, B.S.A., Director, Department of Physical Education.
- Sept. 16, 1946 Mr. J. R. Cavers, B.S.A., M.Sc., Professor, Department of Poultry Husbandry.

STUDENT ACTIVITIES

Student Grand Council

An important development of the year has been the effective union in student government and student activities of the Ontario Agricultural College, Ontario Veterinary College, and Macdonald Institute. Major student societies now include in their activities students of all three institutions, and all are represented on the societies' executives. One new administrative organization has been set up — the Grand Council, which is made up of the presidents of all major societies and the representatives of the individual college adminstrative councils.

Faculty Committee on Extra-Curricular Activities

A joint committee representing the faculties of the Ontario Agricultural College, Ontario Veterinary College, and the Macdonald Institute was organized to supervise and co-ordinate all extra-curricular activities and to assist student organizations in arranging for the best possible use of the limited facilities available for social and other functions. This committee has held meetings with the student Grand Council and works with it in organizing programs and dealing with various problems. Lack of adequate college facilities for dances has made it difficult to keep large year dances on the campus.

College Barbecue

As a substitute for the traditional initiation ceremonies the Committee on Extra-Curricular Activities arranged with the Grand Council for the holding of a barbecue in a large field near the Dairy bush early in the fall term. All students and staff members were invited, and entertainment was provided by the freshmen classes of the three institutions.

College Royal

"Quality With Economy" was the slogan for the twenty-third annual College Royal held on March 5, 1946. Displays were of high quality and a very large number of students entered the various competitions.

Union Literary Society

In addition to the regular program of inter-year debates, in which classes of the Ontario Veterinary College participated for the first time, a debate was held between teams representing the Ontario Agricultural College and the Ontario Veterinary College, and two debates were held with McMaster University, in both of which the O.A.C. teams were winners. Contestants in the Annual Public Speaking contest included representatives of O.A.C., O.V.C., and Macdonald Institute. A discussion group revived the College membership in the International Relations Clubs organization. The program in dramatics was equally successful including the production of three one-act plays in the fall term and, in the spring, the most successful comedy production seen at the College in a great many years.

Philharmonic Society

Monthly Sunday night musicales were arranged throughout both terms with artists from the Toronto Conservatory of Music. A choir was trained which sang at various church services in Memorial Hall including the Baccalaureate Service. At the end of the winter term the Annual Musicale was presented in Memorial Hall.

Student Christian Movement

Fortnightly church services have been resumed on the campus and various outstanding ministers have addressed the student body. A series of lectures and discussions on problems of immediate interest to students was arranged and regular Sunday morning classes were conducted throughout the year.

"The Aggie"

To meet the demands of a larger and more widely dispersed student body for news of college events, a semi-monthly newspaper was published. It is intended to supplement but not to replace the O.A.C. Review.

Organization of Veterans

The servicemen of the Ontario Agricultural and Ontario Veterinary Colleges have organized a college branch of the Canadian Legion. This organization has no affiliation with the college.

Military and Naval Training

The C.O.T.C. was reorganized to perform its new function in the Canadian Army. Quotas have been allotted to each university to provide the anticipated requirements for army officers. The O.A.C. Contingent during the past year had applications from over four times as many students as could be accepted under the quota. Training of the select group has been very satisfactory. Naval training has also been continued with an equally satisfactory support from the student body.

DEPARTMENT OF AGRICULTURAL ECONOMICS

Economics Option

An important development of the year was the institution of a special option in Agricultural Economics which now makes it possible for a group of students to obtain instruction in economics that is reasonably comprehensive and intensive. The number taking the option was 23.

Short Course

The Christmas short course, which was not given in 1945-6, was resumed. It attempted to show how the various agricultural policies and programs are integrated one with another.

Farm Business Management

This work, outlined in last year's report, has already proved extremely useful both in the classroom and to the co-operating farmers.

A suggested form of business arrangement between farmers and their sons or daughters has been prepared to help in solving this problem.

Several changes and additions have been incorporated in the revised edition of the Ontario Farm Account Book as a result of the research conducted.

Extension Activities

Special pamphlets for the use of study groups were written for the Ontario Adult Education Board. Advisory assistance was given to or calculations made for the Ontario Milk Producers, the Milk Control Board, the Ontario Hog Producers' Association, the Cost Committee of the Ontario Federation of Agriculture, and the people responsible for the formation of the Farm Radio Forum annual program. The head of the Department was called upon to act as economic consultant for the Ontario Royal Commission on Milk appointed in October last.

DEPARTMENT OF AGRICULTURAL ENGINEERING

Organization and Courses

The Department was established under the direction of Professor C. G. E. Downing, B.E., M.E.I.C. Fourteen students were enrolled in this option and 35 are expected to enrol this fall.

The following courses have been organized: soil and water conservation; farm structures; farm power and machinery; rural electrification; manual training.

Alloys for Tillage Tools

The protecting of the cutting edges of ploughshares and other tools by new abrasion- and corrosion-resisting alloys developed during the war will greatly increase the efficiency of soil working implements. Forty-four separate types of alloy overlay applications are now undergoing field tests to determine their practical value in agriculture.

Demonstrations and Exhibits

As farmers are requesting more blasting services, twelve demonstrations were put on during 1946 for a total audience of 622.

The use of heavy crawler tractors for farm improvement work received much attention. Clearing scrub growth, fence bottoms, burying stone piles, and improving farm lanes were demonstrated at the International Ploughing Match, at the O.A.C., and in Stormont County and at several county ploughing matches.

At the International Ploughing Match, Goderich, the exhibit featured drainage, land clearance and improvement, plough hitch adjustment, and farm shopwork. Daily outdoor demonstrations were carried out and attracted large crowds.

Machinery Overhaul Program

As new farm machines are still generally scarce, stress has been continued on maintenance and overhaul work to eke out the deficiency. Undergraduate attention has been focused, too, on improvements and modifications to increase efficiency and durability. Several students have already become established in the research laboratories of Ontario implement manufacturers.

New Machine Design

Several new designs have been completed and are on test: the electrical weed killer which is a mobile power-take-off operated D.C. generator applying current to the soil with the objective of killing couch grass, etc; the artificial bee inseminator which is a delicate instrument made of "Lucite" to eliminate casual mating of high production queens and is designed for operation under a microscope; the fertilizer applicator which is designed to reduce experimental error in application of fertilizer and ensures uniform distribution on 20.5 foot test rows.

New Playing Field

Commenced in spring of 1946 immediately behind the O.V.C., operations, including grading, installation of a system of tile drains, and layout and excavation for a ¼-mile cinder track, were completed in the fall.

College Faculty Sub-Division

To relieve the housing shortage among veteran faculty members a subdivision was laid out in the spring of 1946. Water, sewer, and connecting roads were installed and seven homes constructed during the summer by the veterans themselves. These homes were completed for occupation by October.

Drainage Division

Increased help made possible the completion of much more field work. In all, 679 farmers were given assistance. A total of 9,765 acres and 457,303 feet of profile were surveyed. Northern Ontario again appealed for assistance, atter several years of silence. Eleven miles of profiles for ditch construction were prepared.

Tile are still in short supply and ditching machine operators are scarce.

A short course in Drainage was held in Chatham during February with twenty-one in attendance.

DEPARTMENT OF ANIMAL HUSBANDRY

Live Stock

The live stock population has been somewhat increased in order to provide animals for the repeated courses of instruction in live stock breeds and types. Repetition of courses has been necessitated by the subdivision of large classes into smaller groups. The pig population has also been larger than usual in order to provide pork and pork products for consumption in the dining hall.

Temperature of Water in Hog Feeding

Three uniform groups of hogs, all fed the same meal mixture, were given water within the following temperature ranges: Group $1-32^\circ$ to $40^\circ F$; Group $2-50^\circ$ to $65^\circ F$; Group $3-108^\circ$ to $115^\circ F$.

All pigs were fed twice daily, with sufficient water to make a standard slop. The feed consumed by each lot was recorded and all hogs were weighed at two-week intervals.

Results

- (1) The addition of water at higher temperatures to the meal mixture during the winter months increased the daily feed consumption and the rate of maturity, but had no significant effect on the economy of pork production.
- (2) The numbers of pounds of feed required per pound gain were as follows: Group 1, 3.5; Group 2, 3.3; Group 3, 3.5.
- (3) The group that was fed water at a temperature ranging from 50° to 65° produced the most desirable carcasses.

The Influence of the Salt Content in a Pig Ration on Economy of Gain

Four lots of hogs were used, all self-fed on a basal ration made up of ground oats, barley, and wheat, in equal proportions. The protein supplement was a mixture of 90 pounds soybean oilmeal and 10 pounds alfalfa leaf meal. Animal protein was not used because it may contain some salt. The mineral mixture and salt were fed as follows:

- Lot 1 No salt. Mineral mixture in feeder: equal parts of pulverized limestone and steamed bonemeal.
- Lot 2 Loose salt in feeder. Mineral mixture as in Lot 1.
- Lot 3 Loose salt in feeder. Mineral mixture in feeder: 10 parts pulverized limestone and 10 parts steamed bonemeal, plus one part salt.
- Lot 4 Pressed block salt in feeder. Mineral mixture in feeder as in Lot 3.

Results

- (1) Hogs fed no salt ate almost three times as much mineral as did those that had access to loose salt.
- (2) Hogs receiving no salt required 429 pounds of feed to make 100 pounds of gain, as compared with 408 pounds in the case of those fed salt.
- (3) A summary of the salt intake of all lots fed salt indicated that 1 per cent. of salt in the total ration gave the most economical results.
- (4) The hogs that had access to salt gained one-tenth of a pound more per day than those receiving no salt.

Some Factors Influencing Conception Rate as Revealed by Records Where Artificial Insemination is Practised in Artificial Insemination Clubs and Privately Owned Herds

Records of the rates of conception involving 11,331 services were used for this study. The semen used was from 20 Holstein and 7 Jersey bulls of varying ages. The following conclusions were made:

- (1) The fertility of bulls varies in the different seasons, being highest in October and lowest in May.
- (2) Two- and three-year-old bulls are more fertile than yearling bulls, and than four- and five-year-old bulls. Four- and five-year-old bulls are more fertile than bulls over eight years of age.
- (3) Females inseminated with semen from two- and three-year-old bulls are more consistent in their rate of conception throughout the year than is the case with any other bull age group. The greatest variation throughout the year occurred when semen from yearling bulls and aged bulls was used.
 - (4) Heifers have a lower percentage of conception than cows.

Three groups of four first litter cause each of comparable age, weight, and

Three groups of four first-litter sows each of comparable age, weight, and breeding were fed the following rations from time of conception until after the pigs were weaned: Lot No. 1 was fed a balanced ration, protein content. 15.7 per cent.; Lot No. 2 was fed an approved basal ration, protein content, 12.6 per cent.; Lot. No. 3 was fed oats only, protein content, 11.8 per cent. Records of performance were kept until the pigs were weaned. The following is a summary of results:

3 278.75 10 2.25 2.75 72.5 52.5 863.5 250	Lot No.	Average Initial Wt. of Sows lbs. 313.75	Average No. Pigs Born per Sow	Average Birth Wt. of Pigs lbs. 3.25	Average No. Pigs Weaned per Sow 8.75	Per Cent. Mortal- ity 2.78	Average Loss of Wt. During Nursing lbs. 50	Total Feed Consumed per Sow lbs. 845	Total Feed Con- sumed per Pig Weaned lbs. 97	
3 278.75 10 2.25 2.75 72.5 52.5 863.5 250	2	273.5	6.25	2.72	4.75	24.0	60	751	140	
	3	278.75	10	2.25	2.75	72.5	52.5	863.5	250	

Extension

In addition to answering over 3,000 letters, members of the department extended services to the live stock breeders in the Province as follows:

Fairs and exhibition attended • Live stock meetings, executive meetings, annual meetings, conferences Field days	44 51 5
	81 14

Sales of Live Stock

On June 7. 1946, seven Shorthorn bulls were sold at the Shorthorn Field Day for a total of \$4,200.00. The numbers of live stock sold for breeding purposes during the year were as follows:

Beef Cattle — 12; Dairy Cattle — 17; Sheep — 4.

Because of the incidence of rhinitis in the swine herd, no breeding stock was offered for sale for breeding purposes.

This statement does not include the swine that were sold to the Production Services for testing purposes at the Dominion Test Station, Waterloo, the animals that were used for experimental purposes, nor those that were sold as commercial animals to the Ontario Reformatory, the O.A.C. Dining Hall, or elsewhere, the totals of which were as follows:

Horses—5; Beef Cattle—13; Dairy Cattle—36; Sheep—44; Swine—364

DEPARTMENT OF ANIMAL NUTRITION

The activities of the past year have been varied. Every effort has been made to meet the increased demands upon the Department for information relative to the provision of adequate rations for livestock and poultry. Short supply of many feedstuffs has continued, increases in the relative cost of ingredients have occurred and the feeder's interest in nutritive requirements has increased steadily.

A report of the major research activities is given below:

Choline Requirements of Growing Turkeys

The co-operative investigations with the Department of Poultry Husbandry on the choline requirements of broad-breasted bronze turkeys were continued on an enlarged scale. A starting ration, low in animal protein and containing 29 per cent. of soybean oil meal, gave exceptionally good results. with no improvement from supplementary choline. Growth of turkeys on a ration containing more animal protein and only 18 per cent. of soybean oil meal was somewhat improved by small additions of choline. The addition of 4 per cent. of dried brewers' yeast exerted a marked deleterious effect on the growth and appearance of the turkeys.

No toxic effects resulted from the use of as much as 0.5 per cent. pure choline chloride in the ration.

Vitamin Assays

A modification of the Neurospora microbiological assay procedure for choline was developed, and used in routine assays of numerous feedstuffs and rations used in the turkey experiments. Routine assays for other vitamins, particularly riboflavin, have been conducted in volume.

Vitamin A and Carotene

As part of a new activity in co-operation with the Department of Biochemistry, University of Toronto, preliminary comparative studies on the absorption, utilization, and storage of vitamin A and carotene are in progress. These studies will be extended to various species of livestock.

Protein and Amino Acid Studies

Nitrogen balance experiments with mature poultry were continued.

Microbiological assays for amino acids in various feedstuffs have been undertaken.

Cholesterol Feeding and Artherosclerosis in Chickens

This collaborative study with the University of Western Ontario and the Department of Poultry Husbandy was continued. Periodic determinations of cholesterol levels, both total and free, in the blood serum of control and cholesterol-fed groups were made. The influence of vegetable oils on cholesterol absorption was studied.

Vitamin D

Forty-six commercial preparations of various types of vitamin D preparations were assayed. A charge is made for this service.

There was no loss of vitamin D_3 from two types of "dry carriers" during eight months' storage.

A co-operative study, with the Department of Poultry Husbandry, on the stability of vitamin D incorporated in rations was concluded. The potency of unfortified fish oil decreased to about 60 per cent. in 3 months with no further loss up to 2 years. Vitamin $D_{\rm s}$ lost half of its potency in 30 weeks and 70 per cent. in 2 years.

The antirachitic efficacy of dihydrotachysterol for chicks was found to be approximately 600 U.S.P. units per mgm., a potency about 7.5 times that with the rat.

The vitamin D requirements of ducklings was found to be about 35 units per 100 grams of feed.

The British Standards Institute preparation of vitamin D_e was checked against Canadian Standard Reference Cod Liver Oil, using tibiae ash, toe ash and radiographic technique as criteria. The antirachitic value of the A.O.A.C. unit and the B.S.I. unit was found to be in the ration of 1.0 to 1.3.

Phosphatase Studies

The plasma phosphatase test continued to give good agreement with the bone ash method for assaying vitamin D.

The characteristics of the enzyme in the plasma of poults and ducklings were found to be similar to that of chicks.

Nutrient Content of Forage Crops

The investigations on the yields of protein, calcium, and phosphorus in forage crops were continued in collaboration with the Department of Field Husbandry. Some 350 samples were analysed.

Mineral Requirements of Turkeys

The calcium, phosphorus, and manganese requirements of turkey poults were investigated. One per cent. phosphorus and 2.0 per cent. or less of calcium gave good growth and calcification.

Determination of Inorganic Phosphorus

The effect of various concentrations of acid on the development of the molybdenum blue colour was investigated, and suitable ranges were established.

DEPARTMENT OF APICULTURE

Services to Beekeepers

Because of the extremely poor year, Ontario beekeepers required a record number of sugar permits, issued through this office, in co-operation with the Sugar Administration of the Wartime Prices and Trade Board. The decreasing quantities of suitable flora in the Niagara Peninsula and in counties bordering the eastern section of Lake Erie are forcing commercial apiarists to migrate to the eastern and northern sections of Ontario. Production survey records prepared over the past six years have been of considerable value in giving advice to those wishing to move to new territory.

Approximately 200 samples of bee diseases have been diagnosed microscopically. The number of samples of honey which were graded was small, owing to the poor crop.

Pelee Island Queen Rearing Project

Approximately 3000 queens were produced and shipped from Pelee Island during the summer of 1946. These queens were reared from stock which has proved satisfactory for Ontario conditions. This was actually the first time that queen bees have been produced on such a large scale in Ontario.

Stock Testing Project

The plans for setting up a stock testing program using artificial insemination methods are well advanced. This program will be commenced in the 1947 season.

Until such time as suitable artificially-inseminated breeding stock is available, queens mated on Pelee Island are being tested and selected in the College yards.

Wintering Queens in Quantity

About 100 queens were wintered in groups of twelve to sixteen by several methods. Such a project, if satisfactory, would be a boon to beekeepers who require extra early queens in order to replace winter losses. The results to date are most encouraging.

Pollen Supplements

The continuation of the project of feeding pollen supplement has served to verify the original results which indicated that in the Guelph area the presently-recommended supplements are of little value.

Apiary Inspection and Disease Control

During the 1946 season, 6,094 beekeepers registered 227,405 colonies in 8,422 apiaries.

Inspections were made in 3,661 apiaries, consisting of 65,205 colonies. Disease was found in 2,304 colonies, or 3.5 per cent. of those inspected. This shows a decrease of 1.9 per cent. over the previous year.

DEPARTMENT OF BACTERIOLOGY

Services

Three hundred and ninety-eight samples of farm well water were analysed. A total of 261 samples of milk and cream were examined for abnormalities. Three hundred and sixteen lactic starters were prepared and forwarded to cheese makers, dairies, and private individuals. Twenty-nine bovine blood samples from the College herd were tested for Bang's disease and 37 plant and miscellaneous specimens were examined. A total of 5,419 legume cultures was prepared and distributed during the year.

Pullorum Blood Testing

More than 631,200 agglutination tests were conducted, among which were 24,444 tests for pullorum disease in turkeys. A total of 1,100.000 c.c. of antigen

was prepared, of which 147,000 c.c. were sold to operators conducting blood testing for private flock owners as well as for those belonging to a recognized flock policy.

Pullorum Extension

Regular trips to hatcheries were conducted to determine the efficiency of hatchery fumigation. No pullorum infection resulted when advocated methods of fumigation were followed. The service was extended to include hatcheries not visited in former years.

Increasing demand for the rapid whole blood method of testing for pullorum disease has necessitated the training of new operators to conduct the test in the field.

Pullorum Antigen Studies

Studies were commenced to determine the possibility of obtaining strains of S. pullorum containing antigenic factors capable of detecting both standard and variant forms of pullorum disease, thus eliminating double testing. After considerable research, such strains have been isolated and it remains for future work to determine their suitability for antigen production.

Non-Pullorum Reactions

A project was commenced in 1945, at the request of the Poultry Industry Committee, to determine the cause of non-pullorum reactions found in the routine test for pullorum disease. For this purpose, 96 fowl responsible for such reactions were obtained from various flock owners in the province. These birds were maintained for a period of 14 months, during which time they were periodically tested, examined by post-mortem and their organs cultured. It was found that 60 per cent. of them had abnormalities in liver, spleen. and ovaries. More than 200 cultures of organisms were isolated. Non-pullorum reactions were definitely traced to certain organisms which had invaded blood and tissues, giving rise to low grade infections. The reasons for invasion of tissue by organisms normal to fowl have yet to be determined.

Salmonella Food Poisoning Types in Fowl

Investigations to determine the presence of Salmonella food poisoning organisms in fowl and eggs were continued. It was found that artificial inoculation of two food poisoning types into a group of hens resulted in the organisms being recovered in a few of the eggs and in the faeces for more than 40 days after the inoculations. Investigations were also continued to determine the value of polyvalent antigens in detecting Salmonella infection in fowl by the rapid whole blood test.

Coliform Contamination of Eggs

Studies to determine the presence of coliform organisms in eggs were conducted. Examination of 1080 eggs from pullorum-infected hens showed 7.2 per cent. to be contaminated, whereas no coliform organisms were isolated from 1000 eggs laid by hens free from the disease.

Food Research

Work has been continued to determine the nature of the substance in tomato juice which former work has shown to be capable of suppressing organisms responsible for food spoilage. Other known antibiotic substances are being investigated to ascertain the possibility of their use as food preservatives. Preliminary investigations have also been conducted to determine the effects of spoilage and rot organisms on the Vitamin C content of certain vegetables.

Bacterial Ring-Rot of Potatoes

Experiments were conducted to determine the resistance of the Teton variety of potato to the ring-rot organism. Artificial inoculation of Teton and other control varieties demonstrated that after several months' incubation at room temperature, the Teton variety showed no evidence of ring-rot, whereas the controls were severely rotted.

Dairy

A new staining technique has been developed for the microscopical examination of milk. This stain, which is a modification of two other methods, permits staining, fixing, and defatting in one operation in from 5 to 15 seconds.

DEPARTMENT OF BOTANY

Report on 2.4-D Weed Killers

The results of extensive experiments show: (1) that there was little difference between the four types of 2,4-D when used at the same rate of concentration; (2) that Wild Carrot and Chicory can readily be destroyed when sprayed according to the manufacturers' directions; (3) that reasonably effective control of Perennial Sow Thistle, Poison Ivy, and Ox-eye Daisy can be obtained with 2,4-D sprays; (4) that Field Bindweed, Leafy Spurge, White Cockle, Bladder Campion, Barberry, and Buckthorn are very resistant to the present formulations of 2,4-D; (5) that the killing of all perennial weeds by one application of a 2,4-D preparation is the exception rather than the rule.

Apple Orchard Spraying (Conducted in Co-operation with Department of Entomology)

Testing the effectiveness of the various new spray materials which have been made available to the public by the manufacturers was continued.

Under the weather conditions prevailing all the materials tried gave commercial control of Scab. In fact most of them gave over 98 per cent. clean fruit. Scab, on the other hand, was so bad on the check plot that at harvest time no fruit was left on the trees. In the block in which Bordeaux was used for the delayed dormant, the prepink and the 2nd cover sprays, the leaves showed some spotting owing to copper injury, and a considerable percentage of the fruit showed more or less russetting. This was probably due to the fact that in the 2nd cover spray a very heavy application of the Bordeaux was made. In the block where Fermate was used in all the applications except the delayed dormant spray, the leaves on the trees were light in colour, suggesting that there might have been some foliage injury through the use of Fermate.

The Microfine Sulphurs gave good control of Scab without the foliage injury which often follows the use of lime sulphur.

Spraying and Dusting Turnips to Prevent Water-Core

Water-core (boron deficiency) was especially severe in the turnip areas of south-western Ontario during 1946.

Detailed records were kept on the spraying and dusting of 91 widely scattered turnip fields involving 329 acres. A single but thorough application of borax either as a spray or as a dust prevented water-core development, provided the application was made when the turnip root was about thumb-size. The foliage need not be wet for dusting. Custom dusting or spraying proved to be the most practical and efficient.

Experiments to Kill Potato Tops

The purpose of these experiments is to determine the chemicals that are most satisfactory for killing the tops either when attacked by Late Blight or when the season is late and the grower wishes to start digging.

The following substances were tested: (1) Cyanamid (2) Sinox (3) Sinox with Ammonium Sulphate (4) Sodium Arsenite. Sinox with Ammonium Sulphate killed the tops most readily. All these chemicals killed the tops within ten days. Although Sodium Arsenite is a convenient substance to use, it must be handled with great care as it is very poisonous.

Gladiolus Diseases

A study of Botrytis Core Rot has been undertaken and a survey of several gladiolus storage houses has been carried on to try to combat this disease, the control of which seems to be a major factor in the storage of gladiolus corms. Preliminary recommendations have already been made.

DEPARTMENT OF CHEMISTRY

Courses

The formation of the new Department of Soils has necessitated a reorganization of the Department of Chemistry. As a result, the main effort of the Department during the past year has been the instruction of students. In addition to our own classes, the Department has given two courses to students at the Ontario Veterinary College.

General Laboratory Services

Forty-nine special investigations were made in connection with inquiries accompanying samples submitted. Such diverse materials as water, animal organs, limestone, molasses, sugar beet, maple syrup and sewage sludge were included.

Dairy Chemistry Service

During the year, 138 samples of various materials were analysed for routine tests and for consultant work on dairy plant problems. Included were samples of butter, cream, milk, buttermilk, ice cream, water, butter paper. Thirty-two standard solutions were prepared for the dairy industry.

DEPARTMENT OF DAIRYING

Short Courses

The Dairy School three month course held during the winter was attended by 62 students, of whom 14 came from the Maritime Provinces and 48 from Ontario. Enrolment in five other short courses totalled 174 students.

Extraneous Matter in Cheese

As a result of continuing the testing of extraneous matter in cheddar cheese curd, fair progress is being made, but the record of many factories is not yet up to standard. During the period July to October, 215 determinations were made of which 54.7 per cent. were classified as clean or fairly clean.

Butter Yeast and Mould

A total of 2,878 analyses were made on churnings submitted to the laboratory. A marked improvement was evidenced from the results of the yeast and mould competitions this year as compared to those of the previous year.

An effort to measure the potential keeping quality of storage butter was made, but on account of several recognized variable factors no definite conclusions could be established.

Dairy Products Testing

During the year, 188 fat determinations were made on milk, cream, and skim-milk samples supplied by farmers and by dairy plants. In addition, a large number of different dairy products were examined for composition and flavour defects.

Processed Cheese

For effective pasteurization of processed cheese made from cheddar cheese, experiments indicate that in the case of small packages either a higher temperature (above 150°F.) or an appropriate holding period must be employed. During the year laboratory and commercial trials indicated that a a new method of curing and packaging cheese for retail distribution in small units will, with careful attention to details, yield satisfactory results.

Vitamin A and Carotene Content of Ontario Butter

Tests revealed that the peak values for both vitamin A and carotene were reached in the month of June; they declined during the summer, rose almost to the June level in October, and declined again in the winter and spring months.

DEPARTMENT OF ENGLISH

Courses of Instruction

The increase in staff made it possible for the students of the first two years of the Degree Course to be divided into three homogeneous groups each; instruction was adjusted to the needs of each group. In the first two years emphasis is being placed on the raising of standards in writing and speaking. Courses have resumed at the Macdonald Institute.

For the first time in a number of years, instruction was given to the First and Second Year students of the Ontario Veterinary College. Classes in English Literature, Public Speaking, and English Composition were taught.

Other Activities

Six radio broadcasts were given over station CFRB, Toronto, with 26 students participating.

At the request of the Brant Junior Farmers' Club, the Department gave a short course in Public Speaking in Brantford.

A new extra-curricular activity was the formation of a musical appreciation club in connection with which a library of records is being built up.

The Department also helped the executives of the Union Literary and of the Philharmonic Societies in carrying out their programs. For the first time a special director was appointed by the College Royal Executive for the competition in essays, journalism, and music, for which a Grand Championship prize was awarded.

Musical and entertainment programs were also arranged both for the Christmas short course and for Farm and Home Week.

"The History of the Holstein-Friesian Breed in Canada," written by the head of the Department at the request of the Holstein-Friesian Association of Canada was published in November. The collation of facts for this history extended over a period of nearly five years.

DEPARTMENT OF ENTOMOLOGY AND ZOOLOGY

DDT and Fly Control

Tests were conducted on various commercial DDT products for fly control. including oil solutions, emulsions, and 50 per cent. wettable powders. These were tested on unpainted wood, wood that been painted for some time, and on glass. All types gave longer residual action on unpainted wood than on painted wood and on glass. The wettable spray powders were effective for a longer period than the emulsions and oil solutions on painted wood. Oil solutions gave the most lasting effects on glass. All tests were conducted in the College piggery.

Testing Apple Spray Mixtures

In co-operation with the Department of Botany, in whose report the results are mentioned, spray materials were used mainly for fungicide tests in the Ontario Reformatory Orchard.

The College orchard, through the courtesy of the Department of Horticulture, was used mainly to compare DDT against the Ontario standard lead arsenate-oil-Black Leaf 155 schedule. Since codling moth is of minor importance at Guelph, the tests were against conditions of the foliage and European red mite. The lead arsenate-oil schedule gave excellent foliage and almost 100 per cent. freedom from red mite. DDT in combination with oil resulted in foliage injury. DDT alone (no miticide) favoured red mite. By August the leaves in this block were yellowish or bronzed in appearance with heavy mite infestation. Budmoth was almost non-existent in all test blocks in 1946.

Japanese Beetle

Members of the Department assisted with control work on Japanese beetle in co-operation with the Plant Protection Division of the Dominion Department of Agriculture.

Corn Borer Survey

Corn borer survey work was carried out in co-operation with the Dominion Division of Entomology.

Spray Service

The spray service program for the province, as in the past, was developed and carried on as a co-operative effort between this department and various provincial and federal departments. This work involves not only the preparation of the spray calendars but the following up of these with advice on times of application in various areas.

Nosema Disease of Bees

During the 1945 season heavy losses in the honey bee population were reported by apiarists across the province. These losses were attributed by some to the organism Nosema apis, a protozoan attacking the digestive tract of the adult honey bee. At the request of the Ontario Beekeepers' Association, and in co-operation with the Apiculture Department, certain investigations were carried out on this disease during the summer of 1946.

Beekeepers were encouraged to send in samples of any unhealthy bees for diagnosis, but no serious outbreak of the disease was noted during the season. The investigations undertaken were purely of a preliminary nature, and it is felt that this problem may warrant further consideration.

DEPARTMENT OF FIELD HUSBANDRY

Plant Introductions

Dr. O. McConkey of the Field Husbandry Department, who has been in China with U.N.R.R.A. during most of the past year, has sent back to the Department a fairly representative collection of seeds of different kinds of crop plants. These are mostly forage crop species, but include also cereal crops, field roots, some miscellaneous legumes, and a number of samples of potatoes.

A large number of seedling potatoes, obtained through the co-operation of the Dominion Department of Agriculture potato-breeding group at Fredericton, N.B., and a smaller number, secured from the U.S.D.A. breeding station at Presque Isle, Maine, are showing resistance to scab, blight, and physiological troubles. Some are already giving promise of producing good quality tubers.

New cereal and forage crop productions from various U.S. breeding stations were introduced and are being tested in comparison with our standard varieties.

Breeding and Selection Activities

Resistance to all known races of leaf and stem rust of barley has been combined in a number of promising selections. To this combination are being added smooth awns, resistance to mildew, and a definite improvement in malting quality. Similar advances are being obtained in oats, winter wheat, and forage plants. A representative collection of seed from new potato hybrids was secured, and is being increased for further study in the summer of 1947.

Additional apparatus added to the Department quality test laboratory has made possible more accurate evaluation of new productions, particularly in cereal crops. This work has been supplemented by quality testing assistance on the part of the Animal Nutrition Department of forage crops, and of barley by several outside firms; both with winter wheat and soybeans there has been help in quality testing by outside firms.

Variety Testing

Variety testing, both on the experimental grounds at the Ontario Agricultural College, and in various soil climatic zones in the Province of Ontario, is a very essential part of the general program of crop improvement. New introductions are tested prior to their general distribution and the areas are established where such productions can be most profitably grown.

The following is a list of the number of test plots of each kind of crop that was grown in the crop year of 1946:

Winter Wheat	1700	Forage Crops	600
Oats	1485	Field Corn	612
Barley	1125	Potatoes	600
Sovbeans	1200		

This makes a total of 7,322 plots to be seeded, recorded, harvested, threshed, etc., during the season.

Seed Increase and Distribution

This department furnishes pure seed of the more important varieties of crops grown in Central Ontario. After three years' purification most of such seed is sent out as Foundation or Elite seed, and is sold to registered seed growers who in turn raise pure seed for the growers in general.

In the spring of 1946 sufficient seed was distributed to plant the following acreages of the varieties listed:

Galore Barley	18.5	acres	Junior No. 6 Winter		
Barboff Barley	21.5	66	Wheat	6 8	acres
O.A.C. No. 21 Barley	5	6.6	Wong Winter Barley		
Montcalm Barley	4	66	Horton Winter Rye	4	66
Beacon Oats			Oron Orchard Grass	60	66
Erban Oats	13	66	Redon Red Clover	60	46
Alaska Oats	12	66	Medon Timothy	60	66
Dawson's Golden Chaff			Alon Alsike Clover		66
Winter Wheat	32	6.6			

Special Plant Studies

The following special research problems were underway during the year:

- (1) A study of the effect of 2,4-D on crop plants, when applied at varying concentrations and at different stages of development of the plant.
- (2) A special study of the effect of vernalization of winter wheat on its growth characteristics and ultimate yield and quality. Different durations of the treatment and different temperatures of treatment were studied.
- (3) Factors influencing seed setting in legumes and grasses. A number of different treatments were included, such as a comparison of different nitrogen carriers in seed setting, clipping at different stages of development, the use of non-nitrogenous plant foods including trace elements, etc.
- (4) Research on the factors affecting the yield and composition of soybeans. Inoculation, different dates and rates of planting, variations in the plant food, and other treatments of like nature were tried.
- (5) Research on the production of a disease-resistant, smooth-awned, highyielding malting barley. Very material progress has been made in this connection.
- (6) A special investigation of the influence of such factors as soil climatic zone, application of different commercial fertilizers, etc., on the yield and quality of several varieties of winter wheat.

DEPARTMENT OF HORTICULTURE

Preserving Fruits and Vegetables by Freezing

Comprehensive freezing trials were made with new seedlings and varieties in an attempt to find varieties which freeze with the retention of better eating quality than is possible with most of those now available.

Effect of Plant Nutrition on the Development of Vitamin C

Thirty water culture tanks in the greenhouse were used to grow to maturity about 900 tomato plants under conditions of controlled feeding. The development of vitamin C in the vegetable parts and the fruits was measured. The work shows that for all practical purposes the amount of vitamin C is not affected by the nutrition of the plant unless the latter results in a rather marked abnormal growth.

Vegetables on Marsh Land

Research, experimental, and extension work was begun on the Holland Bradford Marsh. The area comprises approximately 6,688 acres, of which about 4,368 acres are under cultivation. The five chief crops are onions, potatoes, carrots, lettuce, and celery. The next four crops in importance are spinach, beets, cabbage, and cauliflower.

Toxic Effects of Sulphates and Chlorides

Study is being made of the amounts of sulphates and chlorides in greenhouse tomato crop soils to ascertain the quantities of each that are detrimental to a profitable yield.

Gladiolus Gardens and Variety Trials

The garden of standard and new varieties of gladioli was maintained in 1946. Over 300 varieties were grown. Forty new varieties were added and records of the performance and quality of these were taken during the flowering season. A comprehensive report on the newer varieties was published in the Canadian Gladiolus Society's Annual.

In co-operation with the Canadian Gladiolus Grower's Council a test garden was operated to provide information regarding the quality of gladiolus seedlings prior to introduction as named varieties. Bulbs of 62 seedlings were grown and recorded during the season; 10 seedlings received A rating.

Trials started in 1945 to determine the suitability of newer varieties of gladioli for greenhouse forcing were continued; 26 varieties were tested in 1946.

Lily Breeding

Lily hybridization and selection were continued. The new variety "Cardinal" which was released to growers for trial will be introduced in fall 1947. Two others are being propagated and as soon as sufficient stock is available they will be distributed for trial.

Greenhouse Soil Testing Service

Approximately 3,000 soil samples were analysed for the major nutrient elements and suggestions regarding fertilizer treatment were made. This service was extended to all Ontario greenhouse operators.

Chrysanthemums

Thirty-five varieties of chrysanthemums were tested for quality, productiveness, and response to artificial shading and lighting. These represented the newer introductions to the trade and were inspected by a number of commercial growers.

An extensive experiment was set out to study spring production of chrysanthemums. The effect of length of growing period and temperature on the quality and productivity of 19 varieties was investigated.

Watering of Greenhouse Crops

(a) Four concrete benches were constructed to study the effect of constant water level culture on the growth of such crops as chrysanthemums, stocks, cyclamen, hydrangeas, and pot mums. (b) Twenty-four tensiometers were used throughout the greenhouse to investigate the water requirements of various greenhouse crops.

Hydrangeas

Studies of growth factors, pH control, and flower colour were conducted. This work has shown that hydrangeas of excellent quality and desired flower colour can be produced in Ontario.

DEPARTMENT OF PHYSICS

Courses of Instruction

The work of this department, which this year was separated from the Department of Agricultural Engineering, has become largely that of teaching theoretical and applied Physics and Mathematics.

Several of the existing courses have been enlarged and revised; new courses have been added with the purpose of helping students in the new options (Agricultural Economics and Agricultural Mechanics).

Investigation and Extension

The Department has continued to be a weather station for the Meteorological Service of Canada. Weather data reports have been given to other College departments, and outside firms, chiefly insurance investigators and fuel oil companies.

The Department has also aided in various phases of research work in co-operation with other departments, particularly with regard to irradiation of Gladioli cormlets and with regard to electrical characteristics of butter for determining which a satisfactory instrument, based on electronics. was developed.

With the assistance of the Field Husbandry Department some preliminary tests have been made on the Universal Grain Moisture Tester for an Electrical Laboratory in Toronto.

DEPARTMENT OF POULTRY HUSBANDRY

Short Courses

Owing to the increased number of classes in the regular courses it was not possible to repeat the Poultry Short Course given in January, 1947, as was done in 1946. Two special short courses in Egg Candling and Grading were given in the Fall, as well as a short course in Chick Sexing.

Poultry Option Established

Courses of study for a Poultry Option, having been approved by the respective governing bodies, will appear in the new college calendar and be available to students in the Fall of 1947.

Research Projects

Inbreeding and outcrossing: A study of inheritance in inbred and outcrossed lines in relation to the effect on egg production, size of eggs. and size of birds.

Refrigeration of poultry meat: Testing various methods of freezing poultry, both raw and cooked, including undrawn, drawn and stuffed with various kinds of dressing, using both fryers and fowl. Temperatures, length of time in storage, and methods of defrosting were studied. The work was done in co-operation with the Department of Horticulture.

Hatchability of turkey eggs as influenced by range and confinement rearing of hens: Range reared hens X range reared toms, confinement reared hens X confinement reared toms, range reared hens X confinement reared toms and confinement reared hens X range reared toms. Results indicate no significant difference in hatchability, fertility or egg production between the various groups.

Relation of body type and size to egg production, fertility, and hatchability in turkeys: Comparison of the broad-breasted type with variations in depth and length of body has indicated the importance of balance in body type and the dangers of extremes in any particular factor of shape.

Pigmentation of turkey eggs as it effects hatchability: Lack of pigmentation is not a factor in hatchability except in so far as the lack of pigment is associated with poor shell texture.

Turkey breeding project: The present breeding program is aimed at reducing the size of the present broad-breasted Bronze bird but at the same time improving the body type, egg production, fertility, hatchability, livability of the poults, and growth and efficiency of feed utilization. All breeding stock is trap-nested and pedigree-hatched.

The effect of addition ascorbic acid in turkey breeder mash: The addition of increased levels of ascorbic acid to practical turkey breeder mashes did not increase egg production. hatchability, or growth, indicating that such rations did not require further fortification with ascorbic acid.

Choline requirements of turkeys: This project was continued from 1945. Twelve groups of 25 birds each were reared in porches for 24 weeks. Two basal rations were used, one supplemented with a high level of soybean oil meal, while in the other protein of animal source was mainly used. Varying amounts of synthetic choline chloride were added to try to establish optimum levels. Bi-weekly weighings were made over the 24 week period. The results of this work are currently being prepared for publication in "Poultry Science".

Mineral requirements of turkeys: A study of the levels and ratios of phosphorus and calcium in the rations of turkey poults to produce optimum growth, calcification, and efficiency of feed utilization. The vitamin D was maintained at a level of 200 A.O.A.C. chick units per hundred grams of feed. The results of this project are being prepared for publication in "Poultry Science".

Other turkey experiments: The supplemental value of liver meal and dried brewer's yeast, when added to standard rations, have been studied and the results will be published at an early date.

The cause and control measures in relation to the widspread occurrence of "Dermatitis" have been undergoing careful study. While certain vitamins are effective in helping control this trouble there is some possibility such troubles as over-heating, chilling, over-crowding, and flushing may be contributing causes or factors in this trouble. Further study of the problem is planned.

The incidence of "perosis" and other nutritional and deficiency problems is being investigated. All the common deficiency disorders have been produced by the use of diets deficient in the known nutrient fractions causing such troubles. This information makes possible more accurate diagnosis of such conditions in the field work.

Egg shell quality in chickens: A major experiment in the study of egg shell quality and hatchability was carried on. Types and sources of vitamin D, the effect of trace elements and iodinated casein were studied. Methods of measuring egg shell quality were tested.

The effect of cholesterol feeding and excitation on Leghorn cockerels in the production of atherosclerosis and coronery thrombosis. This project was carried on in co-operation with the University of Western Ontario and the Department of Animal Nutrition. A group of 500 birds, divided into four lots.

were subjected to controlled cholesterol feeding and various forms of excitation and frustration. Results to date have been important and there is some indication that atherosclerosis may be an important factor in chicken mortality, even under so-called normal conditions. This project is still in progress.

Extension

During the past year the Ontario Accredited Flock Policy and the Ontario Poultry Breeding Station Policy have been amalgamated under the Ontario Poultry Breeding Station Policy.

This stock improvement and disease eradication program includes culling, banding, testing for Pullorum carriers, and inspection of flocks as sources of hatching egg supply. All blood samples drawn are tested for both Standard and Variant strains of Salmonella Pullorum.

Approximately 1,271,433 chickens, located in every county and district of the Province except Haliburton and Patricia, were culled and 1,071,433 in 2,630 flocks were banded. In addition, 7,547 turkeys in 72 flocks were banded. This represents an increase of almost 100,000 more chickens banded in 1946 than in 1945. There was also an increase in the number of turkeys banded.

The Pullorum Testing was carried on in co-operation with the Department of Bacteriology, the latter Department supplying the supervision of the testing laboratory and reading all tests, the Poultry Department providing the operating personnel in the laboratory and in the field. During the season 278,788 chickens were tested with the standard tube test for both Standard and Variant types of Pullorum. A total of 631,000 individual tests were made in the laboratory, which included primary and retests of some chickens and 19,639 turkeys. In addition, 525,366 chickens were tested in the field, using the rapid-whole-blood test; a total of 1,156,366 tests for the season.

The percentage of reactors was the lowest in the period since testing was started in the Province. In the 1,071,433 chickens tested the reaction was .3 per cent. In the 19,639 turkeys tested the reaction was .06 per cent.

DEPARTMENT OF SOILS

The activities of this department, which was newly established in October, 1945, were concerned primarily with the completion and equipping of classroom and laboratory facilities and the building up of an organization for an enlarged program of teaching, research, surveys, extension, and advisory services.

Soil Surveys

Three mapping parties and one inspection party were placed in the field. At the close of the season the areas surveyed and mapped included Wellington County, 652,160 acres; approximately one-half of Perth County, 268,800 acres; and in Huron County, 100,000 acres; making a total of 1,020,960 acres.

Highlight of the season's survey activities was the New York State-Ontario Joint Correlation tour covering a period of two weeks, during which a member of the Dominion Experimental Farms Service, two members of our own soil survey staff, and three members of the U.S. Bureau of Plant Industry Soil Survey Division, Inspection Service, together studied regional soil profiles and their classification on both sides of the border. As a result, our field work benefited greatly and certain problems in field classification were considerably clarified.

Soil Testing and Advisory Service

Over 1,700 persons took advantage of the advisory service and sent in 4,540 soil samples for testing and recommendations. Each sample represented a problem area for which advice on soil management was desired.

Soil Conservation and Farm Planning Projects

Patterned after the farm planning done by the United States Soil Conservation Service, a number of soil conservation demonstrations were laid out on selected farms in co-operation with the county agricultural representatives and their local committees or county crop improvement associations. Nineteen farms, ranging in size from 85 to 840 acres, were surveyed and mapped on aerial photographs, scale four inches-one mile, and plans with revised land use, rotation adjustments, strip cropping, etc., as suited to the land in question, were provided to each co-operator.

Fertilizer Experiments and Demonstrations

Ammonium Nitrate — Nitraprills — Fifteen experiments with ammonium nitrate (Nitraprills), 33 per cent. N., as top dressing for winter wheat were conducted in eight counties on ten different soil types. Yield increases ranged from as low as 0.3 bu. to as high as 29 bu. per acre.

Thirteen experiments with Nitraprills as top dressing for hay were conducted in seven counties on nine different soil types. Increases in yields ranged from less than one-half ton to over two tons of hay per acre.

In seven pasture top dressing experiments with Nitraprills on seven soil types in as many counties, farmer co-operators reported very satisfactory increases in volume and earliness of pasture, and that generally, cattle pastured the top dressed areas before they began to pasture extensively on the unfertilized part of the field.

Potash-Magnesia relationships: Under a research fellowship granted by the International Minerals and Chemical Corporation, Chicago, an investigation of the effect on crops of source of potash, with and without magnesia, was commenced during 1946. Ten crops were used for the study. The experiments were located on Fox sandy loam, Waterloo County, and on the Pontypool sand in Durham County.

Potash fertilizers: Several experiments involving rates of application of fertilizer and methods of placement of fertilizer for potatoes were conducted in Simcoe County. A study was made also of the effectiveness of certain amendments in reducing the incidence of scabby potatoes.

Methods of application of fertilizers: Continuing a study commenced in 1944, a standard 2-12-6 fertilizer, at rates of 200 and 400 lb. per acre, respectively, was applied for wheat, (1) on the ploughsole when the land was ploughed and (2) in the row with the fertilizer-grain drill at the time of seeding. Results to date indicate that as yet the plough-sole method of application of fertilizer on winter wheat cannot be recommended as superior to the usual practice of drilling the fertilizer with the grain at time of seeding.

Fertilizer demonstrations with peas: On sixteen farms, in eleven counties, demonstrations of the value of fertilizer for field peas were conducted. In twelve cases, increases in yield ranged from three bu. per acre to twenty-seven bu. per acre. The benefit to be derived from the use of commercial fertilizer is greatly influenced by the nature of the preceding crops and their manuring, the incidence of weeds, the level of fertility of the soil, and the amount of farmyard manure applied.

Pot-Culture Studies

One series of experiments in the greenhouse was planned to study the effects of lime and increasing amounts of phosphate on the reaction, soluble phosphorus content and productivity of Haldimand clay, generally considered to be a markedly lime and phosphorus-deficient soil. Barley was used as the indicator crop, and was grown to maturity, harvested for dry matter yields and analysed for its phosphorus content as affected by the various treatments.

It was found on both limed and unlimed soil, that increasing the amount of applied phosphorus resulted in increased yield of dry matter, and an increase in the phosphorus content of the plants. On the limed pots, the phosphorus content of the whole plants receiving the highest phosphate dressing was more than four times that of plants which received no phosphate treatment.

Soil Fertility and Lodging of Grain

The study of factors affecting the strength of straw and lodging of spring grain in Oxford County commenced in 1945 was continued during the past season. The work consisted of field studies, laboratory studies, and a careful survey of all available literature from other experiment stations.

Test plots and observations on representative farms indicate that, in some cases, the use of mineral fertilizers supplying more than the usual amounts of phosphate and potash, drilled with the seed, has definitely reduced the degree of lodging. On the other hand, the rotation practised, the amount of manure applied before the grain crop, the ploughing down of legumes, are also observed to be determining factors and hence, the study is being continued for another year.

LIBRARY

Microfilm Reader

To broaden the field from which information may be obtained a microfilm reader has been installed. References which are not in the Library can be photographed and made available in this way at a very small cost.

Statistics

A number of out-dated and worn-out books were withdrawn during the year and 760 new books were added to the Library. The total number now stands at 46,598. The total circulation of books this year was 13,238 — a great increase over last year.

DEPARTMENT OF PHYSICAL EDUCATION

Inter-Collegiate Activities

The regular inter-collegiate sports carried on were: rugby, soccer, track, harrier, golf, tennis, boxing and wrestling, basketball, and swimming.

Intramural Activities

A special effort made this year to provide a complete intramural sports program for O.A.C. and O.V.C. students resulted in a record participation. Two trophies were donated by Year '45 to assist this plan.

Other Activities

Regular classes in Physical Training were conducted in the gymnasium for those who did not participate in the intramural competitions or for those who required special remedial exercises.

DEPARTMENT OF PUBLIC RELATIONS

On January 1, 1947, the Extension Department became the Department of Public Relations. Owing to the nature of the work done it was felt that the new designation was more applicable.

Exhibit Extension Service

Ever increasing demands are being made on our facilities for making exhibits. Work now occupies the time of two full-time and two part-time employees. Exhibits were placed for the Ontario Agricultural College and the Ontario Veterinary College at all worth-while exhibitions.

Photographic Extension Service

Visual aids are in great demand for all phases of teaching, research, and extension work. Two full-time employees are occupied with the producing of slides, photos, and film strips for the Ontario Agricultural College, Student Publications, and Farm Press.

Film Extension Service

- 1. The Film Library showed 1,598 films to 172,881 persons during the year. The service includes machines and operators for O.A.C. and O.V.C. class rooms. Previews of films from anywhere in the world are provided for to all departments. The Library has 164 films and 45 film strips, and distributes a catalogue.
- 2. Rural Film Circuits This service supervised 7,935 two-hour programs for school children and adult audiences comprising 684,682 persons through 32 film circuits in the province.

Packet Loan Library Service

Material provided for speeches, plays, and debates continues to be popular with organized agricultural groups.

Publicity

Practical hints and news items have been supplied to daily and weekly papers, agricultural press, and radio every week. Two radio broadcasts were carried out from the campus. Twenty-five talks were recorded for transcription over popular radio stations.

An agricultural bulletin service was maintained. Publications and typed materials were prepared for O.A.C. and O.V.C. organizations.

Housing Registry

Accommodation for 100 student veteran families was found.

Dean and Counsellor

Attached to this department in co-operation with the President's office is the dean who maintains a counselling service to assist students in their many problems.

Visiting Groups. Conferences, and Field Days

Arrangements were made for accommodation, meals, meeting rooms, tours, and entertainment for some 33,000 people — impressive evidence of the importance of the College as a Provincial Community Centre.

MACDONALD INSTITUTE

Reopening and Registration

Macdonald Institute reopened in September, 1946, after being closed for a period of five years. A One Year Course giving training in the practical arts of homemaking was offered. The total registration for the session 1946-47 was 108. Over 500 letters were received requesting information about the courses to be given.

Courses

The content of the One Year Course has been changed somewhat, but every effort is being made to continue to emphasize its practical application. Because of the appearance on the market of so many new synthetic fabrics and fabric finishes, it was felt that more time should be spent in studying the types and qualities of fabric to assist graduates to select and buy materials best suited to their needs. Consequently an expanded study of textiles has been made a major division of the course.

ONTARIO VETERINARY COLLEGE

During the past academic year, 1946-47, the College enrollment was 348 students, of whom 211 were residents of Ontario. Seventy-two per cent. of the student body is comprised of war veterans. The average age of the undergraduates is 24.65 years, which is almost identical with that recorded in last year's report. The student body consists of 340 male students, and eight female students.

During the year, through the sympathetic consideration of the Honourable the Minister, reclassification of the staff was effected: so that the College faculty now consists of 25 members, of which number there are five professor heads, six professors, four associate professors, and five assistant professors. Combining academic, extension, administrative, and housekeeping staffs, therefore, the College has a total staff of 71 persons.

ACADEMIC STAFF

We regret very much the resignation, during the year, of two members of our staff. Dr. H. J. Griffiths left the Ontario Veterinary College to take a position with Washington State College. Dr. C. E. Phillips resigned from our staff to take a position, which was a definite promotion, with the University of British Columbia. We wish both of these staff members every success.

Assistance in our teaching programme has been obtained from Dr. M. C. Dinberg, of the Ontario Department of Health, who gave instruction in histology; and from Dr. J. A. Campbell, of Toronto, who gave instruction in zoology. Dr. C. E. VanRooyen, of the School of Hygiene, University of Toronto has assisted us in the field of virology. Dr. A. E. Broome, Kitchener, was appointed as a temporary lecturer for the academic year, to give a course of lectures in radiology to the third year class.

Additions have been made to our staff, during the past fiscal year, as follows: Department of Anatomy — Dr. G. K. Boyce, Dr. B. J. McSherry, and Dr. J. H. Ballantyne; Department of Medicine — Dr. J. A. Henderson; and Histology — Dr. J. D. Schroder. Dr. J. W. MacPherson and Dr. E. F. Pallister also joined our staff during the year.

Preliminary re-arrangement has been made in the teaching staff as follows: Dr. C. E. VanRooyen will continue to give instruction in preventive medicine and virology. He will be assisted by Dr. C. Rhodes, also of the School of Hygiene. Dr. Ralph LeGrow will join our staff on July 1, 1947. It is planned that there will be two other appointments, one in the Bacteriological Department and the other in the Clinical Department.

An initial start has been made toward post-graduate training of faculty members. Dr. J. P. Gilman spent the past year at Michigan State College. He will return on June 1, 1947, and assume responsibility for instructional work in embryology, histology, and genetics. Dr. T. Lloyd Jones and Dr. J. D. Schroder, who conducted this work capably during Dr. Gilman's absence, will join the Pathological Department. Dr. D. L. T. Smith, who has spent the past year and a half taking post-graduate work at Banting Institute and the School of Hygiene, Toronto, will assume duties in the Pathological Department. The Pathological Department will be responsible not only for the work in pathology, but also for work in histology and embryology, for the conducting of post-mortems on specimens of tissue removed by autopsy, and for the forwarding of reports on these post-mortems to practitioners. Dr. V. R. Brown spent three months in post-graduate study at Michigan State College.

LENGTHENING OF THE UNDER-GRADUATE COURSE

Considerable thought has been given to the advisability of lengthening the course in veterinary medicine to five academic years. In view, however, of the large number of veterans now among the student body — men who have spent three and four years overseas — it was decided to defer lengthening the course, and instead to prolong the academic year to approximately 32 weeks.

In addition, a regulated internship period between the third and fourth years has been made obligatory for all students. This internship will become effective in the 1947-48 session. All third year students will continue study, following completion of the annual examinations in May. During the months of May and June, they will cover work ordinarily taken in September and October of the fourth year. During the months from July 1 to November 1, the students will be rotated over fields of practical study: one month in Meat Inspection, one month in field work, and two months in general practice. With these innovations, the course, in reality, will extend four and one-half academic years. The students will be placed in governmental work and with general practitioners, selected, as far as possible, in the student's home province and close to him home.

CURRICULUM CHANGES

A definite change has been made in the curriculum. All students, to gain entrance to the College, must have at least five months' farm experience. In addition to this, a course in orientation will be included in the first year, and students will be required to pass a practical examination. A course in agricultural geography will be given during the coming session, 1947-48. Instruction in pathology will be commenced in the second year, and will continue throughout the third year. The fourth year course in pathology will be confined to pathology of special diseases and to clinical pathological demonstrations.

The Department of Preventive Medicine will be established to include the sections of Bacteriology, Immunology, Virology, and Public Health. Public Health embraces the course of instruction in food hygiene, and includes instruction in epidemiology, statistics, and communicable disease control, along with preliminary training in sanitary engineering.

POST-GRADUATE FACILITIES

With the completion of the new wing, approach will be made to the University of Toronto, with regard to facilities and arrangements for post-graduate work to be done at the Ontario Veterinary College. Arrangements in this connection have not yet been completed, but it is hoped that definite plans will be made within the next academic year.

SUBSIDIZED VETERINARY UNITS

Subsidized Veterinary Units have been established in the following districts:

Matheson—established December, 1946; veterinary officer—Dr. C. F. Knell.

New Liskeard—established April, 1946; veterinary officer—Dr. F. C. Nelson.

Algoma—established July, 1945; veterinary officer—Dr. W. Brisbane. Manitoulin Island—established October, 1946; veterinary officer—Dr. S. J. Morrison.

Rainy River—established June, 1946; veterinary officer—Dr. W. Hill. Kenora—established October, 1946; veterinary officer—Dr. M. H. Horwill.

A uniform contract plan is in operation in all the above subsidized Veterinary Units, with the single exception of the Kenora Unit.

REGIONAL VETERINARIANS

According to plan, regional veterinary officers are to be appointed to assist veterinary practitioners in diagnostic work and by office consultation. To date, one such officer has been established, at the Kemptville Agricultural School. Dr. Eric Pallister was appointed regional veterinary officer, in October, 1946, to serve the counties of Lennox-Addington, Frontenac, Lanark, Carleton, Russell, Prescott, Glengarry, Stormont, Dundas, Grenville, and Leeds. A diagnostic laboratory is to be established at the Kemptville Agricultural School.

DEPARTMENT OF EXTENSION

There has been an increase in the diagnostic services offered through the Extension Department of the Ontario Veterinary College. A brief summary of each of the various activities follows:

Brucellosis

During the year, 82,265 blood samples were examined at the College laboratory. Of these, 21,754 were samples from animals intended for export. A questionnaire, forwarded to breeders who had received Strain 19 Br. abortus vaccine from the College for the past five years, revealed the fact that in Brucella-free herds the percentage of abortions among calfhood vaccinated animals was 0.25%, and in Brucella-infected herds the percentage of abortions among calfhood vaccinated animals was 2.8%.

Continued observation of a group of 30 herds in which abortion infection was prevalent showed the value of adult vaccination in lessening the severity of infection.

During the year, 98,659 doses of Brucella abortus vaccine were distributed for calfhood vaccination.

Experimental work in connection with the preparation of vaccine is now under way.

Mastitis

The College laboratory examined 12,932 samples of milk for the presence of streptococcal agalactiae, by far the most frequent cause of mastitis infection. Of these, 2,718 samples were submitted by veterinarians.

Studies of infected herds were undertaken. These included:

- 1. Investigation of the optimum dosage of penicillin for infusion into the udder.
- 2. Tests for penicillin sensitivity, conducted on 240 strains of mastitis organisms isolated.

Toward the end of the year, penicillin bougies in which penicillin is suspended in beeswax and an organic substance, for insertion up the teat canal, were used. Penicillin bougies used in this work contained 25,000 units of penicillin. Treatment was found to be effective, and did not inconvenience the animal nor cause a diminuation in the milk secretion. Investigational work

is being continued to determine the least amount of penicillin required to effect an improvement in cases of mastitis infection.

During the past year, in addition to routine work, a survey was made of the producing animals supplying milk to Guelph, and also of the animals in three government herds. Our survey work will continue throughout the coming year. Indications are that more encouraging results will be obtained in connection with the use of the penicillin bougie, so that a mastitis control programme on a community basis may be made a practical procedure.

Poultry Diseases

Examinations of 5,229 birds were made in the College laboratory. These birds were submitted from various communities throughout the province.

In addition to this, experimental work was conducted in connection with the use of sulfa drugs for the alleviation of coccidiosis infection. An outbreak of fowl typhoid was identified on one premises during the year. The flock was sacrificed. Erysipelas infection was identified on four occasions during the year. Two of these instances were among turkeys, and two among chickens, in Central and Southwestern Ontario. Erysipelas infection had not been evidenced for 12 years prior to this.

An investigation of the toxicity of DDT was also conducted, and the findings published.

Biological products for the prevention of poultry infections were distributed to the extent of: 267,800 doses of fowl pox vaccine, 2,900 doses of pigeon pox vaccine, and 101,500 doses of vaccine for the prevention of laryngotracheitis.

Other Services

Investigational projects concerning pulmonary emphysema of cattle, infectious rhinitis of swine, and sudden death in calves were continued. Because of the heavy tax imposed on the staff by this year's large student enrollment, however, some work had to be deferred.

In addition to serving the farmers and veterinarians of the Province, the Ontario Veterinary College Department of Extension serves also the Ontario Agricultural College and the Ontario Reformatory. This service to the two other provincial institutions provides the Veterinary College with material for teaching purposes as well as with a necessary and desirable contact.

KEMPTVILLE AGRICULTURAL SCHOOL

The Kemptville Agricultural School was instituted to serve the agricultural and home life of Eastern Ontario. It can be said that this school has served its purpose in many ways. Not only has it graduated students who have been leaders in agriculture, on the farm and in professional life, but each year there are more and more graduates in Home Economics, Agriculture and Dairying who are filling many important positions in community life.

Another indication of the lasting appreciation and respect for the School, on the part of former graduates, is the fact that for the first time in its history the opportunity has arisen to present diplomas to sons of previous graduates. We all feel very proud of this fact.

Possibly the greatest indication of the worth of K.A.S. is the ever increasing demand for extension services by the farming public of Eastern Ontario. These requests are not limited to any one special line of Home Economics, Agriculture or Dairying, but include the many, varied sciences as they apply to agricultural industry and home life. Frequent requests are received in connection with drainage surveys, soil testing, information on field crops, horticulture, entomology, live stock, home planning and other practical problems.

The School endeavours to keep in step with the requests as they develop. Special attention has been given to a study of the effectiveness of many of the newer insecticides and poisons that have come on the market recently, in their adaptation to field crops and animals. We welcome very much, as I am sure the live stock breeders of Eastern Ontario do also, the establishment of a unit of the Ontario Veterinary College at the Kemptville Agricultural School.

During the summer and fall of 1946, it was necessary to erect additional buildings to accommodate the increased number of students. During the last year there were the following enrolments:

Agriculture	117
Dairying	44
Home Economics	23
Veterans' Land Act	40
	224

This necessitated the building, in a very short time, of extra sleeping accommodations, another dining hall and three new classrooms. Even with this extra room it was difficult to arrange our classes and it was necessary to repeat the lectures to both the junior and senior years in Agriculture.

With the increase in students the need has also developed for a more complete and larger library. To meet this need another building is being completed on the northern campus. The enlargement in this regard has made it necessary to establish another Division to the school administration — The Division of English. The School now has the following main Divisions:

> General Office - Administration Officials Animal and Field Husbandry Chemistry, Soils and Fertilizers Dairy English and Economics

Farm Mechanics — Agricultural Engineering and Drainage

Home Economics Horticulture Poultry Veterinary Science

The Kemptville Agricultural School wishes to acknowledge the co-operation and assistance given to the School by the following:

Ontario Adult Education Board; Agricultural Representatives Branch; Dominion Experimental Farm Services; Dominion Production Services; Ontario Women's Institute Branch; Ontario Live Stock Branch; Dominion Health of Animals Branch; Ontario Crops, Seeds and Weeds Branch; Dominion Department of Veterans' Affairs; Dominion Department of Veterans' Land Act, and the Agricultural Weekly and Daily Press.

ANIMAL AND FIELD HUSBANDRY DIVISION

The demand for breeding stock continued heavy with a particularly strong demand for Holstein bull calves. There was a slight reduction in the number of swine sold for breeding purposes.

The following animals were sold to herds in Eastern Ontario: eleven boars; six sows; four purebred dairy bulls; twelve purebred dairy cows and heifers.

The enquiry for sheep for breeding purpose was much lower than usual.

All heifers and cows were entered and carried on Record of Performance with the majority of the records being made in 305 day division. The high record for the year was made by a three-year-old Holstein heifer producing 16,739 lbs. milk. The average production for the Holstein herd was 12,852 lbs. milk, 477 lbs. fat, eight of records in the 305 day division. Fourteen cows and heifers completed records during the year, five of them being two-year-old and four of three three-year-old.

In the Ayrshire herd the average production was 9,415 lbs. milk with all records but one being in the 305 day division.

Although work was started on the land in the last few days of March, there was little growth until late in April and early May as the season was rather cold and wet. Later in the year crops suffered from a dry period with the result that hay and corn were not average crops but grain was good quality with good yield.

Frost every month of the summer reduced corn crop considerably.

The following is a summary of crops produced:

Oats — Beaver	560	bus.
Oats — Erban	528	bus.
Oats — Ajax		bus.
Oats — Roxton	115	bus.
Barley	170	bus.
Wixed Grain	135	bus.
Hay	25	tons
Ensilage Corn	225	bus.
Potatoes	1,000	bus.
Turnips	32	tons

The work in Field Husbandry was divided among potatoes, forage crops and weeds. An extensive experiment was planned and carried out to test

various fungicides on potatoes, twelve dusts and eighteen sprays being tested. A full report on this work was presented at the annual meeting of the O.C.I.A. and appeared in the proceedings published by this Association.

Realizing the need for stimulating interest in improved varieties of hay and pasture plants, a forage nursery was established. Six varieties of alfalfa, red clover, white clover, timothy and blue grass; four varieties of brome, meadow fescue and orchard grass and miscellaneous grasses and legumes were seeded in these plots. In addition to the pure species, seven mixtures were seeded. These pure seedings and mixtures were laid down so that the habits of growth, characteristics, and usefulness for pasture and hay could be observed and compared.

Weed spraying demonstrations and experiments were carried out in co-operation with the district fieldman of the Crops, Seeds and Weeds Branch in Eastern Ontario. Special emphasis was placed on serious weeds such as leafy spurge and cypress spurge, bedstraw, poison ivy, barberry and buckthorn. The above work included considerable roadside spraying. Complete data was taken at time of spraying and observations made at subsequent intervals. This information was compiled on record forms designed for this purpose and submitted to the Crops, Seeds and Weeds Branch and Dominion Department of Agriculture for their consideration.

Field days and crop tours were held to give farmers an opportunity of yiewing the results from these three lines of endeavour.

CHEMISTRY, SOILS AND FERTILIZERS DIVISION

The extension work of this Division can be listed under the following projects:

1. Permanent Fertility Trials

This project deals with the application of various fertility treatments on a twelve-acre field located near Merrickville and the recording of the results and observations over a period of the past eight years.

2. Co-operative Cereal and Variety Tests

This work is carried on in co-operation with the Cereal Division of the Central Experimental Farm, Ottawa. Drill width tests using different varieties of oats and barley were carried out in several locations in Eastern Ontario and test yields secured from same. On four locations, fertilizer treatments were applied to ascertain any varietal response to fertilizer treatments.

3. Demonstrational and Special Plots

These projects included test trials on the following:

- (a) Securing residual data on previous applications.
- (b) Pasture fertility treatments.
- (c) Plow sole fertilizer applications.
- (d) Varying rates of application and the incorporation of boron, manganese and magnesium on tomatoes.
- (e) Fertilizer treatments on different potato varieties.

4. Soil Testing

This service continues to be of valuable assistance to those availing themselves of this service. Over fifteen hundred soil samples were received, tested and reports on the analysis and recommendations forwarded to farmers.

5. Meetings attended

Thirty-seven field and special meetings were attended when soil problems and fertility practices were discussed.

DAIRY DIVISION

The fifty-third session of the Dairy School for Eastern Ontario had an enrolment of forty-four students for the three months diploma course. Seventeen students were discharged from war service. Sixty-nine applications were received for the diploma course but twenty-five were unable to attend. The registration shows the following twenty-one counties or districts represented: Carleton 4, Frontenac 3, Glengarry 1, Grenville 1, Hastings 2, Leeds 4, North-umberland 1, Ontario 1, Oxford 1, Parry Sound 1, Peterborough 1, Pontiac, Quebec 3, Prescott 4, Prince Edward 3, Renfrew 1, Russell 3, Stormont 6, Timiskaming 1, Victoria 1, Waterloo 1, York 1.

At the conclusion of the course forty-one students wrote the examinations for the Dairy School dimploma and of these twenty passed with first class honours, fourteen passed with second class honours, and six obtained pass standing. The Montreal Provision Trades Association awarded one hundred dollars (\$100.00) prize money to stimulate competition among the students. The Kemptville Creameries Ltd. awarded two prizes of thirty dollars (\$30.00) and twenty dollars (\$20.00) to the highest students in buttermaking, and the S. F. Lawrason Company Limited, London, Ontario, donated a silver trophy to the student showing the best aptitude to dairy work.

The bacteriological service supplying lactic cultures to cheese factories, in particular, and other dairy plants was conducted from the dairy laboratories throughout the year. During 1946 nine hundred and seventy-seven of these cultures were supplied to two hundred and ninety-four cheese factories.

With a view to eliminating extraneous matter in cheese to a desirable minimum, tests for extraneous matter in curd were made from three hundred and forty-nine factories. These tests show that sixty-five per cent. were acceptable according to the food laws of export markets, whilst thirty-five per cent. were below an acceptable standard. These results show a considerable improvement as compared with similar tests made by the Dairy Research Division at Ottawa in 1943.

The usual laboratory services in dairy science were provided to the dairy instructors and dairy manufacturing plants in Eastern and Northern Ontario. During the year numerous visits were made to cheese factories, creameries, and dairymen's meetings and addresses on dairy subjects were given.

ENGLISH AND ECONOMICS DIVISION

The greatly increased reading requirements of a large student enrolment made existing library facilities inadequate. To meet this need a library building with a large reading room and a reference room was erected in the late autumn of 1946. This library will be organized and equipped before the 1947-48 term begins. Several hundred new volumes will be added. Student organizations, including Year '47 and the Literary Society, displayed a real interest by contributing paintings and texts for the new library. The decision to take this basic step in the development of a suitable library service was one which filled an urgent need. It will be of increasing benefit each year to the staff and students of this School.

The Ontario Department of Education kindly provided travelling library service during the term to augment the School library and also supplied an excellent text in civics for each junior student. These civics texts will be retained for use with the next term's juniors.

In an attempt to improve the standard of written and oral expression the instructor increased the frequency of practical assignments. Tutorial assistance, however, would permit greater attention on the necessary correction of individual faults. The large junior and senior year demand more time for exercise marking than it is possible for one instructor to provide.

FARM MECHANICS DIVISION — AGRICULTURAL ENGINEERING AND DRAINAGE

During the year this Division was engaged in lecturing and demonstrating to the Agriculture and Short Course students.

The extension work of this Division consisted of drainage assistance and engineering improvements on the farm.

The demands for drainage assistance were the greatest ever experienced in Eastern Ontario. There was a very noticeable increase in the number of applications for complete drainage plans. As a result the drainage staff of this Division was unable to keep up with the work. However, many of the surveys completed were not installed due to a shortage of tile and ditching machines. Assistance in a variety of drainage problems was given to ninety-three farmers. Thirty-seven surveys were made which consisted of profiles totalling 67,971 feet and drainage plans of 1,137 acres.

Assistance in planning and installing hydraulic rams, water systems, septic tanks, barn ventilating systems, and farm conveniences, and erecting farm buildings was given to twenty-eight farmers.

HOME ECONOMICS DIVISION

Six students from four counties enrolled in the second year and nineteen students from eleven counties registered for the first year. Most of the students made good progress during the term and it is expected that several will return for a second year.

The K.A.S. Royal Show again proved a very successful demonstration of achievements of the year in practical subjects such as Home Nursing, Home Furnishings, Clothing and Applied Arts.

Redecoration of one bedroom in the students' residence was undertaken as a class project with the senior students.

Residence Department

New equipment included a dishwasher as well as some small equipment for kitchen and dining room.

It was necessary to buy furnishings and bedding as well as small equipment and dishes for auxiliary accommodation.

Meetings Attended

Women's Institute District Annual Meetings

Dat	e Place		Subject			Attendance
May	21 — Elgin—Leeds Co.	Home	Economics	at	K.A.S.	75
	22 — Caintown—Leeds Co.	- "	66	66	6.6	110
	23 — Kingston—Frontenac Co.	. "	66	66	66	115
	29 — Kemptville—Grenville Co.	- "	46	66	66	75
	30 — Glen Ogilvie—Carleton E.		"	66	66	100
	31 — Kinburn—Carleton W.	- "	"	66	"	150

June 6 — Almonte—Lanark N.		66	"	"	130
13 — Moose Creek—Stormont		"	"	"	100
	D: 1	N. C			4 50
July 2-6 — Home Economics Conference		N.S.			. 150
Sept. 28 — Renfrew County Achievemen		laanamia	a at Ta		75
Day, Homemaking Club	Tiome E	Comonne	satr	A.S.	. 75
Groups Entertained					
Date Group					Attendance
April 16-17 School for Judges					. 25
May 8 Eastern Ontario Board of T	Trade				. 70
May 28-29 Peterborough County Junio	r Farme	ers			. 60
June 8 Alumni and Graduation					250-275
June 11 Seed Growers (Dinner)					. 53
June17-21 Agricultural Representative	s Confer	ence	~~~~~		90
June 24-28 National Film Board Confe	rence				. 50
June 28-29 County Weed Inspectors (I	Dinner)				25
July 27 Junior Farmers' Field Day					
Oct. 4-5 Junior Agricultural Fair					
Oct. 10 Waterloo County Junior Far					
Jan. 2-3/47 Junior Farmers' Conference					

HORTICULTURE DIVISION

The spring of 1946 was somewhat similar to that of the previous year, though temperature variations were not so extreme. A comparatively mild month of March was followed by a period of cool, wet weather. Conditions for pollination in apple orchards, though not good, were considerably better than the year previous, consequently, early varieties produced a crop better than sixty per cent. of average, though late varieties in many districts were comparatively light.

These conditions necessitated a number of visits to orchardists in various districts, to look into their varying problems and discuss remedial methods of culture. In this connection, it is interesting to note that where conditions had enabled growers to spray with fairly satisfactory results the year before and thus develop a healthy foliage throughout the growing season of 1945, the orchards produced very satisfactory crops of excellent quality.

Experimental work with some of the newer fungicides and insecticides was continued in connection with spraying of the School orchards. Those found more satisfactory were used to a greater extent. Many of our Eastern growers have small orchards in conjunction with their general farming operations. It has been our object to develop a spray policy as simple as possible, using one fungicide and one insecticide that can be used on more than one crop. The materials selected, either in the form of spray or dust, must be not only efficient but generally obtainable in varying amounts.

With particular reference to the work of the Horticultural Division, the purchase of a Fordson tractor, plow, tiller and orchard mower enabled the staff to keep the seasonal work up-to-date. At a later date a snow plow materially assisted the winter work of keeping roadways open despite exceptionally heavy snowfalls. There were times, however, when heavier equipment was necessary to cope with the conditions experienced after several very heavy falls of snow.

The large student enrolment had necessitated the addition to the staff in 1945 of a lecturer in Botany and Entomology. This work was again carried on during the school year 1946 by Mr. Roy Class, B.S.A., who also gave valuable assistance in addressing several meetings. The practical instruction in laboratory work was materially benefited by the addition of six student microscopes and a number of dissectors.

The most pressing need at this time is additional greenhouse space where practical instruction in Horticulture can be given during the winter and spring months to the number of students now in attendance.

Grateful acknowledgment is hereby made to the Central Experimental Farm and others who gave plants, shrubs or fruit trees of new varieties for trial in the School orchards, garden or grounds.

POULTRY DIVISION

During the hatching season of 1945-46 some work was carried on with relation to egg shell texture and its effect on hatchability.

All hatching eggs were candled and all mis-shapen eggs and those with blood spots removed. The remainder were divided into two classes, (1) strong shells, (2) porous or thin shelled eggs and those with rough large ends.

In order to have a check on results the first hatch was made from all eggs suitable in shape and size regardless of shell texture. In the second and third hatches, the eggs were divided into the two classes and hatched separately.

In the first hatch from all eggs, we secured a 63% hatch. There was a lack of uniformity in this hatch as some hens gave as high as 90% while others were as low as 9%.

In the second hatch, when eggs were divided into the two classes for shell texture, the strong shells gave us a 76% hatch as against $41\frac{1}{2}\%$ for the porous shells.

The third hatch gave $82\frac{1}{2}\%$ for the good eggs and 44% for the porous eggs.

This work could hardly be called an experiment, as with our limited equipment, it is impossible to carry check hatches. However, we are convinced that candling the eggs before setting will pay.

Besides the lectures to our regular students and to the Veterans' Land Act group a considerable amount of extension work was carried on. This extension work consists of assisting Boys' and Girls' Poultry Clubs, Farmers' Clubs, Women's Institute meetings and farm visits in relation to feeding, disease problems and general poultry management.

HORTICULTURAL EXPERIMENT STATION

This report briefly summarizes a few experimental projects and indicates the nature and scope of some other Station services. More detailed information on the work of the Station will be found in the 1942 Annual Report, and subsequent biennial reports.

STAFF CHANGES

A. N. L. Butler, B.S.A., M.S. (Associate in Research), has been appointed as a field investigator for vegetable canning crops. In recent years there has been a very substantial increase in the Ontario acreage and value of these crops and this has been recognized in the creation of the new position. Mr. Butler was appointed April 1st, 1946, on the recommendation of the Ontario Vegetable Marketing Board. The Board has undertaken to pay the salary attached to the position, the Ontario Department of Agriculture assuming travelling and other expenses.

E. A. Kerr, B.A., M.Sc., Ph.D. (Assistant in Research). Dr. Kerr's specialized knowledge in plant genetics make possible a needed expansion of the vegetable breeding work. In particular the breeding program with tomatoes and sweet corn is being greatly increased as part of the expanded general program of work with processing vegetable crops.

Project 461. Sod Treatments vs. Cultivation for Peach Trees. (J. R. van Haarlem.)

In a block of peach trees various sod treatments plus additional mulch or nitrogen are to be compared with clean cultivation plus green-manure crops, the orthodox treatment.

Project 462. Hose vs. Hand Thinning of Peach Fruits. (O. A. Bradt.)

Redhaven and Kalhaven are to be thinned by means of striking with a rubber hose attached to a short stick and by the usual method of hand thinning. Yield, grade of fruit, and growth of trees are to be recorded.

Project 463. Growth Rates and Dropping of the Developing Fruits of Several Varieties of Peaches from Shucks Fall to Beyond the June Drop. (O. A. Bradt.)

The fruits are to be measured every few days until they drop or until after the June drop is completed. The aim is to determine at what size the fruits drop and when the drop is completed in each variety. The work has a bearing on time of thinning and crop estimates.

FRUIT BREEDING

Distribution of Station Varieties and Seedlings

Accompanying Tables 1 and 2 briefly indicate distribution to both growers and nurseries of stock of Station originations.

Once they have been named and introduced, the main distribution of Station varieties is through recognized nursery channels. Nevertheless there is a small continuing demand from both growers and nurseries for true-to-name budwood, scions, and plants.

The indicated distribution of numbered Station seedlings (Table 2) is primarily a grower service, there being many growers who are willing and

anxious to try out promising seedlings. This grower experience and observation provides the Station with valuable additional information on which to base decision as to the commercial possibilities of the seedlings.

Table 1. DISTRIBUTION OF STATION VARIETIES 1945 AND 1946

	Grower Distribution			Nursery Distribution	
	No. of			No. of	
Kind and Variety	Contacts	Trees	Buds, Scions	Contacts	Buds
Velvet cherry	6	2	70	1	60
Vernon cherry	7	3	75	4	200
Victor cherry		1	55	2	100
Valiant peach	4		1,050	1	2,000
Vanguard peach	. 22	4	1,925	4	1,900
Vedette peach	. 2	1	400	2	2,150
Veefreeze peach			135	3	1,300
Veteran peach	. 7	3	1,100	3	2,225
		Plants			Plants
Valentine strawberry	31	935		3	225
Vanrouge strawberry		275		2	37

Table 2. DISTRIBUTION OF NUMBERED STATION SEEDLINGS 1945 AND 1946

Fruit	Number of	Total	Total	Number of Grower,
Kind	Seedlings	Trees	Buds, Scions	Nursery Contacts
Cherry Peach Pear Plum	10	24	1,085	15
	40	291	3,470	139
	2	49	15	9
	2	6	30	3
	54	370	4,600	166

DISTRIBUTION OF PROPAGATING MATERIAL

The distribution of true-to-name propagating material of many varieties of fruits has become a quite substantial grower nursery service by the Station. The extent of this service is indicated in Table 3, from which it will be noted that, in the four-year period 1943 to 1946, buds or scions of 296 varieties of fruits were given out to growers and nurseries. This distribution involved 666 separate contacts, most of these being grower visits to the station. In all 3,197 trees were distributed in this period, 46,120 cuttings and scions, and 193,505 buds.

Table 3. DISTRIBUTION OF PROPAGATING MATERIAL 1943 TO 1946
Standard Fruit Varieties

Kind	Number of Varieties	Trees	Distribution Scions	Buds	Number of Grower-Nursery Contacts
Apple	. 71	465	37,200	26,480	134
Pear		68	635	32,835	75
Plum	34	125	528	31,020	98
Cherry		74	340	4,315	46
Peach	. 34	198		89,270	140
Apricot	. 12	14	50	9,405	27
Grape		13	4,085		20
Nectarine		1	<u> </u>	180	6
Nut	. 11	269	54		23
Currant		73	3,098		39
Gooseberry	. 4		130		8
Raspberry		808			26
Strawberry		1,089			24
	296	3,197	46,120	193,505	666

FRUIT MATURITY STUDIES

An earlier study of size increase of peach fruits in the final week before optimum maturity served to point out the possible value of a more complete record of the changes occurring on the tree in this period in cherries, plums, and pears, as well as peaches. It appeared also to be equally important to measure some of the physical and chemical changes occurring in fruit picked at various stages of maturity and held in baskets at room temperature. In all of this work the interests of the fruit grower, the trade, and the consumer were kept in mind.

The kinds and varieties of fruits in the experiment were:

Cherry — Victor, Windsor, Montmorency.

Plum — Shiro, Lombard, Italian Prune, Grand Duke, Reine Claude.

Peach — Golden Jubilee, Veteran, Elberta.

Pear — Bartlett, Kieffer.

Records over a four-year period were taken at picking time and after holding in the basket at room temperature until ripe (cherries, after one week). Each year all pickings of most of the varieties were canned. From the data collected, only the changes occurring in the final 7 days before optimum maturity are reported herein.

Size. The increase in size (weight) in the final week on the tree ranged from 3 per cent. in Italian Prune and Reine Claude plums to 35 per cent. in Golden Jubilee peach. After picking, the loss in weight in the basket amounted to about one-half of one per cent. per day for all varieties.

Ground Colour. In some varieties there was a complete cover of red, blue, or yellow even a week before optimum maturity. In the other varieties there was a gradual change from green toward yellow colours. Ground colour changes continued in the basket, the most attractive colour being obtained from the optimum-maturity picking.

Spread of Red Colour. In those varieties having a red cheek there was a rapid spread of red colour over the surface. This spread of colour did not proceed further in the basket, except with the Lombard plum.

Intensity of Red or Blue Colour. In Victor, Windsor, and Montmorency cherries, also in Italian Prune and Grand Duke plums the intensity of the red or blue colour increased in the final week on the tree and there was further increase in the basket.

Sugar Content. There were steady increases in total sugars in the final week before optimum maturity. Further increases, usually of small proportions, occurred in the basket.

Acid Content. Differences in acid content between fruits, and between varieties, were very great. The fruit of most varieties decreased in acid content in the week previous to optimum maturity. In the basket there was a general tendency towards reduced acid content, especially in the picking at optimum maturity.

Pressure. Cherry fruits softened very slowly on the tree as did the peach varieties and Kieffer pear. Shiro plum, the peach varieties, and Bartlett pear changed pressure quickly enough to allow the use of pressure as an index of maturity. In the basket, cherries became slightly firmer, or did not change at all; plums and Kieffer pears were relatively slow to change; Bartlett pears and peaches lost pressure at the rate of 1 to 2 pounds per day.

Juice in Pulp. Pressure-extractable juice increased appreciably in some varieties but, in others, remained constant or decreased slightly. In the basket at room temperature there was usually a marked increase.

Days to Ripen. Picked at optimum maturity and held at room temperature, plums did not reach the best eating condition for 5 to 6 days. Peaches should be at their best in 3 to 4 days; Bartlett pears, in about 7 days; and Kieffer pears, in about 3 weeks. Picked 7 days before optimum maturity, the fruit took several days longer to ripen, but not as much as 7 days longer, except in Elberta peach.

Eating Quality. As the fruit was left on the tree to optimum maturity, there was a progressive improvement in eating quality at the ripe stage.

The Canned Product. Better eating quality and higher colours were obtained from fruit of the optimum-maturity picking than from fruit picked previously. The product from the earlier pickings was slightly firmer in texture, but there was no appreciable difference in cloudiness of juice. In cherries and plums, a product with less colour was obtained by canning immediately after picking.

NIAGARA FRUIT AND CONSUMER ACCEPTANCE

Shipping investigations in co-operation with the Ontario Fruit Branch over a four-year period, 1943 to 1946, with the Shiro plum, and four peach varieties, Fisher, Elberta, Golden Jubilee, and Veteran, have yielded the following general conclusions.

Maturity of Shiro Plums

At pressures on the pared cheek, from 2 to 6 pounds (pressure tester) equivalant to 5 to 10 pounds through the skin, Shiro will carry in good condition and give consumer satisfaction. There is a very obvious need for consumer education in the handling and use of plums. In many instances they are being used before they reach peak quality, and then for a purpose, as for canning, to which they are not well suited.

Maturity of Peaches

A maturity range of 4 to 12 pounds pressure through the pared cheek (equivalent to 6 to 18 pounds through the skin) seems to be quite satisfactory for shipping short distances without refrigeration, or longer distances, as far as Halifax, N.S., with refrigeration. Peaches of this maturity ripen in 3 to 4 days at room temperature.

Wastage from brown rot in growers' packs was often very extensive particularly when the consumers had to hold the fruit several days to ripen it. Fruit from orchards in which all recommended rot sprays were thoroughly applied showed practically no brown rot even when held several days in the home of the consumer.

With present equipment and operation methods, the cooling of loaded refrigerator cars is relatively slow. On this account there is some doubt about the economic benefits derived from the use of refrigerator cars for hauls of 36 hours or less.

For the most part the wholesalers passed the peaches along quickly to the retailer, and the retailers usually sold them within one or two days. The shorter the time interval between shipping and consumption the longer the fruit can be left on the tree and the higher its quality.

Some housewives are trying to can peaches before mid-August. Golden Jubilee picked around the middle of August is the first good canning peach. This fact should be given wide publicity among consumers.

Size Classes of Peaches

Separation of peaches into narrow size ranges permits more rapid packing and tighter packs. The present commercial No. 1 which contains peaches from $2\frac{1}{8}$ inches up is not an attractive pack. A three-layer pack of peaches differing not more than $\frac{1}{4}$ of an inch from one another has consumer appeal.

The largest peaches of a given picking are the least firm. Peaches 2½ inches and up, of reasonable maturity, do not carry well in baskets. They should be sold on local markets or shipped in compartment-style containers.

Certain consumers favour peaches of large size, others prefer the medium sizes. For canning, the regular No. 1 (2½ to 2½ inches) is preferred but for dessert purposes the Select grade size (2½ inches and up) usually has the preference. Even though there is no price differential to the grower it would probably pay in the long run to pack all peaches above No. 2 grade in the following size classes — 2½ to 2½ inches, 2½ to 2½ inches, 2½ inches, 2½ inches, and 2½ inches up.

Packages for Peaches

New packages make headway slowly. The six-quart heaped basket is favoured by many consumers because, being heaped, they think they are getting "good measure." Also it is a handy package to carry and holds a quantity of peaches which the average-size family can use readily. For small families for dessert purposes it is too large a package. For this trade a smaller package would be desirable. Package manufacturers should take into consideration two points: (1) ease of inspection of the pack at shipping point and (2) provision for air channels between packages when stacked in cars and trucks.

Peaches packed in sealed cases containing several consumer units may be subject to rough handling somewhere in their journey to the consumer's kitchen. Some employees do not realize that the contents are bruisable or, because the peaches do not "spill" out, do not care how they handle them. There is need for education in this field. There is some evidence too that the cases are made too deep and as a result an up-and-down movement of the peaches is possible. The result is an increased and perhaps excessive, amount of bruising.

Consumer Questionnaire

Many of the experimental packages of peaches were followed through to the homes of the purchasers. In addition to the data on these particular packages, the recorder collected information from the housewife by means of a questionnaire on the use and care of peaches, and on containers. This consumer survey was carried on in a number of Ontario cities for the three seasons, 1944 to 1946 inclusive. Not all questions were answered by each housewife and some answers were not definite enough for use in this summary but, in general, there are sufficient answers to give a reliable picture of the use and care of peaches in the home, and some suggestions concerning packages for this fruit.

The peaches were purchased for both dessert and canning, about equally divided, with a few for jam. About two-thirds of the purchasers selected their own fruit, the remainder by the grocer. Mostly the fruit was kept in the kitchen until ready for use, with some kept in basements, refrigerators, and

other places. No. 1 Grade was almost entirely preferred to No. 2, and within the No. 1 Grade, preference was about equally divided for large and medium. Only 4 in 194 consumers preferred the small size.

74 consumers were satisfied with the fruit offered, 58 were not satisfied, 29 doubtful. There was a decided preference for the 6-qt. basket, although some preferred an 11-qt. basket at canning time. Practically all consumers favoured use of the corrugated cardboard liner which protects the fruit against bruising.

As to the red tarlatan cover, 133 consumers considered that it gave a false impression of the fruit. 20 did not think so, explaining their answer in one of three ways — (1) they lifted the red cover for better inspection, (2) pinched the peaches to see if soft, (3) made allowance for the false colour impression.

EXTENSION SERVICES

Nursery Inspection for Varietal Mixtures

In 1946, 9,292 misnamed fruit trees were found in Ontario nurseries. This is 1.4 per cent. of the total of 645,600 trees inspected, and is slightly higher than the long-time average of .9 per cent. These misnamed trees were either destroyed by breaking, or labelled correctly.

Spray Service

The counties of Haldimand, Welland, Lincoln, and Wentworth, east of Hamilton are included in the Niagara Peninsula Spray Service which is a co-operative project of the Dominion Laboratory of Plant Pathology at St. Catharines, the Dominion Entomological Laboratory at Vineland Station, and the Horticultural Experiment Station. In 1946, 24 mimeograph spray circulars were sent to the 1,904 fruit growers on the mailing list. The 1947 list includes 1,997 growers, this number being up about five hundred since five years ago. All growers also receive, at the beginning of the spray season, the regular spray calendars.

Meetings

During the 1946-47 fiscal year 95 separate addresses, including conducted discussions, were given on cultural topics by various members of the staff. Meetings addressed included fruit and vegetable growers' associations, farm forums, service clubs, horticultural societies, schools, county short courses, women's institutes. Total attendance approximated 7,600.

WESTERN ONTARIO EXPERIMENTAL FARM

The season of 1946 was rather unusual in South-Western Ontario. The month of March was very warm. The average maximum temperature for the month was 52 degrees and the average minimum temperature was 35.7 degrees. This was followed by a rather cold April with an average maximum temperature of 54.9 degrees and an average minimum temperature of 35.1 degrees. This caused considerable damage to many crops, particularly the fruit crop. This was followed by some heavy storms and a cool summer. Such crops as soyabeans and corn suffered considerably. The Fall, however, was very mild without a killing frost till the 13th of November. This enabled a lot of the late crops to mature which otherwise would have suffered considerably if the killing frost had come at the usual time.

The crops at the Western Ontario Experimental Farm were, on the whole, satisfactory. The following table will give you the main crops grown and the acreage and yield:

	Yıeld	Acreage
Winter Wheat	940 bus.	23 acres
Oats	1,500 bus.	24 acres
Winter Barley	520 bus.	12 acres
Rye	64 bus.	1½ acres
White Beans	600 bus.	30 acres
Soyabeans	300 bus.	12 acres
Seed Corn (Crossing stocks)	300 bus.	20 acres
Commercial Corn	1,000 bus.	8 acres
Tobacco	4,220 lbs.	4 acres

FARMER'S WEEK AND SHORT COURSE

Our regular Farmer's Week and Junior Farmer's Short Course was changed considerably this year. Instead of holding these events separately, a two-weeks program was arranged with the forenoon session given over to the Junior Farmers and the afternoon session open to everyone. On these afternoon sessions, we had one or two special speakers as well as our own staff. The following is a list of Special Speakers:

Monday, January 6	Poultry Day Special Speakers:	Dr. J. Glover Prof. E. S. Snyder
Tuesday, January 7	Soils Day Special Speaker:	Prof. G. N. Rhunke
Wednesday, January 8	Live Stock Day Special Speaker:	Mr. W. P. Watson
Thursday, January 9	Live Stock Day Special Speaker:	Dr. R. A. McIntosh
Friday, January 10	Meats and Marketing Day Special Speakers:	Prof. E. C. Stillwell Mr. Earl Nephew
Monday, January 13	Field Crop Day Special Speaker:	Dr. G. P. McRostie
Tuesday, January 14	Fruit and Vegetable Day Special Speakers:	Mr. A. N. L. Butler Mr. J. R. van Haarlem
Wednesday, January 15	Special Crops Day Special Speakers:	Mr. H. F. Murwin and Staff
Thursday, January 16	Sprays Special Speakers:	Dr. L. W. Koch James McGuigan
Friday, January 17	Machinery Day Special Speaker:	Prof. James Scott

This Course was arranged with the co-operation of the Agricultural Representatives in Essex, Kent, Elgin, Middlesex and Lambton. Bus trips were organized but, unfortunately, the very icy conditions of the roads prevented some of them making regular trips. The one bus from Lambton County was able to attend every session and brought 35 boys to the Course for both morning and afternoon sessions. The buses from Elgin and Middlesex were not so fortunate and had to be discontinued on account of adverse weather conditions. The attendance varied from 75 to a little over 200 with an average daily attendance of 125.

Concensus of opinion of the Junior Farmers attending was that they got more out of the morning sessions than they did the afternoon with the special speakers. Some of these young men attended the Course last year when the Course was entirely planned for Junior Farmers.

The buses worked exceptionally well during the winter of 1946 when we had ideal weather but are not satisfactory when they are coming long distances under winter weather conditions. This Short Course has a lot of possibilities and we hope to arrange something for the young men of South-Western Ontario in the future.

ANNUAL LIVESTOCK SALE

The Annual Sale of pure bred Livestock was held on August 14. Only swine were included in this year's sale as our herd of cattle is being increased at the present time. There were 58 Yorkshires sold. 26 bred sows brought \$2,030.00 with an average price of \$78.00 and a top price of \$100.00. 20 gilts were sold for \$535.00 with an average price of \$26.75 and a top price of \$32.50. 12 boars brought \$560.00 with an average price of 46.66 and a top price of \$65.00.

LIVE STOCK

There has been a change made in our livestock program, particularly relating to cattle. It has been the practice for a number of years to feed a carload of steers each winter and consequently the Shorthorn herd was kept down rather small. For some years it has been difficult to purchase feeding steers at reasonable prices either locally or in Western Canada. It was felt that where possible the farmer would be well advised to raise his own feeders. In order to get some practical information along this line, the Shorthorn herd here was put on a regular commercial type of management. During the winter part of the herd was stabled in the regular way. Some of the calves were fed on the pail while other nursed their dams. There was another lot in a shed where yearlings, heifers and cows with their young calves were run in the shed and around the strawstack. Their feed consisted of corn fodder, bean straw and hay which makes a ration composed only of roughages. This type of ration has been tried before on cows that freshen in the spring but insofar as we know very little information has been obtained on this type of feeding for cows that freshen in the fall and winter months.

Eight baby beefs were sold during the year and the herd now consists of thirty females.

A young bull was purchased during the year.

SWINE

This has been rather an off-year in swine production. There has been a very heavy mortality in young litters. This was caused in some cases by sows not having sufficient milk. These sows have been replaced by four young sows

purchased during the year. There was also considerable loss from iron poisoning. One lot of iron was fed to young pigs with disastrous results and consequently four litters that were treated at the one time were almost wiped out.

FIELD CROPS

Hybrid Corn Crossing Stocks

Since 1941 the Western Ontario Experimental Farm have been growing the crossing stocks or foundation stocks for Canada Hybrids. We have produced stock for 15 different varieties. This necessitates the letting out of a number of contracts to growers where proper isolation can be obtained. This isolation requires at least 70 rods from other corn and it is possible to get only two and sometimes three isolations on the Experimental Farm.

Besides supplying farmers in Ontario with these crossing stocks, we have for the past few years sent considerable of the material to the United States. This has been possible with some varieties where we had a surplus over our own demands. The following table will show the amount by acres of these seed stocks distributed in the Province of Ontario for the last six years:

1942 — 3303 a	icres	1945	3523	acres
1943 — 4976 a	ecres	1946	4961	acres
1944 — 3467 a	acres	1947 —	6811	acres

The 1947 amount may vary a little as the season is rather unpredictable at the present time. The above figures show a fairly regular increase each year with the exception of 1944. In that year, however, there was considerable corn that was taken out by the Seed Corn Growers which was not planted in 1943, the majority of which was planted in 1944.

The following table will list the corn from the early maturing to the late and will also give the average number of acres of each variety grown during the past six years:

Variety	Total Acres Grown	Average per Year	No. of Years Produced
240	595 acres	149 acres	4 years
255	275 acres	69 acres	4 years
275	1,496 acres	299 acres	5 years
279	685 acres	137 acres	5 years
335	40 acres	40 acres	1 year
355	4,172 acres	695 acres	6 years
416	250 acres	250 acres	1 year
531	4,555 acres	759 acres	6 years
606	8,996 acres	1,496 acres	6 years
625	697 acres	116 acres	6 years
645	4,215 acres	702 acres	6 years
692	65 acres	65 acres	1 year
696	867 acres	144 acres	6 years

Corn

The experimental work with corn varieties has been part of the plan of the Ontario Corn Committee. Several varieties of new Hybrids were tested out last year and while there was some good new ones, none of them showed much superiority over those that are already in production. A test plot of Hybrid varieties was conducted on the Western Ontario Experimental Farm. Another test was run on the farm of Angus McLean of Wardsville.

White Beans

During 1946, five variety test plots were conducted, one on the Experimental Farm, others in Elgin, Lambton, Huron and Middlesex Counties. There

was considerable variation in these different plots as the following table will indicate:

Variety	Ridgetown	Hensall	St. Thomas	Alvinston
Corvette	29.55 bus.	22.83 bus.	23.17 bus.	25.75 bus.
Blue Pod	29.25 bus.	21.17 bus.	18.33 bus.	20.00 bus.
Michelite	29.05 bus.	19.50 bus.	20.85 bus.	20.75 bus.
A 142	27.30 bus.	14.83 bus.	21.67 bus.	22.75 bus.
Robust	27.15 bus.	16.34 bus.	19.50 bus.	17.75 bus.
EFR	27.00 bus.	19.50 bus.	23.17 bus.	25.75 bus.
Guelph Selected Robust	25.50 bus.	22.00 bus.	20.33 bus.	23.50 bus.
2562 A	24.75 bus.	18.34 bus.	17.83 bus.	19.00 bus.
Luther Burbank	23.10 bus.	21.17 bus.	18.33 bus.	20.25 bus.
Rainy River	20.70 bus.	20.17 bus.	16.50 bus.	23.00 bus.
Gt. Northern	14.25 bus.	18.83 bus.	6.67 bus.	12.50 bus.
Yellow Rye	13.80 bus.	15.00 bus.	9.00 bus.	13.00 bus.

In some cases the later varieties of beans did not mature well enough to make a true comparison. Michelite is still the leading bean grown in South-Western Ontario. While the yield of this variety was not as high as usual in the plots in 1946, yet the buyers particularly like this bean for its cooking and handling qualities. The Corvette, a comparatively new bean, gave a little better standing on the average than usual. This bean, however, is not popular with the buyer or processor. The Blue Pod is an early variety and particularly suited for short seasons. It stood up very well in the test this year. This bean continues to be the most popular short season variety throughout the bean district.

Soyabeans

The soyabean acreage increased throughout South-Western Ontario this year. Several new varieties were grown and practically all of them matured rather better than was expected. In other years, the Lincoln never matured in the Ridgetown district. In 1946 it matured as well as some of the earlier varieties. Earlyanna and Capital varieties were grown under field conditions for the first time and proved to be very satisfactory, the Capital yielding 32.2 bushels per acre and the Earlyanna 33.5 bushels per acre. This differed somewhat on the experimental plots where the following table gives a comparative yield per acre:

Variety	Yield per Acre	Variety	Yield per Acre
Lincoln	43.0 bus.	Richland	33.7 bus.
Harman	37.8 bus	Earlyanna	33.4 bus.
Manchu	37.2 bus.	Harrow 81B	31.2 bus.
Capital	36.3 bus.	Mandarin	30.5 bus.
Cayuga	36.3 bus.	O.A.C. 211	29.7 bus.
A. K	36.2 bus.	Kabott	24.0 bus.
Hudson I	Heights 35.8 bus.	Goldsoy	21.7 bus.

Winter Barley

Winter barley was an excellent crop in 1946. Four varieties grown in previous years were tested again and the Wong stood at the top of the list with 53 bushels per acre, Tennessee 44 bushels, Belgian 42 bushels and Kentucky 39 bushels.

The spring of 1947, however, showed more winter killing of this crop than any of the previous ten years it has been grown. This was particularly true on the low fields where ice was present in any quantity. On the higher land the stand is very good.

Oats

Acre plots of oats were grown as usual during the year. The following table will give the yields of the different varieties grown:

Variety	Yield	Variety	Yield
Erban	63.6 bus.	Cartier	57.4 bus.
Ajax	59.2 bus.	Vicland	55.3 bus.
Mahle	58.4 bus.		

The Erban continues to do very well under our conditions and yielded the highest of any variety in 1946.

Winter Wheat

Experimental plots of winter wheat varieties were conducted again during the year. These tests have revealed that there were other varieties more suitable to the district than the varieties which have been grown for seed purposes. Dawson's 61 has been grown and distributed here for seed purposes. This will be replaced by Cornell 595. In order to meet the demand for red wheat a selection known as Ridgetown has been grown for a number of years. This will be replaced with another red wheat known as Wilson's.

The largest yield of wheat under field conditions during the year was from Dawtas which yielded 60 bushels per acre. This, of course, was grown on land following a tobacco crop.

Pasture

No new work has been attempted with pasture grasses during the year. There has been some interesting results in ploughing up the different kinds of grasses to see how persistent the roots of the different grasses were when the land was put back in the regular rotation. In no case has the common Brome given us any trouble. It is quite noticeable that the most persistent roots of any grass is the Reid's Canary. For the past two years strips of grass were ploughed both in spring and fall. It seems to be apparent now that a better kill of the Reid's Canary grass roots is obtained in spring ploughing. This is particularly true on the gravelly soil in the front of the Farm.

The winter of 1946-47 was a very hard one on all kinds of pasture crops. Ladino clover in this district was very nearly wiped out and Orchard Grass suffered severely but is making a good recovery. Other grasses suffered severely particularly on the low land where the ice laid the heaviest.

CULTURE PRACTICES

During the past few years, considerable work has been done in regard to the cultivation of row crops. With the modern type of cultivator, it is possible to do a more thorough job of killing weeds. It is also liable to do damage to crops as well, particularly is this true with Hybrid corn with its extensive root system. During these tests it looks as if three cultivations is the maximum as in no case was yield of corn increased with a fourth cultivation. At times when the fields were clean, extra cultivation did not increase yields so a fair rule would be with Hybrid corn to cultivate only to kill weeds. Last year part of the corn field was not cultivated at all. Weed control was attempted by spraying with 2,4-D. The following table illustrates the results:

Treatment	Yield
Cultivated 3 times	80 bus, per acre
Not cultivated but sprayed July 4	58 bus, per acre
Not cultivated, sprayed double strength July 25	45 bus, per acre
Not cultivated or sprayed	30 bus. per acre

In these plots there was no apparent damage to the corn by spraying. Yield in the plots not cultivated was lowered by a very heavy growth of grass as the spraying did not control any of the grass.

Early in the season the corn that was not cultivated was more advanced than where cultivation took place but later in the season the weed and grass growth checked the growth considerably.

In other places corn was reported injured by the 2,4-D spray. In this case and in several others in this district there was no apparent damage to the corn. The reason for such reported injury has not yet been established.

Yields were also cut down by deep cultivation late in the season in field beans and soyabeans.

In this district it is almost impossible to get steam engines for the treating of greenhouse and hotbeds. In order to overcome this, several chemicals have been used to advantage. In a greenhouse where nematodes are prevalent in the tomato house, it has been possible to get just as good results with Dowfume G as it was when the steaming method was followed.

In hotbeds, Cyanamide has been particularly useful in controlling weed growth. This should be applied early in the fall at the rate of 10 lbs. per cubic yard of muck. This muck is what is used in the hotbed. In 1946, very poor results were obtained when the treatment was given in the winter time. This year with the treatment given on September 7 the weed control was excellent.

Camsco 1-A gave excellent results with the carrot crop. The worst weeds present were puslane, sow thistle, canada thistle and crab grass. One spraying with Camsco 1-A controlled these weeds and did no injury to the carrot crop.

D.D.T. was tried out for control of cabbage maggot against the old corrosive supplement treatment. For this insect D.D.T. gave no appreciable results.

In the summer of 1945 it was definitely proven that considerable damage was done to the onion crop in Erieau marsh by manganese deficiency. An attempt was made to determine what would be the best method of applying this material. Unfortunately the flood hit Erieau marsh and this and other experiments there were completely destroyed.

EXTENSION

The extension work of the Western Ontario Experimental Farm continues to be varied. One of the main phases is the supplying of seed. The largest part of this work is with the crossing stocks for Hybrid corn. The Experimental Farm also co-operate with the Bean Marketing Board by supplying seed stock of beans which are distributed to the commercial growers by the Board. Oats, winter wheat, soyabeans, and winter barley are also sold for seed purposes throughout the district.

The supplying of swine for breeding purposes is also being carried out as usual as well as supplying Barred Rock Cockerels and eggs for hatching purposes.

It is also the policy of the Experimental Farm to work with the many Agricultural organizations in Western Ontario. Lectures, demonstrations, conferences are arranged at all times of the year and educational exhibits are prepared and exhibited at some of the Fairs as well as during the Farmer's Week.

The problems of the individual farmer occupy a good deal of the time of the staff. A great many farmers visit us during the year and numerous visits are made to farms throughout the district when any special problem presents itself. During the year some serious problems were met. These included an outbreak of fowl typhoid which was the second time it was reported in Ontario. Fowl cholera was also encountered.

Blue mold in tobacco did considerable damage in this district and almost every tobacco bed was affected after the middle of June.

Besides this, assistance was given to the University of Western Ontario with their Short Course in Agriculture. Assistance was also given at the Ontario Agricultural College with their Course for the inspectors of the Veterans' Land Act Administration. The Western Ontario Experimental Farm have co-operated with the other branches of the Ontario Department of Agriculture in problems relating to Western Ontario Agriculture. They have also worked in close harmony with the Dominion Department of Agriculture and have also enjoyed the hearty co-operation of the many Agricultural organizations operating in this section of the Province.

DEMONSTRATION FARM, NEW LISKEARD

FOREWORD

The season of 1946 opened up early with the snow disappearing from the fields in March. This was followed by cool frosty weather and occasional showers till the middle of April, when a warm dry spell came, and seeding got started on May 3rd, which was the earliest start in many years. The soil was in excellent shape and the seed got away to a good start. Showery weather then commenced the following week and seeding was not completed till June 18th. By this time the fields were quite grassy and was not as favourable for crop production as the year previous throughout the District, as shown from the amount of grain offered for sale during the Fall and Winter months.

Registered grain of varieties considered best suited to the District are grown and the seed is available to our farmers. Quite a number are now using this seed as much of the local grain growth has become badly mixed and cannot be graded to Commercial Number One on account of other cultivated seeds.

An excellent crop of Hay was harvested, this was largely Alfalfa, as there was more than we required for our own use a stack of about eighteen tons was sold. The second crop was put in the silo and the balance not required for this purpose was used for pasture.

The stock consists of pure bred herds of Shorthorn and Holstein Cattle, Yorkshire Swine, Hampshire and Oxford Sheep, and Barred Rock Poultry. All surplus stock considered suitable for breeding purposes are sold by public auction, giving farmers the opportunity of securing good foundation animals at their own price.

LIVE STOCK

Horses

Six work horses are kept. During the busy season bush horses are available when needed. No foals are raised.

Cattle

This being the second year since the Holsteins were brought in from the South, they have now become more acclimatized and their production has improved accordingly. Nine Calves were raised, three Bulls, and six Heifers. The Heifers are being retained to increase the herd while the Bulls were sold to local farmers at the Auction Sale held in November. The Cows are all on R.O.P. giving the following record:

Name	From		To		Pounds of Milk	Fat Test
College Challenge B College Gal College Charity College Governess College Gaiety B College Girl B College Charity B	December, December, January, November, December, November,	1945 1945 1945 1946 1945 1945	December, December, January, November, October, September,	1946 1946 1946 1947 1946 1946	13863.5 18288.1 11697.0 19194.0 13094.0 12392.0 10569.0	3.6% 3.8% 4.1% 4.1% 4.1% 3.5% 4.0%

The herd is headed by the Bull, Inka Supreme Reflection, and weighs around the twenty-five hundred pound mark.

The Shorthorn herd is a straight beef type. The Calves are allowed to nurse the Cows. The surplus breeding stock were sold by auction. The herd is headed by O.A.C. Ransom 135.

Swine

Owing to an outbreak of Rhinitis our breeding stock had to be reduced. The Hogs were put out on new pasture and the pens thoroughly cleaned and disinfected. No stock was sold for breeding purposes. After the pens being empty for three months the breeding stock were again put in use. The stock now appear to be free of any trace of this disease. Our surplus Hogs during the year were all sold for slaughtering purposes.

Our breeding stock are housed during the Winter in an outside shed and fed in the yard, this gives them plenty of exercise. No farrowing difficulties have been experienced. The herd sire is Kap Alexander, of good Yorkshire type and weighs around 700 pounds.

Young Pigs are fed reduced iron and Sows given potassium iodine.

Sheep

While two breeds of Sheep are kept we are hoping to increase our pure bred Hampshires to sufficient numbers, and do away with the Oxfords, as Hampshires are becoming quite popular throughout the District as a market lamb. This breed grades up well at our Lamb Fair and finish well within the market weight.

The flock is wintered in an open shed made of poles covered with straw. The surplus breeding stock is graded by the Dominion Livestock officials and sold for breeding purposes.

The flock is treated each year for Nodular and Round Worms.

Poultry

Our henhouse has a capacity of four hundred and fifty laying birds. The old birds are sold off during the summer, the place thoroughly cleaned out, and disinfected, and Pullets are put in in the early Fall. With our home grown feeds and concentrate, very satisfactory results have been obtained.

Around sixteen hundred Chicks are hatched with our own incubator. The roosters are sold locally at from two to three weeks of age, this makes room in our brooder pens. The Chicks are raised on a clover pasture which is alternated every third year with a corn crop grown beside their run for shade.

Pullets not required for our laying pens are sold to farmers who are desirous of securing pullets ready to lay.

Hatching eggs are sold as required after our requirements are met.

FIELD CROPS

Our field crops consist of:

Acres	Variety	Yield	Date Sown	Date Harvested	Days to Maturity
4	Barboff Barley	169 bus.	June 3	Aug. 30	88
17	Barboff Barley	524 bus.	May 17-18	Aug. 17	91
2	Mixed Grain	138 bus.	May 15	Sept. 13	121
20	Mixed Grain	909 bus.	June 4, 5, 6	Sept. 2	89
20	Regent Wheat	505 bus.	May 4	Aug. 21	109
10	Erban Oats	631 bus.	May 17-18	Aug. 31	105
4	Registered O.A.C. 21 Barley	118 bus.	June 8	Aug. 31	84
20	Registered Ajax Oats	923 bus.	June 5-10	Sept. 13	97
20	Cartier Oats	762 bus.	June 10-14	Sept. 12	92
2	Hybrid Corn 275	19 tons	June 14	Sept. 14	92

As shown by the above dates seeding was a long drawn out affair owing to wet weather. Towards the last the fields were quite grassy and required extra work to kill the grass and make a fair seed bed.

Hay and Pasture

Approximately sixty acres are seeded each year to the following mixture: ten pounds of Alfalfa, six pounds of Timothy, and four pounds of Red Clover. This makes a very satisfactory hay and pasture mixture. The Hay is handled largely with the Buck Rake which we find a great convenience and is a real labour saver, especially if the weather is favourable. A field of the Provincial Permanent Pasture mixture was laid down three years ago and has given excellent pasture. Most of the grass mixtures have shown up quite prominently. All our pastures are clipped in June to destroy any weeds which may be present and to encourage new growth. We have ample pasture on the Farm for all our stock.

Potatoes

A demonstration Potato Plot is carried out in the Kennabeck area on suitable Potato soil. This is a six acre area. Two acres of Potatoes are grown each year with the following rotation followed: Potatoes, Grain, Clover. A crop of Hay is cut early and the aftermath is plowed down for organic matter as we have no barnyard manure for this field. Irish Cobbler potatoes are grown. The estimated yield this year, made by Mr. Goodin of the Crops Branch, was 434 bushels to the acre. Commercial fertilizer is used. The Potatoes are treated before planting and were sprayed five times during the growing season using D.D.T. and Copper. The Potatoes came out remarkably clean with no indication of Blight. The field was certified as Foundation "A".

LIVE STOCK INVENTORY

Shorthorns (Beef Cattle) Cows	4	On Hand March 31, 1947 14 5 4
	_	
Holsteins (Dairy Cattle)	27	23
Bulls		1
Cows		7
Heifers		8
Calves	. 9	6
Horses	$\frac{-}{21}$	22
Mares	. 1	0
Work Horses		5
Colts	. 1	0
		_
Swine	6	5
Boars		2
Sows		12
Young Pigs	. 58	0
C1	cc	1.4
Sheep	66	14
Rams	2	2
Ewes	^	27 5
Lambs	. 0	3
Poultry	28	34
Hens	358	362
Chicks	1000	950

DEMONSTRATION FARM, HEARST

Spring Grain Crop

A cold, backward Spring prevented the spring seeding of grain until the month of June. Serious damage was done to Spring Grains by an early September frost. This gave a light yield of poor quality grain.

Hay and Pasture Crop

Wet weather in May and June was favourable for the production of 130 tons of good quality Hay harvested from 68 acres.

Pasturing of cattle extended from June 15 to October 1st.

Live Stock

The Ayrshire herd is composed of the following: 14 cows, 6-1½ year heifers, 7 calves and 2 bulls. All the animals are registered and all the cows are on R.O.P. Three cows and six bull calves were sold to farmers during the year. The bull which was used for three years at the farm has improved the herd and it has now been loaned to the Kapuskasing Experimental Farm.

Swine

Four sows had six litters during the year and 49 pigs were brought to weaning age. All the young pigs were affected with Rhinitis and it was decided to dispose of all the pigs and clean the buildings and the grounds. None of the pigs were sold for breeding.

Poultry

Four hundred mixed Barred Rock chicks were purchased and one hundred and fifty pullets were kept over the Winter. The roosters and the remaining pullets were sold for meat.

Labour

It was very difficult to keep men on the farm. Fortunately our farm foreman is very steady and was alone on the farm with his children for a few weeks. At the present salary level it is not possible to attract good men to work on the farm as the lumber camps have been paying good wages and work shorter hours. For this reason also very little work was done repairing buildings, etc.

STATISTICS AND PUBLICATIONS BRANCH

Very great attention was given by the staff of the Statistics and Publications Branch to the compilation and distribution of detailed statistics on agricultural operations during the year. Approximately 60,000 individual schedules were received from farmers, dairies, creameries, cheese factories, and processing plants, as a basis for the preparation of estimates on farm production. The rural school teachers of Ontario provided excellent cooperation in distributing and returning cards for both the June and December Surveys on crops and live stock.

The statistical data prepared was published promptly, and made available, free of charge, for the use of the public through the medium of the following reports:

The Annual Statistics Report, showing by county division, the acreage, production and value of field crops, and the number and value of each class of live stock, record of number and amount of chattel mortgages outstanding; detailed weather information; and a valuable yearly summary of statistics from 1882 to date.

The Monthly Crop Report, containing the latest available information on field crop and live stock production, current prices received by farmers for agricultural products, weather data, and other pertinent and timely information.

The Monthly Dairy Report, containing statistics covering the entire field of milk production, manufacture, distribution and prices. The record of purchases and sales of fluid milk given in this Report has been useful in permitting analysis to be made of this important branch of the dairy industry. Production figures for creamery butter, Cheddar cheese, and manufactured milk products, have assisted greatly in the marketing problems connected with the allocation of output between domestic consumers and export to Great Britain.

The Seasonal Fruit and Vegetable Report contains much detailed material on these crops prepared by the Ontario Fruit and Vegetable Statistics Committee, which is composed of both Dominion and Provincial Government officials.

The demand for farm publications continued heavy, and many thousands of bulletins, circulars, and handbooks, containing much useful and up-to-date information on a wide range of agricultural subjects were distributed in response to direct requests from farmers, or forwarded in quantity lots to County Agricultural Representatives, Agricultural Colleges, and Experimental Institutions, situated in the Province, for local distribution.

During the fiscal year 1946, the following literature was printed:

Annual Reports	No. of Copies
The Report of the Minister of Agriculture	1,650
Agricultural Societies	3,000
of Ontario	3,300
Entomological Society of Ontario	1,500
Horticultural Societies	
Ontario Agricultural College and Experimental Farm Ontario Crop Improvement Association	10,000
Potato Section, Ontario Crop Improvement Association	10,000

Ontario Fruit Growers' Association and Ontario Vegetable Growers' Association Ontario Veterinary College Stallion Enrolment Board Statistics Branch	1,000 2,800
Bulletins	
Serial No.	
355 Raspberry and Blackberry Culture 414 Capons and How to Caponize 433 Establishing the Young Orchard 445 Temperature Control in Relation to the Storage of Food	5,000 10,000
446 Eggs—The Production, Identification, and Retention of Quality in Eggs Farm Account Book Soil Survey of Durham County	10,000
Extension Circulars	
Serial No.	
Good Seed Mixtures for Hay and Pasture in Ontario The Control of Sheep Stomach and Nodular Worms	
Pamphlet	
Ammonium Nitrate Fertilizer	5,000
Leaflets	
Chicory Perennial Sow Thistle Poison Ivy Ragweed Wild Carrot	10,000 10,000 5,000

AGRICULTURAL AND HORTICULTURAL SOCIETIES BRANCH

AGRICULTURAL SOCIETIES

Fall Fairs

For county and township fairs, 1946 was a banner year. Previous high attendance records were broken by many and 86% reported an increase in gate receipts, and 75% an increase in the number of exhibitors. Weather was almost perfect as only 6 Societies qualified for special weather grants. This is a low record.

Societies standing highest in gate receipts by 3 classes of fairs:

"B" Class	2-Pay Day Fairs	1-Pay Day Fairs
Can. Lakehead Ex. \$26,638.75 Lindsay 20,811.89 Leamington 10,739.80	Owen Sound\$4,855.30 Markham 4,338.55 Collingwood4,213.14	Woodbridge \$4,009.00 Teeswater 3,113.75 Erin 2,942.85

While the Royal Winter Fair was held most successfully, other large exhibition associations had not regained possession of their grounds in time to get re-organized. Several township fairs were revived after being dormant during the war. A total of 253 fairs were held, an increase of 16 over 1945.

The following societies were re-organized: Orillia, Tillsonburg, Demorest-ville, Cochrane, Marmora, Hymers, Murillo, Aurora. Norwood, Sutton, Brussels and Petrolia.

Special grants were paid on 179 Field Crop Competitions, an increase of 16. Maintenance grants were paid on 86 pure bred sires owned by Societies.

A new society was organized in Cumberland Township with headquarters at Navan and the Clinton Society was recognized under the Act after having operated independently for 40 years. Fitzroy in Carleton was authorized to dispose of property and the Ameliasburg and Hillier society was dissolved.

Encouragement to Juniors

In addition to increased opportunities for public school pupils, 209 clubs for teen-age boys and girls were sponsored by societies, compared with 158 the pervious year. Nearly 2000 club calves were entered at fairs and of these, 42 animals were exhibited in the King's Guineas Class at the Royal Winter Fair. The Junior Fair at Kemptville under the auspices of the Central Canada Exhibition was successful with some 250 calves exhibited. Girls' Garden Clubs organized by the Women's Institute Branch were supported by 31 societies.

Special Breed Shows

Assisted by grants from the Ontario Live Stock Branch and with the co-operation of Breed Associations, societies sponsored Breed Shows.

	County or Regional	Championship
Holstein-Friesian	39	4
Ayrshire	. 13	2
Shorthorn	_ 8	
Yorkshire	. 3	1
Berkshire	. 1	1
Tamworth	_ 2	1
Sheep	_ 5	1

Exhibits of Market Hogs competing for special prizes donated by packing and other firms, were an educational feature at many fairs. Largest exhibits were at Walkerton — 192, St. Marys — 100, Alvinston — 76.

Special Features

As wartime restrictions had been lifted, machinery exhibits were colourful additions at numerous shows. The encouragement given to handicrafts recently was reflected in more prizes and larger classes. The Department of Travel and Publicity paid grants of \$18.00 each to 43 selected soiceties for articles suitable for sale to tourists. Entries were appreciably larger than in 1945 and quality was improved.

The number of educational exhibits and demonstrations was increased. The Federal Department of Agriculture staged exhibits at 25 fairs. By 10-operation of regional agents of the National Film Board, educational films were an added feature in many cases.

Improvement to Grounds and Buildings

In spite of shortages of material and labour, 140 societies reported some improvement to facilities. Of these, 42 had erected new buildings or fences; 14 levelled and graded grounds; 25 did painting and 70 made general repairs. Hydro was installed by 8 and 2 had permanent pavements laid down. Many societies reduced debts and several were released from mortgages including Durham, Perth and Dufferin.

Centennial Celebrations

Assisted by special grants, historical structures were erected by Kingston and Esquesing Societies. The construction of pylons was postponed in several cases owing to contemplated levelling of grounds and rearrangement of buildings. The South Lanark Society (Perth) celebrated its 100th Birthday by an unusually good fair. The burning of the mortgage was a gratifying highlight. The Plympton and Wyoming Centenary Celebration included a 2-day programme initiated by a parade of floats and concluding with a banquet attended by 500.

The Ontario Association of Agricultural Societies Activities

The Annual Convention of the Association was the largest and most enthusiastic ever held with 750 guests at the Annual Dinner after the sale of tickets had been restricted. District meetings were held in each Association Zone except No. 15, west of the Great Lakes. There were 2 meetings in several of the Districts and 3 in one case.

Service Diplomas for outstanding and unselfish service to Agriculture were completed and provided by the Association without cost, one to each of 50 societies.

In 1945 the Association advertised widely for copies of early reports of Agricultural Societies. While there was no immediate result at that time, the search has borne fruit in the form of a handsome gift from Dr. J. J. Talman, Secretary of the Ontario Historical Society of 6 volumes of early history including the first published report of Agricultural Societies for 1854.

ONTARIO PLOWMEN'S ASSOCIATION

Victory International Plowing Match

The Victory International Match, the first held since 1941, was in many respects the largest and most successful ever conducted. While there had been a higher entry in 1940, in most other respects, the programme was on a larger

scale. In spite of very bad weather, an all time attendance record was established. The Port Albert airfield provided the best facilities to date as the hangars with concrete floors were well suited for the display of farm equipment and supplies. Farm and other heavy machinery was exhibited on the taxi runway in front of the hangars. Educational exhibits by Departments of the Government, Federal and Provincial, and by organizations added to the attractiveness of buildings and the information of visitors. The Huron Committee arranged a comprehensive and excellent display of Huron County products and a cavalcade of old machinery. An exhibit of antiques and a labour saving display aroused wide-spread interest.

Educational demonstrations were increased and included the following:

Land clearingMechanical treeRoto-tillersForage HarvesterplantingJeeps — plowingCorn PickingOxen plowingLog sawing competitionCombine threshersPick-up balersHorse shoeing competitionSub soil plowTile drainageDraft tests

The number of entries was increased and competition sharpened by prospects of trips to Britain as top awards in both horse and tractor classes, as anticipated, there was a tendency for horse classes to decrease and tractors to go up.

Winners of Special Classes
The Trans-Atlantic Class

Salada Tea Company of Canada Limited
Gold Medal and trip to Britain, Floyd Steckley, Stouffville.
Silver Medal and trip to Britain, Austin Nairn, Munro.

"Esso Open Tractor Class"

Gold Medal and trip to Britain, Fred Timbers, Stouffville. Silver Medal and trip to Britain, Alex. Black, Guelph, R.R.2.

Inter-county Junior Competition — Horses — 12 teams

County — Brant. Coach — J. D. Moore.

Team members - John Capton, Jr., Ohsweken; Bill Buck, Paris, R.R.2.

Inter-county Junior Competition — Tractor — 15 teams

County — North Simcoe. Coaches — S. L. Page, Donald A. Taylor. Team members — Bert Maw. Minesing; Allan McNabb, Edenvale.

Horse Show Winners

Prize winning plow team — Local Day — T. Ballantyne, Stratford, R.R.3. Special for teams and equipment — open competition — Chas. Halliday, Chesley.

Agriculture was honoured by an official visit by His Excellency, Viscount Alexander, Governor-General of Canada. The Legion Post of Huron County provided a suitable guard of honour and other reception arrangements including the presentation of 24 representatives of the Association and leading citizens of the County. After delivering an appropriate address, His Excellency went to all parts of the fields to see plowmen in action and to inspect demonstrations and exhibits. The Hon. J. G. Gardner, Minister of Agriculture for Canada, was guest speaker at the closing banquet where trophies were presented and 1200 guests were served.

Branch Activities

The revival of the International stimulated interest throughout the Province as evidenced by an increase of 7 in senior matches, with 68 being held and a 50% increase in junior activities. The number of plowing demonstrations was doubled with 28 arranged. Departmental judges were supplied for all Branch matches except 4 in Northern Ontario and for all demonstrations.

An increase in prizes offered by Branches was noted and some of those leading were: Peel County, \$680.00; King and Vaughan, \$600.00; Brant County, \$500.00. Farm Machinery exhibits were featured at 34 matches and the educational programme of demonstrations and exhibits extended.

Annual Convention

The Annual Meeting in February was well attended and enthusiastic. Wide-spread interest in good plowing was evidenced by 4 substantial deputations from counties and cities extending attractive invitations for future International Matches, which were accepted as follows: Frontenac, 1947; Victoria, 1948; Brant, 1949.

Trip to Britain

Accompanied by Mr. Geo. Waldie, Trip Manager, and Mr. Clark Young, Association Treasurer, the 4 top-ranking plowmen at the International enjoyed a trip to Britain from January 18 to March 5, 1947. The sponsors were the Salada Tea Company of Canada Limited and Imperial Oil Limited. One main object of the trip was to compete in the British International Match announced to be held in County Down, Ireland, on February 12th. The plowmen were invited to participate in a match at Cumberland, England, organized especially in their honour. Bad weather, unfortunately, prevented these and other matches from being held much to the disappointment of the Canadian plowmen.

The Association is indebted to an overseas committee including Major J. S. P. Armstrong, Col. J. G. Robertson, and E. H. Gurton. These gentlemen planned and directed an extensive tour through England, Scotland and North Ireland and including visits to live stock establishments, markets and historical sites. Members of the party report a most hospitable welcome and interesting and enjoyable tour in spite of most unfavourable weather.

The observations of these Ontario farmers on British Agriculture were prepared in press article form by Mr. Clark Young and published by many weekly and daily papers not only in Ontario but across Canada.

ONTARIO HORTICULTURAL ASSOCIATION

The war loss in total membership has been recovered and now stands at approximately that of 1939. The latest complete figures available are for 1945 at 25,047, an increase of 2,124. Preliminary reports show 65% of societies with an increase in membership. Societies with most marked increases were: New Liskeard, 210%, Barrie, 105%, Port Arthur, 82%, Collingwood 56%.

High membership by municipal classes:

City	Town	Village	Township
Waterloo1027	Huntsville 716	Stouffville 222	Guelph Twp. 225
Galt 934	Barrie 584	Thornhill 211	Bertie Twp 193
Kitchener 900	Collingwood _ 525	Thamesville 127	Pickering Twp. 109

The following new societies were authorized: Corunna, Sunnylea (Etobicoke Twp.), Mille Roches.

Not active in 1945 but received grants in 1946: Kirkton, Petrolia, Strathroy, Udney, Beeton, Beaverton, Orillia, North Roxborough, Rockwood, Stouffville.

Social Activities

Civic improvement was a major project of most societies and 107 reported some definite form of public planting. There was an increase in junior promotion as 90 societies featured juvenile work including shows, garden contests, competitions for essays and bird houses.

A 40% increase was reported in the number of societies promoting flower and vegetable shows. The number of attractive and useful year books was increased but a shortage of paper prevented a return to prewar standards. Several societies issued monthly bulletins giving timely hints. In several cases, a horticultural church service was organized. Waterloo Society co-operating in a Chamber of Commerce "Clean-up and Paint-up Campaign" demonstrated the landscaping of an average home in 30 minutes. To encourage new home owners, the London unit demonstrated the planting of several new homes in 4 representative sub-division areas.

Many a hospital ward and sick room has been brightened by societies throughout the Province and the year. A great variety of activities might be reported as of semi-social nature including garden visits, picnics, banquets, parties and boat trips all of which have contributed to friendliness and indirectly to the programme of beautification.

On recommendation of the Association, 39 societies have reported the choice of a tree, shrub or other plant as a civic emblem.

Ontario Horticultural Association Activities

Snow interefered with the holding of the 1947 convention at Niagara Falls but the number of delegates registered was only slightly below that of the previous year in spite of the Bruce Peninsula and adjacent areas being snow bound and travelling inconvenient in other sections. Attendance was higher and interest more keen at meetings held in the Association Districts throughout the Province.

Rural School Ground Improvement

There were 16 inspectorate competitions and a total of 291 schools entered, an increase of 21.

Prize winners:

S.S. No. 23, Haldimand	Northumberland	J. E. Carter Trophy
S.S. No. 1, Hamilton	Durham & Northumberland	Hon. P. M. Dewan Trophy
S.S. No. 13, Cornwall	Stormont	T. Eaton Company, Ltd., Prize
S.S. No. 9, Nissouri	Middlesex E.	T. Eaton Company, Ltd., Prize

Another plan initiated by the Association in 1945, to encourage improvement particularly in areas where competitions are not organized, met a ready response. On the recommendation of School Inspectors, a certificate provided by the Association was awarded to one school in each of 241 townships.

School Forestry Competition

This competition new in 1945, showed a healthy increase from 78 to 112 entries.

Zone	No. Entries by Zone	1st Prize Winner in Each Zone	Provincial Winners
1	10	S.S. No. 5, East Nissouri	S.S. No. 12, Haldimand
2	76	New Hamburg Public School	S.S. No. 5, East Nissouri
3	15	S.S. No. 5, Puslinch	New Hamburg Public School
4	11	S.S. No. 12, Haldimand	S.S. No. 5, Puslinch

The standing committee on Conservation reported an active year which included an impressive brief presented to the Royal Commission on Forestry, and the promotion of legislation to protect wood lots. Since the passing of an enabling Act at the 1946 session of the Legislature, County Councils have been encouraged to pass by-laws thus authorized and by March 6, 1947, action had been taken by 8 councils.

Maple Trees in British Cemeteries

By co-operation of the Imperial War Graves Commission and the Royal Horticultural Society of Great Britain, trees donated by this Association and forwarded in 1944 have now been planted and are thriving in the following cemeteries containing the graves of Canadian personnel: Brookwood, Harrogate, Chester, Stratford-on-Avon and Great Bircham. A surplus remains in the fund and young trees are available in the Brookwood nursery to continue this policy of planting trees in other burial grounds in the United Kingdom.

A plan has been approved also for the planting of Maple Trees at the Aldershot Camp where so many Canadians were trained in two wars. It has been agreed that 2 main parade grounds of these rather bare barracks be surrounded by Canadian Maples. The names of the parade squares will be changed in recognition of this gift to "Ontario" and "Huron". Suitable plaques will be erected. The cost will be borne by the Association.

Other Association Services

Horticulture Service Diplomas were completed and provided without cost by the Association to 37 societies.

Society News Column, Canadian Horticulture and Home Magazine was continued.

Standard record books and refills for same were supplied at cost to 23 societies, and slides forwarded to 15.

Community Halls Act

The desire of rural people to improve community educational and recreational facilities was reflected in many enquiries and consultation on plans and grants for halls, athletic fields and parks. Due to shortage of labour and material, construction in many cases was delayed and in others postponed. Grants were paid on Frankford Community Hall, \$2,000.00; South Gillies Community Hall, \$2,000.00; and Bluevale Community Hall, \$1,000.00.

Farm Implements

While rationing of implements has been discontinued, many enquiries were received from farmers seeking assistance in the purchase of urgently needed machines and equipment, as in many important lines, demand greatly exceeded supply.

This office acted as a clearing house for War Assets. Several agricultural societies and other organizations were assisted in procuring buildings from military camps being dismantled in Ontario. Service was rendered also on the Committee supervising the distribution of 450 trucks made available to Ontario farmers through the Ontario Federation of Agriculture.

LIVE STOCK BRANCH

INTRODUCTION

Cash income obtained from the sale of Ontario farm products reached an all time high in 1946. According to the Bureau of Statistics the total for the year was \$469,353,000.00, an increase of approximately 17 million dollars over the previous year. Of this amount \$342,626,000.00, or about \$3.00 out of every \$4.00 was derived from the sale of live stock and live stock products, a situation that should dispel any doubt about the importance of the live stock industry to Ontario's agriculture. Of the various products those derived from the dairy cow provided the greatest source of income, with \$109,568.000.00. Hogs ranked second with \$84,453,000.00, while cattle were a close third with \$82,769,000.00. The poultry industry which expanded very materially during the war produced revenue to the extent of \$59,986,000.00. By comparison the sheep and horse industries were minor sources of income, the figures being \$4.373,000.00 and \$2,350,000.00 respectively.

Farm income in Saskatchewan was \$411,000,000.00, which ranked second to Ontario. In that province most of the income is derived from the sale of wheat and cereal grains. In view of the fact that live stock production was at a fairly high level in Ontario the farmers of this province made a substantial contribution to the farm income of Saskatchewan through their purchase of western grain.

Despite the fact that farm income in this province was higher than ever before, the actual values of live stock marketed registered a decline. However this deficiency was more than offset by increased prices. Incidently the decline in live stock marketings in Ontario was not as sharp as in the western provinces. Herewith follows a summary of live stock marketed through inspected packing plants by Ontario farmers during each of the past five years:

ONTARIO LIVE STOCK MARKETINGS

Year	Cattle	Calves	Hogs	Sheep and Lambs
1946	530,906	236,751	1,769,432	276,699
1945	606,436	262,586	1,806,668	309,406
1944	459,943	235,185	2,108,734	258,803
1943	408,821	216,319	2,029,228	236,170
1942	457,727	268,551	2,021,591	229,070

HORSES

If the number of stallions standing for public service is any criterion of the general trend in the horse industry, interest in horse production has reached an all time low. In 1946 fewer stallions were enrolled in the province than in any year since the Stallion Enrolment Act was placed on the statutes, the actual number being 751. Inasmuch as 1701 horses were enrolled in 1939, the decline which was rather acute throughout the war years is rather alarming. Fewer stallions being maintained invariably means fewer mares being bred and a smaller number of foals being raised. If this trend continues Ontario will soon be populated by old horses totally incapable of producing the horse power required on the farms of the province. Furthermore it may not be possible to import from Western Canada in large numbers as has been the custom in years gone by as that section of the Dominion has taken definite steps to reduce its horse population. A fairly large number of horses was purchased in Canada, principally in the West, by UNRRA for shipment to

countries where the horse population was depleted during the war. Furthermore a considerable group of horses, numbering in thousands, was processed into meat in order to supply food for the human population of the needy countries of Europe. These developments plus the fact that breeding operations have declined lead to the conclusion that Canada may soon find herself seriously short of horse power.

The picture is not entirely black inasmuch as the reopening of the Royal Winter Fair and other major shows has stimulated an interest in horses of top quality. These shows have also set a pattern in style by creating a situation whereby it is fashionable to own a saddle horse. As the year drew to a close, horses of the hunter type and horses with speed were in keen demand at good prices.

Of the 751 stallions enrolled, 105 qualified for form 1 premiums and 67 for form 2 premiums. The owners of these horses received payments from this Branch in amounts totalling \$4,117.50 and \$1,643.00 respectively. Premiums paid on form 1 horses were on the basis of \$1.50 per infoal mare, while those on the form 2 horses were on the basis of \$1.00 per infoal mare. In both cases five or more infoal mares were required before any premiums were paid. The Dominion Department of Agriculture subsidized stallion owners in an amount equal to 75% of the Ontario contributions.

HORSE SHOWS

Despite the apparent lack of interest in horse breeding throughout the province special horse shows were well supported by exhibitors and spectators alike during the year. These shows are organized and sponsored by approved horse breeding associations and as such are entitled to grants equal to 50% of the prize money paid out, up to a maximum of \$200.00 per show. In cases where a group of local associations combines, the maximum grant is \$500.00 provided the county or municipality contributes an equal amount. Two shows, namely Stratford and St. Catharines, qualified for \$500.00 grants in 1946. Herewith follows a tabulation of shows receiving grants last year, together with the amount paid in each case:

Hamilton-Wentworth Horse Show	\$200.00
Elora Spring Show	63.00
Perth County Horse Breeders' Association	500.00
Linwood Spring Horse Show	197.00
Toronto Horse Show Association	200.00
Middlesex Heavy Horse Show	130.00
St. Catharines Riding and Driving Club Limited	500.00
Brooklin Spring Horse Show	
Wingham Horse Show	200.00

CATTLE

Cattle slaughterings in Canada which amounted to 1,665,911 in 1946 were slightly lower than during the previous year when the number killed in inspected plants was 1,813,840. Regardless of this fact the figure for the year was well above prewar levels. As a result of heavy slaughterings Canada was in a position to export large quantities of meat to nations that were badly in need of it. Exports to Great Britain totalled 110.3 million pounds, the product of approximately 250,000 cattle. In addition almost 100 million pounds of canned meats were purchased by UNRRA for distribution in Europe and Asia. Meat was rationed throughout 1946. Despite this fact the total number of cattle consumed in Canada was well above prewar years. The comparative shortage of pork products in the domestic market doubtless contributed to the higher consumption of beef but increased buying power throughout this

country was the greatest single factor. The export of dairy cattle reached an all time high of 69,539 head. Not only was the number large but many sales were of a spectacular nature. Perhaps the most important one was negotiated between the Holstein-Friesian Association of Canada and the British Friesian Society. Delegates of the latter organization visited this country and purchased 221 head for approximately \$500,000.00. Sales were made to 19 other countries including Palestine and a great many of the Republics in South America. These countries are mainly interested in top quality animals. United States still buys the largest number. While she obtains some tops the majority of the cattle exported across the border may be classified as good commercial animals.

RESTRICTED AREAS

The testing of cattle under the restricted area policy is conducted by officials of the Dominion Health of Animals Branch. That Branch suffered a serious depletion in its ranks during the war. Since many of the men who left the service have not been replaced, testing operations have been severely curtailed. Testing in a few new areas, principally in Northern Ontario, was undertaken during the year, while a number of counties were retested. At the present time a great many counties in Western Ontario are eagerly awaiting the test. The Federal Bureau of Animal Industry at Washington imposed new regulations on the movement of cattle across the border during the year. These regulations make it very difficult for cattle originating in non-restricted areas to meet the requirements. Since many of the non-restricted areas are heavily populated by dairy cattle whose owners are vitally interested in the export market, it is essential that testing work in the province be expanded as rapidly as possible. Herewith follows a summary of the status of the work in areas in which testing was done during the year:

County or	Test	No.	No.	No.	%
District		Herds	Cattle	Reactors	React ors
AlgomaBrant	1st general	1,431	16,564	139	0.84
	3rd "	464	8,159	48	0.57
Cochrane	1st "	1,745	14,654	171	1.17
Essex	2nd "	4,566	33,105	377	1.14
Grenville	5th "	706	11,504	19	0.16
Halton	3rd "	1,406	24,341	69	0.28
	2nd "	2,155	42,199	138	0.33
Leeds Manitoulin	4th " 4th "	2,509 101	50,910 2,643	82 2	0.16 0.08 0.75
Peel Prince Edward Rainy River	3rd " 6th " 2nd "	1,764 235 1,172	33,590 3,275 12.738	253 22 5	0.67 0.04
Thunder BayYork		10 3,479	332 55,306	676	1.22

Transportation expenses of the veterinarians engaged in this type of work was paid by the Ontario Live Stock Branch. During the year the expenses amounted to \$2,911.01.

Warble Fly Control

For a number of years farmers in Western Canada and Western United States have attempted to control warble flies by spraying cattle with power equipment at the time of the year when the warbles reach the cattle's backs. Such work was never attempted on any extensive scale in this province until 1946. In an effort to promote the work on an area basis the Ontario Live Stock Branch entered into an agreement with the Township of Goderich and the Crang Corporation. The Township Council agreed to enlist the co-operation of all cattle owners in an attempt to have the entire cattle population sprayed at such times as might be deemed necessary. The Crang Corporation supplied

the equipment, material and men to do the spraying. The Ontario Live Stock Branch and the Goderich Township Council obligated themselves to pay for the spraying at the rate of 5¢ per animal per spray on the understanding that the Crang Corporation would absorb any additional costs connected with the experiment. Three sprays were applied during the period March to June. The cost amounted to 13.01¢ per animal per spray. The total cost to the Live Stock Branch was \$929.70. Results obtained lead to the conclusion that this type of treatment is effective if properly done but is slightly more expensive than the old-fashioned method of applying the solution with a scrub brush.

Artificial Insemination

In the spring of 1944 the Ontario Live Stock Branch contributed to the establishment of an artificial insemination unit in Leeds County and agreed to assist in financing the unit for two years thereafter. The local people were sufficiently impressed by the results to carry on as a self-supporting unit when the agreement expired in 1946. They purchased bulls and equipment from the Branch and serviced about 800 cows during the year. This unit served a useful purpose in revealing the possibilities and limitations of this type of breeding programme in the province and the experience gained has been invaluable in formulating plans for other units. In 1945 a centre was organized with headquarters at Maple in York County. This centre serviced 2,250 cows in 1946. At the end of the year plans had been completed for providing service to auxiliary units organized in Simcoe, Halton, Ontario and Peel. A centre organized by the Oxford County Holstein Club commenced operations in June of 1946 and the officers report a successful season. This centre is branching out by providing service to sub-centres in adjoining counties. Up to the present its membership is confined largely to pure bred breeders. Waterloo County breeders have operated a centre for several years. They erected a new bull barn during the year and plan to increase the number of bulls on hand in order to provide service for a larger number of members. In the early months of 1947 considerable progress was made in organizing a centre in Eastern Ontario. This unit will likely commence operations in June, 1947, with an enrolment of approximately 5,000 cows located in several counties in that section of the province. A bill designed to impose some measure of control over centres was passed at the 1947 session of the Ontario Legislature and will become effective on June 1st.

Auction Sales of Pure Bred Live Stock

For a number of years breeders' clubs organized on a county or district basis have followed the practice of holding consignment sales. This has proven a useful method of distributing high class breeding stock throughout the province. The Ontario Live Stock Branch has assisted approved clubs in selecting suitable animals and also through the payment of grants. Such grants are on the basis of \$4.00 per animal sold, up to a maximum of \$150.00 per sale, provided all animals offered are certified free from T.B. and Bang's disease. In some instances clubs hold shows previous to the auction and when such procedure is followed a club is eligible for an additional grant of \$25.00. A summary of results obtained at sales receiving assistance in 1946-47 herewith follows:

Association	No. Head Sold	Grant	Average 1946	Average 1945	Prize Money Grant
Dufferin Pure Bred Beef and Swine			A404.00		
Breeders' Association—Hereford	_ 18		\$161.67		
Shorthorn	. 10	\$112.00	182.00		
Ottawa Valley Ayrshire Breeders' Club	34	136.00	158.90		
Toronto District Ayrshire Breeders' Club	43	150.00	137.56		
All Eastern Ontario Holstein Sale Association	64	150.00	436.95	\$409.04	

Grey County Shorthorn Breeders' Club 40 150.00 188.13 \$25.00 Ontario Jersey Club 38 150.00 302.24 343.67 — Guernsey Cattle Breeders' Association 39 150.00 480.26 — — Grey-Bruce Hereford Breeders' Association 31 132.00 183.64 169.00 21.00 Western Counties Hereford Association 31 124.00 192.25 — — Ontario Aberdeen-Angus Association 45 150.00 1,034.55 817.93 — Bruce County Shorthorn Breeders' Club 32 128.00 176.56 144.35 9.50 Hamilton, Niagara and Banner Counties 49 150.00 257.35 — — Western Ontario Consignment Sale Co. 40 150.00 301.13 220.00 — Tri-County Shorthorn Club 37 148.00 197.16 149.10 — Royal Shorthorn Club 50 150.00 426.80 — Victoria County Shorthorn Club 17 68.00
Guernsey Cattle Breeders' Association 39 150.00 480.26 Grey-Bruce Hereford Breeders' Association 33 132.00 183.64 169.00 21.00 Western Counties Hereford Association 31 124.00 192.25 — Ontario Aberdeen-Angus Association 45 150.00 1,034.55 817.93 — Bruce County Shorthorn Breeders' Club 32 128.00 176.56 144.35 9.50 Hamilton, Niagara and Banner Counties 49 150.00 257.35 — Western Ontario Consignment Sale Co. 40 150.00 301.13 220.00 — Tri-County Shorthorn Club 37 148.00 197.16 149.10 — Royal Shorthorn Club 50 150.00 426.80 — Victoria County Shorthorn Club 17 68.00 146.47 161.67
Grey-Bruce Hereford Breeders' Association 33 132.00 183.64 169.00 21.00 Western Counties Hereford Association 31 124.00 192.25
Western Counties Hereford Association 31 124.00 192.25 Ontario Aberdeen-Angus Association 45 150.00 1,034.55 817.93 Bruce County Shorthorn Breeders' Club 32 128.00 176.56 144.35 9.50 Hamilton, Niagara and Banner Counties Ayrshire Club 49 150.00 257.35 257.35 220.00 257.35 220.00 277.35 220.00 <td< td=""></td<>
Ontario Aberdeen-Angus Association 45 150.00 1,034.55 817.93 — Bruce County Shorthorn Breeders' Club 32 128.00 176.56 144.35 9.50 Hamilton, Niagara and Banner Counties 49 150.00 257.35 — Western Ontario Consignment Sale Co. 40 150.00 301.13 220.00 — Tri-County Shorthorn Club 37 148.00 197.16 149.10 — Royal Shorthorn Club 50 150.00 426.80 — — Victoria County Shorthorn Club 17 68.00 146.47 161.67 —
Bruce County Shorthorn Breeders' Club 32 128.00 176.56 144.35 9.50 Hamilton, Niagara and Banner Counties Ayrshire Club Western Ontario Consignment Sale Co. 49 150.00 257.35 301.13 220.00 Tri-County Shorthorn Club 37 148.00 197.16 149.10 Royal Shorthorn Club 50 150.00 426.80 Victoria County Shorthorn Club 17 68.00 146.47 161.67
Ayrshire Člub 49 150.00 257.35 Western Ontario Consignment Sale Co. 40 150.00 301.13 220.00 Tri-County Shorthorn Club 37 148.00 197.16 149.10 Royal Shorthorn Club 50 150.00 426.80 Victoria County Shorthorn Club 17 68.00 146.47 161.67
Western Ontario Consignment Sale Co. 40 150.00 301.13 220.00 Tri-County Shorthorn Club 37 148.00 197.16 149.10 Royal Shorthorn Club 50 150.00 426.80 Victoria County Shorthorn Club 17 68.00 146.47 161.67
Tri-County Shorthorn Club 37 148.00 197.16 149.10 Royal Shorthorn Club 50 150.00 426.80 Victoria County Shorthorn Club 17 68.00 146.47 161.67
Royal Shorthorn Club 50 150.00 426.80 Victoria County Shorthorn Club 17 68.00 146.47 161.67
Victoria County Shorthorn Club 17 68.00 146.47 161.67
Victoria County Discussion Class
Lambton, Middlesex, Oxford, Shorthorn
Club 38 150.00 164.21 189.43
678 \$2,483.50 \$281.40 \$278.50 \$55.50
Summary of Sales by Breeds
Total Average
No. of Selling Selling
Sales Breed Cattle Price Price
3 Hereford 82 \$14,930.00 \$ 182.07
9 Shorthorn 284 68,780.00 242.18
3 Ayrshire 126 23,927.50 189.90
1 Holstein 64 27,965.00 436.95 1 Jersey 38 11.485.00 302.24
1 00100
1 Guernsey 39 18,730.00 480.26 1 Aberdeen Angus 45 46,555.00 1,034.55

SPECIAL CATTLE SHOWS

Special cattle shows first gained prominence following the discontinuance of major shows in the province on account of war. In some quarters it was thought that these shows might be discontinued when major shows resumed operations. However they have served such a useful purpose that breeders in all parts of the province are demanding their continuance. There is no gainsaying the fact that they have contributed greatly to the development of smaller breeders. Individuals who have never entertained the thought of subjecting their cattle to the scrutiny of a judge have become enthusiastic supporters of these shows and as a consequence have been inspired to improve the status of their herds. The Ontario Live Stock Branch assists breeders' clubs sponsoring such shows by the payment of grants equal to 20% of the prize money paid out, up to a maximum of \$100.00 per show. Holstein, Ayrshire and Jersey breeders also follow the practice of holding championship shows. Herewith follows a summary of shows receiving assistance in 1946:

Black and White Shows

	Name of Show	No. of Cattle	No. of Entries	Grant
1.	Ridegtown (Kent County)	130	180	\$ 100.00
2.	Blyth (Huron County)	101	- 134	100.00
3.	Stratford (Perth County)	163	213	100.00
4.	Norwich (Oxford County)	162	235	100.00
5.	Aylmer (Elgin County)	98	125	95.20
6.	Kincardine (Bruce County)	49	73	61.40
7.	Harrow (Essex County)	93	127	100.00
8.	Wyoming (Lambton County)	80	112	90.20
9.	Simcoe (Norfolk County)	172	137	88.80
10.	Ilderton (Middlesex County)	147	176	100.00
11.	Waterloo (Waterloo County)	119	138	96.40
12.	Brampton (Peel County)	121	148	90.20
13.	Milton (Halton County)	143	182	100.00

27 / 67	No. of	No. of	~
Name of Show 14. Ancaster (Wentworth County)	Cattle 102	Entries 129	Grant 88.80
15. Beamsville (Lincoln County)		72	57.80
16. Welland (Welland County) 17. Caledonia (Haldimand County)	125	131 126	78.00 98.90
18. Paris (Brant County)		93	56.40
19. Fergus (Wellington County)	99	133	79.80
20. Owen Sound (Grey County) 21. Vankleek Hill (Prescott County)	51 66	74 83	53.40 56.40
22. Williamston (Glengarry County)	94	124	89.80
23. Newington (Stormont County) 24. S. Mountain (Dundas County)	_ 125 _ 51	154 69	100.00 53.40
25. Spencerville (Grenville County)	53	71	53.80
26. Delta (Leeds County) 27. Kingston (Frontenac County)	89 76	123 99	89.00 92.00
28. Perth (Lanark County)	69	97	66.20
29. Renfrew (Renfrew County)		78 155	77.40 100.00
31. Orono (Durham County)	103	142	87.00
32. Pt. Perry (Ontario County) 33. Warkworth (Northumberland County)	141	202	100.00
33. Warkworth (Northumberland County)34. Beeton (Simcoe County)		95 75	56.20 60.00
35. Lakefield (Peterborough County)	123	181	100.00
36. Stirling (Hastings County) 37. Markham (York County)		131 141	79.60 89.40
38. Picton (Prince Edward County)	67	77	47.40
39. Napanee (Lennox and Addington)	57	76	47.20
Championship Shows:			
40. Kemptville	187	234	100.00
41. Guelph	206	286	100.00
42. London		254 201	100.00 100.00
10. 1 00100611	110	201	
		Total	\$3,580.10
Red and White Shows		Total	\$3,580.10
Stormond Breeders' Club		Total 107	\$3,580.10
Stormond Breeders' Club Banner Counties Breeders' Club	80	107 101	\$ 80.00 69.20
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club	80 61 139	107	\$ 80.00
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club	80 61 139 158	107 101 80 143 211	\$ 80.00 69.20 57.60 100.00 100.00
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club	80 61 139 158 62	107 101 80 143 211 87	\$ 80.00 69.20 57.60 100.00 100.00 63.80
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club	80 	107 101 80 143 211 87 75	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club	80 61 139 158 62 55 109	107 101 80 143 211 87 75 140	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club	80 61 139 158 62 55 109 73 115 62	107 101 80 143 211 87 75 140 88 171	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club	80 61 139 158 62 55 109 73 115 62 63	107 101 80 143 211 87 75 140 88 171 94	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club	80 61 139 158 62 55 109 73 115 62 63 65	107 101 80 143 211 87 75 140 88 171	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club	80 61 139 158 62 55 109 73 115 62 63 65	107 101 80 143 211 87 75 140 88 171 94 98 78	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show	80 61 139 158 62 55 109 73 115 62 63 65	107 101 80 143 211 87 75 140 88 171 94 98 78 139	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show	80 61 139 158 62 55 109 73 115 62 63 65	107 101 80 143 211 87 75 140 88 171 94 98 78	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show	80 61 139 158 62 55 109 73 115 62 63 65 114 101	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00 100.00 \$\frac{1}{2}\$\$\frac{1}{2}
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Hamilton-Niagara Breeders' Club Hamilton-Niagara Breeders' Club Wankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Waterloo Jersey Parish Breeders' Club	80 61 139 158 62 55 109 73 115 62 63 63 65 114 101	107 101 80 143 211 87 75 140 88 171 94 98 78 139	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Breeders' Club Simcoe and District Breeders' Club Ottawa Valley Breeders' Club Contral Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Ottawa Valley Breeders' Club South Shows Waterloo Jersey Parish Breeders' Club York County Jersey Club Show Ontario and Durham Counties Jersey Club Show	80 61 139 158 62 55 109 73 115 62 63 63 65 114 101	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00 100.00 \$\$\frac{1}{128.40}\$
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Central Ontario Breeders' Club Wastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Waterloo Jersey Parish Breeders' Club York County Jersey Club Show Ontario and Durham Counties Jersey Club Show Newington Jersey Parish Show	80 61 139 158 62 55 109 73 115 62 63 65 114 101	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00 100.00 \$1,128.40 \$ 61.40 75.40 46.80 77.00
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Vankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Jersey Shows Waterloo Jersey Parish Breeders' Club York County Jersey Club Show Ontario and Durham Counties Jersey Club Show Newington Jersey Parish Show Elgin County Jersey Cattle Club Perth-Huron Jersey Breeders' Club	80 61 139 158 62 55 109 73 115 62 63 63 65 114 101	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00 100.00 \$1,128.40 \$ 61.40 75.40 46.80 77.00 69.00 17.80
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Ottawa Valley Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Jersey Shows Waterloo Jersey Parish Breeders' Club York County Jersey Club Show Ontario and Durham Counties Jersey Club Show Newington Jersey Parish Show Elgin County Jersey Cattle Club Perth-Huron Jersey Breeders' Club Halton County Jersey Breeders' Club	80 61 139 158 62 55 109 73 115 62 63 63 65 114 101	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00 100.00 \$\$1,128.40\$ \$\$61.40 75.40 46.80 77.00 69.00 17.80 37.10
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Wankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Central Ontario Breeders' Club Wastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Jersey Shows Waterloo Jersey Parish Breeders' Club York County Jersey Club Show Ontario and Durham Counties Jersey Club Show Newington Jersey Parish Show Elgin County Jersey Breeders' Club Halton County Jersey Breeders' Club Brampton District Jersey Parish Club Peterborough District Jersey Breeders' Club	80	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 57.20 100.00 100.00 \$1,128.40 \$ 61.40 75.40 46.80 77.00 69.00 17.80 37.10 43.20 45.80
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Wankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Central Ontario Breeders' Club Eastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Dontario and Durham Counties Jersey Club Show Ontario and Durham Counties Jersey Club Show Dewington Jersey Parish Show Elgin County Jersey Cattle Club Perth-Huron Jersey Breeders' Club Halton County Jersey Breeders' Club Brampton District Jersey Parish Club Peterborough District Jersey Breeders' Club Lambton County Jersey Breeders' Association	80 61 139 158 62 55 109 73 115 62 63 65 114 101 78 96 79 96 61 18 54 54 72 52	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 50.40 73.60 57.20 100.00 100.00 \$1,128.40 \$ 61.40 75.40 46.80 77.00 69.00 17.80 37.10 43.20 45.80 49.20
Stormond Breeders' Club Banner Counties Breeders' Club Leeds-Lanark Breeders' Club Southern Counties Breeders' Club Toronto District Breeders' Club Grenville-Dundas Breeders' Club Peterborough-Durham Breeders' Club Hamilton-Niagara Breeders' Club Wankleek Hill Breeders' Club Glengarry Breeders' Club Simcoe and District Breeders' Club Central Ontario Breeders' Club Central Ontario Breeders' Club Wastern Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Western Ontario Championship Ayrshire Show Jersey Shows Waterloo Jersey Parish Breeders' Club York County Jersey Club Show Ontario and Durham Counties Jersey Club Show Newington Jersey Parish Show Elgin County Jersey Breeders' Club Halton County Jersey Breeders' Club Brampton District Jersey Parish Club Peterborough District Jersey Breeders' Club	80 61 139 158 62 55 109 73 115 62 63 65 114 101 78 96 61 18 54 79 54 54 72 52 36	107 101 80 143 211 87 75 140 88 171 94 98 78 139 113 Total	\$ 80.00 69.20 57.60 100.00 100.00 63.80 48.60 71.40 56.60 100.00 57.20 100.00 100.00 \$1,128.40 \$ 61.40 75.40 46.80 77.00 69.00 17.80 37.10 43.20 45.80

Name of Show Ottawa Valley Jersey Club Wentworth and District Jersey Show Oxford Jersey Parish Show Ontario Jersey Club Championship Jersey Show	No. of Cattle 77 78 65 153	No. of Entries 89 97 18 206	 Grant 64.00 45.80 83.60 100.00
Hereford Shows			
TeeswaterErin	65 55	88 72	\$ 90.00 77.00
		Total	\$ 167.00
Aberdeen Angus Shows			
Strathroy	66	84	\$ 69.00
Guernsey Shows East Zone Registered Guernsey Show (Markham) Centre Zone Registered Guernsey Show (Galt) West Zone Registered Guernsey Show (Leamington) Guernsey Championship Show (Simcoe)	62 71 65 110	62 71 65 110	\$ 56.20 77.40 78.20 100.00
		Total	\$ 311.80
Shorthorn Shows			
Counties			
1. Exeter Perth, Huron, Waterloo, Brant	84	104	\$ 100.00
2. Dresden Essex, Elgin, Kent, Norfolk Simcoe County breeders to exhibit at	106	109	100.00
either Lindsay or Owen Sound)	98	152	100.00
4. Renfrew Leeds, Lanark, Renfrew, Carleton, Prescott, Russell, Stormont, Glengarry, Grenville, Frontenac, Lennox and Addington	79	109	98.00
5. Owen Sound Grey, Bruce, Simcoe (Simcoe County breeders to exhibit at either Lind-			
say or Owen Sound) 6. Orangeville Dufferin, Halton, Peel, Haldimand, Lin-	110	124	100.00
coln, Wellington, Welland, Went- worth	108	136	100.00
7. StrathroyLambton, Middlesex, Oxford	114	144	100.00
8. GaltOntario Dual Purpose	74	94	94.00
		Total	\$ 792.00
County Dairy Shows			
Middlesex Dairy Show (Strathroy) Brant County Dairy Show (Paris)	58 96	84 126	42.80 72.00
		Total	\$ 114.80
Summary — Special Cattle Shows			
43 — Black and White 15 — Red and White 16 — Jersey 2 — Hereford 1 — Aberdeen Angus 4 — Guernsey 8 — Shorthorn 2 — Dairy Cattle		167.00	

SWINE

Swine marketings in Canada registered a further decline in 1946 when marketings totalled 4,460,736 as compared with 5,861,073 in 1945 and 8,863,178 in 1944. The big decline last year occurred in Western Canada where hog marketings were down 37.5%. Marketings in Eastern Canada were substantially lower than in 1944 but only 4.9% lower than in 1945, and for the first time in several years marketings in Eastern Canada were higher than in the West. Bacon exports followed the trend in hog marketings. For the second time since the contract system of buying was introduced Canada failed to fulfil her obligation. Total bacon exports for the year of 273,607,400 lbs. fell far short of filling the contract for 450,000,000 lbs. If the present downward trend in hog production in Western Canada continues, Ontario's production will be the determining factor in future contracts with Great Britain. It is encouraging to note that the quality of Canadian hogs continues to improve but still leaves much to be desired. In 1946 the percentage of A's for the Dominion was 32.4% and B1's 43.3%. Ontario with 41.1% A's and 42.9% B1's ranks far ahead of other major hog producing provinces. The Ontario hog subsidy of \$1.00 on A's and 50¢ on B1's continued throughout the year and cost the provincial treasury \$1,097,544.50. The Dominion premium was reduced from \$3.00 to \$2.00 on A's and from \$2.00 to \$1.00 on B1's. At the present time Canada has bacon contracts covering 1947 and 1948. Under these contracts Britain has agreed to purchase 350,000,000 million pounds during the current year and 400 million pounds in 1948. Unless an unforseen increase hog production occurs it is unlikely that either of these contracts will be filled.

Bacon Hog Clubs

Under the terms of this policy boars are loaned to organized groups of producers located in those districts where good breeding stock is not readily available. Each group must consist of not less than 6 farmers owning a minimum of 20 sows. Most of the clubs are located in Eastern Ontario. The purchase price and cost of transportation on boars is borne by the Ontario Live Stock Branch. During 1946-47, 40 boars were purchased at a cost of \$2,697.50 and the express charges totalled \$281.39. Herewith follows a summary of clubs functioning on March 31st, 1947:

County Carleton Dufferin Dundas Durham Essex	1 2	Clubs Operating March 31, 1946 6 1 7 1
Frontenac Glengarry		Å
Grenville		8
Grey		3
Halton		ĭ
Hastings		25
Kent		3
Lambton		3
Lanark		3
Leeds	0	16
Lennox and Addington		3
Oxford		1
Peel		1
Prescott		2
Renfrew		16
Russell	1	4
Stormont	~~~	4
Thunder Bay		2
	_	
	16	122

PURE BRED SWINE SALES

In recent years swine breeders' clubs have followed the pattern laid down by cattle breeders' clubs in using consignment sales as a medium for the distribution of high class stock. The Ontario Live Stock Branch assists clubs sponsoring such sales by the payment of grants not exceeding \$150.00 per sale. Clubs are not eligible for a grant on more than one sale in any year. Grants paid in 1946 were as follows:

	No. Head		Average
Breeders' Club	Sold	Grant	Price
Dufferin Pure Bred Beef and Swine Breeders'			
Association	. 19	\$ 38.00	\$ 80.76
Eastern Ontario Yorkshire Breeders' Association	43	129.00	74.01
Stratford District A. R. Yorkshire Club	. 26	52.00	82.46
Simcoe County Yorkshire Breeders' Club		86.00	100.23
Grey-Bruce Yorkshire Club	. 31	62.00	73.06
Ontario Yorkshire Breeders' Society	. 52	104.00	134.44
South-Western Ontario Yorkshire Breeders' Association	53	106.00	49.62
•			
	267	\$577.00	\$ 86.35

Regional Swine Shows

The regional swine show programme for 1946 consisted of six Yorkshire shows, one championship Yorkshire show, one Berkshire show and one Tamworth show. Boundaries of the zones are determined by the Ontario Swine Breeders' Association. The location of each show is decided by the breeders residing within the zone, and details of management are handled by zone committees. The Ontario Live Stock Branch assists by contributing 25% of the prize money paid out up to a maximum of \$100.00 per show. Following is a summary of the results obtained at shows receiving assistance in 1946:

Zone	Place	No. of Swine	No. of Entries	Grant
1	Dresden	55	63	\$ 78.75
2	Teeswater	85	115	100.00
3	Galt	87	100	100.00
4	Collingwood	111	135	93.75
5	Lindsay	63	69	100.00
6	Richmond	64	76	80.00
Cham	pionship Yorkshire Show, Erin	115	141	100.00
Berks	hire Show, Leamington	100	100	100.00
Tamw	orth Show, Stratford	50	68	59.00

SHEEP

There was a slight reduction in inspected slaughtering of sheep and lambs in Canada in 1946. Mutton and lamb are now being shipped to Great Britain under contract. Purchases for shipment completed during the year totalled approximately 10 million pounds. This export outlet had a stabilizing effect on the market and as a consequence lamb prices were reasonably strong throughout the year.

Wool Subsidy Policy

Wartime regulations which required all wool to be officially graded at authorized warehouses remained in effect in 1946. Those farmers who marketed wool up to a prescribed standard of cleanliness qualified for a subsidy of 4¢ per pound. This subsidy was paid by the Ontario Department of Agriculture, which Department was later reimbursed by the Dominion Department for one-half the amount paid out. Following is a summary of payments made during 1946-47:

Number of applications approved	13,526
Number of pounds of clean wool	1,653,188
Total subsidy paid	\$66,127.52

Assistance to Sheep Sales

Two regional sheep breeders' clubs qualified for grants on account of holding consignment sales during 1946. These grants were on the basis of \$1.00 per lot sold up to a maximum of \$100.00 per sale, but in no case did the grant exceed the actual sale expenses. Grants paid in 1946-47 were as follows:

Ottawa Valley	Sheep Breed	ers' Association	\$48.00	
Grey-Bruce S.	heep Breeders	' Association	45.00	

Regional Sheep Shows

As in previous years the Ontario Live Stock Branch co-operated with the Ontario Sheep Breeders' Association and Agricultural Societies in sponsoring regional sheep shows. Five such shows and a championship show were held in 1946. Grants paid by the Live Stock Branch were equal to 25% of the prize money paid out, with a maximum of \$100.00 per show. Herewith follows a summary of results at 1946 shows:

Zone	Place	No. Sheep Exhibited	No. of Entries	Grant
1 2 3 4 5 Champ	Leamington Owen Sound Burford Lindsay Renfrew pionship, Woodbridge	170 155 275 168	191 295 195 302 174 409	\$100.00 100.00 97.50 100.00 100.00
				\$597.50

Lamb Fairs

For a number of years lamb fairs have been promoted by the Ontario Live Stock Branch and the Dominion Department of Agriculture in various sections of Northern Ontario with a view to encouraging producers to market their lambs on a co-operative basis. More recently several of the original groups have assumed full responsibility for the marketing. This is particularly true in Manitoulin Island where a large percentage of the lambs are handled by the co-operative association. Most of the 1946 crop was settled for on a rail grade basis. Producers of high quality lambs have shown a preference for this system of marketing because returns have been slightly higher due to the fact that good lambs usually have a high dressing percentage. The following fairs received assistance in 1946:

District	Location of Fair	Grant
Temiskaming	Uno Park	\$30.00
Thunder Bay	Fort William	30.00
Kenora		30.00
		\$90.00

BOYS' AND GIRLS' CLUBS

Boys' and Girls' Live Stock Clubs are organized under the direction of the Agricultural Representatives. The Ontario Live Stock Branch assists at educational meetings and achievement days, also in paying one-third of the prize money. Payments in 1946-47 were as follows:

Type of Club	No. of Clubs	Total Contributions
Calf Foal	141	\$2,502.33 9.00
Swine Poultry	38 18	627.00 264.00
•		\$3,402.33

The branch also contributed to the prizes at the Inter-club Competitions held at the O.A.C. as follows:

Dairy Cattle Beef Cattle Swine Poultry	\$	45.00 45.00 45.00 13.50
	\$1	48.50

King's Guineas

A special competition for baby beef calves was held at the 1946 Royal Winter Fair. Only the top calves of the various beef clubs organized under the Boys' and Girls' Calf Club policy were eligible to compete. The grand champion award was made in the main arena in the presence of His Excellency, the Governor-General. At the auction which followed, the T. Eaton Company purchased the steer for \$5.50 per pound, thereby enriching his owner. John Kinsman of Perth County, by approximately \$4,800.00. In addition Mr. Kinsman received the King's Guineas prize of \$250.00 contributed by this Branch. The Branch paid transportation on all calves exhibited and \$25.00 prize to all contestants. The total amount of money paid out on account of this competition was \$1,555.71.

POULTRY

The Ontario Live Stock Board assists poultry associations by making grants to local poultry shows, and paying salaries and expenses of judges and lecturers at such fairs. Assistance granted in 1946 was as follows:

1	Number of Associations holding shows	16
1	Number of judges and lecturers supplied	15
- 1	Total amount of grants paid to local associations	\$677.00
	Judges' services	171.50
	Judges' travelling expenses	187.64

LIVE STOCK PROTECTION ACT

This Act is administered by the municipalities of the province. It was designed to protect live stock owners from losses resulting from live stock being attacked by dogs. In such cases the municipality is responsible to the owners on the basis of awards made by valuators in their employ. If either party, the owner or the municipality, is dissatisfied with the award an appeal may be lodged with the Minister of Agriculture and a special valuator will be sent in to deal with the case, whose decision shall be final. In 1946-47 six appeals were received from sheep owners.

Branding of Live Stock Act

Under the terms of this Act brands are recorded by the Live Stock Commissioner. During the year 47 new brands were allotted and 75 were renewed. bringing the total number recorded up to 3,039.

Live Stock Associations

Members of the Ontario Live Stock Branch staff serve as secretary for the following associations:

Ontario Horse Breeders' Association
Ontario Cattle Breeders' Association
Ontario Sheep Breeders' Association
Ontario Swine Breeders' Association
Ontario Yorkshire Breeders' Society
Ontario Tamworth Breeders' Society
Ontario Aberdeen Angus Breeders' Association
Ontario Hereford Association
Ontario Poultry Association
Ontario Provincial Winter Fair

The executive work of these organizations is carried out by the secretary.

MANITOULIN FEEDER AND STOCKER SHOW

The only feeder and stocker show in the province was held on Manitoulin Island during the month of September under the auspices of the Manitoulin Co-operative. Members of the Branch assisted in organizing the first show held in 1944 and have assisted in sorting and grading cattle at all shows held to date. At these shows cattle are grouped into car load lots and offered for sale by public auction. The 1946 show attracted a record entry of approximately 2,000 cattle. The top load sold for 12.09¢. All lots were purchased by Ontario buyers, with the majority going to feed lots in Old Ontario. The Branch made a contribution of \$800.00 to the sponsoring organization to assist with expenses of sale and capital expenses involved in erecting suitable accommodation for holding cattle and offering them for sale.

WOMEN'S INSTITUTE BRANCH AND HOME ECONOMICS SERVICE

GENERAL

Membership

Number of Senior Women's Institutes in Ontario, March 31, 1947	1,263
Number of Junior Women's Institutes in Ontario, March 31, 1947	47
Total Number of Women's Institutes in Ontario, March 31, 1947	1,310
Membership, March 31, 1947	37,500
Institutes organized during the year	59
Institutes re-organized during the year	4
Institutes disbanded during the year	20

Of the Institutes organized, 14 were Junior and 45 were Senior. Of the Institutes disbanded, 4 were Junior and 16 were Senior.

The newly organized Institutes were:

Brockville	
Bruce East	- Elsinore, Young Women's Evening
Bruce South	- Kairshea, Purple Grove
Carleton East	— Greely
Dufferin	— Backline, Mansfield
Elgin East	— Central Elgin Juniors, East Elgin Juniors
Elgin West	— Tyrconnel, West Elgin Juniors
Essex South	- Anderdon and Sandwich West Juniors
Glengarry	— Summerstown Front
Grenville North	— Heckston, Oxford Mills Juniors
Grenville South	— Third Line
Grey North	_— Rockview
Haldimand	— Haldimand Juniors
Hastings North	— Huntingdon East, Madoc Juniors
Huron South	— Crediton, Exeter Juniors
Kent West	- Kent Centre, Molly Creek
Lambton East	.— Warwick Juniors
Lambton West	Birkhall, Eddy's Mills, Plum Creek
Northumberland East	— White School
Ontario North	— Brechin Juniors
Ontario South	_— Ajax
Oxford North	— Anna P. Lewis
Peel	-Flower Town, Trixie Juniors
Perth North	
Perth South	
Prince Edward	— Prince Edward Juniors
Renfrew North	- Cohden Juniors
Refrew South	— Roleam Hill
Simcoe East	
Simcoe South	
Victoria West	— Bridgeport, Dorking
Waterioo North	—South Wentworth Juniors
Welland	
York North	
Cochrane South	
Kenora	- Emsdale, Pine Portage
Muskoka South	-Barkway, Baysville, Gravenhurst, Housey's Rapids,
	Glen Orchard, Peninsula —North Star
Parry Sound North	— North Star

The Institutes which re-organized were:

Bruce EastPinkerton
Kent East — Wabash
Cochrane North — Dunning
Thunder Bay Rossport

The Institutes which disbanded were:

Addington	— Newburgh
Brant North	—Paris
Carleton East	
Haldimand	— Cheapside
Middlesex East	— Dorchester Juniors
Middlesex West	— Tait's Corners
Norfolk South	
Oxford North	— Innerkip Juniors
Perth South	
Renfrew North	Lake Dore
Russell	Grant
Victoria East	— Haliburton
York North	— Nobleton Juniors, Glenpark
Muskoka North	— Birkendale
Rainy River West	— Dearlock
St. Joseph Island	— Milford Haven
Temiskaming Centre	— Swastika
Thunder Bay	Coronation, Slate River

District Annual Meetings and Conventions

In May and June, 1946, annual meetings were held in 99 districts with representatives from 1,231 Institutes (93.9%) and a total attendance of 9,050.

Thirteen area conventions were held in the fall of 1946 with an attendance of 3.546.

The Women's Institute Branch and Home Economics Service was represented at all annual meetings and at all conventions.

Correspondence

Circular letters approximated 40,000; personal letters approximated 26,000.

Legislative Grants

To districts \$3,646.50; to Institutes \$2,013.00; Total \$5,659.50.

Literature Printed

Home and Country — 4 issues — 38,000 copies each. Co-operative Program in Home Economics — 7,800 copies.

Literature Mimeographed

Care of Clothing	600	copies
Personality and Dress	3,200	copies
Frozen Foods		copies
Oven Meals		copies
Whole Grain Cereals	1,500	copies
The Bride's Primer	200	copies
Salads the Year Round	15,000	copies
Aids for the Home Aid	500	copies
Safety First	250	copies
Junior Extension material	23,900	copies

FEDERATED WOMEN'S INSTITUTES OF ONTARIO

The Provincial Board held two meetings. April, 1946, and December, 1946. At the April Board meeting Mrs. J. H. McCulloch was appointed secretary-treasurer. At the December meeting Mrs. Hugh Summers, R.R. 1, Fonthill, was re-elected president and Mrs. J. H. McCulloch, R.R. 2, Brampton, was re-appointed secretary-treasurer.

The treasurer's annual statement showed receipts of \$15,782.23, expenditures of \$5,755.12 with a balance of \$10,027.11.

The Fiftieth Anniversary Committee and the Handbook Committee continued to work on their respective tasks.

An Adelaide Hoodless Foundation Fund was launched to provide Home Economics' scholarships and to help defray expenses in connection with the Fiftieth Anniversary Celebration to be held at the Ontario Agricultural College, Guelph, on June 18, 1947. At the end of March, 1947, the total amount collected was \$18,077.05.

In December, 1946, two Junior Institute Directors were appointed to the Provincial Board for the first time. F.W.I.O. fee of 15 cents per member for Junior members was discontinued and in place of this the Junior Farmers' agreed to pay an affiliation fee of \$25.00 and carry the expenses of the Junior Board Directors to the Board Meetings of the Federated Women's Institutes of Ontario.

Affiliations

The Federated Women's Institutes of Ontario are constituent members of the Federated Women's Institutes of Canada and the Associated Country Women of the World. They are also affiliated with the Ontario Federation of Agriculture.

Mrs. Hugh Summers and Mrs. L. W. Challand were appointed Directors to the Federated Women's Institutes of Canada Board to represent Ontario at the Biennial meeting in Halifax, Nova Scotia, in June, 1947.

Letter Friends

To establish closer bonds of friendship and understanding between Ontario Women's Institutes and other constituent groups of the Associated Country Women of the World the following new letter friends were contacted: Australia 15, England 20 and New Zealand 5.

Adopting British Institutes

The names of the county secretaries of the National Federation of Women's Institutes have been sent to 51 Ontario Institutes who are adopting British Institutes, sending them parcels, exchanging programs and carrying on correspondence.

Visitors to Ontario Institutes

Miss Sybil Hill, Senior Social Welfare Officer, Lands Department, Jamaica, a guest of the Women's Institute Branch during October and November, visited several Institutes and Convention areas.

Mrs. Charles Russell of England, representing the A.C.W.W., spoke to a representative gathering of women across Southern Ontario.

CENTRAL WAR CHARITIES FUND

The Central War Charities Fund was officially closed April 30, 1946. The balance of the Fund was used as follows:

Save the Children Fund	\$ 235.00
Veterans' Amputation Fund	500.00
Veterans' Health and Occupation Centre (Ottawa)	180.00
Christie Street Hospital, Toronto	360.00
Red Chevron (Veterans' Home), Toronto	180.00
Scarboro Hall, Toronto	180.00

Lyndhurst Veterans' Home, Toronto	180.00
Veterans' Health and Occupational Centre, Divadale, Toronto	180.00
War Veterans' Hospital, Kingston	180.00
War Veterans' Hospital, Peterboro	
Sunnybrook Military Hospital, Toronto	1,000.00
The Canadian Paraplegic Association, Toronto	180.00
Sunnybrook Hospital, Toronto (for plaque on door of ward	
furnished with the \$1,000.00)	45.00

The two mobile canteens previously donated to the Civil Defence Committees of Nova Scotia and New Brunswick were turned over to the Save the Children Fund and sent to Sweden and Poland.

WOMEN'S INSTITUTE BRANCH AND HOME ECONOMICS SERVICE

At the end of the fiscal year 1946-47 the Branch name was changed to Women's Institute Branch and Home Economics Service, the superintendent became director of the Branch and provision was made for the appointment of an assistant director and supervisors in various fields of Home Economics extension work.

Two new phases of work were introduced, namely, weaving and psychology for the homemaker.

Staff

The staff consisted of the director, the supervisor of Junior Extension, four Home Economists in Nutrition, four Home Economists in Clothing, one in Housing, two in Handicrafts, two in Loan Library work, one field Assistant in Health Education, one in Psychology, thirteen County Home Economists and five office staff. As well as the above, six part-time extension workers were employed to do special work in Administrative Leadership, Clothing and Junior work.

The following appointments were made: Misses Beth Bridge, Dora W. Burke, Nora Creyke, Elsie M. Irvine, Mary Irvine, Anne Lawson, Ina R. Lindsay, Esther F. Martin, Irene H. McBride, Edna Shea, Audrey Spencer, E. Jean Stewart and Katherine Veale.

The following resignations were received: Misses Evelyn McDonald, Margaret Roy and Margaret Schwieder.

The following transfers were arranged: Misses Jean M. Glen and Katherine Veale.

Miss Helen Abell and Miss Helen McKercher were on leave of absence attending Cornell University.

Staff Conferences

Two Junior conferences were held, one in November and a workshop conference in September. A general staff conference was held in the main Parliament Buildings in November and two Senior conferences were called in the spring to discuss the Co-operative Program for 1947-48 and to plan for district annual meetings.

Radio Programs

With the assistance of the Supervisor of Publicity, 16 radio interviews were arranged by the staff members as promotion work for our Branch.

THE CO-OPERATIVE PROGRAM IN HOME ECONOMICS

In planning the Co-operative Program in Home Economics special emphasis was placed on the needs of the young matron and courses were re-vamped to help our women cope with new postwar responsibilities.

Through our Home Economics extension program we aim:

- 1. To help women acquire sound and improved practices for greater home efficiency.
- 2. To discover, stimulate and train leaders.
- 3. To develop a more abundant life in our rural communities and a deeper appreciation of the things near at hand.
- 4. To develop better and more useful citizens.

Our Women's Institutes of Ontario are deeply interested in the maintenance and betterment of home life, fully realizing that "A nation cannot rise above the level of its homes".

Through our Co-operative Program it is our aim to take to the women of Ontario the type of Homemaking education which they most desire and which will be most helpful to them.

District Services included: one day conferences (to be followed by local study) in Care of Clothing, Wise Buying of Clothing; one-half day conferences in Household Accounting, Citizenship in the Rural Community and Developing Community Enterprises; two-day local leader training schools in Salads the Year Round and Better Meals with Whole Grain Cereals; one day lecture-demonstrations in Health Education; and one day rallies in Administrative Leadership.

Short Courses were offered to Branch Institutes as follows: Food for Young Children, Frozen Foods, Oven Meals, The Bride's Primer of Food Preparation, The School Lunch—two afternoons each; Knitting, Quilts and Quilting—two successive whole days; Leather Glove Making—three successive whole days; Needlecraft, Braided Rugs and Hooked Rugs—five successive whole days; The Furnishings of the Living Room—two successive afternoons; The Time-Saving Kitchen—three afternoons; Health Education—five successive days.

DISTRICT PROGRAM

Topic	Districts Served	Meetings Held	Institutes Represented	Enrol- ment
Care of Clothing	7	28	92	541
Wise Buying of Clothing	1	4	12	76
Better Meals with Whole Grain Products	. 2	6	24	88
Salads the Year Round	26	55	229	928
Household Accounting	_ 7	21	52	481
Health Education	9	41	108	1967
Citizenship in the Rural Community	25	59	143	1217
Developing Community Enterprises	12	42	135	1123
Family Relationship		5	7	180
Administrative Leadership	42	67	354	1367

INSTITUTE PROGRAM

Short Courses			
	No. of	Enrol-	Average
Topic	Courses	ment	Attendance
Modern Dressmaking	34	433	10
Clothes for Little Folk	8	100	10
Personality and Dress	28	528	17

Oven Meals	57	1257	22
Frozen Foods	32	1188	37
Foods for Young Children	5	67	13
The Bride's Primer of Food Preparation	5	65	13
The School Lunch	4	70	18
Leathercraft	2	24	12
Leather Glove Making	13	129	9
Needlecraft	4	66	17
Quilts and Quilting	2	30	15
Hooked Rugs	7	46	10
Health Education	3	161	23
The Furnishings of the Living Room	9	155	17
The Time-Saving Kitchen	13	282	22
The Development of the Elementary School Child	4	90	11
Refreshments	2	54	27

Five Summary Days in Nutrition were arranged with an enrolment of 361 and an average attendance of 73.

Two special lectures in Nutrition were given by two Institute groups with an average attendance of 35.

LOAN LIBRARY

Number	of	folders sent to Institutes	7773
Number	of	Women's Institutes served	1314
Number	of	letters sent with folders	1314

To assist members in the preparation of programs 7,773 folders were sent out on loan for a two-week period. The following classification indicates the interests of the Institutes: Home Economics 1,597, Women's Institutes work 1,544, Citizenship 1,211, Social Welfare 1,029, Agriculture and Canadian Industries 812, Historical Research 428, Music, Art and Literature 29, Unclassified 1,122.

JUNIOR EXTENSION PROGRAM IN HOME ECONOMICS

Junior Homemaking Clubs

The Junior Homemaking Club program for girls and young women, ages 12 to 26, is planned to give training in home economics, to develop leaders and to promote intelligent rural citizenship. This program is carried on through local leader schools, conducted by the county home economist, which are followed by club meetings and county achievement days.

	Training			No. of	
	Schools for	No. of	No. of	Achievemen	t Records of
Units	Leaders	Clubs	Members	Days	Achievement
Food and Nutrition Clubs	23	99	478		388
Clothing Clubs	33	151	933		681
House Furnishing Clubs	7	70	332		271
Hospitality Clubs	17	112	728		559
Home Defence Clubs	_ 1	6	41		29
Total	81	438	2512		1928

Sixty-nine members participated in the Junior Homemaking Club program at the Belleville Fair, 55 at Stratford Fair, 60 at Simcoe Fair and 95 at Central Canada Junior Day at Kemptville Agricultural School.

Clothing teams from nine counties took part in a provincial clothing contest at Guelph in October. The York County team was selected on that day to represent Ontario at the National Contest sponsored by the Canadian Council on Boys' and Girls' Work at the Royal Winter Fair. The Ontario team, in competition with seven provincial teams, stood first.

Provincial Honour pins and certificates were awarded in 1946 to 31 club members who had completed 12 Homemaking Club units.

Girls' Garden Brigades

Girls' Garden Brigades had a membership of 1,590 gardeners in 1946. Brigades were organized in 48 counties and districts under the supervision of the agricultural representatives and the home economists. Records show over 90% of the gardens in production with 75% of the gardeners completing every phase of the program.

Short Course Schools in Home Economics

During the winter months two Three Month, one Six Weeks and seven One Month Schools in Home Economics were conducted in nine counties. Courses in Foods and Nutrition, Clothing, Handicrafts and Health Education were given. The Three Months Schools were held at Kohler at the Haldimand Rural Youth and Community Centre and at Rockton in Wentworth County. Since this was the second year at Kohler, registration included both first and second year students. The Six Weeks School was held at Woodstock and the One Month Schools at Ripley, Bruce County; Exeter, Huron County; Belgrave. Huron County; Campbellford, Northumberland County; Brampton, Peel County; Newton Robinson, Simcoe County; St. Clements, Waterloo County. Registration reports show 125 young women enrolled in these schools.

Junior Institutes

Junior Institutes, Farm Girls' Clubs and rural young women associated with Junior Farmers' continued to co-operate with Seniors and Junior Farmers' in developing home and family life, agriculture, community spirit and citizenship. Juniors have been given representation on the Board of the Federated Women's Institutes of Ontario. The representatives, two members of Junior Institutes, are selected at the annual meeting of the Junior Farmers' Association to represent Junior Institutes and other young women, members of Junior Farmers' Association. Throughout the year the Juniors carried on special activities with Junior Farmers such as Field Days, Sunday Services, Amateur Entertainments, Public Speaking Contests and Citizenship studies. They attended one day Leadership Training Schools for officers in seven districts and regional conferences at the Kemptville Agricultural School and the Ontario Agricultural College, Guelph.

Program kits with assistance on subject matter for papers, demonstrations and discussions on twenty-four topics were used by fifty-two clubs. Do You Know the Rules and What Are You Like were most popular topics with Family Living and Citizenship rating next.

Special Undertakings

Juniors adopted sixteen children representing five nationalities through Save the Children Fund and made special donations to The Canadian National Committee on Refugees and The Unitarian Service Committee of Canada. Some twenty-four garments, made from supplies on hand, were released to Save the Children Fund — Czechoslovakia and England.

Junior Pen Friends

Pen friends have been established with forty-five rural young women in Australia, New Zealand, England, Scotland and Holland.

COMMUNITY NUTRITION COURSE

The Women's Institute Branch and Home Economics Service co-operated with the Canadian Dietetic Association in the organization and administration of a post-graduate course in Community Nutrition. Each of three home economics graduates, who had been granted bursaries provided by the Canadian Life Insurance Officers' Association spent six weeks with the Women's Institute Branch and Home Economics Service as part of her nine-month course.

CO-OPERATION WITH OTHER ORGANIZATIONS

Our Branch wishes to acknowledge the assistance given so generously by other Branches of the Department, especially the Agricultural Representatives Branch, the Ontario Agricultural College and the Kemptville Agricultural School.

The staff of the Women's Institute Branch and Home Economics Service co-operated with such organizations as the Women's Division of the Ontario Agricultural Societies, the Junior Farmers' Association, the Federation of Agriculture, the Canadian Council on Boys' and Girls' Club Work, the Canadian Red Cross Society, the Consumer Branch of the Wartime Prices and Trade Board, the Canadian Society for the Control of Cancer, the Health League of Canada, the Universities' Adult Education Board of Ontario and other agencies.

ONTARIO'S GIFT TO THE WORLD

On February 19, 1947, the Fiftieth Anniversary of the founding of the first Women's Institute in the World was celebrated at Stoney Creek, Ontario.

From Stoney Creek the Women's Institutes have spread throughout Ontario, across Canada to Great Britain and the Empire. Women's Institutes and similar organizations are now established in twenty-five countries throughout the World and are organized as The Associated Country Women of the World.

We pay tribute to Stoney Creek Institute, to Mrs. Adelaide Hoodless the organizer, to Mr. Erland Lee who was instrumental in arranging that first meeting and to all those who contributed so much toward the early establishment of the organization and its development throughout the years.

OUTLOOK

Working with the rural women and girls of this province through Senior and Junior Women's Institutes, Homemaking Clubs and other groups, the Women's Institute Branch and Home Economics Service looks forward to meeting the challenge of the day.

Through intelligent study and practical action we shall work together to maintain high standards for home and family life. This covers a wide field since our home and family life influences and is influenced by conditions in our community, our country and the world. Our horizons have broadened and our responsibilities have increased.

The outlook is bright because our women are ready for constructive action. This has been show by the growth of our organization in the past year and in the expansion of the work of our Branch.

Much must yet be accomplished. Some parts of our Province have still not been reached by Institute work and in other sections where groups already are established many in the community do not receive the benefits offered. This is a challenge to our members and our extension workers. If we are to maintain high standards of home and family life in our rural communities and accept our responsibilities in the world community then every family in the community must be encouraged to work toward this goal.

To do this we shall need adequate well-qualified staff and unselfish publicspirited Institute women. With gratitude we report that progress is being made in securing this personnel.

FRUIT BRANCH

As mentioned in the previous report for this Branch, weather conditions in 1945 adversely affected tree growth and the production of fruit for that year. Above normal precipitation together with sub-normal temperatures prevailed in the April-June quarter. These weather conditions were unfavourable for good pollination and were most favourable for the development of apple scab. So serious was the infection of apple scab that many apple orchards were defoliated, a considerable number of trees being killed. However, during the period now under review growers made a more determined effort to spray their orchards thoroughly, and to re-invigorate the trees by good cultural practices, and as weather conditions were more favourable, trees in 1946 made good growth, matured well and wintered without injury; so that more satisfactory yields were harvested in 1946, and present prospects indicate further recovery. For 1946 the value of the fruit crop was \$15,025,700.00 compared with \$9,870,000.00 for the 1945 crop.

The record of precipitation, together with normal for that station, has been tabulated from statistics obtained from the Dominion Meteorological office for certain stations located in important fruit and vegetable producing areas, as follows:

Three Month Period	Year	Lean Total	ington Station Normal	Vin Total	eland Station Normal	Collin Total	igwood Station Normal	Belle Total	ville Sta. Nor.
JanMar.	1944 1945 1946	6.57 6.30 5.20	6.57	6.27 7.60 6.60	7.28	5.21 6.10 6.50	5.17	7.38 8.20 6.10	8.35
AprJune	1944 1945 1946	9.21 12.00 9.15	8.26	9.67 13.90 5.39	7.72	4.71 5.30 1.95	6.99	7.92 11.60 6.50	7.20
July-Sept.	1944 1945 1946	8.54 8.80 2.39	7.22	9.16 13.30 6.67	7.83	4.23 4.70 3.43	7.60	6.11 11.90 6.15	7.95
OctDec.	1944 1945 1946	3.24 10.20 6.91	6.78	7.39 9.20 7.51	7.17	9.01 6.30 6.63	6.97	$9.47 \\ 8.40 \\ 10.74$	7.67

Production Commercial Fruit Crop

The final estimated production of fruits in 1946, together with the five year average production 1940-44 inclusive, is as follows:

Commodity	Unit	5 Year 40-44 Average	Produ 1945	uction 1946	1946 % Change From Average
Apples	Bus.	2,207,600	549,540	2,039,607	— 7.6
Cherries, sour	Bus.	105,831	11,526	135,217	+ 27.8
Cherries, sweet	Bus.	85,998	29,650	48,257	44.0
Grapes	Ton	27,624	31,531	32,563	+ 17.9
Peaches	Bus.	1,130,000	910,500	1,475,560	+ 30.6
Pears	Bus.	368,000	46,480	268,811	- 27.0
Plums and Prunes	Bus.	156,000	27,415	301,315	+ 93.2
Raspberries	Qts.	4,763,500	4,436,750	3,022,700	36.5
Strawberries	Qts.	6,636,300	6,146,350	7,759,470	+ 16.9

Production and harvesting costs were as high as in the year previous, and in some districts were considerably higher. The fruit and vegetable growers of the Province are now much interested in better facilities for storage of their products at points of production, in central grading and packing and in the further development of domestic and export markets. Marketing, of course, starts with production and the Fieldmen of the Branch have worked energetically to have producers adopt the most approved cultural and marketing practices.

Vegetables

The fertile marsh lands in the Leamington and Erieau areas suffered from flood damage which seriously reduced the onion acreage. In the Holland Marsh area, now cleared and under production, a careful survey was made to ascertain factual information on production for the industry, and for the Department. The following is a summary of the survey.

	Total Acreage	% of	Production
Crop	1946	Total	Estimated 1946
Potatoes	1316	29.2	559,300 bus.
Onions	1124	24.9	730,600 bags 50's
Carrots	675	15.0	506,250 hprs.
Head Lettuce	667	14.8	233,450 crates
Celery	456	10.1	364,800 crates
Beets	63	1.4	47,250 hprs.
Cauliflower	39	0.9	19,500 doz.
Spinach		0.8	444 tons
Cabbage	30	.7	600 tons
Miscellaneous	99	2.2	
	4506	100%	

Throughout the main vegetable producing areas of the Province acreage was maintained but with some shifting of crops. Yields in most sections were satisfactory, and the value of the 1946 crop was calculated to be \$31,199,800.00 compared with \$27,530,600.00 for the 1945 crop. The growers of early potatoes in the Kent-Essex area, the celery growers in the Thedford and Bradford areas and the onion growers have made progress by improving the grading and packaging, by adding to and improving storage facilities, and by selecting strains of vegetables more suitable for any given area. In the Holland Marsh area the Bradford Co-operative Storage Limited, with financial assistance from the Dominion and the Province, constructed a modern cold storage warehouse. at a cost of \$275,000.00. Celery, onions and carrots grown in the area were stored to the full capacity of the warehouse.

The production of vegetables for processing showed a substantial increase above that of the year previous. Purchases made by processors of some of the major canning crop vegetables for 1946 are tabulated along with corresponding figures for 1945, as follows:

PURCHASES BY PROCESSORS OF THE MAJOR CANNING CROP

			1946 % Change
Vegetables — Tons	1945	1946	From 1945
Asparagus	1,289	1,174	8.9
Beans, green and wax	782	1,061	+ 35.7
Corn	27,373	42,828	+ 56.5
Peas, shelled	19,412	28,101	+ 44.8
Tomatoes	144,071	279,588	+ 94.0

THE PLANT DISEASES ACT

European Dutch Elm Disease

Fortunately the European Dutch Elm Disease has not been found in Ontario. Knowing the disease to be present in the Lake St. Pierre area of the Province of Quebec, and realizing possible loss to Ontario should the disease gain a foothold in this Province. a careful survey was again undertaken during the summer. Most of the survey work being done in counties bordering on the Ottawa and St. Lawrence Rivers. A staff of six university students was engaged to undertake scouting operations. These inspectors worked under supervision of officials appointed by the Plant Protection Division. Realizing the native elm contributes so much to the landscape of the Province and that commercially the elm is very important to industry, a careful watch will be maintained to ensure the disease does not become established.

Japanese Beetle

In co-operation with the Plant Protection Division a further survey was made to determine where the Japanese beetle occurred in the Province and the degree of infestation. Fifty school girls wer appointed to attend the traps placed in selected areas. The results may be tabulated as follows:

Area	No. of Traps	No. of Beetles Trapped	Increase or Decrease from Previous Years
Windsor District	2370	9	— 15%
	1265	38	— 7%
Niagara Falls Toronto-Hamilton	1670	46	+ 2%
	1882	454	+282%

Only in the Hamilton area was the beetle count considered to be sufficiently high to warrant control measures being taken. The City of Hamilton co-operated with government departments in spraying with arsenate of lead the lawns in that section of the city most heavily infested. Satisfactory results were obtained.

Nursery Inspection

During the year under review six inspectors were appointed to inspect plants being propagated in nurseries registered in Ontario. These inspectors, undergraduate women students, were under supervision of the Provincial Entomologist and performed their duties in a very satisfactory manner.

Apple Maggot

A more vigorous educational campaign for control of apple maggot has been undertaken. Seven inspectors were in the field making personal visits to commercial growers to induce them (a) to destroy all native hawthorns (b) to destroy or spray neglected apple trees and (c) to apply the recommended apple maggot sprays to all apple trees in or near their orchards.

In the autumn just prior to harvesting of the apple crop an inspection of orchards was made. The degree of apple maggot infestation was down substantially from the previous year. More strict Dominion regulations respecting the issuance of certificates for apples intended for export, and because the apple growers of this Province wish to retain the United Kingdom markets, induced the Apple Maggot Control Board of Ontario to urge the Department to amend existing control regulations to provide for (a) the destruction of all native hawthorns growing within 300 yards of a commercial orchard and (b) for either the destruction or the thorough spraying of all neglected apple trees growing near a commercial orchard.

Bacterial Ring Rot in Potatoes

Bacterial Ring Rot in potatoes is perhaps the most menacing disease threatening the potato industry. However, experience has shown that where the prescribed prevention and control measures are employed thoroughly the disease can be eradicated. Commercial potato growers have shown marked co-operation and enthusiasm in an endeavour to check the spread of this disease. The regulations respecting this disease have the endorsation of these growers. The following table summarizes the extent to which the disease has been found:

	Inst	pected	Inf	Infected	
Year	Farms	Acreage	Farms	Acreage	Counties
1943	902	10,000	157	1,200	24
1944	3000	10,000	463	2,800	
1945	3300	31,000	281	1,200	26
1946	2410	15,000	673	3,637	28

The educational work deemed advisable to check the spread of this disease has been undertaken by Crops, Seeds and Weeds Branch of the Department. Proper enforcement of the regulations respecting Bacterial Ring Rot in potatoes led to prosecution in a few cases.

Sugar Beet Nematode

Sugar Beet Nematode was not found to occur outside the Blackwell precautionary area. Two inspectors attended at country loading points to ensure care was taken by truckers to prevent spread of the nematode through scattering of nematode infested soil. Similarly these inspectors supervised car washing operations at unloading points. Crop rotation appears to give the desired check in nematode count. Control of flood waters is also desirable. Where growers have small holdings adequate rotation appears difficult.

Licensing of Dealers

Regulations passed under the provisions of The Farm Products Grades and Sales Act respecting the Licensing of dealers in fruit and vegetables became effective July 1st, 1946. These regulations required persons to procure a licence before engaging in the business of a dealer in fruit and vegetables. Licences to 636 dealers and markers for 902 trucks were issued during the period July 1, 1946, to March 31, 1947. This work was administered by Mr. J. W. Drennan, Inspector of Licences, Fruit Branch. On complaints received from producers three cases were investigated where it was alleged dealers had failed to keep agreements respecting payment for produce. Satisfactory settlements were arranged so that prosecutions proved unnecessary. It may be said that in general dealers willingly complied with these new regulations and producers approved of the progress made in the marketing of fruits and vegetables.

Inspection - Fruit and Vegetables

During the period under review inspection of fruit and vegetables under the supervision and administration of Mr. W. McNiven, Chief Inspector, a marked expansion was accomplished. Much of this work had to be discontinued during the war but now that help is again becoming available more attention can be given to ensure that farm products are properly graded and packed. Producers' organizations have urged an expansion of inspection services realizing that higher grade standards and improved packing and packaging will materially benefit the marketing of such products.

Inspection work was undertaken in an administrative capacity in the larger distributive and consuming centres, at highway inspection stations and by determining the grades of tomatoes purchased from producers for processing.

Fruitland Inspection Station

A new highway inspection station was built on the Queen Elizabeth Highway near Fruitland, to serve the Niagara Peninsula. The station was opened on August 6, with a staff of six inspectors providing a twenty-four hour service. Both the Highway Inspection Station at Gravenhurst on Highway No. 11 and the station at Napanee on Highway No. 2 were opened, the staff providing a twenty-four hour service seven days a week. The following table summarizes the movement of fruits and vegetables through each of these stations:

Station	No. of Trucks Inspected	No. of Packages Carried
Fruitland	6524	2,695,057
Gravenhurst	2656	605,554
Napanee	528	108,829
	9708	3,409,440

At five of the more important tomato producing areas the Branch was requested to determine the grades of tomatoes purchased for processing. Some factual information was requested by growers and by processors to ascertain grade averages, costs of grading and equipment and to determine how best an extension of this service might be undertaken when requested by the industry. Sample packages were selected from each load of tomatoes delivered for processing, the results being summarized as follows:

		No. 1	No. 2	
Area	Tonnage	Grade	Grade	Culls
Essex-Kent	27,620	61.5	36.9	1.6
Halton, Peel, York	6,827	65.8	32.5	1.7
Durham, Northumberland	5,195	64.7	34.1	1.2
Prince Edward	4,642	74.7	23.2	2.1
Totals	44,284	66.7	31.7	1.6

Much educational work was carried on at certain seasons of the year and in different producing areas to improve the quality of the products marketed. Growers were cautioned for example about picking immature plums and peaches. In some of the commercial potato producing areas the inspectors made many visits to growers to ensure the potatoes were properly graded and the packages properly marked.

THE CO-OPERATIVE MARKETING LOAN ACT

Under this legislation which was drafted primarily to assist co-operative organizations in providing needed facilities for processing and for central grading and packing of farm products produced in the community, substantial financial asstance has been given. Wherever the need arose or whenever it was deemed advisable, counsel and advice in management and administration was given, hoping the groups would avoid mistakes which might undermine the success of such co-operatives.

With respect to the record of co-operatives assisted under this Act, it is gratifying to know that with one exception there are no arrears of principal or interest, in fact several of the co-operatives have repaid their loans before the due date. Believing it to be sound policy the co-operatives have been advised in this period of general prosperity to retire any indebtedness as soon as possible.

GOVERNMENT COLD STORAGE

The Government owned cold storage warehouse at Thedford again operated throughout the year. The local fruit and vegetable growers and poultrymen of the county are given preference when storage space is required. During the year the following commodities were admitted for storage:

Apples	1,662	hprs.
Beets	455	tons
Carrots	1,909	hprs.
Celery	41,973	crates
Cerogras	816	tons
Eggs	2,640	cases
Peas	258	bbls. ?
	3,000	cases §
Potatoes	860	bags

A satisfactory net profit has been shown for the last fiscal year after writing off depreciation on plant and equipment at standard rates and maintaining the efficiency of the plant.

The cold storage warehouse at Brighton bought by the Province, in 1921, and presently managed by Mr. H. Morley Webster, Fieldman for this Branch, has not sufficient capacity for storing the apples produced in the area. Nevertheless to the capacity of the plant it does provide very necessary facilities and services for apple growers in the community. During the year the following commodities were stored by 24 producers:

Apples 29,500 hprs. Onions 1,600 bags

The revenue of this warehouse met all operating and maintenance costs and showed a satisfactory surplus for the year.

Fruit Merchandising Tests

The fruit merchandising tests as reported a year ago were continued in co-operation with the Horticultural Experiment Station, Vineland Station. Various non-standard packages were tried, further tests made with transparent covers, information gathered on results obtained from tests on brown rot control. This Branch examined experimental shipments sent to Ft. William, Timmins, Ottawa, Belleville, Oshawa and Toronto. More detailed summaries of these tests may be obtained by referring to project No. 432 of the Horticultural Experimental Station report.

DAIRY BRANCH

Butterfat manufactured into creamery butter continued to be subsidized at 10 cents per pound by the Dominion Government during 1946. With the removal of subsidies on many commodities it is expected the subsidy on butter will soon be discontinued and a subsequent rise in the ceiling price of butter is expected. The Dairy Branch continued to supervise this work during the year as previously.

During the period in which cheese was requisitioned for Britain from June 1st to October 12, 1946, the provincial subsidy of 2 cents per pound was paid on all cheddar cheese manufactured from milk produced in Ontario. The requisitioning period was shorter than the previous year and the amount of cheese requisitioned was less than the previous year, with the result that the total subsidy paid was \$1,260,083.88, compared with \$2,198,331.70 for the previous year.

Despite the fact that an increase of 4 cents per pound was allowed on butter on April 1, 1946, the production of creamery butter was the lowest since 1930. The decrease in production from 1945 was 11.2 per cent. Cheese production declined 18.6 per cent. from the previous year and was the lowest since 1939. This, despite the fact that producer subsidy of 30 cents per hundred pounds of milk was paid compared with 20 cents in 1945.

Concentrated milk declined only 2.4 per cent., while milk for fluid consumption increased 6.4 per cent. The production of milk in Ontario decreased over 5 per cent. in 1946 largely due to the extremely dry summer. Until the rise in the consumer prices of milk, fluid milk requirements diverted milk away from creameries and cheese factories. After the price increase the production of creamery butter increased.

While a number of men returned to their former positions in creameries and cheese factories on being discharged from the armed forces, there still existed a shortage of experienced help in quite a number of plants. Observations indicate that men are not returning to creameries and cheese factories in any great number when higher salaries and shorter hours prevail in other industries.

A number of changes were made in the personnel of the Dairy Branch field staff — W. R. Derry, B.S.A., joined the creamery instruction staff on May 15th and assumed the supervision of the Northern Ontario group with the added responsibility of field work with the Milk Control Board. Mr. Derry was with the Army Intelligence Service and saw action in Italy and Holland. Mr. F. V. R. Macdonald resigned from the creamery instruction staff on February 28th to accept a position in another industry. Mr. C. W. Hamilton joined the cheese instruction staff on May 1st as cheese instructor and inspector in Western Ontario where he has made cheese for several years. Mr. C. E. Butterill was appointed cheese instructor on April 1st in the County of Frontenac as successor to Mr. G. E. Clarke who had left the service. Mr. J. S. Thibault succeeded Mr. P. Blondin as cheese instructor in Russell and Stormont Counties. Mr. H. Stinson was appointed as instructor and inspector to assist in the quality production of milk received at milk manufacturing plants in Eastern Ontario.

Chief Creamery Instructor Chief Cheese Factory Instructors Cheese and Butter Instructors Cheese Factory Instructors Creamery Instructors Manufactured Milk Plant Instructor		. 2 . 2 . 28	1946 1 2 2 2 28 9
Tot	al	42	43
Dairy Plant Licenses Issued: Creameries Cheese Factories Combined Plants		571 27	1946 266 532 20
Production of Cheese in Ontario: Western Ontario Central Ontario Eastern Ontario Northern Ontario Totals	1945 23,051,466 19,185,500 69,526,249 1,641,153	1946 19,082,273 16,340,465 57,013,685 1,302,801 93,739,224 g	
Of the total production of cheese	in the Dominic	n Ontario n	roduced 59

Of the total production of cheese in the Dominion, Ontario produced 59.3 per cent. in 1944, 61.5 per cent. in 1945 and 65.3 per cent. in 1946. This is the highest percentage produced by Ontario for many years.

Federal	Grades	of	Ontario	Cheese —	1946:
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per pound of cheese

		~ ~ .		~ ~ .	Per Cent.	
	No. Boxes	Per Cent. 1st Grade		Per Cent.		Average
	Graded	1st Grade	2nd Grade	sra Graae	sra Graae	Score
Western Ontario	197,815	96.41	3.57	0.02		92,818
Central Ontario	235,288	95.81	4.04	0.14	0.01	93.164
Eastern Ontario	562,298	95.99	3.81	0.18	0.02	92.888
Northern Ontario	11,824	86.00	13.15	0.56	0.29	91.763
TOTAL — 1946	1,007,225	95.91	3.92	0.15	0.02	92.926
TOTAL — 1945	1,260,121	96.00	3.87	0.12	0.01	92.944
Total for Canada, 1946	1,549,273	93.38	6.31	0.27	0.04	92.656
Total for Canada, 1945	2,036,060	93.80	5.95	0.21	0.04	92.688

Score of Ontario Cheese:

beore of Omario Cheese.			
	Per Cent. 94 Score or Higher	Per Cent. 93 Score	Per Cent. Below 93 Score
1946	31.70	43.46	24.84
1945	32.54	43.32	24.14
Cheese Factory Summary:			
		1945	1946
No. of Factories operatin No. of PatronsAverage per cent. fat in	the milk	25,667 3.36	544 23,445 3.32
Average pounds milk to p			11.42
Average pounds cheese p	er pound of fat	2.60	2.59
Money spent on improve	ments	\$258,997.	\$278,691.
Average price per pound (subsidies and premi Average Dominion Gove	ums excluded)		21.24¢
Tiverage Dominion Gover	imment i chimuni		

1.18¢

1.06¢

Cheesemakers' Certificates Issued:

	First Class	Second Class	Permits	Beginners' Permits	Special Permits	TOTAL
1946	422	95	26	56	17	616
1945	438	93	30	45	27	633

Cheese Factory Instruction

The labor conditions in the cheese factories in 1946 were more serious than in 1945 and seem to be getting more serious rather than improving. The shortage of qualified makers was quite pronounced. Many of the older makers who continued during the war have retired. There was also a definite shortage of experienced and inexperienced helpers for cheese factories. More remunerative employment in other industries and shorter hours of employment are attracting the younger men away from the dairy industry. The slight decrease in quality can largely be attributed to the labor shortage and inexperienced help in many of the plants.

The production of cheese declined 18.6 per cent. below 1945. Dry weather in the summer months was largely responsible for this decline. Shortage of farm labor also resulted in fewer cows being milked in cheese factory areas.

During the year the instructors made 10,448 visits to cheese factories and 3,504 visits to producers sending inferior quality milk to cheese factories. Due to the improvement in the quality of the milk, there were less visits made to producers than last year. Greater improvement has been made in producing clean milk for cheese in 1946, than in any year previous as is illustrated by the improvement in the amount of extraneous matter in cheese in 1946. Many cheese factories have purchased milk sediment testers and are testing the milk for sediment. Many of the producers are making every effort to keep sediment out of their milk. More care is also being taken at cheese factories to keep sediment out of the milk received than ever before. This has greatly improved the quality of the cheese in respect to extraneous matter in cheese.

Plants manufacturing condensed and evaporated milk have had the services of the Dairy Branch Instructors to check the milk for sediment. This is the first year this work has been done by this department. It has aided considerably in improving the quality of milk going to these plants. The plant managers appreciate the assistance given and have expressed their desire to co-operate with the department in our effort to clean up the milk going to these plants. The improvement in quality this year is very encouraging and stresses the need for continuing this work.

During the year the instructors made 39,453 methylene blue tests, 18,195 fermentation tests and 67,278 sediment tests at cheese factories to determine the quality of the milk. The quality of milk for cheese is being closely inspected by the instructors in order to keep up the quality of Ontario cheese.

Cheese Factory improvement has been encouraged and the condition of plants and equipment again received close inspection. A great many improvements have been made and many more improvements are required before some plants will receive their license to operate in 1947.

Three hundred and thirty cheese factories in Ontario have improved ripening rooms. In Eastern Ontario, 26 factories were equipped with improved cool curing rooms in 1946. Aside from factories which have been amalgamated there are 17 cheese factories that have been re-built or re-constructed to replace old factories, including 3 factories destroyed by fire.

In 1946, there were 15 amalgamations of cheese factories in Eastern Ontario and new factories erected. Some of these new factories are completed and ready for operation while others are in the process of construction and will be completed in the near future. These 15 new factories will replace 32 small and poorly equipped plants which are no longer in operation. The amalgamation of cheese factories is being encouraged and more amalgamations are under consideration for next year. The decrease in the number of factories within the year from 570 to 544 is largely due to amalgamations. A few plants received so little milk that it was found unprofitable to operate and the milk was delivered to other cheese factories and milk plants. One-hundred and eighty-five factories have completed extensive improvements to plants and equipment, and the outside as well as the inside appearance has been improved at many plants. The general appearance of cheese factories has shown a marked improvement in 1946.

Production of Creamery Butter in Ontario

	1945	1946
Western Ontario	51,264,801 lbs.	44,004,586 lbs.
Central Ontario	12,538,454	11,689,477
Eastern Ontario	9,473,779	9,311,445
Northern Ontario	4,234,226	3,948,729
Total	77,511,260 lbs.	68,954,237 lbs.

Of Canada's total butter production Ontario produced 25.1 per cent. in 1944, 26.0 per cent. in 1945 and 25.4 per cent. in 1946.

Federal Grading of Ontario Creamery Butter

While slightly less of the total production of Ontario butter was graded in 1946, nevertheless the trends indicate that operators were becoming more quality minded. Approximately 46 per cent. of the total make was graded in 1946 compared with 47 per cent in 1945.

	Total Boxes	Per Cent. 1st Grade	Per Cent. 2nd Grade	Per Cent. 3rd Grade	Per Cent. Below 3rd Grade
1946	556,799	81.12	16.63	1.97	0.28
1945	655,315	72.23	24.91	2.46	0.40

Again a marked improvement in quality is shown over the previous year. This is the best grading record Ontario has shown since the inception of butter grading in 1923. However, had more operators cleared on the requirements of their trade for salt content and had taken more care in the branding of their boxes, particularly when the boxes had been previously used. Ontario's record would have been much more impressive. Improvement has been made in this regard as 8.59 per cent. of the butter was lowered to second grade because the butter contained over 2 per cent. salt or was lined with single parchments or packed in used boxes improperly re-branded, compared with 13.9 per cent in 1945. The quality of this butter was otherwise first grade. Making these allowances the quality of Ontario butter which was graded is as follows:

	Per Cent. 1st Grade	Per Cent. 2nd Grade	Per Cent. 3rd Grade	Per Cent. Below 3rd Grade
1946	89.71	8.04	1.97	0.28
1945	86.13	11.01	2.46	0.40

Cream Quality

The quality of cream received at the creameries as compiled from the instructors' monthly reports is as follows:

					Per Cent.	
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Special and	
	Special Grade	1st Grade	2nd Grade	Off Grade	1st Grade	
1946	4.30	89.62	6.02	0.06	93.92	
1945	3.00	89.10	7.84	0.06	92.10	

1946 established a new low in below first grade cream. Weather conditions were for the most part favourable to the production of good cream. However, the fact that wartime restrictions were completely removed and return to normal marketing resulted in more creameries reverting to the pre-war twice a week pickup for cream during the hot weather.

C		
Creamery Statistical Summary	1946	1945
No. of Creameries Operating	272	279
No. of Patrons	71,697	70,921
Average per cent, fat in cream	32.0	32.2
No. of creameries making cheddar cheese	17	24
No. of creameries making powdered or condensed milk	23	19
No. of creameries making whey butter	35	31
No. of creameries with locker storages	92	97
No. of creameries making butter only:—		
(a) with no other associated products	39	62
(b) with no other dairy products	134	144
Average price of first grade butter (solids)	38.60¢	34.66¢
Average price of first grade butterfat net the producer		
(10¢ per pound subsidy extra)	39.82¢	35.26¢
Approximate per cent. of cream delivered to cream-		
eries by producers	31.3	31.9
Average per cent. fat in milk received at manufac-		
turing plants	3.63	3.60

Buttermakers' Certificates Issued

	First Class	Second Class	Permits	Beginners' Permits	Special Permits	Total
1946	229	16	2	33	13	293
1945	236	23		16	17	292

Production of Concentrated Milk and Milk Products

	1946	1945
Condensed whole milk	14,765,673 lbs.	16,048,635 lbs.
Evaporated milk	98,063,667	103,571,358
Whole milk powder	14,535,126	14,211,493
Condensed skimmilk	3,244,405	4,484,521
Evaporated skimmilk	2,179,853	1,639,400
Powdered skimmilk	22,630,080	19,113,425
Condensed buttermilk	2,377,087	2,539,353
Powdered buttermilk	1,313,773	1,379,344
Powdered skimmilk (feed)	620,304	1,508,446
Casein	937,181	954,331
Other products	2,142,929	1,203,986
	162,810,078 lbs.	166,654,292 lbs.

Milk Utilization in Ontario Dairy Plants

Milk received at Ontario plants was utilized approximately as follows:

	1946	1945
Creamery Butter	36.9 per cent.	38.5 per cent.
Cheddar Cheese	23.6	26.9
Fluid Milk	27.7	23.7
Fluid Cream	3.4	2.9
Condensed Whole Milk	0.8	0.8
Evaporated Whole Milk	4.9	4.8
Powdered Whole Milk	2.7	2.4

Over three-quarters of the estimated total milk production in Ontario is processed in dairy plants.

Quality Improvement Competitions

So successful were the results of the Quality Improvement Competitions in 1945 that there was little hesitation in deciding to conduct them again in 1946. Two new competitions were added, namely, Workmanship and Keeping Quality. Because a large portion of summer made butter must be stored for winter use it was considered of value to sponsor a Keeping Quality Competition.

The entries were slightly less than in 1945. However, as indicated previously the quality of butter was again improved, largely among the creameries in the competitions.

The Grand Championship winners and runners-up in each competition were as follows:

Quality Competition

1 - Borden Co. Ltd., Toronto	100 pe	r cent.	first	grade b	utter	(79.64%	93	score)
2 — Chesley Creamery, Chesley	100 pe	r cent.	first	grade b	utter	(39.26%	93	score)
3 — Barrie Creamery, Barrie	100 pe	r cent.	first	grade b	utter	(39.00%	93	score)
4 — Marshall Dairy, Jarvis	. 100 pe	r cent.	first	grade b	utter	(27.74%	93	score)

Yeast and Mould Competition

1 — Canada Packers, Mount Forest average count	1.28
2—Silverwood Dairies Ltd., Chatham average count	4.24
3 — Canada Packers, Bancroftaverage count	5.04
4 — Barrie Creamery Co., Barrie average count	6.00

Workmanship Competition

1 — Middlesex Creameries, London	92.23 points
2 — Tilbury Creamery, Tilbury	90.20 points
3 — Stacey Bros. Ltd., Mitchell	89.68 points
4 - Dresden Creamery Dresden	88 31 points

Combined Quality, Workmanship, and Yeast and Mould Competition

1—Barrie Creamery Co., Barrie	265.94 points
	256.39 points
3 — Silverwood's Lindsay Creamery, Lindsay	252.93 points
4 - Stacey Bros Ltd Mitchell	248 37 noints

Keeping Quality Competition

1 — Canada Packers, Clinton	97.33 points
2—Canada Packers, Wiarton	96.33 points
3 — Hibbert Co-operative Co., Staffa	95.75 points
4 — Swift Canadian Co. Stratford	95 17 points

Buttermakers' Clubs

Eleven Buttermakers' Clubs were active in 1946 compared with only three the previous year. The clubs which carried on during the war years and those whose members were the least changed from pre-war days had the most successful season. The attendance at the clubs definitely revealed a big change in personnel in the creameries during the past five or six years. The efforts of the clubs were noticed particularly in their support of the Quality Improvement Competitions with particular stress being placed on good relationship between the producers and the cream grades in the various creameries.

Creamery Instruction

Despite the return of a number of buttermakers from the armed forces to their former positions, there developed a rather serious shortage of qualified help in the creameries — more so than during the war years. This situation again utilized much of the time of the instructors in satisfying themselves that

the weighing, grading, sampling and testing of the milk and cream was done properly. They were fortunate in again being able to reduce the number of adjustments to producers, which is an indication that those doing the testing and sampling are appreciative of the importance of their duties.

Three prosecution under The Dairy Products Act were made during the year, two for wilfully over-reading and under-reading butterfat tests, and one for falsifying creamery records.

The creameries in the Quality Improvement Competition again drew on the services of the instructors for assistance but not to the extent of the previous year as most of the contestants had benefited from instruction given at that time.

The mechanical defects in butter were reduced to a new low but considerable attention still had to be given to manufacturing and tempering of butter which would hold up in composition and color during printing.

There appeared to be more interest in generally producing butter, not only of good flavor, but also of uniform composition, color and workmanship.

More cream producers were visited during the year than for the past several years. Most of those visited were very appreciative of the assistance given.

Instructors having manufacturing plants in their groups spent more than the usual amount of time checking the weighing, sampling and testing of the milk received at these plants. There appeared to be an increase in the amount of milk coming into this channel and indications were that these manufacturers would be opening receiving units or new plants. The instructors worked very closely with both the manufacturers and the Ontario Milk Producers' Association fieldmen.

The scope of duties of the instructors as usual extended to addressing farm forum meetings, producer meetings, operator meetings and buttermakers' clubs; acting as judges of dairy products at fairs and in giving special lectures and demonstrations at short courses on the production and care of high quality milk and cream and the weighing, grading and testing of same.

AGRICULTURAL REPRESENTATIVE BRANCH

FOREWORD

From the standpoint of the farmer, 1946 is generally acknowledged as a good year. Oat yields of 90 to 100 bushels or more per acre were recorded. Fruit crops were much better than the preceding two years. There was a record potato crop. Farm income was the highest in the history of the Province. Prices for most farm products were satisfactory and the demand keen. Offsetting this to some extent, of course, were local disturbances such as the disastrous flood in South Western Ontario, the tornado which swept through sections of Middlesex and Perth, and the excessive Spring rains in the extreme Eastern counties resulting in light grain crops in those areas.

During the year the general over-all plan of agricultural development and progress was considerably clarified and strengthened. The Ontario Marketing Act assumed new significance to large numbers of farmers with the inclusion of the Hog Producers Marketing Scheme. Interest in Health of Animals was stimulated through subsidized veterinary units in Northern Ontario, the Calfhood Vaccination and Warble Control Programmes and renewed activity in Federal T. B. Testing. Rapid progress in dairy cattle improvement among the commercial herds may be expected from the development of major breeding units established at strategic locations across the Province. Co-operative Marketing continues to expand. Junior Farmers and Boys' and Girls' Clubs have greatly increased in membership.

A greater appreciation of the need of soils and land use study is apparent and many economic problems are being solved in Northern Ontario through the application of land clearing, breaking and drainage policies.

Farm labor continues to be a perennial problem but no doubt sooner or later will show some improvement with the gradual appreciation on the part of employers for the necessity for yearly contracts, adequate housing, reasonable hours and protection against loss of income through injury or illness. With the introduction of these improvements and the return to normal of the sky rocketing urban wage scale, a more reliable and responsible type of labour will be encouraged to seek employment on farms.

In all these phases of agricultural activity the Agricultural Representative plays an important roll of assistance to individuals and organizations in the planning, development and operation of these many programmes for the advancement of agriculture and farm life in Ontario.

PERSONNEL AND OFFICE STATISTICS

The Agricultural Representatives Branch includes 54 offices and on March 31st, 1947, there were 53 Agricultural Representatives, 1 Acting Agricultural Representative, 17 Assistant Agricultural Representatives and 53 stenographers.

HEAD OFFICE

Changes in Personnel New Appointments

- C. D. Graham, Director of Extension, promoted to position of Deputy Minister, October 1st, 1946.
- J. A. Garner, Agricultural Representative, Kent County, promoted to position of Director of Extension, November 1st, 1947.

- A. H. Martin, Assistant Director, appointed as Associate Director of Extension, October 1st, 1946.
- T. R. HILLIARD, Assistant Representative, York County, appointed as Junior Extension Fieldman, April 1st, 1946.

AGRICULTURAL REPRESENTATIVES

Died —

ROWLAND M. TIPPER, Agricultural Representative for Muskoka and Parry Sound District at Huntsville, died July 8th, 1946, after a short illness. Mr. Tipper had served eleven years — April, 1913 - June 30th, 1924 — as Agricultural Representative in Ontario County, and for twenty-two years, from July 1st, 1924, until his death, in Muskoka and Parry Sound.

Transfers -

- Donald N. Graham, from Assistant Representative, Waterloo County, to Agricultural Representative, Muskoka and Parry Sound, August 1st, 1946.
- F. M. CAMPBELL, from Ontario to Kent, January 1st 1947.
- H. L. FAIR, from Hastings to Ontario, January 1st, 1947.
- A. O. DALRYMPLE, from Assistant Agricultural Representative in York County to Agricultural Representative, Hastings County, February 1st, 1947.
- LEROY G. Brown, appointed as Agricultural Representative for Huron County, April 1st, 1947. Mr. Brown had been acting Agricultural Representative in Huron County from April 1st, 1946, during the illness of Agricultural Representative F. K. B. Stewart.
- F. K. Bain Stewart, Agricultural Representative for Huron County, on sick leave from February 1st, 1946 January 31st, 1947. On loan to Agricultural Economics Department, O.A.C., Guelph, from February 1st, 1947.

ASSISTANT REPRESENTATIVES

Appointments -

J. Keith McRuer, Bruce County, June 1st, 1946.

Frank H. Webster, Elgin County, June 1st, 1946.

Harry W. Burns, Hastings County, June 1st, 1946.

BRUCE B. HODGINS, Kent County, April 1st, 1946.

G. W. Montgomery, Lambton County, June 1st, 1946.

DONALD A. KNAPP, Ontario County, June 1st, 1946.

GEO. R. McLaughlin, Perth County, June 1st, 1946.

RAOUL PORTELANCE, Cochrane West, August 1st, 1946.

J. L. McQuay, Waterloo County, October 1st, 1946.

A. L. McKenzie, York County, February 1st, 1947.

Jas. A. Ross served as Assistant Representative in Haldimand County from November 1st, 1946 - February 28th, 1947.

OFFICE STATISTICS

54 Offices

· ·	Tota l	Average Per Office
No. Letters Received	129,297	2,394
No. Letters Written	121,174	2,244
No. Circular Letters Mailed	784,144	14,521
No. Incoming Telephone Calls	124,640	2,308
No. Visitors at Office	143,561	2,659
No. Meetings Held in Office	3,700	69
No. Bulletins and Reports Distributed through Office	110,931	2,054
No. Miles Travelled on Government Business	1,081,638	20,030
No. Meetings Addressed	3,609	67
No. Additional Meetings Attended	3,260	60
Attendance at Meetings	220 000	6,089

ADMINISTRATION

Administrative duties in Head Office include the supervision of 53 offices, and the New Liskeard and Hearst Demonstration Farms, purchase of equipment, inspection visits to offices, supervision of leases, changes in personnel, new appointments and transfers, organization of annual and regional conferences and committees, assistance in organizing County Committees, supervision of general policy on Junior and Senior Extension, organization of short course itineraries and assembling of equipment, auditing Agricultural Representatives' Appropriation and County Grant accounts, serving on committees and boards, speaking engagements, supervision of emergency surveys and reports, distribution of Western farm workers, assisting Agricultural Representatives with special projects, managing competitions at larger fairs, supervision of boys' and girls' club work, including preparation of forms, policies and manuals, organization and management of the Provincial Inter-Club Competitions and assistance at the National Contests, supervision of the distribution of seed grain through the Seed Grain Subsidy Act and the Northern Ontario Seed Grain Policy, the issuing of weekly crop reports, purchase and maintenance of cars and equipment, subscriptions to papers and magazines for the Department and supervision of the Agricultural Representatives' Branch Group Insurance Policy.

LIVE STOCK IMPROVEMENT

The Veterinary Assistance Policy in Northern Ontario has proven to be one of the most popular and useful policies ever introduced. Units are now established in Rainy River, Kenora, Algoma, Manitoulin, Temiskaming and plans are nearly completed for establishing units in all other districts.

Agricultural Representatives were responsible for most of the local organization and assembling of local funds.

Horses

Apart from the sale of a few superior horses for Show purposes and a demand for pregnant mares in the production of biologics, interest in the heavy horse business in practically nil. Local appreciation for the horse on the part of a few groups of interested horsemen resulted in rather outstanding horse shows at St. Thomas, Aylmer, Stratford and the Little World's Fair at Rockton and, of course, the display of good horses at the Royal surprised many.

Bot control programmes were conducted in two or three places and in some areas in Northern Ontario, groups of horses were treated against sleeping sickness.

Cattle — Calfhood Vaccination

Interest in Calfhood Vaccination spread rapidly. In Dundas County, 6,000 calves were vaccinated; in Norfolk 4,868; in Renfrew 500, Grenville 300 and in Bruce 80% of the farmers had some calves vaccinated; in Perth 90% of the calves were vaccinated in 8 of the 11 townships; in Durham 60% of the calves were vaccinated in Cartwright township. Sufficient vaccine was distributed by the Ontario Veterinary College to vaccinate 80,000 calves in the Province.

Milk Testing

In spite of continuous illustrations of the advantage of cow testing in the improvement of the commercial herds, the old cow testing plan has developed little interest. In fact less than 1,000 cows are now on test under this plan. The Co-operative Herd Improvement Plan, as operated in Essex County, where farmers pay half the cost, continues to expand. There are now 112 herds including 1,200 cows in this plan under the supervision of Mr. Alexis Burrell.

Warble Control

With the introduction of power machinery for the control of Warbles new interest has developed. The work started in Huron County a year ago has spread and this year a number of counties have organized to have practically all the cattle in the county treated 2 or 3 times. Several municipalities have purchased power equipment which can be used for spraying cattle in the Spring and for weed control during the summer. In other areas such as Algoma, Manitoulin, 1 township in Hastings and Cartwright township in Durham, powder is distributed either free or at cost.

A total of 15,400 cattle were treated for warbles during the Spring of 1946.

In Oxford County, after a lapse of some years, the County Council again voted funds to purchase 2 tons of Warble powder — this was distributed to every cattle owner in the County. In addition to assisting in organization, the Agricultural Representative handled the educational programme. In addition to press releases, a lesson on Warbles was prepared and sent to every rural school in the County. Also 50 Junior Farmers were asked to report the Warble counts on their own herds. It is estimated that the loss in milk in 1 day in Oxford due to gadding would more than pay for the two tons of powder purchased.

T. B. Testing

Due to lack of Federal staff some counties in Ontario lost their T. B. health status but with the gradual building up of the inspection staff and with the use of larger numbers of approved local veterinarians, some of these counties are now receiving their long delayed tests. Futhermore, one or two new areas are canvassing in the hope of being incorporated in the restricted area plan. Considerable testing was done in Algoma, Grenville and Thunder Bay in 1946.

Breeding Units

Interest in the Artificial Insemination of dairy cattle is growing rapidly. In 1946, 9,673 cows were inseminated in 17 units. This work was carried on in greater or less degree in 17 counties with York, Waterloo and Oxford leading by a very wide margin. Towards the end of the year a new unit which eventually will serve most of Eastern Ontario, as far West as Brockville, was

organized with headquarters near Kemptville. Experience in this work indicates that large units with a number of branches is more satisfactory and more economical than a large number of small units. With the exception of Elgin County, Holstein bulls only were used

In Oxford County 15 bulls are now kept in the unit, 3,225 cows were bred in Oxford in 1946 and it is expected this will reach 7,000 in 1947. In addition, sub units or branch units were organized in Perth, Middlesex, Brant and Norfolk and it is expected that upwards of 500 cows will be bred at each of these centres. One technician and three assistants are now maintained at the main centre. Semen is shipped three times per week to the branches.

In York County 6 bulls are kept in the Maple unit, all being ¾ brothers—2,252 cows were bred. Branches have been established in Halton and Simcoe Counties and one is almost organized in Ontario County, each of which will serve at least 500 cows.

In Waterloo County, 4 bulls are kept. There are 135 members in the Club.

Bull Loaning Policy

The Federal Bull Loaning Policy continues to provide a useful service in herd improvement in Northern Ontario and in Bruce and Renfrew Counties. There are now 143 clubs in operation with a membership of 794. Most of the sires are of the beef breeds although there are a few Holstein and Ayrshire bulls.

The popularity of the feeder cattle going through the Manitoulin Sale can be attributed to improvement in quality, brought about by the use of bulls over a number of years, secured through this Policy. Agricultural Representatives are responsible for organizing all Bull Clubs and, in some cases, for periodic inspection of the bulls.

The Manitoulin Cattle Sale

The Manitoulin Stocker and Feeder Sale merits special attention in that it is the only sale in Eastern Canada that, in any way, compares in size and quality with the Western Feeder Sales.

In the third annual sale, held at Little Current, 219 consignors sold 1,867 cattle for a total of \$175,123.99. These cattle were all sold in a few hours and all shipped out the same night, which means a tremendous amount of preparation and organization on the part of the local Co-operative in the contruction of pens, assembling cattle, sorting, grading, feeding, weighing, shipping and settlement of accounts.

Barn Meetings

For various purposes during the year there were 33 barn meetings organized by Agricultural Representatives, with an attendance of 2,561.

Sheep

With but few exceptions the sheep population has decreased in most areas. This may be attributed to lack of proper fences and the ravages of bears, wolves and dogs.

Hasting County as an example had 373 sheep and lambs killed and 22 injured for which municipalities paid \$4,145.00 plus \$374.00 for valuating. To offset this, however, the same municipalities collected \$9,112.00 in dog taxes. From April 15th to November 30th, 1946, bounty was paid on 936 bear and 70 cubs under the Bear Bounty Plan. Bounty is only paid in those municipalities where 25% or more of the area is devoted to agriculture.

In addition to Northern Ontario, bounty was paid on 12 bear in Bruce, 8 in Frontenac, 33 in Haliburton, 61 in Hastings, 13 in Lennox and Addington, 5 in Peterborough, 52 in Renfrew and 2 in Victoria.

In Thunder Bay, during the past four years, 115 new sheep flocks have been established under the Boys' and Girls' Club Kiwanis Credit Policy. The Agricultural Representative held a Shearing and Parasite Control Demonstration with an attendance of 14. Because of the tendency to congest markets, Lamb Fairs are not as popular as they once were; however, 10 Lamb Fairs were held with 1,623 entries and 1,793 lambs where shipped to market.

In Manitoulin where most of the Lamb Fairs used to be held, all lambs are shipped out during the season as they reach market weight and are sold on dressed weight carcass grade. 7,600 lambs grading 73% A 1 and A 2, valued at \$120,000 were handled in this manner.

Under the Ram Grading Policy 52 breeders had 374 rams graded.

Swine

Quarterly Pig Survey

All Agricultural Representatives co-operate with the Federal Production Service in supplying information for the Quarterly Pig Survey.

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Boars Reported	353	272	301	367
Sows Bred	6488	4354	4338	6326

On these quarterly reports are based the forecast of marketings.

Boar Clubs

In co-operation with the Live Stock Branch, boar clubs are organized in many counties. In 1946 there were 137 clubs in operation 18 new clubs were organized and 19 clubs were disbanded.

78 special Swine meetings were held during the year with an attendance of 2.419.

Early in 1946 the Swine Marketing Scheme Vote was taken with the Agricultural Representatives acting as Deputy Returning Officers. More than 30,000 votes were cast, mostly in favour and the Scheme was approved.

Poultry and Eggs

Poultry and egg production continued at extremely high levels, Haldimand County, for instance, maintained more than 200 birds for each 100 acres of assessed land. Production was handicapped by the difficulty in maintaining a steady supply of the desired feed mixtures. Ontario produced 50% of all the eggs exported to Britain.

Agricultural Representatives organized and conducted 51 special Poultry meetings with an attendance of 2,275. Agricultural Representatives co-operated closely with the Poultry Industries Committee in keeping before the producers at all times, the Poultry situation and outlook.

Quality and production in Ontario flocks are due in part, at least, to the large number of "Approved" flocks which supply a large percentage of the hatching eggs.

In 1946 there were 2.630 Approved flocks with 1,071,433 birds. In addition, there were 72 Approved flocks of turkeys with 7,547 birds.

SOILS AND CROPS

Agricultural Representatives act as secretaries of the 53 County Crop Improvement Associations and are largely responsible for the organization of the following:

	Number	Attendance
Soils and Crop Meetings	187	7,164
Field Crop Tours	23	1,070
Seed Fairs and Seed Displays	34	2,844 (entries)

In co-operation with other branches and departments and in some cases commercial organizations demonstration and test plots were laid down in accordance with the following table:

Demonstration and Test Plots

		Number
Variety Test Plots		274
Variety and Fertility Plots		
Fertility Plots		
Junior Farmer Test Plots		26
Rod Row Plots		
Hay and Pasture Plots		321
Mustard Control Plots		
Disease and Insect Control Plots		22
Other types of test or demonstration plots		147
	Total	1,033

Rapid Soil Test kits are maintained in most Agricultural Representative's offices. Agricultural Representatives tested 99 Soil Samples and sent away for testing 1,918 samples.

2,096 Nitro Cultures were distributed through Agricultural Representative's offices.

34 Seed Fairs were held with a total of 2,844 entries and \$676,000 prize money paid.

Agricultural Representatives organized 187 Soil and Crop meetings with an attendance of 7,164.

Demonstrations and test plots, seed fairs, meetings, tours, and high yield clubs pretty well constitute the County Crop Improvement Programme. Agricultural Representatives act as secretaries of all these clubs and are, therefore, closely associated with all phases of Crop Improvement work.

Pastures

The Long Term Pasture Demonstration Work was carried on for the third successive year. 120 plots, comprising 508 acres, were laid down in 1946. During the three years, 481 plots comprising 2,060 acres, were established. Very few of these so far had to be plowed up. In 1946 the Demonstration Plots averaged 175 pasture days as compared to 121 days for the check plots. There is plenty of evidence now to show that well cared for long term pastures will produce revenue equal to, if not greater than, any of the grain crops; for instance in Halton County one pasture produced milk to the value of \$152.02 per acre as compared to \$65.47 on the check and in Bruce an improved pasture of 14 acres carried 35 beef cattle and 3 horses three months.

Seed Grain Distribution — Northern Ontario

For the second year in succession the Northern Ontario Seed Grain Policy was operated on a cash basis. The only expenses involved were the handling charges and in some cases part of the freight. Very little grain was distributed through this policy in 1946. The total cost of operation, including cost of the grain, was \$862.81 and the net cost was \$246.56. This is quite a difference from 10 years ago when this Policy used to cost the Department upwards of \$50,000.00. Northern Ontario is fast becoming self supporting as far as seed grain is concerned.

Orchard Spray Service

A series of from 8 to 10 spray letters are issued from Argicultural Representative's offices. These letters went to 5,365 orchardists. This is a service of long standing and is greatly appreciated.

Soil Conservation and Land Use

Evidence of progress in this phase of Agriculture is now apparent. In Peterborough County the Blewett farm has been used as a demonstration in land use planning and contour farming. Some fences have been removed, stone piles buried, soil tests made and the farm surveyed. A four year crop plan has been prepared and crops are now grown on the contour. Some sections of the farm are being reforested.

With the continuous removal of cash crops and the burning of corn stalks and straw, humus has become depleted and hard impervious layers have developed in the soil rendering almost useless the underground drainage systems. Late in the year, in co-operation with the Department of Agriculture, Mr. Kenneth A. Standing was engaged on a full-time basis to assist with an organized programme designed to improve the physical condition of Essex County clay loam soils. The County Council, County Committee and various other farm rganizations are assisting in this project.

Waterloo farmers, alarmed at the increasing evidences of soil depletion, through their councils, farm organizations, county committee and Agricultural Representative, have completed plans for a very progressive Land Use and Conservation Programme.

An organic matter survey will be taken, this to be used as a basis for discussion on this problem at meetings and short courses. A number of farms will be selected on which a definite Soils Management Programme will be planned. Erosion control plots will be set up. Illustrative and lesson material will be provided the schools. The County Agricultural Committee is acting as the co-ordinating body so that all agricultural organizations in the county can take a part.

In South Simcoe the Steers farm at Bradford is being used as a demonstration. This farm has been surveyed, the soil classified and analyzed and crops plan drawn up. Also in Simcoe, a Soils and Land Use Committee, appointed by the County Council, continues to function effectively in keeping soil problems continually before the public. This committee has been voted a budget of \$1,000.00 by the County.

Farm Engineering

Interest in drainage has greatly increased, the limiting factor being the shortage and high price of tile. Agricultural Representatives made 103 drainage surveys and forwarded an additional 244 to the Drainage Departments. These surveys included a total area of 12,768 acres, and 6,220 acres were drained.

The above figures do not include special drainage work done in Northern Ontario.

During the year 200 septic tanks were built with the use of forms maintained at Agricultural Representative's offices.

Farm Labour

Farm labour continues to be the number one problem in Agriculture; although Agricultural Representatives are not directly responsible for placement of labour, yet they do expend considerable amounts of time and energy in the Farm Labour field, particularly with reference to harvesters from the West, harvesters going West and with the placement of Polish veterans.

Western Harvesters coming East Ontario Harvesters sent West — Men	2,900 2,926
Women	74
Polish Veterans placed	1,200

All P.O.W.'s working on farms were returned home during the year and C.O.'s were released.

Assistance was given employment officers in meeting trains from the West, re-routing harvesters and in their local distribution to their respective places of employment. A lot of time was also spent in organizing Commando Labour. From Toronto alone 8,825 man days were provided surrounding counties of York, Peel and Halton.

Reforestation

Each year sees new interest in reforestation. There are now in Ontario more than 41,456 acres of Municipal forests. New purchases amounting to 5,409 acres were made in 1946. Agricultural Representatives act in an advisory capacity and assist in organization and are members of or officers in many committees dealing with reforestation.

Co-operative Organization

Co-operative services are now big business. Agricultural Representatives work closely with managers and co-operative organizations. Successful co-operatives can and do serve as important agencies in the development of agriculture. With 2,729 members out of a total of 4,525 farmers, Oxford County is probably the most co-operative minded county in Ontario. Six co-operatives in this county had a business of over \$3 million dollars in 1946. The Co-operative in Peterborough expanded the business from a million dollars in 1945, to nearly 2 million dollars in 1946 and the membership increased from 1,200 to 1,833.

These are only two examples of several co-operatives with a business of a million dollars or better.

In Northern Ontario co-operative expansion is also going ahead rapidly. The amalgamated co-operative services in Rainy River did a \$300,000.00 business in 1946.

The Temiskaming Co-operative has just completed a new building and did a business of \$200,000.00. The Potato Co-operative in Cochrane had a business of \$70,000.00 and in Manitoulin, 11,000 lambs, 85,000 lbs. of wool, 2,000 cattle, 24,000 lbs. chicken and 63,000 lbs. of turkey for a total value of \$352,000 were handled co-operatively.

Plowing Matches

84 Plowing Matches and Competitions were organized, including 68 senior, 9 junior matches and 7 Home Plowing Competitions. There were a total of 2,167 entries with \$18,512.05 in prizes.

At the International Plowing Match, 28 county teams were entered, 16 in the tractor and 12 in the horse drawn junior classes. The winning teams were:

Horse Drawn Plows — Brant County John Capton, Jr., Oshwekin Wm. Buck, Paris

Coached by J. D. Moore, Agricultural Representative.

Tractor Plows — North Simcoe Bert Maw, Minesing

Allan McNabb, Elmvale

Coached by S. L. Page, Agricultural Representative,

Don Taylor, Assistant Agricultural Representative.

JUNIOR DEVELOPMENT

Rural School Fairs

71 Rural School Fairs were held with 512 schools taking part, 10,766 pupils made 29,851 entries. The attendance amounted to 15,080 children and 30,685 adults.

Boys' and Girls' Club Work

The Department of Agriculture takes full responsibility for the organization and management of Club Work in Ontario, pays one-third of all prize money and grants the Canadian Council on Boys' and Girls' Club Work an annual sum of \$1,750.00.

Club Work in the Counties is organized by the Agricultural Representative or, in the case of Homemaking Clubs by the Home Economist.

Clubs Organized in 1946	To. of Clubs	Membership
Calf	141	2303
Swine	38	539
Foal	1	12
Poultry	14	276
Grain	47	765
Potato	50	874
Girls' Home Garden Clubs	204	1590
Girls' Nutrition Clubs	68	403
Girls' Clothing Clubs	105	706
Girls' Housefurnishing Clubs	45	312
Girls' Hospitality Clubs	89	628
Girls' Defense Člubs	5	29
Totals	807	8437

Provincial Inter-Club Competition

The Inter-Club Competitions for Provincial honours were held at the Ontario Agricultural College. Guelph, on October 25th with 298 boys and girls in 149 teams taking part.

3				
Project	Teams Competing	Winning Team Members	County	Coach
Dairy Calf	. 38	Ray Ingleton, Agincourt John Kennedy, Agincourt	York York	W. M. Cockburn Oliver Dalrymple
Beef Calf	20	Jack Pearson, Uxbridge Mack Christie, Port Perry	Ontario Ontario	F. M. Campbell Don Knapp
Swine	24	Fraser McNabb, Georgetown Keith Merry, Hornby	Halton Halton	J. E. Whitelock J. E. Whitelock
Poultry	_ 3	Jack McLean, Glencoe Garnet Leetch, Walkers	Middlesex Middlesex	W. K. Riddell Ken Lantz
Grain	31	Gordon Welsh, Brantford Keith McClure, Brantford	Brant Brant	J. D. Moore J. D. Moore
Potato	24	Stewart Elliott, Tweed Carl Bateman, Tweed	Hastings Hastings	H. L. Fair Harry Burns
Clothing	_ 9	Orphie Orr, Maple Evelyn Hare, Maple	York York	Miss Lulu Row Miss Lulu Row

The winning teams in Dairy Calf, Beef Calf, Swine, Potato, Grain and Clothing went to the National Club Contests held at the Royal Winter Fair and were placed as follows:

Clothing	First (Dominion	Champions)
Dairy Calf	_Second	
Potato	_Second	
Swine	_Third	
Grain	_Third	
Beef Calf	_Fifth	

During the 15 years in which National Club Contests have been held, 62 Ontario teams entered have won 26 National Championships, 19 seconds, 11 thirds, 1 fourth and 2 fifths.

Seed Judging Competitions

Inter-County Seed Judging Competitions were held in connection with the Ottawa Valley and Quinte Seed Shows.

Fair	Team Members	County	Coach
Ottawa Valley	Jack Bennett, Spencerville	Grenville	C. C. Tennant
	Jim Bennett, Spencerville	Grenville	C. C. Tennant
	Preston Ralph, Kemptville	Grenville	C. C. Tennant
Quinte	David Craig, Bowmanville	Durham	E. A. Summers
	Orville Hindman, Hampton	Durham	E. A. Summers
	Ross Cryderman, Enniskillen	Durham	E. A. Summers

Junior Fairs

The Central Canada Exhibition Board supported by the Ontario Department of Agriculture, staged the Eastern Ontario Boys' and Girls' Club Show at Kemptville. This show brought out the largest display of calves ever assembled in Ontario.

List of Entries at Kemptville:

Holstein Calves	120
Avrshire	77
Jersey	12
Shorthorn Calves	25
Hereford Calves	12
Baby Beef Calves	11
Swine (2 sows each)	12
Garden Brigades and Other Girls' Work	95
Judging Competition — Seniors	30
Intermediates	88
Juniors	81

The Champion Holstein Calf in this show in 1945 was later made all Canadian Calf and the following year sold for \$3,000.00 in the National Sale.

At the Lakehead Exhibition, in co-operation with the Kiwanis Club, a three-day Junior Camp was held. 67 Camp members made 214 entries in the Junior section of the Fair.

Junior Section - Royal Winter Fair

34 teams of 3 boys each entered the Inter-County Live Stock Judging Competition at the Royal, in competition for the Jeffrey Bull Memorial Trophy. In addition, there were 15 contestants in the Robt. Graham Memorial Trophy Competition in Horse judging.

Winning	Team	Team Members		
South Si	mcoe	Ross Beattie, Stayner		
		Jack Walker, Stayner		
		Frank Todd, Gilford		

Coaches F. A. Lashley Don Taylor

Gold Medal Winners

Heavy Horses	Allan White, Port Hope	Durham County
Beef Cattle		South Simcoe
Dairy Cattle	Glen Grice, Malton	Peel
Sheep	Geo. Reid, Georgetown	Halton
Swine	Lloyd Ayre, Hampton	Durham
Robert Graham	Memorial Trophy — A. R. Aitken, O.A.C	., Guelph.
E. H. Stonehouse	Memorial Trophy - Glen Grice, Malton	n.

All contestants were given a dinner by the Department and passes to the Fair and tickets to the evening Horse Show by the Royal.

Two days of coaching practice were arranged at O.A.C., Guelph, for all contestants.

The King's Guineas Classes

42 Club members entered Baby Beef calves in these new Classes at the Royal. There were 19 Shorthorn, 13 Angus and 10 Hereford calves.

The first prize calf in each class was shown by:

Shorthorn	_John Kinsman, Cromarty.
Angus	Esther Dowling, Alvinston.
Hereford	Robert J. McNull, Denfield.

The Shorthorn calf, shown by 19 year old John Kinsman, was made Grand Champion and the King's Guineas (\$250.00) was presented by His Excellency Viscount Alexander, Governor-General of Canada. This 840 lb. calf later sold by auction for \$5.50 per lb. bringing his youthful owner some \$4,900.00, including prize money.

The 42 calves netted, in the sale, a total of \$14,055.80 or an average of \$334.66.

Short Courses

The number of Courses held during the year considerably increased over the previous few years.

THREE MONTHS' COURSES—

THREE MONTHS' COURSES—				
	Agricu	lture - Boys	Home Eco	nomics — Girls
	No. on		No. on	Average
County	Roll	Attendance		Attendance
HALDIMAND	16	12.1	13	10.5
WENTWORTH	30	14.5	13	9
CIV WEEKS, COURSE				
SIX WEEKS' COURSE—				= 0
OXFORD	76	37	10	7.9
ONE MONTH COURSES—				
BRUCE—Ripley	22	16	11	8.3
Port Elgin		20		414
DURHAM	19	17	****	grandeless.
ELGIN	31	20		***
GREY		11.5		
HASTINGS	61	26.5		
HURON—Exeter	55	33.5	15	12.1
Belgrave	25	15.6	14	10.5
NORTHUMBERLAND	18	12	14	12
PEEL	53	38	17	14
PERTH	18	7.8	19 9	11.4 7
WATERLOO	15 35	10 22	19	11.4
SOUTH SIMCOE		18	19	11.4
WELLINGTON—Drayton Palmerston		5		
YORK	40	28	****	-
IUMA	-20	20		-
	546	364.5	154	114.1

MISCELLANEOUS COURSES AND SPECIAL MEETINGS-

Length of Course	Number	Attendance
2 weeks	1	10
6 days	2	70
5 days	11	96
3 days	2	63
2 days	3	329
1 day	55	2661
	—	
TOTAL	74	3229

In addition, night schools were held at three points with a total attendance of about 125.

COUNTY COMMITTEES

Under the Agricultural Committees Act the following counties and districts have established County Committees:

Algoma	Kenora	Perth
Carleton	Lambton	Peterborough
Durham	Lanark	Rainy River
Essex	Lennox and Addington	Renfrew
Frontenac	Leeds	Simcoe N.
Grenville	Nipissing	Simcoe S.
Grev	Norfolk	Thunder Bay
Halton	Northumberland	Waterloo
Hastings	Peel	Wellington

The Agricultural Representative acts as secretary. Although all committees are not equally active, some of the most progressive projects ever attempted have been established by County Committees.

In Northern Ontario the district veterinary services became a reality largely through the efforts of district committees.

In Waterloo the County Committee is credited with interesting the County Council in a Soils Conservation Programme. The County Council voted \$2,000.00 with an equal amount granted by the Department of Agriculture, for this year. It is estimated a total of \$12,000.00 will be required for the three year programme. This committee is also supporting a plan for investigational work in connection with the control of reproductive diseases of live stock. The committee was also instrumental in getting the County Council to make an experiment with chemical in the control of roadside weeds.

The Essex County Committee has been instrumental in co-ordinating all farm organizations in a co-operative Soils Programme on a fifty-fifty basis with the Ontario Department of Agriculture.

A Fieldman has been appointed and an effort will be made to return more organic matter to the heavy soils of that county.

Other projects under discussion by various County Committees include:

Hydro Extension
Marketing
Rural Telephone Extension
Farm Water Supply
Insurance Costs
Weed Control
Clearing and Breaking Land
Drainage
Rural Dental Clinics
Rural Libraries
Road Equipment

Calfhood Vaccination
Prices of Insect Sprays
Rural Improvement and Beautification
Metal Roofing
Machinery Repairs
Glass for Greenhouses
Farm Labour
Fencing Conditions on Farms
Artificial Insemination
Compulsory Delivery of Pasteurized Milk
Game Losses

During the year a Provincial Association of County Agricultural Committees was formed with W. E. Brecken, Freeman, as President and the Director of Extension as Secretary.

AGRICULTURAL AND YOUTH CENTRES

In 1945 a large hangar 112 x 126 feet, a work shop 132 x 32 feet, an H Hut 130 feet long with each wing 32 feet wide and smaller buildings were purchased for an Agricultural and Youth Centre in Haldimand. Extensive alterations have been made to the work shop and the H Hut. The H Hut now includes an auditorium to seat 300 people, 2 classrooms, a two unit demonstration kitchen, the caretaker's apartment and various other rooms. Home Economics, Woodworking, Metal Working, Blacksmithing, Soldering and Harness Repair Equipment has been purchased. During 1946, 16 different organizations held 72 meetings with a total attendance of 8,162 at the Centre. In addition, a Three Months' School and various night classes were held during the year. During September, October and November, meetings were discouraged because of alterations being made.

The Woodstock Agricultural Society, in lieu of rent for their grounds and buildings, acquired from the Department of National Defence, some 10 buildings in addition to the original buildings. This Society has started on a plan of year-round use of their equipment. All the buildings, except two, will be available for Fair purposes. Annual rentals of approximately \$2,500.00 are being obtained from various organizations for the use of the buildings.

Excellent Short Course facilities are available and at a small rental an excellent auditorium is available for Junior Farmers and other farm organizations for meetings, dances, socials, seed fairs, conferences and conventions.

JUNIOR FARMERS

The Junior Farmer Movement continued to expand, increasing in membership from 6,535 to 8,034 and the number of clubs from 185 to 215 as of March 31st.

The executive of the Junior Farmers' Association continues to act as the Junior Directors of the Federation of Agriculture. Two members are elected to the Royal Winter Fair Association, one of them being a director. Two girls of the organization are elected as representatives on the Federated Women's Institute Board.

Field Days were held at Kemptville, Presqu'ile Point, Guelph and Ridgetown, with a total attendance of 3,000. Conferences were held at Kemptville and Toronto and the annual meeting and Conference at Guelph. The Provincial Public Speaking Competition was carried through its various stages to the finals with more competitors than ever before. Francis Willson, Ontario County, a former Junior Farmer Provincial Director, won this event.

Leadership Training Schools, for officers, were held at Cornwall, Ridgetown, Cayuga, Newmarket, Peterborough, Palmerston and Carleton Place, with a total attendance of 338.

A Junior Farmer Exhibit was prepared and displayed at the International Plowing Match, Royal Winter Fair, Middlesex Seed Show, Federation of Agriculture Convention, Toronto, and the Junior Farmers' annual meeting, Guelph.

Junior Farmer delegates were sent to the 4-H Camp, Jackson's Mill, West Virginia. Quebec 4-H Congress, Montreal, a 4-H Conference and a 4-H State Fair at Lansing, Michigan, and the National 4-H Congress, Chicago.

Contact was maintained with the Canadian Youth Commission and the World Federation for Democratic Youth.

A survey revealed that 85% of all clubs carry on from 7 to 12 educational meetings per year. The same survey showed that Junior Farmer Clubs had carried on 72 different projects and 35 different methods of raising funds.

Junior activity was further encouraged by the Department of Agriculture by the appointment of a fieldman for Junior Work. The Associate Director continues to act as Secretary-Treasurer.

Junior Farmer organization now covers every County and four of the 10 Districts in Ontario.

MILK CONTROL BOARD OF ONTARIO

Personnel

Mr. W. Ovens, Milk Distributor of Peterborough, replaced Mr. F. W. Hamilton who resigned as a member of the Board, owing to ill health. Mr. A. P. Clark was appointed Secretary of the Board in January, 1946. Mr. Ross Arnott was appointed to the temporary staff as Fieldman, Group I, in April to replace Mr. Roy Randle who was promoted to Fieldman, Group II.

Meetings of the Board

During the year meetings were held as follows:

1.	Meetings having to do with fluid milk matters	21
	Meetings having to do with manufacturing milk matters	3
3.	Registered notices of hearings before Board	51
4.	Appointments in Chairman's Office	193
	Meetings attended by Chairman out of the office	109

Licenses Issued

	Regular	Producer		Milk	Milk	
Year	Distributor	Distributor	Peddler	Transporters	Manufacturers	Total
1934			Not differen	ntiated		1,335
1935			Not differer	ntiated		1,624
1936	647	861	87	177	28	1,800
1937	750	924	87	205	32	1,998
1938	598	850	90	220	36	1,794
1939	607	590	150	235	38	1,620
1940	610	572	. 129	231	40	1,582
1941	635	490	116	230	40	1,511
1942	624	440	100	182	43	1,389
1943	610	452	125	181	43	1,411
1944	615	415	72	184	46	1,332
1945	624	389	76	239	46	1,374
1946	642	346	83	264	48	1,383

Bonding

The total amount of bonds on file with the Board during the year 1946 for the guarantee of payments to producers for milk purchased from them was \$3,608,422.00. This amount is divided between the deposit of negotiable securities, such as Victory Bonds, and the deposit of the bonds of surety companies.

The bonds of two licensed distributors were called during the year in the amount of:

1. \$169.84 2. 500.00 ——— \$669.84

FIELD INSPECTION

The Board's field inspection work was continued on the same general basis as in previous years, namely:

Routine inspection of individual distributor businesses by local Fieldmen, which inspection was concerned chiefly with supervision of milk purchases, tests, records, payments, etc., and the handling of minor complaints. Six Fieldmen were employed full time on this work and some assistance was received from the Fieldmen of the Dairy Branch in Northern Ontario.

Audit and Investigational Work — Two Fieldmen gave full time to routine audits on producer payments and to special investigations and audits to obtain information for the Board. Some very valuable information was obtained on the operations of milk distributors, which was used by the Board in the arbitration of prices which took place in September. Our two Fieldmen (Auditors) devoted practically their entire time from July to October, 1946, to this special work.

DECONTROL BY THE FEDERAL GOVERNMENT

All Federal subsidies on fluid milk were withdrawn during the year. The consumer subsidy of 2 cents per quart was discontinued on June 1. The producer subsidies of 35 cents and 55 cents per hundred to milk producers supplying the fluid milk trade were withdrawn on October 1. The subsidy of 30 cents per hundred to producers of milk for manufactured milk products was also discontinued on October 1. With the dropping of control on milk prices by the Wartime Prices and Trade and the Agricultural Food Board, full authority to control milk prices within the Province was restored to our Board.

Inquiry by the Board

Coincident with the discontinuance of Federal controls, our Board was faced with requests from Industry for assistance. In the case of the 2 cent consumer subsidy withdrawal, the Board's local market Orders on consumer prices, which were in effect at the time the subsidy was given consumers in December, 1941, and Orders passed since that time, took care of the situation. That is, there was an automatic increase in consumer milk prices of 2 cents per quart, bringing them back to the legal prices as provided in Orders of the Board.

When the announcement of the withdrawal of the 2 cent consumer subsidy was made by the Federal authorities in late May, they also announced that on October 1 the producer subsidies would be discontinued. The Board, fully realizing that it would be faced with a demand from producers for a price for their milk which would give them at least the returns per hundred they had been receiving through direct payments and subsidies and realizing that an increase to the consumer was inevitable, gave considerable study to the matter during the summer months. It was not until August 27 that the Board received a request from the Ontario Whole Milk Producers League for an increase of \$1.20 per hundred to all milk producers in the Province over the basic prices in effect by Board Order 44-6. It was explained in the request that this amount of increase was necessary to take care of the 55 cent subsidy and an additional amount of 65 cents per hundred to cover their increased costs of production. On receipt of this request, the Board decided to deal with the matter under Section 4 of The Milk Control Act and conduct an inquiry into the production and distribution of milk. This was considered advisable and necessary because of the magnitude of the problem and in order to give consumers of milk every opportunity to become as conversant as possible with the problem facing the Board, the Industry and the Consumers of milk.

The first meeting of the Inquiry was held on September 17. Notices of the meeting were sent to Consumer Representatives appointed under the Act, and to the Ontario Whole Milk Producers League and the Ontario Milk Distributors Association. All of these groups had representation at the Inquiry. The Producers presented their case and in support of their request filed with the Board their economist's figures on their costs of milk production. The Distributors presented a brief in which they outlined their position in regard to the increased costs of operation which they had absorbed during the war

period and the future increases in operating costs with which they will be faced. They pointed out that they could not absorb any further increases without an increase in their operating margin and that it would be impossible for them to determine their requirements until they knew what prices producers were to receive. The Consumer Representatives were, for the most part, opposed to any increase in the price of milk and requested an adjournment of the Inquiry to prepare a brief on the position of Consumers. In order to assist the Consumer Representatives, the Board granted an adjournment till September 24, and also gave a copy of the findings of a study by the Board into the Distributors' operating margain to all Consumer Representatives.

At the meeting held on September 24, the Consumer Representatives again took objection to any increase in the price of milk and for the most part took the stand that the payment of the producer subsidy should be maintained. At this meeting, Mayor Saunders of Toronto submitted that the power of the Board to fix the price of milk was limited to the approval of Agreements between Producers and Distributors and, therefore, the Board had no power under Section 4 to fix the price of milk. There being no Agreement between Producers and Distributors, his Worship, the Mayor, submitted that there should be no Order issued by the Milk Control Board.

The Board was not in agreement with this opinion, as it considered Section 4 of the Act gave the Board its authority to issue Orders on milk prices, as had been done since 1936.

We, therefore, following the Inquiry, gave immediate consideration to the evidence gathered at the Inquiry and to the results of investigations made by the Board's auditors during the summer months into the operating statements of some forty representative milk distributors across the Province, supplying about 45 per cent. of the total milk sold in the Province. We also consulted with Professor W. A. Drummond of the Ontario Agricultural College on the milk production cost figures, submitted by the Ontario Whole Milk Producers League. After very careful weighing of all the evidence, it was the considered opinion of the Board,—

that the expenses incidental to milk production had increased to the extent that a minimum increase of \$1.00 per 100 in producer milk prices was warranted;

that a price increase to consumers at the rate of 3 cents per quart was necessary to pay the \$1.00 increase to producers and to place the distributor in a better position to meet his increasing costs.

Before any Order covering this decision was issued, the Board was informed by the Government that there was doubt as to the Board's powers in respect to price-fixing, and that the Government had decided to appoint a Royal Commission to investigate the Milk Industry.

During the interim while the Royal Commission is investigating, the Industry is carrying on, on an agreement, covering producer and consumer prices, reached on September 30 between the Ontario Whole Milk Producers League and Ontario Milk Distributors Association. Under this agreement, producer prices were increased \$1.00 per 100 and consumer prices, three cents per quart, two cents per pint and one cent per half-pint. These price changes went into effect in all markets of the Province on October 1, 1946. The increase in prices to the consumer changed the upward trend in milk consumption which has prevailed for the past five years into a slight decrease in sales, compared to the corresponding month of the previous year. In October, the first month of the higher prices, sales were down 1.6 per cent.

November and December were 1.8 and 2.8 per cent. respectively lower than the same months of the previous year.

The increase in producer prices brought encouragement to milk producers and this better frame of mind on the part of producers resulted by the end of the year in an increase in milk shipments. This increase, together with a levelling off of milk consumption, brought a better balance in supply and demand conditions. It is anticipated that the improvement in production will continue and that early in 1947 the fluid milk markets will not be faced with milk shortages.

The year was fraught with many difficulties, most of which were the outcome of the dropping of controls by the various wartime boards at Ottawa. The consumers of milk enjoyed subsidies amounting to between three and four cents per quart of milk during the war years. It was to be expected that there would be many problems for the Industry and for the Milk Control Board when the time came for these large subsidies to be dropped. The discontinuance of the subsidies, unfortunately, all came within a few months in 1946 and, in spite of the confusion which was created, the Industry has been able to carry on a very orderly system of milk marketing.

CO-OPERATION AND MARKETS BRANCH

The activities of the Branch are devoted to administering The Farm Products Marketing Act under the jurisdiction of The Farm Products Marketing Board, and The Credit Unions Act under the jurisdiction of the Supervisor-Inspector and Registrar of Credit Unions, and the Ontario Food Terminal Act under the jurisdiction of the Ontario Food Terminal Board of which the Commissioner of the Branch is Chairman.

THE FARM PRODUCTS MARKETING BOARD

Under The Farm Products Marketing Act, the Farm Products Marketing Board is given authority to recommend the approval of marketing schemes, and, if approved by the Minister of Agriculture, to establish and supervise the operation of local boards to administer the schemes.

Marketing schemes are the legally constituted means for collective bargaining and regulating the sale of designated farm products. Each scheme must provide for a definite program of marketing activities and must be supported by a vote by ballot showing that a fairly representative number of the growers concerned are in favour of the scheme.

Each scheme is administered by a local board of growers, elected by the growers. Subject to the approval of the Farm Products Marketing Board, local boards are empowered to negotiate and fix agreements respecting minimum prices, premiums, discounts, forms of contract and conditions of sale. Growers now have some direct voice and authority in marketing their own produce.

Presently there are nine schemes covering fifteen crops and products in force under the Act; viz:

The Ontario Cheese Producers' Marketing Scheme, 1938.

The Ontario Asparagus Growers' Marketing Scheme, 1938.

The Ontario Pear, Plum and Cherry Growers' Marketing Scheme, 1938.

The Ontario Peach Growers' Marketing Scheme, 1938.

The Ontario Sugar Beet Growers' Marketing Scheme, 1942.

The Ontario Berry Growers' Marketing Scheme, 1944.

The Ontario Bean Growers' Marketing Scheme, 1944.

The Ontario Vegetable Growers' Marketing Scheme, 1946.

The Ontario Hog Producers' Marketing Scheme, 1946.

Early in the year under review, as reported in its last annual statement, the Board recommended the approval of the Ontario Hog Producers' Marketing Scheme. Approval was granted by Order-in-Council and the scheme came into effect May 1st, 1946.

At about the same time the Board recommended the amalgamation of the Ontario Tomato Growers' Marketing Scheme and the Ontario Pea and Corn Growers' Marketing Scheme into the Ontario Vegetable Growers' Marketing Scheme. This also was approved.

As a result of the approval by the Legislature of the Farm Products Marketing Act, 1946, replacing the Farm Products Control Act and all amendments thereto the Board arranged for the revision and approval by the Registrar of Regulations of all the marketing schemes in force under the Act. This was completed shortly before the end of the fiscal year under review.

A brief comment on the working of each Scheme will illustrate the scope of the marketing activity involved.

1. The Cheese Scheme

Some 26,000 milk producers supply milk for processing into cheese. The cheese scheme was the first marketing scheme approved under the Act. The purpose of the Scheme is —

"to require the primary sale or primary offer for sale of all cheddar cheese produced in Ontario to be made on local cheese boards under uniform rules and regulations."

The extent the Scheme has achieved its primary object of stimulating competition in buying cheese is evident from the figures that, during 1946, 95% of the cheese graded in Ontario was sold on local boards, whereas only 36.6% of the cheese graded was sold on local cheese boards in 1935, the year prior to the commencement of the Scheme's operations.

2. The Asparagus Scheme

Some 800 growers sell asparagus annually to the canners in Ontario for processing. Only the processing industry is regulated; i.e., asparagus sold on the fresh vegetable market is exempt from the Scheme. One marketing agency appointed by the local board sells all the asparagus purchased for processing, each growing district being allotted its share of the tonnage sold. A unique feature of this Scheme is an agreement by the growers to cease cutting when total orders have been filled. In this way production is fitted to demand.

In 1946, 1,174 tons of asparagus were sold for processing at a total value of \$233,040.71. This compares with 1,290 tons valued at \$237,616.77 sold for processing in 1945.

Official 1946 asparagus minimum prices were the same as 1945; viz.,

1945		1946	
Grade No. 1 12½¢	per lb.	Grade No. 112½¢	per lb.
Utility Grade A 10¢	per lb.	Utility Grade A 10¢	per lb.
Utility Grade B 8¢	per lb.	Utility Grade B 8¢	per lb.
Grade No. 2 51/4¢	per lb.	Grade No. 2 51/4¢	per lb.

Actually producers received $14\frac{1}{4}\phi$ per pound for Grade No. 1, $11\frac{3}{4}\phi$ per pound for Utility Grade A and $9\frac{1}{2}\phi$ per pound for Utility Grade B in 1946 paid by the processors in order to divert a large tonnage of product from the wholesale and retail fresh vegetable market.

3. The Pear, Plum and Cherry Scheme

Some 2,700 growers sold 3,069 tons of sour cherries valued at \$645,226.78; 737 tons of sweet cherries valued at \$195,115.19; 5,237 tons of plums valued at \$353,526.68; 390 tons of Bartlett pears valued at \$37,685.28 and 3,699 tons of Kieffer pears valued at \$210,819.68, or a total of \$1,442,373.61 for processing in 1946.

This compares with 136 tons of sour cherries valued at \$32,765.95; 386 tons of sweet cherries valued at \$126,145.54; 104 tons of plums valued at \$7,678.38; no Bartlett pears were processed, and 92 tons of Kieffer pears valued at \$5,437.93, or a total of \$172,027.80 sold for processing in 1945.

The 1945 season, due to a combination of weather conditions in April and May beyond the memory of any living grower, resulted in near crop failures for pears, plums and cherries for processing purposes.

In 1946 cherry, plum and pear minimum prices compared with 1945 were -

	1946	1945
Sour Cherries		Open Market
Sweet Cherries	\$260.00 per ton	Open Market
Plums	65.00 per ton	\$ 90.00 per ton
Bartlett Pears—2" and up		100.00 per ton
Bartlett Pears—13/4" to 2"		70.00 per ton
Kieffer Pears—2" and up		60.00 per ton
Kieffer Pears—134" to 2"	40.00 per ton	40.00 per ton

4. The Peach Scheme

Some 900 growers sold 19,865 tons of peaches valued at \$1,779,116.03 for processing in 1946. This compares with 7,435 tons of peaches valued at \$768,634.71 sold for processing in 1945.

Minimum prices were reduced slightly in 1946 due to more favourable crop conditions as compared with 1945 levels as follows:

	1946	1945
Jubilees	\$100.00 per ton	\$107.50 per ton
Elbertas	90.00 per ton	107.50 per ton
"V" type and other varieties	85.00 per ton	102.50 per ton

5. The Vegetable Scheme

As noted earlier in this report the tomato and the pea and corn schemes were amalgamated early in the year under review.

Some 12,500 growers sold 279,588 tons of tomatoes valued at \$5,757,108.39; 28,101 tons of green peas valued at \$1,559,930.35 and 42,828 tons of sweet corn valued at \$648,694.78 for processing in 1946. This compares with 107,767 tons of tomatoes valued at \$2,287,459.15; 19,969 tons of green peas valued at \$1,062,478.35 and 27,372 tons of sweet corn valued at \$393,292.57 sold for processing in 1945.

The minimum prices to the growers for tomatoes were \$20.10 per ton, for green peas \$55.00 per ton (subject to minor variations depending on the cost of pea seed) and for sweet corn \$14.50 per ton in 1946. The same prices were paid to the growers in 1945 but included Dominion Government subsidies of \$6.00 per ton for tomatoes, \$10.00 per ton for green peas and \$4.00 per ton for sweet corn.

6. The Seed Corn Scheme

The membership of this marketing group is comprised of some 260 open pollinated seed corn growers and some 200 hybrid seed corn growers in southwestern Ontario who specialize in the production of corn for seed purposes. The Scheme's objective is to make the production of seed corn sufficiently attractive, despite the extra costs of selection and isolation, that certain varieties and strains will be preserved and maintained. Through negotiation with the dealers in seed corn a scale of premiums to the growers for different services rendered is established for the different varieties of hybrid seed corn to be paid over and above the average January market price per bushel for dried commercial corn in each year. Also through negotiation with the dealers in seed corn a scale of minimum prices per bushel is established for the different varieties of open pollinated seed corn in each year. In 1946 some 177,667 bushels of open pollinated seed corn and 175,960 bushels of hybrid seed corn were produced compared with 349,485 bushels of open pollinated seed corn and 232,325 bushels of hybrid seed corn produced in 1945.

The minimum prices for open pollinated seed corn and minimum premiums for hybrid seed corn in 1946, compared with those in 1945, were —

OPEN POLLINATED SEED CORN

10.40

		1946	1945
(1) Dents, Golden Glow, Wisconsins No. 7, White Cap, Yellow Dent, Bailey,	Registered No. 1	\$5.00 per bu.	\$4.25 per bu.
Bloody Butcher and Sweepstakes (2) Flints	Registered No. 2 Registered No. 1	4.75 per bu. 5.50 per bu.	4.00 per bu. 4.75 per bu.
(=)	Registered No. 2	5.25 per bu.	4.50 per bu.

HYBRID SEED CORN

Options	basic price \$1.14 per bu. plus following premiums:	1945 basic price \$1.04 per bu. plus following premiums:
•	*	2
(1) Dealer supplies seed; grower supplies land, cultivates and uses every reasonable endeavour to assure early maturity		\$.50 per bu.
(2) Grower supplies seed, plants, grows, cultivates, detassels, harvests, properly sorts, dries, processes, treats and delivers in new hour.		2.75 per bu.
bags (3) Grower supplies seed, plants, grows, cultivates, detassels, harvests, properly sorts, dries, shells and delivers	-	1.80 per bu.
(4) Grower supplies seed, plants, grows, cultivates, detassels, harvests, properly sorts and delivers	1.45 per bu.	1.40 per bu.

7. The Berry Scheme

Some 400 growers sold 1,687,601 quarts of strawberries valued at \$331,653.00; 87,853 quarts of red raspberries valued at \$31,719.48 and 52,964 quarts of purple raspberries valued at \$17,337.62 for processing in 1946. This compares with 2,714,052 quarts of strawberries valued at \$563,053.63 and 83,605 quarts of raspberries valued at \$26,417.00 sold for processing in 1945.

As a result of the reduced acreage devoted to berry crops since 1937 which situation has been further aggravated by wartime labour conditions, fresh market berry ceiling prices have been relatively higher than authorized berry ceiling prices for processing purposes. Consequently no minimum prices were established for these crops in 1946 and the market declared free and open.

8. The Sugar Beet Scheme

Some 3,000 growers sold 232,426 tons of sugar beets from 23,375 acres with an average sugar content of 18.07% for a total value of \$3,122,712.44 for processing in 1946. This compares with 164,156 tons from 17,600 acres with an average sugar content of 17.27% for a total value of \$2,042,100.64 sold for processing in 1945.

The minimum average price (16% beet) in 1946 delivered plant was \$11.53 giving effect to the benefit of the Dominion excise tax reductions and including the Ontario subsidy of 58¢ per ton compared with \$11.00 per ton giving effect to the Dominion excise tax reductions and the Ontario subsidy of \$1.55 per ton in 1945.

9. The Bean Scheme

Some 5,700 growers marketed approximately 1,250,000 bushels of beans in 1946 compared with approximately 860,000 bushels in 1945. Returns to growers were on a price basis of \$3.00 per bushel for No. 1 beans in 1946

compared with a price basis of \$2.75 per bushel for No. 1 beans in 1945. The maximum charge for grading and picking beans was set at 8ϕ per pound for each pound picked out as culls in excess of one pound per bushel in 1946 compared with a maximum charge for the same services of 7ϕ per pound in 1945.

10. The Hog Scheme

As noted earlier in this report the Hog Scheme was recommended by the Board and approved by the Ontario Government early in the fiscal year under review. The hog industry is the most important branch of Ontario agriculture, both in point of volume and value of production and in number of producers affected, to come under the provisions of the Farm Products Marketing Act to date. The yearly value of hog production in Ontario is between \$75 million and \$100 million.

Despite the complicated problems involved, particularly as a substantial volume of live hogs shipped inter-provincially is outside the jurisdiction of the Scheme, some progress has already been made, especially in connection with "condition of sale" for hogs. Certain agreements covering "Rules for the Sale of Hogs" have been negotiated and approved by the industry representing producers and processors. They provide for the purchase of hogs on a basis of rail grade with payment to the producers on that basis; supplying the producers with an adequate form of statement and form of settlement; adequate identification of each producer's hogs in all shipments and other related matters.

Considerable study has also been given and is continuing on losses due to bruising, feed supplies, quality programs and methods of distribution.

General

As reported in each of the past four years the operations of the Farm Products Marketing Board were necessarily curtailed and its authority limited following the establishment of the Wartime Prices and Trade Board. This was inevitable under Section 2 (3) P.C. 8528 (Dominion) which provides that no properly constituted authority, Dominion or Provincial, by statute or regulation shall fix or approve any specific maximum or minimum price or mark-up at which any goods or services may be sold, offered for sale or supplied except with the written concurrence of the Wartime Prices and Trade Board.

The Farm Products Marketing Board has co-operated with the Wartime Prices and Trade Board in every possible way and was able to obtain concurrence to all its 1946 minimum price Orders excepting sour cherries, strawberries and raspberries.

As reported for a number of past fiscal years there has been under consideration by the cream producers of the Province a proposed Cream Marketing Scheme. The Scheme, despite the difficulties involved in the marketing of a product in which the Province is not self-sufficient and which necessitates the shipping in of substantial quantities of butter, particularly from Western Canada, proposes to negotiate and determine minimum prices for cream for butter manufacture, premiums and discounts for the various grades of cream, terms of contract, conditions of sale, transportation and other matters related to the marketing of this commodity. The Board, after consideration of all the factors involved, decided the point had been reached when the opinion of the rank and file of the cream producers throughout the Province should be ascertained, arranged for a vote by ballot of all regular shippers on the proposed scheme to be held in April, 1947. The outcome and the decision to be made as a result accordingly is not available for this annual report.

ONTARIO FOOD TERMINAL

As required under Section 8 of the Ontario Food Terminal Act, there follows the first Annual Report of the Ontario Food Terminal Board to the Honourable the Minister of Agriculture for the year ending December 31st, 1946.

During the year the Department of Highways and the Department of Public Works purchased a site in the Township of Etobicoke for the location of the proposed Food Terminal, comprised of 45 acres of land between the main line of the Canadian National Railways, the Queen Elizabeth Highway and the Queensway just west of the Humber River. Title to the property is presently vested in the Department of Public Works.

During the 1946 Session of the Legislature the Ontario Food Terminal Act was approved. The Act provides for the appointment of a Board of not more than seven persons to be appointed by the Lieutenant-Governor in Council. This Board is empowered, subject to the approval of the Minister of Agriculture, to construct, equip and operate a wholesale fruit and produce market, to be known as the Ontario Food Terminal, on the site chosen by the industry and now purchased for its location. The Act also establishes the Board as a corporate body with authority to sue and be sued and prescribes its powers and duties as well as those of its officers. The Act further provides that no future fruit and vegetable wholesale market may be established in the City of Toronto and the Counties of York and Peel but this restriction does not apply to any fruit and vegetable wholesale market presently in operation save that such may not be extended or enlarged. The Ontario Food Terminal Act was proclaimed in force and effect by the Lieutenant-Governor in Council on May 1st, 1946.

On May 13th, 1946, an important legislative step was also taken by the corporation of the Township of Etobicoke whose Council passed a zoning by-law restricting the sale of fresh and processed fruits and vegetables at wholesale in a defined portion of the Township to within the Ontario Food Terminal Board's market area.

On July 16th, 1946, the present members of the Ontario Food Terminal Board; viz., G. F. Perkin, Chairman, Geo. H. Reynolds, Member and M. M. Robinson, Member, and its Advisory Committee, comprised of the Executives of the Ontario Fruit Growers' Association, the Ontario Vegetable Growers' Association and the Toronto Wholesale Fruit and Produce Merchants' Association were appointed by the Lieutenant-Governor in Council.

The members of the Board and its Advisory Committee serve without remuneration or expense.

The Board's first step was to prescribe the form of its corporate seal and to appoint James C. Hay as Secretary. Mr. Hay is Solicitor of the Ontario Department of Agriculture. The appointment was approved by the Minister and subsequently both the form of the seal and Mr. Hay's appointment as Secreary to the Board were ratified by Orders-in-Council dated July 29th, 1946, and July 30th, 1946, respectively.

The Board's first major consideration was the appointment of its architect. After interviews, correspondence and consultations with some seven firms, the Board on August 6th, 1946, appointed the firm of Shore and Moffat, Toronto, as its architects. Both members of this firm are young men with particularly high educational backgrounds and practical experience and both are recently discharged from the Armed Services. On the same day the Board also appointed Mr. A. J. Kelsey, Washington, D.C., as its Market Consultant. Mr. Kelsey

was formerly Assistant to Dr. W. A. Crow, Chief, Perishable Commodity Marketing Administration, United States Department of Agriculture. Mr. Kelsey is an architect by profession but also has specialized training in refrigeration and cold storage. After leaving UNRRA service in Europe Mr. Kelsey went into private practice in Washington, D.C. He has acted in a consulting capacity on a number of United States terminal market projects.

Since these appointments the Board has met continuously or held consultations with interested groups or parties in developing the plans for the proposed project. The grades and levels of the property have been set, after consultation with the Department of Highways, the Hydro-Electric Power Commission and the Canadian National Railways and a contract for grading the site was awarded in November by the Department of Highways after tenders were called. Presently the Board is engaged in developing the preliminary plans and sketches of the proposed produce buildings, cold storage plant and farmers' market to be constructed on the property. These will be submitted for approval together with their estimated cost as far as this can be determined at this stage before preparation of detailed blueprints and working drawings are authorized.

ONTARIO CREDIT UNIONS

The annual returns filed by Ontario Credit Unions for the year ending December 31, 1946, showed the continued development and the increasing maturity of the movement. Though some small groups, where the bond of association was never strong, were in the process of liquidation during the year, generally the picture was one of progress both in the formation of new credit unions and in the activity of established groups.

39 new credit unions were chartered, of which 13 were rural groups. Total membership increased 53,728 to 63,817 or almost 19%.

Total assets rose from \$6,893,682.96 to \$9,305,880.51, an increase of over \$2,400,000.00.

Loan business increased from \$4,658,070.92 to \$6,431,716.09.

GENERAL

Credit Unions are co-operative savings and credit societies organized on a local basis among groups of people who have a close common bond of occupation or association or are the residents of some well-defined community.

The main objectives of these groups are:

- To develop the habit of regular saving and to encourage a program of personal thrift among the members.
- 2. By the consolidation of the small savings of many members to create a source of credit at reasonable rates of interest for the provident and productive needs of the members, and
- 3. To develop a program of education in co-oper; ion and personal finance.

The Credit Union is operated by a Board of Directors with a bonded Manager appointed to handle the funds. Loans are made only after a Credit Committee has approved the same and has defined the necessary security and terms of repayment. The interests of the members are protected by a Supervisory Committee who are responsible directly to the members and who not only audit the books but see that the provisions of the Act and of the Certificate of Incorporation are complied with. The Manager, usually a part-time official, is available at regular times to accept deposits and loan repayments and to pay out withdrawals and loans.

Many Credit Unions also provide secondary services such as co-operative hospitalization, loan insurance, savings insurance, etc.

The Credit Union is of European origin, but has attained it greatest development on this continent. The first American group was organized by Alphonse Dejardins in Levis, Quebec, in 1900, and from there the movement has spread until today there are thousands of credit unions throughout the United States and Canada. Even though a few Ontario Credit Unions have been operating for over thirty years, the main development in this Province has occurred since 1940. Only 14 of the existing groups were chartered previous to that year.

Ontario Credit Unions are authorized by the Credit Unions Act, 1940, and amendments thereto, which Act replaced the Co-operative Credit Societies Act, 1922, and the Credit Unions Amendment Act, 1939.

INCORPORATIONS

Application for the incorporation of a credit union is by Memorandum of Association signed by at least twenty persons capable of contracting. Certificates of Incorporation are issued by the Minister of Agriculture and all by-laws must be approved by him.

During the year 1946, forty certificates were issued and one surrendered. Of the new incorporations, one was for a regional league, La Federation des Caisses Populaires Ottawa et Districts Ltee.

The geographic distribution of these new Credit Unions, by counties, is as follows:

Eastern —	Carleton Ontario Peterborough	1 2	4
Western —		2	
	Lambton	1	
	Lincoln	1	
	Middlesex	1	
	Oxford	1	
	Simcoe	2	
	Welland	3	
	Wellington	1	
	Wentworth	2	
	York	7	04
			21
Northern -	- Cochrane	6	
	Kenora	1	
	Nipissing	1	
	Thunder Bay	6	
			14
			39

The distribution, when sorted by "Bond of Association", is shown on the table below. The growth of rural groups is demonstrated by the fact that while they compose only 24% of the total to date, they accounted for one-third of the groups organized during 1946.

Urban Groups

Occupational—	
Industrial	8
Public Service	4
Utilities	1

Associational— Co-operatives Racial Religious Other	2 4 6 1	26
Rural Groups	_	20
Associational—		
Co-operative	2	
Poligious	7	
Community	4	
•	-	13
		30

A list of the credit unions incorporated during the year 1946 is included as an appendix to this report.

FINANCIAL STATEMENT

The financial statements of the 281 Credit Unions that were carrying on active business at the end of 1946 have been consolidated and the combined statements are given below. Owing to the inadequacy of information in a few of the returns and minor inaccuracies in others it has been necessary to act upon arbitrary assumption in some cases, which may have led to error. Such errors, however, will be minor.

COMBINED PROFIT AND LOSS ACCOUNT 1946

Expenditure		Revenue
Interest on Deposits Interest on Loans Insurance and Bonding Salaries, Allowances, etc. Office Supplies and Expenses Rent, Light and Heat Other Expenses Combines Profit	6,925.65 34,720.51 59,901.96 27,852.33 5,601.04 24,434.98	Interest Earned on Loans \$329,689.18 Interest Earned on Investments 77,152.10 Other Interest Earned 5,262.74 Profit on Sale of Securities 20,914.38 Other Income 5,303.45
	\$438.321.85	\$438,321,85

COMBINED BALANCE SHEET

Assets	
Cash	\$1,041,328.49
Accounts Receivable	7,506.31
Prepaid Accounts	18,108.87
Loans to Members: Personal \$3,243,890.69	
Mortgage 2,315,471.3	
1101 tgage	- 5,559,362.04
Investments: of Surplus Funds \$2,375,279.33	2
of Guarantee Funds 275,917.94	
of Guarantee Funds	- 2,651,197.32
Furniture and Fixtures	
Real Estate	. 10,034.01
	\$9,305,880.51
Liabilities	
Accounts and Loans Payable	\$ 245,947.70
Members' Deposits	
Education Fund	
Reserves: Guarantee Fund (Statutory)	
G 1	EO 050 00
Members' Equity: Share Savings \$4,010,193.75	9
Undivided Earnings 237,186.22	ó
Offdivided Earnings 251,100.24	4,247,380.01
	- 4,241,300.01
	\$9,305,880.51

COMBINED DISPOSITION OF SURPLUS

To	From
Guarantee Fund Appropriation (Statutory) \$ 42,256.33 Rebate on Loan Interest 18,164.25 Education Fund 3,291.31 Dividends on Shares 84,080.94 Other Disposition 14,151.24	Undivided Earnings: Balance brought forward \$ 37,678.36 Profit and Loss 1946
Undivided Earnings forward 75,242.15 \$237,186.22	\$237,186.22

GENERAL PROGRESS

Every credit union in Ontario is required to file an "Annual Return and Audited Statement" which return contains not only copies of the financial statements for the past year but also certain statistical information. This statistical information has been summarized and related to similar figures for previous years. The following comments on credit unions progress during the year are based on these figures.

(a) In the Province as a whole

The following gives the comparative figures for several years in connection with several important items.

Membership

Total membership in Ontario Credit Unions increased from 53,728 to 63,817 or 18.8% during 1946. This sizeable increase is a continuance of that shown each year since 1940 as indicated below.

Year	Total Membership	Increase
1939	8,809	
1940	4.4.404	5,652
1941	18,670	4,209
1942	23,699	5,029
1943	32,290	8,591
1944	44,480	12,550
1945	53,728	8,888
1946	63,817	10,089

Total Assets

Even though many small groups are rendering a very worth-while service and so size cannot be taken as the sole criterion of success, it is however true that the amount of total assets does indicate general growth and development.

The total assets of Ontario Credit Unions increased during 1946 from \$6,893,682.96 to \$9,305,880.51 or 34.9%.

Steady, rather than rapid accumulation of assets is the best sign of credit union progress and as a result of this, the greatest increase occurs in the more mature groups. This steady accumulation is clearly indicated in the following grouping of existing credit unions by the amount of total assets. In each year there is a gradual movement toward higher groupings.

Grouping By Total Assets	Number	Credit Uni	ons in Eac	h Group
Grouping By Total Assets	1943	1944	1945	1946
New or Inactive \	42 \	51	18	23
Under \$1,000.00 }	}		28	27
\$ 1,000.00 to \$ 2,500.00	26	39	46	39
2,500.00 to 5,000.00	25	24	49	54
5,000.00 to 10,000.00	25	42	40	48
10,000.00 to 25,000.00	28	31	43	50
25,000.00 to 50,000.00	6	17	22	34
50,000.00 to 100,000.00	5	8	11	14
100,000.00 to 250,000.00	3	4	3	7
250,000.00 to 500,000.00	2		3	5
500,000.00 to 1,000,000.00	1	3	2	1
over 1,000,000.00			1	2
	163	219	266	304

Loans to Members

Loan demand continued at a high level during the year with a ratio of loans outstanding to total assets at the end of 1946 of 59.7% as compared with a similar figure of 53.9% at the close of 1945.

Though the tendency for savings to increase more quickly than loan demand continued in the larger credit unions, many smaller groups found it necessary to liquidate security holdings and to borrow from the Central Credit Department or other sources to satisfy the credit needs of their members during the year.

Wider interest in mortgage loans was apparent though much of the increase is traceable to older and larger groups. The provincial totals for mortgage loans made were more than 53% above those for 1945.

Total loans made increased from \$4,658,070.92 in 1945 to \$6,431,716.09 in 1946 or 38% and at the end of the year, loans outstanding were up 49%.

During the year \$9,657.38 of loans were written off as compared with \$1,871.05 in 1945. Far from indicating a marked rise in default, this would rather appear to be a realistic move on the part of many credit unions to close out of their accounts long standing uncollectible loans.

(b) Geographic Progress

The development of the Credit Union movement in Ontario has largely come about through voluntary organizational work and other personal contact. As a result, the geographic development has tended to be in concentrated local areas — there are 89 groups in Toronto, 30 in Hamilton, 23 in Windsor, 21 in Cochrane District, 15 in Ottawa and 14 in Thunder Bay District. These areas are gradually spreading and there are now chartered groups in all the Districts except Manitoulin and Parry Sound, and in all but 15 of the counties.

The greatest numerical development has occurred in the Cities of Central and Western Ontario. The greatest accumulation of assets has taken place among the Parish and Civil Service groups in Ottawa, some of whom have been operating for more than a quarter of a century. And the greatest rural development has been in Eastern and Northern Ontario, particularly among the French-speaking groups.

(c) Progress Among the Various "Bond of Association" Groups

Even though credit union charters may be issued to any kind of group having the necessary "common bond" there has been a tendency in Ontario

for certain types of groups to organize many credit unions and for others to ignore the movement. Again, when organized, some types have developed much more satisfactorily than others.

The predominance of parish groups, both urban and rural, and of industrial groups is very evident. Community groups, which have been very successful in some other Provinces are not so prominent in Ontario. A summary of the situation at the end of 1946 was:

Parish Groups — Urban	58	
Rural	39	
Industrial Public Service Utility Employees Racial		97 69 21 21 25
Co-operatives — Urban	11	
Rural	9	20
Community Groups — Urban	19	20
Rural	25	
Miscellaneous		44 7
111100111111111111111111111111111111111		304

(d) Progress According to Age Group

The development of a successful credit union usually follows a standard pattern. For the first year or two there is regular but often slow progress. Then, as the members become familiar with the services rendered and as the management becomes matured, there is a consistent increase in membership and a gradual increase in total assets, which increase continues indefinitely.

LEAGUE ACTIVITY

Organizations have been formed in the Province under Section 48 of The Credit Unions Act to provide league facilities on both a provincial and a regional basis.

The Ontario Credit Union League was incorporated in 1942 and now has 204 member credit unions. The League holds a two-day convention in connection with its annual meeting, this year at Niagara Falls where credit union matters of province-wide interest were thoroughly discussed.

In 1946 La Federation des Caisses Populaires d'Ottawa et Districts Limitee was organized to provide service to French-speaking groups in the Ottawa District.

These organizations are incorporated to further educational and promotional programs in their areas and to provide member groups with such services as a supply department, central credit facilities and bookkeeping and auditing assistance.

RURAL CREDIT UNIONS

In 1946 the credit union movement made considerable headway among rural groups. There are now 73 of these with a combined membership of 6,627 and total assets of \$671,558.40. During 1946 these credit unions supplied farm credit to a total amount of \$413,359.02.

The location by counties and the year of incorporation of these rural credit unions is given below.

W	est	orn.	Ont	ario

11 0000110 010		N	o. of Rura	1 Credit	Ilnions	hu Yen	rs of Inc	orporati	on
Count	y	1940	1941	1942	1943	1944	1945	1946	Total
Bruce		2							2
					1	1			2
Grey			****		1				1
Haldin	nand on	1		****			1		1
	n	1					1	****	1
	1		****	1				****	ī
			4	1	-	1		2	4
	ıd		****					1	1
	gton	***	****	1		1			1
AA CIII W	orur					1			_
Eastern Ont	ario								
Carlet	on	****	w-m -0 -0			1		****	1
	gs		1				****		1
	0b				1			1	$\frac{1}{2}$
	orough_ tt		****	2	1	2	****	_	$\frac{2}{4}$
	W	1	3	3				Miran	7
	1	****		2	1	3	1		7
Victor	ia						1		1
Northern On	ıtario								
	a			1					1
	ane			2 - ma		5	6	5	16
Nipiss	ing	1	****	*****	1		4		6
	River			**		2 2	1		2
	er Bay	****					1	3	3 2 4
Temis	kaming_			1		****			1
			_		_	-			
TOTA	LS	5	4	12	5	18	16	13	73

CONCLUSION

During 1946 there was considerable evidence of the continued expansion and the growing maturity of the Credit Union movement in Ontario. As in previous years the major development was among urban groups, but interest in rural areas is increasing and gradually becoming more widespread.

There are now more than sixty thousand people in the Province taking advantage of the savings facilities of credit unions and they have gradually accumulated a combined savings account in excess of eight and a half million dollars. These same people have been extended credit for provident and productive purposes to a total greater than six and a half million dollars during the year and in excess of thirty million dollars during the life of exising credit unions.

The fact that many credit union members were not previously accustomed to using commercial banking facilities is a measure of the usefulness of credit unions in providing security through savings programs and as sources of credit.

Incorporated Group Served

No.

CREDIT UNIONS INCORPORATED IN 1946

Name

No.			nuie	a Group Servea
270	York Hosiers (Woodstock) Credit Union Limited	Jan.	7	Employees York Knitting Mills.
271	Kakabeka Falls Community Credit Union Limited	Jan.	8	Residents of Community of Kakabeka Falls.
272	La Federation des Caisses Populaires Ottawa et Districts, Limitee	Jan.	10	
273	Polish National Credit Union Limited		14	Members of Polish National Union, Toronto.
274	Caisse Populaire de Val-Rita Limited		14	Members of Val-Rita Parish.
275	All For One M.S.B. Society (Toronto) Credit Union Limited		25	Members of the All For One Mutual Sick Benefit Society.
276	Abrasive Workers of Niagara Falls Credit Union Limited	Jan.	25	Employees of Canadian Carborundum Co.
277	Caisse Populaire de Moonbeam Limited	Jan.	29	Members of Church of The Nativite de la Ste. Vierge.
278	Caisse Populaire de Harty Limited	Feb.	12	Members of Harty Parish.
279	Limited	Mar.	7	Members of the Parishes of Holy Family and Christ the King.
	Port Arthur Teachers' Credit Union Limited		7	Members of Teaching Staff.
281	People's Co-operative (Port Arthur) Credit Union Limited	Mar.	15	Members and Employees of People's Co-operative Society.
282	Sherwood (Toronto) Credit Union Limited	Mar.	15	Members of Sherwood Archery and Handicraft Club.
283	Ukrainian (St. Catharines) Credit Union Limited	Mar.	27	Members of Ukrainian Na- tional Federation.
284	Ukrainian (Windsor) Credit Union Limited	Mar.	27	Canadians of Ukrainian Origin in County of Essex.
285	Camera Heights (Mount Dennis) Credit Union Limited	Mar.	28	Employees of Canadian Kodak Co.
286	Collingwood Georgian View Credit Union Limited	Mar.	28	Members Georgian View Farm Youth and Colling- wood Dist. Co-op.
287 288	Caisse Populaire de Val Cote Limited St. Joseph's Parish (Snyder) Credit Union	Mar.	30	Members of Val Cote Parish.
	Limited	Apr.	16	Residents within the boundaries of St. Joseph's Parish (Snyder).
289	Toronto Police Employees' Credit Union Limited	Apr.	16	Employees of and persons on pension from Toronto
290	Windsor Dominion Civil Servants Credit Union Limited	Apr.	18	Police Department. Employees of the Government of Canada.
291	Otis-Fensom Employees' (Hamilton) Credit Union Limited	Apr.	24	Employees of Otis-Fensom Elevator Co.
292	Baird Community Credit Union Limited	May	2	Residents of the Community of Baird.
293	Adjala Credit Union Limited	May	8	Residents of Townships of Adjala and Tecumseh.
				•

CREDIT UNIONS INCORPORATED IN 1946 (Continued)

No. 294			orate	ed Group Served
201	Limited	May	20	Members of the Parish of St. Joseph.
295	St. Columbkille Parish (Uptergrove) Credit Union Limited	May	20	Members of the Parish of Columbkille.
296	Mueller Employees' (Sarnia) Credit Union Limited	June	11	Employees of Mueller Limited.
297	Caisse Populaire de Val Gagne Limited			Residents of Val Gagne and vicinity.
298	Saskatchewan Pool Employees' (Port Arthur) Credit Union Limited	June	20	Employees of Saskatchewan Pool Terminals Limited.
299	Sacred Heart Parish (Peterborough) Credit Union Limited	Sept.	9	
300	Co-op. Services (London) Credit Union Limited	Sept.	13	Members of London District Co-op. Services.
301	Caisse Populaire de Mattawa Limited	Oct.	18	Members of Parish of Mat- tawa.
302	Fleetway Transports Credit Union Limited	Oct.	21	Employees of Fleetway Transports Limited, To- ronto.
303	P. & G. Employees' (Hamilton) Credit Union Limited	Oct.	31	Employees of Proctor & Gamble Company—Hamilton Factory.
304	College Heights (Guelph) Credit Union Limited	Nov.	7	Employees of O.A.C., Ontario Veterinary College, Macdonald Institute and other Government services.
305	St. Joseph's Parish (Dryden) Credit Union Limited		25	Members of St. Joseph's Parish.
306	Westeel Employees' (Toronto) Credit Union Limited	Dec.	11	Employees of Westeel Prod-
307	Caisse Populaire du Sacre Coeur de Welland Limited	Dec.	30	ucts. Members of Sacred Heart
308	Caisse Populaire St. Antoine de Timmins Limited	Dec.	30	Parish. Members of Parish of St.
309	Nipigon Consumers Co-operative Credit Union Limited			Anthony.

CROPS, SEEDS AND WEEDS BRANCH

CROP PRODUCTION PROGRAMME

Ontario farmers were favoured with excellent crops, good markets and profitable returns in 1946.

Production and Value of Field Crops Produced

1 rounceron and rance of 1	teva Crops	1 / Outreed		
		Yield	Total	Total
Crop	Acres	Per Acre	Production	Value
•		bushels	bushels	\$
Fall Wheat	546,100	29.8	16,274,000	19,952,000
Spring Wheat		22.0	826,000	1,018,000
Oats		43.9	71,776,000	38,831,000
Barley		36.7	10,753,000	7,698,000
Fall Rye		21.2	1,378,000	2,522,000
Flaxseed		9.4	169,000	512,000
Mixed Grains	946,000	44.7	42,286,000	27,106,000
Buckwheat	116,000	23.2	2,691,000	2,037,000
Corn for Husking (shelled)	240,000	43.3	10,401,000	11,025,000
Peas		21.0	720,000	2,045,000
Dry Beans		17.3	1,328,000	3,944,000
Soy Beans		18.1	1,072,000	2,370,000
Mangolds	20,200	420.0	8,484,000	2,376,000
Turnips	41,300	401.0	16,600,000	5,478,000
		tons	tons	
Fodder Corn (green)	340,000	8.97	3,050,000	10,980,000
Hay and Clover		1.75	4,795,000	52,074,000
Alfalfa		2.26	1,599,000	18,916,000
Alsike		1.44	77,800	856,000
Sweet Clover	158,000	2.05	324,000	2,676,000
		bushels	cwt.	40.040.000
Potatoes	120,000	149.5	10,764,000	19,913,000
				Adan 200 000
Total Value				\$232,329,000
Total Acreage	8,248,400			

This Branch assisted with this crop production programme. A representative of the Branch attended the Dominion-Provincial Conference in Ottawa in early December when crop production goals for the various provinces were set. Assistance was given in setting our production goals for the various crops and publicity was given the programme through crop meetings, broadcasts, press articles and seed fairs. The use of approved varieties, the best seed, seed treatment and proven cultural and cropping practices was emphasized. Seed cleaning plants were urged to encourage farmers in their respective districts to make use of modern seed cleaning and grading facilities available in their plants, to start their plants early in the season and to assume the responsibility of providing local seed requirements. Contacts were made between buyer and seller of seed; seed surveys were made at regular intervals and lists of seed for sale were prepared and given wide distribution.

SEED CLEANING PLANT POLICY

Under this policy a subsidy of 50% of invoice price of seed cleaning machinery, plus 50% of freight, not to exceed \$250.00 is available. This subsidy was paid on plants at Hallebourg, Almonte and Powassan. Total number of plants installed to date under policy — 116.

It is now necessary under The Weed Control Act for seed cleaning plant owners to obtain an annual seed cleaning plant license, a fee of \$1.00 being necessary when the plant is to be used for custom work. Inspection and general supervision of all seed cleaning plants in the Province was started by our fieldmen before the end of the fiscal year.

GRAIN AND POTATO CLUBS

This Branch in co-operation with the Plant Products Division, Dominion Department, paid \$1.00 per entry exhibited by club members on Achievement Day, up to a maximum of \$20.00 to each club. Assistance was given at Provincial Inter-County club competitions, also in supplying show ribbons and prize money for same. Expenditure during the year to grain and potato clubs — \$1.211.66.

NORTHERN ONTARIO SEED PURCHASING POLICY

This Branch had charge of the purchase of seed for Northern Ontario under this policy. All seed purchased graded in accordance with The Canada Seeds Act. Distribution of seed was taken care of by Agricultural Representatives in their respective districts. The following is a brief statement of our expenditure under this policy:

Cash received	616.25
Balance in notes under policy Note: The above statement does not include seed purchased and dist	\$246.56

Note: The above statement does not include seed purchased and distributed in Muskoka and Parry Sound. Seed to the value of \$2,263.66 was purchased by this Branch and distributed through the Crop Improvement Association for each district at no cost to the Department.

AGRICULTURAL LIMESTONE POLICY

This Branch in co-operation with the Dominion Department of Agriculture and railway companies offers the following asistance with the transportation of agricultural limestone:

(a) Assistance in payment of freight by rail up to a maximum of \$1.00 per ton in Southern Ontario and \$1.75 per ton in Northern Ontario.

(b) Assistance with transportation by motor truck at the rate of 3 cents per ton per mile up to 50 miles. Maximum subsidy \$1.00 per ton—minimum subsidy 50 cents per ton.

Tonnage on which Rail Subsidy was paid \$9,295.35 (251 cars)
Tonnage on which Motor Truck Subsidy was paid 1.896.65

POTATO IMPROVEMENT PROGRAMME

The estimated potato acreage for 1946 in Ontario was 120,000 acres with a production of more than 18,000,000 bushels or an average yield per acre of 149.5 bushels per acre. This was the highest recorded average yield per acre since 1920 and an increase over 1945 of more than 4,000 acres. The crop was valued at approximately \$20,000,000.00. Two thousand, two hundred acres were passed for seed certification, an increase of more than 100 acres over the previous year, and the highest ever recorded.

The quality of Ontario potatoes has definitely improved during recent years. This much needed change has been brought about by specialized production methods and increased attention to grading and marketing. There has been noticeable improvement in methods of packing, attractiveness of product, and eating quality, but storage, distribution and merchandising methods are in need of adjustments to more modern practices. Licensing of potato truckers became effective September 1, 1946, and grade requirements of the Farm Products Grades and Sales Act are now being more strictly enforced. Regulations now require that all potatoes offered for sale or transported must be properly graded and identified. Cull potatoes are being used more extensively for live stock feed with excellent results. Growers are concerned about reducing cost of production, particularly with regard to spray and dust

materials. From a security standpoint, they want more orderly and stabilized markets with a view to keeping the value of potatoes as a food on a more equitable and reasonable level, with a greater portion of the consumer's purchasing dollar going to producers.

During the 1946 season, DDT as an insecticide was used commercially on an extensive scale for the first time. Excellent growing conditions late in August and early in September kept tops green, thus progressive growth continued late in the season, resulting in unusual tuber development. Generally speaking, weather conditions were not favourable for blight disease, although very minor infections were observed in an occasional area. There is an increased interest in chemical top killers. These were used by several growers for the first time in 1946. Scab disease continues on the increase, and growers are continually asking for some practical remedy for this everincreasing problem. Bruising and mechanical injury accounts for heavy losses in some crops.

Total imports of potatoes into Ontario during 1946 amounted to 5,463 carloads. These were made up of large quantities from U.S.A. including some 1,273 carloads to Toronto during a period of local scarcity. The early crop moved on a clean market. During the spring of 1947, several carloads were exported to U.S.A. including 30 carloads for seed purposes.

500 Bushel Per Acre Clubs

Fifteen local clubs with a total of 282 contestants completed the 1946 contests with an average yield of 379 bushels per acre. Six growers obtained more than 600 bushels per acre. Yields of fifty-two were more than 500 bushels per acre and records from 136 growers were estimated at more than 400 bushels per acre in each case. Several contests featured quality and exhibit, as well as yield. Certificates of Merit were provided to each contestant obtaining the objective of 500 bushels or more per acre. Visiting the growers, taking yields, scoring entries, arranging and attending functions required much attention from an extension standpoint.

Potato Field Days

A Monster Field Day and machinery demonstration was held on the W. R. Gowman farm, Brantford, on September 11th. This farm on which our 1946 test plots were located proved an ideal location for this field day, and those in attendance had an opportunity of seeing 100 acres of potatoes on one farm, also modern storage facilities for 20,000 bushels of potatoes. Demonstrations were given using power sprayers, dusters, pickers, automatic weighers, top killers, etc.; addresses were given by prominent authorities. It is estimated that over 1,500 were in attendance.

A potato field day for Eastern Ontario held at Kemptville created much interest. Several counties held special potato field days either during the growing season or at harvest. The potato fieldmen assisted in organizing and attended these events.

Additional activities in connection with potato improvement included assistance at Royal Winter Fair Seed Show; arrangement of displays and exhibits at county and district seed fairs; assistance with boys' and girls' potato club activities; representation at Canadian Horticultural Council meetings, Ottawa, and American Potato Association, Chicago; activities in the interests of growers in connection with support prices; continuation for third year of survey on potato production costs; potato growers' crop tours; annual potato meeting; potato seed displays; assistance to buyer and seller of seed potatoes

in disposing of surpluses and location of requirements; judging of field crop competitions and club project plots; attendance at various meetings; press articles and broadcasts; correspondence and office routine.

Spray and Dust Tests

In a co-operative arrangement with the Laboratory of Plant Pathology, St. Catharines, and Department of Entomology, Ontario Agricultural College, Guelph, some torty fungicides and insecticides were tested using a randomized system in which each material was used in five different locations in the series. This project was conducted in Brant County during the 1946 season. It was a continuation and an enlargement of a somewhat similar project located during 1945 in Middlesex County. The 1947 plots will be located in the counties of Norfolk and North Simcoe.

To especially serve potato growers in Eastern Ontario, a project was organized in co-operation with the Agricultural School, Kemptville. Thirty materials were used, each replicated five times in the plot series. Plans were drawn up. A series of tests were also conducted on various tarms in Durham, Ontario and North Simcoe Counties.

This Branch assisted in planning the work, including taking of yield tests, calculations, etc. These tests created wide interest and have already been of much value. Further work of this nature will be undertaken in 1947.

Bacterial Ring Rot Programme

As a service to potato growers, and in order to establish some control over the spread of the very intectious and destructive disease known as bacterial ring rot, provision was again made for inspection of commercial fields, upon request, without charge. Further, a survey was conducted on an enlarged scale to ascertain the prevalence of this comparatively new disease in the province. Special attention was given to concentrated seed producing areas.

Field reports were made on 2,410 farms. Crops on 673 farms, with an acreage of more than 4,000, were found infected with the disease. These were located in 28 counties and districts. Of this number, 519 were cases on farms where the disease had not been previously reported. One hundred and thirty-seven or 21% were repeaters, as compared with an average for four years of 14% as repeaters. A few cases of severe infection were located, but the amount of disease in most cases was less than 1%. The increase in number of repeaters is attributed largely to a favourable season for detecting symptoms during the growing season, coupled with the widespread distribution of used bags from infected areas outside the province, and a more extensive survey.

Regulations under the Plant Diseases Act were immediately brought to the attention of the owner of each positive crop by registered letter. These required —

- Disposal of all potatoes produced on grower's farm, not later than January 31, 1947, by satisfactory outlet, not including seed purposes.
- No potato machinery or potato equipment used on infected lands and premises shall be moved therefrom until thoroughly disinfected and written consent obtained.
- All potato storage bins, machinery, premises and any other equipment and material on farm must be thoroughly disinfected before April 1, 1947.
- 4. Seed potatoes must be secured from an approved source.
- A detailed report providing information regarding production and exact disposal of entire crop, name and address of purchaser, final destination, and other information required on form provided.

Assistance was given to growers by way of marketing crops, securing new seed, disinfection and following a clean-up programme. This required much time and effort, by way of correspondence and personal contacts throughout the province. Careful attention is being given continually to devising and establishment of a practical, efficient method to disinfect used potato bags on a wholesale basis.

A quantity of variety Teton was secured from U.S.A. in the spring of 1946. Arrangements were made for testing under practical field conditions in five counties for yield and quality, also by four qualified authorities for resistance to bacterial ring rot. The accumulated results compared favourably with standard varieties for yield, marketable tubers and eating quality. When extensively tested in the laboratory, inoculated tubers did not develop the organism, and tuber cell tissue did not break down. By further tests, this variety was found to be resistant to bacterial ring rot, but not totally immune from the standpoint of carrying the disease organism.

While much has been accomplished by way of education and enforcement of regulations within the Province, the lack of effective action in other potato producing areas continue to handicap maximum accomplishments.

TURNIP IMPROVEMENT PROGRAMME

Turnips have been exported from Western Ontario for more than sixty years, but during the past six years, quantities exported have shown a tremendous increase. It is estimated that twelve counties annually devote some ten thousand acres to growing of table turnips for export, with annual shipments amounting to approximately three million bushels.

The fact that some growers obtain less than 300 bushels per acre, while others harvest more than 1,000 bushels per acre indicates that education and research are needed with regard to cultural practices.

While successful control measures are now available for two serious diseases, namely water-core and black rot, two serious insect pests, namely aphids and maggots, still remain without satisfactory control measures.

At a meeting attended by representative growers and shippers from various turnip producing areas, circumstances were reviewed, resulting in a recommendation for a programme of experiments and demonstrations to be undertaken in turnip producing areas, work to be started in 1947. A committee was appointed to work out details.

The following are the results of activities to date:

- A programme was arranged for a full day meeting on Wednesday, February 12, of turnip growers, as a section of the Ontario Crop Improvement Association. Growers expressed approval of organizing as a Turnip Section of the Ontario Crop Improvement Association, with local active branches in each county where turnips are grown for export. Ten thousand copies of addresses were distributed.
- The mimeographed information on subject of turnips was reviewed, and provision was made for printing 5,000 revised copies in bulletin form.
- Suggested turnip projects were prepared and submitted to secretaries of Crop Improvement Association.
- 4. Upon interview with the Minister of Agriculture, approval was given to an expenditure of \$1,200.00 for turnip improvement work, from the appropriation of this Branch.
- Special insect investigational work is being undertaken by Entomology Department, Ontario Agricultural College.

- 6. Investigational and demonstration plots are being arranged in five concentrated turnip producing areas for 1947. These will give special attention to the following subjects: —soil fertility; time and technique of fertilizer application; depth of seeding; ridges versus flat seeding; rotation; optimum stage in plant development for thinning, also spacing; insect control.
- 7. In addition, plans are underway for attention to such important factors as: — development of labour-saving machinery, particularly for harvesting; breakdown of turnips in shipping; field meetings; distribution of information; strengthening grade standards; rigid inspection of domestic sales; advertising and marketing.

THE WEED CONTROL ACT

The administration of The Weed Control Act is the responsibility of this Branch of the Department.

Amendments to the Act during the year included

- 1. The appointment of a County Weed Inspector by each county council, the Department to subsidize the county on the remuneration paid its inspector to the extent of 50%, not to exceed \$500.00 per county per year.
- 2. Payment of a 50% subsidy to township councils in Northern Ontario on remuneration paid weed inspectors, not to exceed \$50.00 per township per year.
- Licensing of every seed cleaning plant in Ontario annually, a fee of \$1.00 being necessary in the case of plants engaged in custom cleaning.
- Addition of Barberry and Buckthorn, both of which act as hosts for rusts of cereal crops during their development, to the list of noxious weeds.
- 5. Legislation with respect to disposal of noxious weed seeds.

The appointment of County Weed Inspectors has proven to be a definite step forward in weed control. Remuneration being offered attracts good men as inspectors and enables them to devote whatever time is necessary to the work. They are better informed; they have assurance their services will be retained providing good work is accomplished, therefore they take more interest in the work and can plan a long-term programme. Township, city, town and village municipal councils are encouraged to appoint their own inspectors to assist the county inspector.

Two-day weed conferences were held at the O.A.C. in June, 1946, and the Parliament Buildings, Toronto, in March, 1947. These weed conferences were very successful and are considered an indispensable part of the weed control programme. Duties in connection with the administration of the Act included, appointment of ten District Weed Inspectors to supervise the work in different districts, distribution of information and supplies to weed inspectors, contacts with municipal and county councils and attendance at council meetings when necessary. Contacts with individuals and organizations regarding responsibility in connection with weed control, educational work through press, radio and meetings, direction of a weed spraying programme of experiments and demonstrations, contacts with those who fail to assume their responsibility in connection with weed control on their property, etc.

Weed Control Experimental and Demonstrational Programme

Seven 50 gallon power weed sprayers were purchased for experimental and demonstrational work with new and proven chemical weed killers. These machines are modern in every respect and are mounted on a two-wheel trailer which our District Weed Inspectors pull behind their cars.

Weed spraying demonstrations were undertaken in co-operation with individuals, municipal councils and agricultural organizations, the object being to demonstrate recommended methods of applying chemicals, results obtained, costs, etc.

One hundred and seventy such demonstrations were conducted in every county in Southern Ontario, and eight districts in Northern Ontario. The results of these demonstrations were watched with interest and have in many cases resulted in the purchase of equipment and chemical for the more efficient control of weeds and brush.

In addition, these machines were used for experimental purposes to test the efficiency of various brands of 2,4-D under practical spraying conditions. One hundred and forty-four of these plots were laid down.

In addition to the work done with our demonstration sprayers, our Branch supplied sufficient 2,4-D of various brands for one 600 gallon tank of solution in four counties. This material was applied under actual working conditions using their equipment. In each case observations were made and records kept of the percentage kill obtained. Valuable information was gained from this piece of work.

In addition to the above, the following work was continued from 1945:

- 1. The Parry Bindweed demonstration plot consisting of nine quarter-acre plots of Field Bindweed in Dover Township, Kent County, sprayed with various chemicals were spot sprayed where necessary, and information regarding results recorded.
- 2. Work on the Elma Township Leafy Spurge demonstration plot consisting of seven acres of plots in Elma Township, Perth County, was continued. Cultural and cropping practices, also chemicals, are being demonstrated on these plots, the object being to determine the cheapest and most effective method of combatting this weed. Leafy Spurge is on the increase in Ontario and is particularly bad in this area.
- 3. Eighteen plots of Wild Carrot sprayed in Scarborough Township, York County, in 1945, were observed and results recorded.

A programme of Leafy Spurge eradication was started in 1946. Five acres were sprayed in Hastings County and twelve acres in South Simcoe. In each case, costs were taken care of jointly by the occupant of the land, township and county councils and our Branch.

ADVISORY COMMITTEE ON HERBICIDES FOR ONTARIO

Because of a pressing need for a co-ordinated programme of research and experimentation with several new herbicides, an Advisory Committee on Herbicides was apopinted. This Committee includes representatives from this Branch, Central Experimental Farm, Ottawa, and Field Husbandry, Botany and Chemistry Departments, Ontario Agricultural College, Guelph. The first meeting of the Committee was held in March, 1946, and an extensive programme of experiments were undertaken. Over 700 plots were laid down using the four types of 2,4-D at different rates of application, at various stages of maturity on a number of our most troublesome weeds. The Committee met at the conclusion of the year's work for the purpose of presenting reports on the 1946 work, to plan the 1947 programme and to discuss problems and make recommendations pertaining to the use of herbicides in Ontario. Subcommittees are at present at work directing various phases of the work. A publication on chemical weed control was prepared by the Committee and given wide distribution. It is the intention to revise this publication annually and keep it up-to-date.

The Department of Agriculture, through this Branch, became a member of The North Central States Wood Conference and was represented at the annual weed conference meeting held at Des Moines, Iowa, in December. This conference is made up of fourteen North Central states and several provinces in Canada. A uniform plan of experiments with 2,4-D weed killers is published by this conference. This plan is followed closely in our weed experiments which are being conducted in Ontario.

LICENSING OF SEED CLEANING PLANTS

Licensing of seed cleaning plants has been undertaken with the objects in mind of improving the condition of plants, the efficiency of plant operators and the quality of work being accomplished. Inspection of plants is being conducted by our fieldmen, and they will be graded "A", "B" and "C" according to their general condition. A seed cleaners' meeting was held in connection with the annual meeting of The Ontario Crop Improvement Association in February, and a programme in the interests of the seed cleaning industry has been planned.

ONTARIO CROP IMPROVEMENT ASSOCIATION

The Ontario Crop Improvement Association reached its main objective in 1946 in completing the organization of the Province 100%. A \$200.00 annual grant is available to each Association on approved projects. We now have Branch Associations in every county and district in the Province being served by an Agricultural Representative, making a total of fifty-five branches.

A four day annual meeting was held which included a full day potato meeting, also meeting for registered seed growers, turnip growers, a business session, a hay pasture meeting and a full day weed meeting. Approximately 1,000 attended this meeting. Mimeographed copies of all addresses presented were available. A portion of the programme was broadcast and 10,000 copies each of the potato meeting and general meeting were printed and given wide distribution.

Seed Fairs, Seed Displays

Seed fairs continue to be one of the main projects of Branch Associations and are acknowledged as one of the best means of stimulating an active interest in good seed.

Seed fairs held in 1946 Exhibitors	33 961
Entries	2,482
Attendance	15,949
Grain offered for sale	93,095 bushels
Small seeds offered for sale	17,650 pounds
Potatoes offered for sale	13,208 bags

A number of these fairs have developed into two-three day events and several include bacon displays, farm machinery displays, junior judging competitions, etc. Several non-competitive seed displays featuring seed for sale were also held during the year.

Crop Improvement Projects

An extensive programme of projects was conducted during the year including demonstration plots of recommended varieties of oats, barley, wheat. corn, peas and soy beans; demonstrations on use of manure, manure plus stable phos, commercial fertilizers, manure plus fertilizers, green manure crops, agricultural limestone, rates of seeding, cultural practices and weed control; potato variety demonstrations which included ploughing down of

green manure crops, use of commercial fertilizer, spraying and dusting; various hay and pasture projects including long term pastures, short pasture mixtures. Yield per acre projects with ptoatoes, corn, oats, barley, winter wheat, peas and turnips were undertaken by a number of branches. Seed of recommended varieties were introduced for multiplication, and assistance was given in payment of freight on seed by a number of our Associations.

The following is a brief summary of projects undertaken in 1946:

Total number of projects	280
Total number of co-operatives	2,123
Acreage under projects	3,978

The Association adopted a standard metal sign, 15 x 24 inches, with the following wording thereon: "Crop Improvement Demonstration on this Farm — Inquire for Information". These were purchased by Branch Associations and erected to mark each satisfactory demonstration. In the majority of cases, a check plot was sown for purpose of comparison, and field meetings and farm tours were organized by a number of Branches. Several bus tours to points of interest in the Province were organized by several branches.

High Yield Per Acre Clubs

The following "High Yield Ped Acre" club competitions were organized during the year by a number of Crop Improvement Associations:

-	75-100 bushel oat club	ર
-		
6	35 bushel barley club	1
3	30 bushel per acre pea club	1
7	75-100 bushel corn husking club	4
8	300 bushel turnip club	1
5	500 bushel potato club	15

In the 500 bushel per acre potato club competitions, 282 growers completed the project, 52 produced over 500 bushels and 6 over 600 bushels. Thirty-nine growers competed in a 30 bushel pea club conducted in Renfrew County. The high yield was 45.5 bushels per acre with ten competitors obtaining yields of over 30 bushels. Two oat competitions were undertaken with 32 growers completing the project. One grower obtained a yield of 102.6 bushels per acre, 6 growers over 90 bushels per acre, 18 growers 75 bushels per acre and 30 growers over 65 bushels per acre. In the corn husking competition, the high yield was 95.75 bushels per acre, five competitors obtained over 75 bushels per acre and 24 over 50 bushels per acre. In the 800 bushel turnip club competition, two competitors obtained over 1,000 bushels of marketable turnips per acre.

Fifty Bushel Winter Wheat Club Competition

This contest was sponsored by the Ontario Crop Improvement Association in co-operation with the Maple Leaf Milling Company and the Ontario Agricultural College, the object being to encourage the use of good seed, disease control, greater fertility, better cropping and cultural practices and greater yields per acre. Five counties competed with a total of 69 competitors. This competition was directed by a committee through regulations, fields were inspected and substantial prizes awarded for field and yield county contests, also for an inter-county contest. Ten counties with a total of 200 competitors are continuing the competition in 1946-47.

LONG TERM PASTURE PROJECT

The final work in establishing the long term pasture demonstration project was completed in 1946 when an additional 508 acres were seeded on 120 farms. This 1946 seeding was sufficient to realize our objective of one demonstration field in each of our best townships in Southern Ontario.

The total extent of these demonstration fields established in the three years, 1944, 1945 and 1946 is as follows:

	Total	2,060 acres	481 farms
1946	***************************************	508 acres	120 farms
1945		712 acres	173 farms
1944		840 acres	188 farms

Work of experimental and statistical nature undertaken under the directtion of The Ontario Pasture Project Committee and our fieldmen on these demonstration fields included:

- (a) Fertilization at 3 different rates of commercial fertilizer, with and without manure. Yields taken by cage clippings, dry weights determined through co-operation of Department of Field Husbandry, O.A.C., Guelph.
- (b) Soil analysis as service to farmers in determining their fertilizer requirements, also to determine the change in fertility levels of fields under pasture sod, and with recommended pasture management. Soil analysis of nearly 300 fields was made possible through the co-operation of the Department of Soils, O.A.C., and Kemptville Agricultural School.
- (c) Records of pasture days obtained during the season, milk production from dairy herds, and a comparison of these figures with pasture days and milk production figures from an unimproved, or short term, or hay pasture mixture. These records were taken by farmers co-operating in this demonstration and provide the most valuable indication of the merits of this type of pasture.
- (d) Records of ground coverage in per cent., by each of the eight species represented in the mixture. This survey, including 1944 and 1945 seeded plots was made to indicate the most useful species from standpoint of production, and the hardiest and most perennial species under pasture conditions and under the various soil and climatic conditions found throughout the province.
- (e) Co-operators were advised regarding care and management of their demonstration fields and a detailed report of all work in connection with the project was mimeographed and distributed.

PROBLEM PASTURE PROJECT

This project which is under the direction of this Branch has been designed to demonstrate the most satisfactory treatment for unworked pasture fields which can be worked only with difficulty. Many such fields are rapidly deteriorating below profitable production and are becoming a source of infestation of weeds. The basis of this demonstration is to prepare a permanent unworked pasture field which can be ploughed, and to seed it to a recommended mixture for that particular field. It is the responsibility of the owner and county Crop Improvement Association to prepare the field for seeding in 1947, this preparation to include removal of unnecessary brush, stones, etc., and to prepare a seed bed for seeding in 1948. The extent of this project will be one five-acre field per county. Seed and fertilizer will be supplied by this Branch of the Department.

CAFETERIA PASTURE PROJECT

One three-acre cafeteria pasture plot was established in each of the five districts in Southern Ontario being served by our fieldmen, the object being to observe and study the nature of growth and palatability by permitting live stock to graze at random over the entire three acres, resistance to frost, drought and other unfavourable conditions and the hardiness and perennial nature of the various species. Twelve species of clovers and grasses were seeded in one-quarter acre strips under direction of our fieldmen. Seed and fertilizer was paid for by this Branch.

SEED MARKETING AND PUBLICITY COMMITTEE

The Seed Marketing and Publicity Committee set up under the Ontario Crop Improvement Association on July 19, 1945, continued to give attention during the past year to many important items with regard to seed. Membership of the Committee includes nine seed growers and four department officials, including two representatives from this Branch.

The objects of the Committee are as follows:

- To obtain accurate data with regard to yields and quality of seed from various field crops produced in the Province of Ontario and such other areas as may be considered advisable.
- 2. Enquire concerning quantities and grades of field crop seeds in producers' and dealers' hands.
- 3. Obtain information with regard to possible annual demands for various varieties, grades and quantities of field crop seeds.
- 4. Assist in movement of seed from areas of plenty to areas of scarcity.
- Provide reliable information by way of press releases, radio or enquiry, relative to available field crop seeds.
- Conduct seed surveys, preparation of lists of seed for sale and distribution of same.
- Establish reliable sources of supply of high quality seed of approved kinds and varieties.
- 8. Adopt such measures as may be considered advisable to put the production of high quality seed of recommended varieties on a more satisfactory basis.
- 9. Advocate the efficient use of recommended seed cleaning and seed treating machinery and encourage use of same on a larger scale.

Four meetings of the full committee were held during the year as follows: April 12, May 3, October 11, January 20. In addition, members attended subcommittee meetings, made representation when necessary, and generally kept the interests and welfare of seed producers to the fore.

TESTS WITH SEED TREATERS

Tests were continued during the year with several seed treaters under the direction of this Branch in co-operation with the Central Experimental Farm, Ottawa, Ontario Agricultural College, Guelph, and Ontario Department of Health, the object being to discover a machine which is safe from a health standpoint and efficient in the control of seed borne diseases. Three types of seed treaters have been approved to date and a number will be installed in custom seed cleaning plants as rapidly as they become available. A committee has been working on the loose smut problem, and it is expected that at least one centre for the treatment of fall wheat by the hot water method will be established for the treatment of a portion of our 1947 seed requirements.

SEED DRILL SURVEY

A seed drill survey was undertaken in the ten eastern counties (east of and including Leeds). Five hundred and seventy samples of seed grain and forage crop seeds were taken from farmers' grain drills when seeding and submitted to the Plant Products Division Laboratory, Dominion Department of Agriculture, Ottawa, for analysis and grade. The objects of this survey were as follows:

- To reveal quality of seed being sown from a standpoint of purity and weed seed content.
- 2. To determine percentage of seed sown with and without proper cleaning.
- To emphasize the seriousness of sowing seed improperly cleaned and without being cleaned.
- To emphasize the need for a more extensive weed control and seed cleaning programme.

Samples collected graded as follows:

Grade No. 1 (Canada Seeds Act)	215	samples	or	38%
Grade No. 2	90	samples	or	16%
Grade No. 3	63	samples	or	11%
Rejected (unfit for seeding purposes)	202	samples	or	35%

This survey will be continued in 1947 in twenty central and western Ontario counties.

REGISTERED SEED PRODUCTION

This Branch was active during the year in the interests of our registered seed growers. Seven hundred and twenty-nine growers received crop registration certificates during the year as compared to 562 in 1945, an increase of 167. The following is a summary of crops and acreages covered by crop registration certificates:

Wheat 454 a	cres	Red Clover	15	
Oats 8,857	66	Mangels	$26\frac{1}{2}$	66
Barley 1,118	66	Meadow Fescue	$1\frac{1}{2}$	66
Flax 31	66	Tobacco	$7\frac{3}{4}$	66
Field Peas1.241	44	Beans	$3\frac{1}{2}$	66
Field Beans 1,118	66	Beets	21/2	66
	66	Onions	1/4	66
Field Corn 108	66	Garden Peas	1/10	66
Hybrid Corn 8,086	66	Pepper	1/10	46
-		Tomatoes		66

A strong and profitable export market for registered and certified seed developed during the year, our exports being four times greater than in any previous year. The following are approximate quantities of cereals and corn approved for export from the 1946 crop:

Registered Corn	200,000 255,000	bushels "
Registered Field Beans	19,000	66
Registered and Certified Barley	237,000	66
Certified Field Peas	13,000	44

A registered seed growers' meeting was held in connection with the annual meeting of The Ontario Crop Improvement Association. A catalogue listing registered and certified seed for sale was prepared and 10,000 copies distributed. A bus trip of registered seed growers to the 1946-47 annual meeting of The Canadian Seed Growers' Association at Macdonald College was arranged. The value of registered seed was emphasized at meeting and through the press and radio, etc.

ALSIKE SEED PRODUCTION COMMITTEE

This committee was appointed for the purpose of investigating the reasons for failure of the alsike crop to set seed. Its membership includes representatives from the Dominion and Provincial Departments of Agriculture, the Canadian Seed Trade Association and seed growers.

Upon the recommendation of this committee, a graduate student was appointed to conduct investigation on forage crop seed production under the direction of the Field Husbandry Department, O.A.C., with emphasis on the initial stages of the alsike seed problem. This work included investigation of pollination, insect damage and fertility levels in several representative alsike fields in Haldimand, Victoria and Peterborough Counties. Tests with fertilizers on the alsike crop were conducted in Nipissing District and strains of Northern British Columbia and Northern Alberta alsike seed were increased under contract with a number of selected growers. Several meetings of the committee were held for the purpose of hearing reports and planning future activities in connection with this problem.

ADVISORY COMMITTEE ON AGRICULTURAL LIMESTONE

This committee was appointed for the purpose of reviewing our Agricultural Limestone Policy and making recommendation in connection therewith. Payment of our subsidy on transportation of limestone by motor truck was introduced upon the recommendation of this committee. A Lime Requirement Survey was recommended and approved. This survey will be conducted on a volutary basis and will include the collecting and analysing of soil samples from farms in each of the counties and districts to determine soil reaction and lime requirement. Other recommendations include payment of a subsidy on lime spreaders, a closer check upon agricultural limestone distributors, a publicity programme on the use of limestone where required, the application of limestone as a Crop Improvement Association project, etc.

CROPS, SEED AND WEED COMMITTEES

Other committees active during the year included the following:

Weed Control Advisory Committee

This committee appointed for the purpose of planning our weed control programme and reviewing the Weed Control Act met during the year and prepared recommendations for the consideration of the Legislature. Several amendments to the Act recommended by this committee have been approved and are at present in effect.

Pasture Project Committee

This committee was appointed for the purpose of planning and directing the pasture programme being undertaken by Crop Improvement Associations. The committee met with fieldmen of this Branch during the year for the purpose of reviewing and planning the work. Our Long Term Pasture Project, Problem Pasture Project, Cafeteria Pasture Project are being undertaken under the direction of this committee.

Project Approval Committee

It is the responsibility of this committee to review and approve proposed crop projects as submitted by Crop Improvement Associations. Proposed projects must be submitted to the committee before they are undertaken, and payment of grants are not recommended until after projects have been approved by the committee. Meetings were held during the year when necessary.

Seed Cleaners Advisory Committee

Plans for the licensing of seed cleaning plants, also for a seed cleaners' meeting held in connection with the annual meeting of The Ontario Crop Improvement Association, were discussed with a group of seed cleaners which were called together for this purpose. Other matters in the interests of the seed cleaning industry were also discussed with this group at two meetings held during the year.

Potato Advisory Committees

Two Advisory Committees on Potato Production and Marketing were appointed under the Crop Improvement Association for the purpose of giving guidance in the production and marketing of the potato crop.

Growers' Committee
 Departmental Committee

These committees met during the year for the purpose of reviewing the work and planning future activities. Sub-committees met frequently as problems arose in connection with the industry.

Advisory Committee on Seed Treaters

This committee which includes representatives of the Dominion and Provincial Departments of Agriculture was appointed for the purpose of assisting with our experimental programme with seed treaters. Upon the recommendation of the committee, a policy with respect to the use of seed treaters in custom seed cleaning plants has been approved.

Standing Committee on Field Crop Improvement

This committee includes representatives of the Dominion and Provincial Departments of Agriculture. Problems in connection with crops, seeds and weeds were discussed by this group at a meeting held during the year. The publication of Extension Circular No. 68, "Guide to Crop Production in Ontario", was undertaken under the direction of this committee.

In addition to assistance on the various committees referred to, members of this Branch assisted with the activities of The National Barley Contest Committee, High Yield Soy Bean Contest Committee, National Flax Committee, Potato Committee — Canadian Horticultural Council, Statistics Committee. Field Root and Garden Vegetable Seed Production Committee, Ontario Corn Committee, etc.

GENERAL CROP IMPROVEMENT PROGRAMME

This Branch co-operated with our Supervisor of Publicity in the preparation of news items on crops, seeds and weeds. A number of broadcasts were prepared for presentation over C.B.L. and C.F.R.B. radio stations.

Educational displays were prepared for The International Plowing Match. The Royal Winter Fair, The Ontario Crop Improvement Association Annual Meeting and numerous fall fairs, seed fairs and crop meetings. Bulletins, circulars and pamphlets were distributed at these events and representatives of the Branch were on hand to give required information.

A dodder control experimental plot was located in co-operation with the Central Experimental Farm, Ottawa, on a dodder infested farm in Lancaster Township, Glengarry County. Various crops were sown with the object of determining crops which are immune and susceptible to dodder. Information obtained to be used in our recommendations to forty farmers in the area on whose farms this weed has been found.

Interest in the eradication of barberry and buckthorn is developing and a clean-up programme has been started in several counties including York, Lanark, Bruce, Brant, Durham, Ontario, North and South Simcoe. Our fieldmen are assisting local authorities in this work.

In co-operation with the Ontario Veterinary College, this Branch has undertaken tests to determine the toxicity of various noxious weed seeds. Weed seeds are provided by this Branch and tests are being undertaken at O.V.C.

In co-operation with the Plant Products Division, Dominion Department of Agriculture, tests were undertaken to determine the efficiency of various types and makes of rollers, choppers and hammer mills in the destruction of weed seeds. Samples of grain were taken by our fieldmen before and after processing and submitted to the Plant Products Division for analysis.

The activities of the Branch during the year also included regular office routine, assistance on various committees and sub-committees, judging field crop competitions, fall fairs and seed fairs, preparation and distribution of various mimeographed articles, pamphlets and bulletins on crops, seeds and weeds. Members of the staff attended various county and township council meetings, and assistance was given throughout the province with a general crop improvement programme.

The activities of this Branch are becoming greater each year as new work is taken on. Our permanent staff now includes, the Director, five fieldmen and four stenographers. Ten district weed inspectors were engaged during the summer months and eighteen inspectors under the Plant Diseases Act were appointed for inspection of potato fields for bacterial ring rot.

NORTHERN ONTARIO DEVELOPMENT

During the year ending March 31, 1947, the Department of Agriculture undertook the establishment of a series of new policies aimed at promoting the development of agriculture in the Northern Ontario districts. Owing to the special conditions prevailing in these sparsely-settled districts, it was felt that the farmers and settlers in these areas required assistance and encouragement along certain lines, which are as follows:

- 1. Assistance in land clearing and breaking.
- 2. Assistance in provision of drainage outlets.
- 3. Assistance in the purchase of potato spraying, dusting and grading machinery.
- 4. Assistance in the purchase of live stock.
- 5. Assistance in the provision of veterinary services to Northern Ontario farmers.

In order to provide for some responsible official on the ground to guide and oversee the application of these new policies, J. S. P. Ballantyne, former Superintendent of the Dominion Experimental Farm at Kapuskasing, was appointed Commissioner of Agricultural Development for Northern Ontario, and has been in charge of the work done in the North since the policies were inaugurated.

LAND CLEARING AND BREAKING

In July, 1946, the new policy with reference to assistance for settlers in the clearing and breaking of new land with heavy power machinery was put into effect. This policy provided that where settlers made contracts to have land cleared and broken by such machinery, they would receive a subsidy for each hour of use of the tractor, the specific amount of subsidy varying with the horsepower of the equipment. The regulations governing this new policy provided that subsidy would be limited to ten acres of land cleared and broken in one year. Provision was also made so that where new land was cleared and broken by other methods than the use of heavy machinery, there would be a subsidy on an acreage basis to bona-fide farmers and settlers, of 50 per cent. of the cost, with a maximum of \$7.50 per acre for clearing and \$5.00 per acre for breaking. The method adopted was that the farmer or settler would pay the owner of the heavy land clearing machinery on a rental contract basis, and would then receive the subsidy on the number of hours for which the machinery was used.

Steps were taken immediately to make the new policy effective. On investigation, however, it was found that heavy equipment for both clearing and breaking land was difficult to obtain, because of the keen demand for this type of equipment for road construction and house building projects which had a priority rating. In spite of this, and considering the late date of commencement and the difficulties encountered, excellent progress has been made.

The following statistical report gives a brief summary of the work accomplished in 1946:

Number of Settlers assisted 762 659 554
Number of acres cleared 3,748*

(*42 per cent. by rental of heavy machinery; 58 per cent. by man and horse labour.)

Number of acres broken ______ 3,053*
(*72 per cent. by rental of heavy machinery; 28 per cent. by man and horse labour.)

Subsidies paid settlers	Clearing Land \$32,528.87	Breaking Land \$23,092.73
Average subsidy paid per settler, using heavy machinery	64.92	50.05
Average subsidy paid per settler, using man and horse labour	35.97	21.33
Clearing Land	By Heavy Machinery	
Average acreage per settler Average operating hours per acre Average cost to settler per acre for clearing	\$22.06	5½ 35¾ \$20.75
Average subsidy paid per acre for clearing Breaking Land	\$11.21	\$6.75
Average acreage per settler Average operating hours per acre Average cost per acre to settler Average subsidy paid per acre	\$12.90	$4\frac{1}{2}$ $15\frac{1}{2}$ \$13.15 \$4.76

This work has been done and subsidies paid to settlers in every one of the eleven districts of Northern Ontario:— Muskoka, Parry Sound, Nipissing, Sudbury, Manitoulin Island, Algoma, Thunder Bay, Rainy River, Kenora, Cochrane and Temiskaming. Over \$150,000.00 worth of equipment was used in this work, and it is noteworthy that no equipment was purchased, all of it being used on a rental basis.

The effect of this has been to enable settlers to clear and break their land and put it into production much more quickly, and at a lower cost to themselves, than by the old manual methods, and this will have a highly beneficial effect on the agricultural development of Northern Ontario.

DRAINAGE AND DRAINAGE OUTLETS

The Department also undertook a plan to provide drainage and drainage outlets by constructing main ditches, opening up water-courses and deepening road ditches where necessary to provide outlets for water from farm lands where the natural water-courses drain into the road ditches. This latter phase of the work was undertaken by arrangement with the Department of Highways.

The undertaking of this drainage policy was prompted by several reasons found in the Northern districts. First, the contour of the land in the Northern clay belt is level, and secondly, there is a heavy rainfall. These two factors made it imperative that ample drainage outlets be provided so that the water can run off the farm lands. Furthermore, the lack of adequate municipal organization in many sections of Northern Ontario creates the necessity for special financial assistance for such work.

Under this policy, some 118 miles of ditching was done. This consisted of clearing out creeks, digging new ditches with power shovels and also with teams and scrapers. Several miles of ditching were also completed by hand labour.

POTATO SPRAYING, DUSTING AND GRADING MACHINERY

Several sections of Northern Ontario have great potentialities for the growing of potatoes, with high yields per acre and exceptional quality. To encourage the improvement of potato growing and marketing in the North, a new potato assistance policy was put into effect in the summer of 1946. This potato policy provides that co-operatives incorporated under Part XII of the Companies Act may secure financial assistance in the purchase of power potato spraying and dusting equipment and grading machinery. In each case, the

Department pays 50 per cent. of the approved cost of the equipment, and also 50 per cent. of the railway freight charges to their destination. The maximum grant in each case is \$350.00, and the provision is made that these graders, sprayers and dusters are for the use of members of the co-operative organization.

Under this policy, the Cochrane Farmers' Co-operative received a grant on the purchase of modern potato grading equipment for the co-operative storage and grading warehouse at Cochrane.

This assistance in providing machinery necessary for efficient potato production and marketing, should result in a further development and improvement in this important branch of Northern Ontario agriculture.

LIVE STOCK ASSISTANCE

Northern Ontario is admirably fitted for the production of good live stock, and in order to encourage Northern settlers to keep larger numbers of farm animals, the Department has put into effect a policy of assistance.

Under this policy, the Department pays the freight on carload lots of live stock from points in Old Ontario to their destination in Northern Ontario, and also pays the travelling expenses of one man from Northern Ontario for the purpose of selecting such live stock, provided that it is being purchased for a group of three or more bona-fide farmers or settlers and distributed at the original cost.

Since this new policy was inaugurated, one carload of dairy cows was purchased and received the grants on being brought into the Cochrane district. One carload of 42 pure-bred Yorkshire sows was brought into the Western part of the district, and this should have the effect of increasing the hog population substantially, which is greatly needed.

VETERINARY ASSISTANCE

One of the great drawbacks to live stock development in Northern Ontario has been the lack of veterinarians in the Northern Districts. Due to the sparse population and the long distances to be travelled, farmers could not afford the services of a veterinarian at the regular charges for such service, plus mileage, with the result that there was no inducement for qualified veterinarians to settle there.

To overcome this handicap, the Department has instituted a plan for Veterinary Assistance for the Northern Districts. This plan is carried on under agreements made between a Veterinary Agricultural Committee and the veterinarian, under which municipalities and school sections agree to contribute to a veterinary fund, from which regular monthly payments, totalling \$1,400.00 per annum, are made to the veterinarian. The Department contribute to this fund \$1.00 for each \$1.00 paid into it by the contributing area or areas, but not exceeding \$1,400.00.

In return for these payments, the veterinarian agrees to provide all necessary services as required by all live stock owners residing within the contributing areas, at a reasonable schedule of fees, set out in the agreement. It is also provided that during the months from November to April, inclusive, the committee will pay half the railway fare, where train has to be used, for calls beyond thirty miles and not exceeding ninety miles, the farmer to provide transportation to and from the station. During these same months, the farmer

is required to provide transportation to and from the plowed highway. The other provisions of the agreement set forth the condition under which the veterinarian will carry on his practice in the area.

Under this Veterinary Assistance policy, subsidized veterinary units have been established in the following districts:

New Liskeard, established April, 1946; veterinary officer, Dr. F. C. Nelson. Rainy River, established June, 1946; veterinary officer, Dr. W. L. Hill. Algoma, established July, 1946; veterinary officer, Dr. W. P. Brisbane. Manitoulin Island, established October, 1946; veterinary officer, Dr. S. J. Morrison.

Kenora, established January, 1945; veterinary officer, Dr. M. H. Morwill. Matheson, established December, 1946; veterinary officer, Dr. C. F. Knell.

At the close of the fiscal year negotiations were under way for the establishment of a veterinary unit in the Muskoka district.

The uniform contract plan is in operation in all the above subsidized veterinary units, with the exception of the Kenora unit, in which there are some slight variations.

This Veterinary Assistance Policy in Northern Ontario has proven to be most popular and serves a long felt need. During the year, the veterinary officer in Kenora made 1,065 calls; in Rainy River, from June 1 to March 31, 359 calls were made by the veterinarian, who travelled 16,500 miles by car. In Manitoulin from October 16 to March 31, 434 calls were made and 8,543 miles travelled. In the New Liskeard area, during the year, the veterinarian treated 222 horses, 1,269 cattle, 226 sheep and 74 hogs, and travelled 27,000 miles in thirteen organized townships. These figures give a graphic picture of the great service which has been rendered to the farmers of the present areas covered by the policy for the provision of qualified veterinary assistance.

In the organization of the Veterinary Agricultural Committees and the assembling of the necessary local funds, valuable assistance was given by the Agricultural Representatives, and acknowledgment is made of their excellent co-operation.

PROVINCIAL ENTOMOLOGIST

The Provincial Entomologist continued as Acting Head of the Department of Entomology, Ontario Agricultural College until September, 1946.

Research and Experimental Work

The research and experimental work in Economic Entomology of the Department of Entomology of the Ontario Agricultural College and the Provincial Entomologist has been under the direction of the Provincial Entomologist. This work is reported by the Ontario Agricultural Colloge.

EXTENSION

Spray Service Supervision

Spray service circulars with directions for each spray application were prepared jointly with the Department of Botany of the Ontario Agricultural College, and sent at the proper times to all commercial orcharding areas of Ontario outside the Niagara Peninsula.

Personal Visits

Personal visits were made to districts in the province whenever unusual occurrences of insects were reported. The results of control work on the farms where the Ontario spray recommendations or new promising insecticides were used were checked closely in the field.

Miscellaneous

Fruit, vegetable, field crop, gardeners' and livestock breeders' meetings were addressed on timely topics in many parts of the province throughout the year. Press and radio bulletins on insect control were prepared for broadcast, for the press and other groups during the year.

Reports on insect pests and control were prepared for the Seasonal Fruit and Vegetable Reports and the Monthly Crop Reports printed by the Statistics and Publications Branch, Toronto.

The Ontario Spray Calendars were revised in co-operation with the Department of Botany, Ontario Agricultural College, the Ontario Fruit Branch and the Dominion Department of Agriculture. A new calendar dealing with Greenhouse Vegetable Crops was included.

The section on Raspberry and Blackberry insects was brought up to date in connection with the revision of the Vineland Experimental Station bulletin "Raspberry and Blackberry Culture".

Corrspondence concerning economic insects continued to increase as well as many agriculturalists coming to the Department with their insect problems. Many specimens of insects and/or their damage were examined and controls recommended.

REGULATORY DUTIES

The Provincial Entomologist is charged, under the Director of the Fruit Branch, with the supervision and enforcement of the Plant Diseases Act and its regulations.

European Corn Borer

A total of 88 inspectors and assistant inspectors were appointed during the spring of 1946 to enforce corn borer clean-up regulations in 20 counties in Southern Ontario. Growers generally complied with regulations and also due to good weather in the spring of 1946 for farm work, good clean-up was obtained. Early sweet corn growers are especially anxious in most cases to see these regulations strictly entorced.

Stalk infestation records were made in the fall of 1946 with most of the counties showing a decrease in infestation compared to 1945. Most severe borer damage was to early sweet corn with very little commercial damage to field corn.

Peach Yellows, Little Peach, "X" Disease and Black Knot

The inspection work on these diseases in the Niagara Peninsula was carried on by local inspectors.

Nursery Inspection

Six university girls were employed from the end of May until late in August to inspect the 87 registered nurseries in Ontario. A total of 983,726 units of fruit stock susceptible to San José scale was inspected. 368 infested units were destroyed. 1,224,493 units of susceptible ornamental stock were also inspected in the same nurseries, with 352 units showing infestation being destroyed. Pear blight infestation was again light in 1946 with 109 units showing infection. While not under the regulations of the Plant Diseases Act, other insects and diseases were reported during the same inspection.

Nursery Stock Fumigation

All nursery stock susceptible to San José scale was fumigated with cyanide preparatory to shipment to Nova Scotia. These shipments, as in 1945, were not large.

Apple Maggot

A small cross-section of the orchards were inspected in 1946. Due at least in part to a very small crop of apples in 1945 and practically no fruit on hawthorns and unsprayed apple trees in 1945, the orchard surveys showed a great improvement in 1946, many orchards being reported as "apparently free".

Sugar Beet Nematode

Regulations concerning the movement of sugar beets from the infested Blackwell district were enforced with local inspectors seeing that beets were transported to the factory as laid down in the Plant Diseases Act. Beets from all areas were watched as they arrived at the Sugar Company for new areas of infestation. None were found in 1946.

ONTARIO FARM SERVICE FORCE

The Ontario Farm Service Force was organized during the season 1946 on substantially the same basis as during the war years.

During the year 1946 there were placed on individual farms 1,900 young men and about 450 young women. The term of service ranged from two months to one year.

Farm Commando groups were organized in Brantford, Chatham, Toronto, Windsor, Peterborough, Stratford, London, Acton, St. Catharines. These groups supplied 35,000 work days, which is equal to 112 years and two months of farm help. The wages paid averaged \$4.00 a day, plus meals. The Commandos helped in hoeing, haying, weeding, stocking, threshing and harvesting. The work started in April and carried on until November 15th.

Day by day work was again organized at West Toronto and started on April 6th, finishing on November 13th. 3,441 registered for the work and 2,259 were actually placed. 113 growers were served, ranging from 10 to 35 each morning, the number of workers supplied ranging from 35 to 325 each morning. 14,516 days' work were put in by this group and their earnings are estimated at about \$40,000.00. This year, for the first time, the workers were covered for accident and employer liability insurance. The premium paid was \$300.00, giving liability covering of from \$10,000.00 to \$20,000.00 and first aid to the extent of \$500.00 in any one case. This insurance premium was paid by the Dominion-Provincial Farm Labour Committee, being rebated by the growers in proportion to the number of workers used by each. The premium was rebated to within \$2.00 of the total cost.

Thirty-seven families were placed in year round engagements. These families in the great majority of cases have given very satisfactory service.

Farm Service Force Camps with the co-operation of the National Council of the Y.W.C.A. were operated in 43 communities, for girls and women, and in 6 communities for young men. These accommodated 2,566 girls and women and 950 young men. The wages paid to this group amounted in all to \$230,997.76 for 695,004 hours, an average hourly wage of 33.23 cents. The camps this year started, as in former years, about April 15th, with some four or five camps, and the last of them closed on November 9th. In many ways the Ontario Farm Service Force Camps operated in 1946 have been the most successful we have ever had.

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FORTY-SIXTH ANNUAL REPORT

OF THE

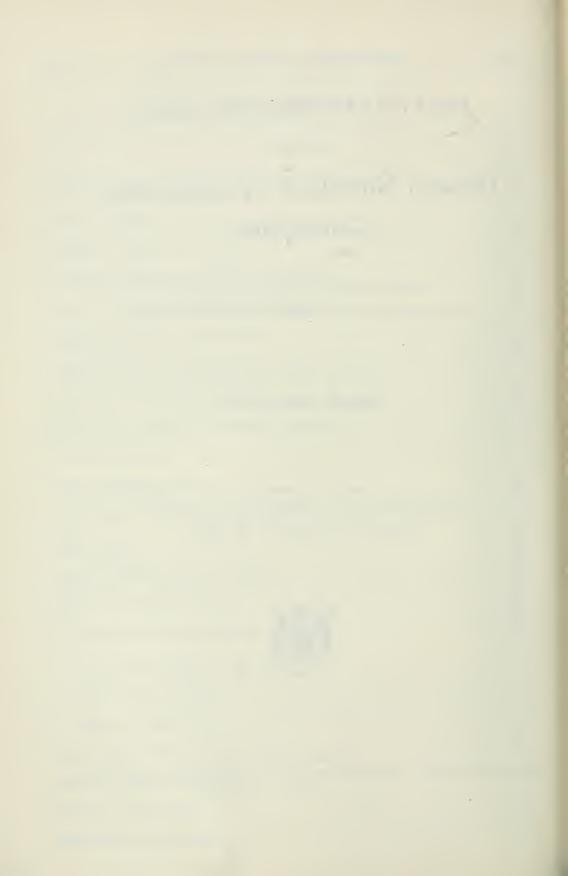
Ontario Northland Transportation Commission

ONTARIO GOVERNMENT RAILWAY
Honourable George A. Drew, K.C., Prime Minister

FOR THE YEAR ENDED March 31st, 1947

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 23, 1948





To The Honourable Ray Lawson, O.B.E., Lieutenant-Governor, the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour of presenting to your Honour the Forty-sixth Annual Report of the Ontario Northland Transportation Commission for the year ended March 31, 1947.

Respectfully submitted,

D. R. MICHENER,
Provincial Secretary and Registrar.

North Bay, Ontario, November 1, 1947.

Honourable D. R. Michener, K.C., Provincial Secretary and Registrar, Parliament Buildings, Toronto, Ontario.

SIR:

In conformity with Section 36 of the Temiskaming and Northern Ontario Railway Act, Chapter 55, Revised Statutes of Ontario and the Ontario Northland Transportation Commission Act, 1946, I have the honour of submitting the Forty-sixth Annual Report of the Ontario Northland Transportation Commission for the year ended March 31, 1947.

All of which is respectfully submitted.

C. E. REYNOLDS,

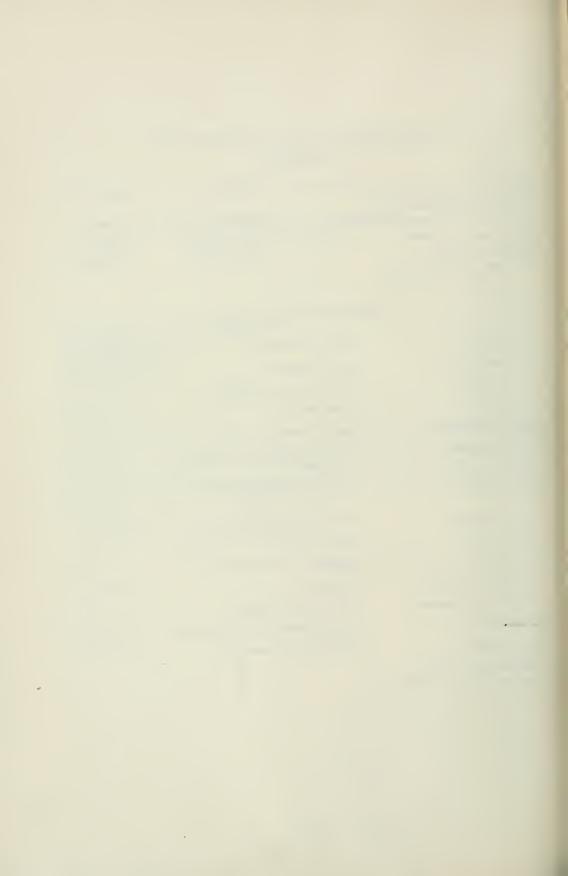
Chairman.

COLONEL C. E. REYNOLDS, D.S.O., M.C. Chairman North Bay
COLONEL THE HONOURABLE
G. ARTHUR WELSH, D.S.O., E.D. Vice-Chairman Toronto
REGINALD A. AUBERT Commissioner Englehart
ROBERT S. POTTER Commissioner Matheson

PRINCIPAL OFFICERS

*A. FREEMAN	General Manager	North Bay
T. D. Saunders	Chief Engineer	North Bay
F. G. Foster	Chief Mechanical Officer	North Bay
A. JARDINE	Superintendent	Englehart
†R. P. C. McLeod	Traffic Manager	North Bay
*H. H. PHILLIPS	General Freight and Passenger Agent	North Bay
*H. W. Teskey	Auditor of Revenues and Acting Treasurer	North Bay
*E. L. SHERMAN	General Accountant	North Bay
G. B. Alford	Purchasing Agent and Storekeeper	North Bay
*E. A. FRITH	Manager of Communications	North Bay
J. B. WILLIS	Paymaster	North Bay
Col. W. W. Johnson	General Tourist Agent	North Bay
†R. WORKMAN	Superintendent of Transportation	North Bay
*S. W. Gowan	Secretary of Commission	North Bay
*Appointed July 1st, 1947.		

†Appointed February 7, 1947.



North Bay, Ontario, November 1, 1947.

COLONEL C. E. REYNOLDS, D.S.O., M.C., Chairman.

DEAR SIR:

I now submit report of operations of the Ontario Northland Railway for the year ended March 31, 1947.

RAILWAY EARNINGS AND EXPENSES

Result of Operations as compared with the previous year:

	Year Ended March 31, 1947	Year Ended March 31, 1946		Increase or Decrease
Operating Revenues	\$8,985,895.94	\$7,827,501.48	(i)	\$1,158,394.46
Operating Expenses	7,032,387.32	5,872,970.86	(i)	1,159,416.46
Operating Ratio	78.3%	75.0%	(i)	3.3%
Net Operating Income	1,953,508.62	1,954,530.62	(d)	1,022.00
Non-Operating Income	39,891.75	116,396.73	(d)	76,504.98
Gross Income	1,993,400.37	2,070,927.35	(d)	77,526.98
Deductions from Gross Income	697,745.71	680,595.91	(i)	17,149.80
To Profit and Loss Account	1,295,654.66	1,390,331.44	(d)	94,676.78

The trend to higher Operating Revenues which became noticeable with the close of the war continues as indicated in the following table:

Year Ended	Operating Revenues
March 31, 1943	\$6,240,648.91
" 31, 1944	6,358,428.95
" 31, 1945	6,605,360.94
" 31, 1946	7,827,501.48
" 31, 1947	8,985,895.94

Operating Expenses, however, continue to rise even more rapidly than revenues. It will be observed that with an increase in Operating Revenues of \$1,158,394.46, there was an actual reduction in net of \$94,676.78 during the fiscal year under review. It is apparent that without the present volume of traffic, it would not be possible to maintain net earnings at anything like present levels.

FINANCES

At March 31, 1947, the Commission had no bank indebtedness. Outstanding Bonds at the end of the year totalled \$4,868,000.00 Maturing Bonds to the extent of \$146,000.00 were retired February 1, 1947.

TRAFFIC

As indicated by the statement of revenue, traffic was at unprecedented levels throughout the year. Further details are shown in table below:

	Year Ended March 31, 1947	Year Ended March 31, 1946	Increase	%
Freight		\$5,283,523.42	\$ 751,307.12	14.2
Passenger	1,411,644.92	1,323,539.08	88,105.84	6.7
Express	203,954.76	169,963.15	33,991.61	20.0
Telegraph	129,120.74	116,162.39	12,958.35	11.2
Telephone		505,660.20	84,130.56	16.6
All Other	010 881 00	428,653.24	187,900.98	43.8
Тотац	\$8,985,895.94	\$7,827,501.48	\$1,158,394.46	14.8

EMPLOYER-EMPLOYEE RELATIONSHIPS

The relationships between the Commission and its employees as represented by the various Labour Organizations have been satisfactory. As a result of collective bargaining an increase of 10¢ per hour was granted to all employees, effective June 1, 1946. For the ten month period June 1, 1946 to March 31, 1947, this increase in wages added about \$375,000.00 to Operating Expenses.

PENSION FUNDS

On March 31, 1947, the number of persons benefitting by pensions was:

		Monthly Pension Payroll
Contributory Pla	n —149 employees \ 52 dependents∫	\$10,005.50
Non-Contributor	y Plan— 61 employees	
		· ———
Total	262	\$12,935.11

PROSPECTIVE

There is every reason to believe that Gross Revenues for the year ending March 31, 1948 will exceed all previous records. Expenses are also at a higher level and net earnings are likely to be lower.

A. FREEMAN,

General Manager.

AUDITORS' REPORT

EDWARDS, MORGAN AND COMPANY

Chartered Accountants

To The Commissioners, Ontario Northland Railway, North Bay, Ontario.

We have examined the books and records of the Ontario Northland Railway for the year ending March 31, 1947.

The record of securities owned and held in trust on that date has been verified by examination of the said securities in the custody of the Treasurer.

We certify that the annexed Balance Sheet and Surplus account are in accord with the books and records and that they are, in our opinion, properly drawn up so as to show the true financial position of the Railway at March 31, 1947, and correctly set forth the result of operations for the year ending on that date.

(Signed) EDWARDS, MORGAN AND COMPANY,

Chartered Accountants.

Toronto, Ontario, July 21, 1947.

ONTARIO NORTHLAND TRANSPORTATION COMMISSION BALANCE SHEET AS AT MARCH 31, 1947

Assets

INVESTMENT:			
Road. Railway Equipment and Motor Buses. Floating Equipment Miscellaneous Physical Property— Boat Lines, Nipissing.		\$35,286,357.10 7,319,966.71 249,436.70	
White Top Cabins, Temagami	14,212.10 21,045.61 35,842.37	78,813.95	
Dominion of Canada Bonds		800,000.00	
Improvements to Leased Property— Railway Boat Lines, Temagami. Hotel Temagami	25,902.93	356,307.35	
Affiliated Companies— Nipissing Central Railway \$4,943,376.00 Less: Reserve	\$4,268,987.29	0,00,001.00	
Temagami Navigation Ltd Temagami Outfitting Company Ltd	300,000.00 53,966.38	4,622,953.67	040 710 007 40
			\$48,713,835.48
Current Assets: Cash. Accounts Receivable, Operating. Balance due on Townsite Sales. Agents' and Conductors' Balances. Traffic Balances. Material and Supplies. Ballast Pit Sidings. Canada Savings Bonds, Employees. Other Assets.		\$ 574,825.33 234,779.68 2,314.45 480,953.99 1,767.00 1,312,436.80 63,329.06 90,888.45 10,060.23	9 771 974 00
			2,771,354.99
Deferred Assets: Pension Fund Investments— Non-contributory. Contributory. Fire Insurance Fund.	1,455,585.46	\$ 1,590,074.07 153,833.17	
			1,743,907.24
Unadjusted Debits: Advance to Treasurer		s 350.00	
Accounts in Suspense		9,183.69	9,533.69
		*	\$53,238,631.40

Liabilities

Liabilities	
Province of Ontario Loan without interest	\$30,207,934.92
Long Term Debt: Debenture Debt payable in instalments in the years 1948 to 1968, Interest 4% per annum	4,868,000.00
CURRENT LIABILITIES: Audited Accounts and Wages Payable \$ 742,534.23 Traffic Balances 58,632.51 Debenture Interest Due and Accrued 35,233.36 Deposits on Sidings 8,426.20 Income Tax Payable, Employees' Deduction 12,794.61	857,620.91
Deferred Liabilities: Pension Fund Reserve— Non-contributory. \$ 134,488.61 Contributory. 1,455,585.46 Fire Insurance Reserve. \$ 1,590,074.07 153,833.17	1,743,907.24
UNADJUSTED CREDITS: Equipment Retirement Reserve— Railway Equipment. \$2,590,480.36 Motor Buses. 97,296.50 Floating Equipment 12,039.84 Hotel and Restaurant Equipment 14,674.48 Fidelity Insurance Reserve \$2,714,491.18 Fidelity Insurance Reserve 281.15	
Surplus: Balance, March 31, 1947.	2,718,382.76 12,842,785.57 \$53,238,631.40
Certified as per our report of this date. (Signed) EDWARDS, MORGAN & CO., Chartered Accountants. July 21, 1947.	
SURPLUS ACCOUNT—MARCH 31, 1947	
Balance, March 31, 1946.	\$11,557,214.71
Additional	
	\$12,857,684.96
DEDUCT—(written off): Uncollectible Accounts. Surveys and Investigations. Nipissing Navigation Company Ltd. Retired Road and Equipment. Balance as at March 31, 1947.	3,446.86 3,420.47 8,020.08

COMPARATIVE INCOME STATEMENT

April 1, 1945 to March (31, 1947		
	April 1, 1946	April 1, 1945	
Operating Income	to March 31, 1947	to March 31, 1946	
Railway Operating Revenue	\$8,985,895.94 7,032,387.32	\$7,827,501.48 5,872,970.86	
	\$1,953,508.62	\$1,954,530.62	
Non-Operating Income			
Hire of Freight Train Cars. Rent from All Other Equipment. Joint Facility Rent Income. Interest and Exchange on Unfunded Debt. Miscellaneous Income.	\$ 946.26 25,154.00 13,551.02 240.47	\$ 51,862.00 21,898.02 39,434.71 202.00	
	\$ 39,891.75	\$ 116,396.73	
Gross Income	\$1,993.400.37	\$2,070,927.35	
Deductions from Gross Income			
Hire of Freight Cars—Debit Balance. Joint Facility Rents. Interest and Exchange on Funded Debt. Miscellaneous Income Charges.	\$ 490,195.72 5,063.00 199,586.68 2,900.31	\$ 467,925.96 5,045.00 205,260.00 2,364.95	
	\$ 697,745.71	\$ 680,595.91	
Net Income carried to Profit and Loss	\$1,295,654.66	\$1,390,331.44	
RAILWAY OPERATING R	EVENUES		
	April 1, 1946 to	April 1, 1945	
	March 31, 1947	to March 31, 1946	
Freight Passenger Excess Baggage Parlor and Chair Car	\$6,034,830.54 1,411,644.92 5,916.50 261.65	\$5,283,523.42 1,323,539.08 4,249.86 1,124.60	
Mail. Express. Milk.	78,615.36 203,954.76 18,467.45	73,900.26 169,963.15 17,338.79	

Switching.....

Boat....

Dining and Buffet
Hotel and Restaurant
Station, train and boat privileges.
Tourist Cabins

Storage—Freight. Storage—Baggage

Demurrage
Telegraph
Telephone

Miscellaneous Joint Facility—Cr. Joint Facility—Dr. 13,771.29

82.254.27

20,159.80

196,114.19

1.167.25

2,831.00

3,086.47

1,019.00

43,067.54

129,120.74

589,790.76

104,049.74

40.116.20

9,942.23

\$8,985,895,94

9,419.51

18,584.53

969.63

1,576.14

1,046.82

32,115.00

116,162.39

505,660.20

95,344.24

36,650,14

\$7.827.501.48

6,278.19 7.42

130,048.11

SUMMARY OF RAILWAY OPERA	TING EXPENSES		
Maintenance of Way and Structures. Maintenance of Equipment. Traffic. Transportation. Miscellaneous Operations. General.	\$1,373,488.31 1,396,488.16 38,651.87 2,976,589.66 812,041.44 435,127.88	\$1,197,454.87 1,118,763.29 45,667.27 2,667,064.98 494,302.71 349,717.74	
	\$7,032,387.32	\$5,872,970.86	
Ratio of Operating Expenses to Operating Revenues	78.3%	75.0%	
TRAFFIC AND MILEAGE S	TATISTICS		
Passenger Traffic			
No. of passengers carried earning revenue. No. of passengers carried one mile. No. of passengers carried one mile per mile of road. Average distance carried—miles. Total passenger revenue. Average amount received from each passenger. Average receipts per passenger per mile (cents). Total passenger train service revenue. Passenger service train revenue per mile of road. Passenger service train revenue per train mile.		497,120 56,800,927 98,905 114.3 \$1,411,644.92 2.84 2.49 \$1,718,860.64 2,992.97 2.90	
Freight Traffic			
Number of tons carried earning revenue. Number of tons carried earning revenue one mile. Number of tons carried earning revenue one mile per mile Average distance haul of one ton—miles. Total freight revenue. Average amount received for each ton. Average amount received per ton per mile (cents). Freight revenue per mile of road. Freight revenue per train mile.	of road.	2,447,589 495,834,353 863,372 203 \$6,034,830.54 2.47 1.22 10,508.15 6.76	
Total Traffic			
Operating revenue. Operating revenue per mile of road. Operating revenue per train mile. Operating expenses. Operating expenses per mile of road. Operating expenses per train mile. Net operating revenue. Net operating revenue per mile of road.		\$8,985,895.94 15,646.69 6.05 7,032,387.32 12,245.15 4.73 1,953,508.62 3,401.55	
Car Mileage			
Average No. of passengers carried one mile per car mile. Average No. of passengers carried one mile per train mile. Average No. of passenger cars per train mile. Mileage of passenger cars. Mileage of loaded freight cars. Mileage of empty freight cars. Average No. of freight cars per train mile. Average No. of loaded freight cars per train mile. Average No. of empty freight cars per train mile. Average No. of tons of freight per train mile. Average No. of tons of freight per loaded car mile. Average No. of miles operated during the year.		12 95.8 8 4,734,436 18,502.751 8,432,463 31.2 20.7 9.5 555.5 27 574.3	
Train Mileage			
Mileage of revenue passenger trains. Mileage of revenue freight trains. Total revenue train mileage.		593,209 892,605 1,485,814	

Miles of Track Operated at Close of Fiscal Year

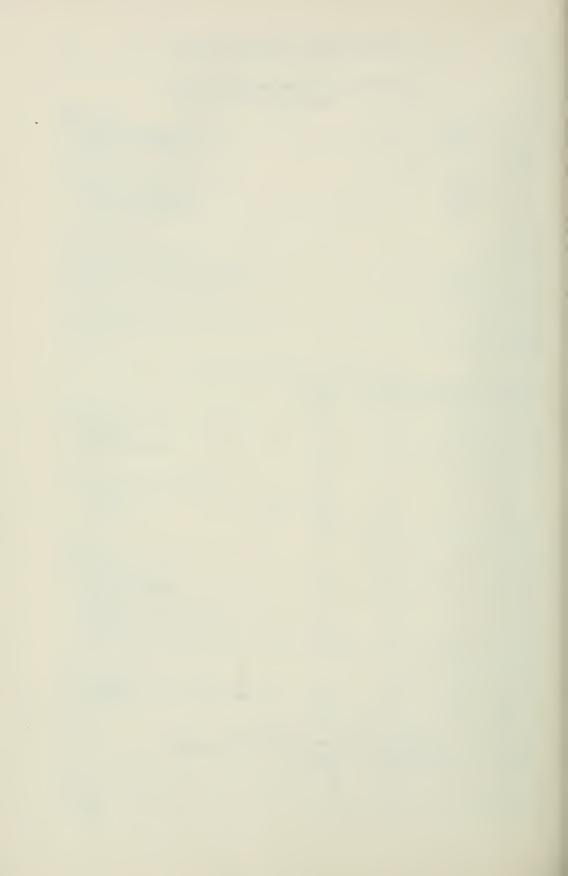
Miles of Track Operated at Close of Fiscal Tear			
March 31, 1947			
Main Line:			
	$257.30 \\ 28.10$		
	86.20		
Cochrane—Moosonee		471.60	
Branch Lines:			
Earlton—Elk Lake	28.50		
Englehart—Charlton	7.60		
Porquis—Iroquois Falls	6.60		
Swastika—Noranda	60.00	102.70	
OTHER TRACKS:		102.70	
Yard tracks and sidings		121.2	
PRIVATE SIDINGS OPERATED BY THE RAILWAY:			
Under private siding agreement	$25.95 \\ 1.74$		
Owned by private companies	1.74	27.69	
SIDINGS OPERATED BY PRIVATE COMPANIES:		21.00	
Under private siding agreement		11.83	
Order private stang agreement			
		735.02	
		===	
DETAILS OF RAILWAY EQUIPMENT			
March 31 Additions Reti	rements	March 31	

	March 31 1946	Additions during year	Retirements during year	March 31 1947
Locomotives:				
Passenger-Freight	45	0	0	45
Switching	6	0	0	6
Switching Diesel Switching	0	3	0	3
	51	3	0	54
REVENUE FREIGHT EQUIPMENT:				
Box Cars	201	0	1	200
Flat Cars	211	0	10	201
Hart Cars	80	0	8	72
	492	0	19	473
Cabooses	34	ő	0	34
Passenger Equipment:				
First Class Cars	30	0	0	30
Second Class Cars	10	0	0	10
Combination Cars	7	0	0	7
Parlour Cafe and Restaurant Cars	6	0	0	6
Baggage and Express Cars	13	0	0	13
Diesel Power	1	0	0	1
Other Cars in Passenger Service	8	0	0	8
	75	0	0	7 5
Work Equipment:				
Business	3	0	0	3
All Other Cars in Railway's Service	213	0	7	206
	216	0	7	209

DETAILS OF HIGHWAY SERVICE EQUIPMENT

	March 31 1946		the Year Retirements		31
Buses Trucks		$\frac{3}{7}$	1 0	10 8	
	9	10	1	18	





FORTY-SECOND ANNUAL REPORT

OF THE

ONTARIO MUNICIPAL BOARD

To December 31st, 1947

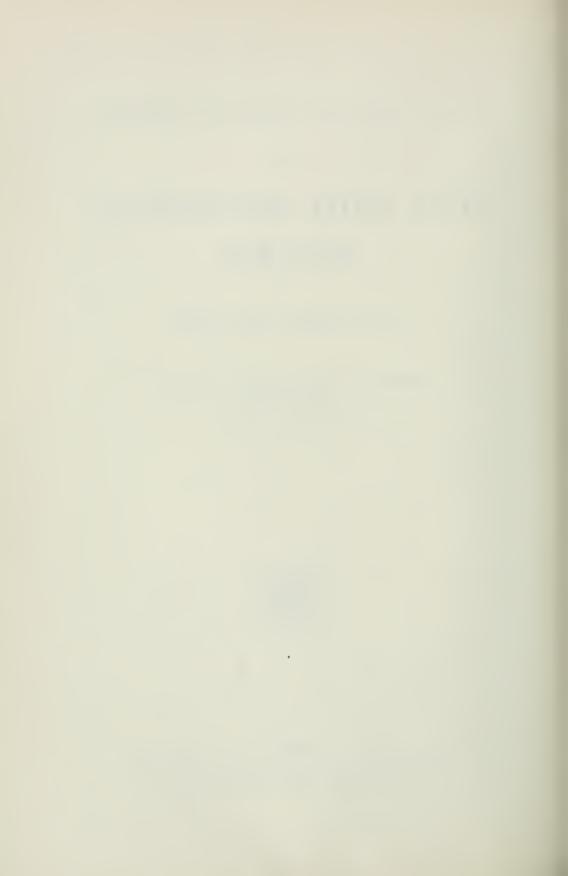
PRESENTED TO THE LEGISLATIVE ASSEMBLY BY COMMAND

Sessional Paper No. 24-1948



TORONTO

Printed and Published by Baptist Johnston, Printer to the King's Most Excellent Majesty, 1948



TO THE HONOURABLE RAY LAWSON, O.B.E., LL.D., Lieutenant-Governor of the Province of Ontario in Council.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to transmit herewith the Forty-Second Report of the Ontario Municipal Board for the year ending December 31st, 1947.

Respectfully submitted,

G. H. DUNBAR,

Minister of

Municipal Affairs.

Parliament Buildings, Toronto. March 15th, 1948.



March 15th, 1948.

Re Forty-Second Annual Report

Dear Sir:

I have the honour to send you herewith the Forty-Second Annual Report of the Ontario Municipal Board to December 31st, 1947.

Your obedient servant,

R. S. COLTER, Chairman.

THE HONOURABLE G. H. DUNBAR, Minister of Municipal Affairs, Parliament Buildings, Toronto.



FORTY-SECOND ANNUAL REPORT

OF THE

ONTARIO MUNICIPAL BOARD

To December 31st, 1947

PRESENTED TO THE LEGISLATIVE ASSEMBLY BY COMMAND



ORGANIZATION of the ONTARIO MUNICIPAL BOARD of the PROVINCE OF ONTARIO 1947

R	. (S.	COLT	ER,	K.C										Chairman
															e-Chairman
W	7.	J.	MOC	RE,	O.I	.S.									Member
R		Ĥ.	YEA	TES											Member
															Member
M	1.	В.	SANI	DERS	ON										Secretary
Ţ.	A	۱.	McDO	NAL	.D				In	spec	ctor	of	Tel	epho	one Service



FORTY-SECOND ANNUAL REPORT

OF THE

Ontario Municipal Board

to December 31st, 1947

In pursuance of Section 108 of "The Ontario Municipal Board Act" (R.S.O. 1937, Chapter 60), the Ontario Municipal Board beg leave respectfully to submit their Forty-Second Annual Report.

"THE ONTARIO MUNICIPAL BOARD ACT"

Since the revision of the Statutes of Ontario in 1937, "The Ontario Municipal Board Act" was amended by Statutes of Ontario, 1938, Chapter 37, Section 18; 1939, Chapter 47, Section 26; 1940, Chapter 20; 1941, Chapter 40; See Ontario Statutes 1942, Chapter 34, Section 41 and Section 42 (6); Ontario Statutes 1943, Chapter 16, Sections 1 and 2; Ontario Statutes 1946, Chapter 66; and Ontario Statutes 1947, Chapter 73.

APPLICATIONS TO THE BOARD

There were 3088 applications to the Board during 1947 (exclusive of Public Vehicle and Public Commercial Vehicle License applications), and in regard to these applications and those not disposed of in 1946, 494 public hearings were held. The applications included a great variety of matters falling within the jurisdiction of the Board and those granted are set out in a list contained in the "Abstract and Summary" appended to this Report, indexed under "Orders issued by the Board". Copies of formal Decisions issued are also contained in the Abstract and Summary, indexed under "Decisions of the Board" and also under the names of the parties.

SITTINGS OF THE BOARD

The Board held meetings for the transaction of routine business and the disposal of applications every juridical day throughout the year. Many of these applications, though dealt with informally and disposed of without the necessity of Hearings, entailed in many instances a considerable amount of inquiry and consideration on the part of the Board, especially those coming under the provisions of Section 70 of the Board's Act, which section requires all capital undertakings and expenditures therefore by Municipalities to be approved by the Board.

APPROVAL OF UNDERTAKING OF CAPITAL EXPENDITURES BY MUNICIPALITIES

(Section 70 of "The Ontario Municipal Board Act", R.S.O. 1937, C. 60)

(Subsection (3) re-enacted O.S. 1940, C. 20 s. 4) (Subsection (1) amended O.S. 1941, C. 40 s. 3)

(Subsection (1) re-enacted O.S. 1946, C. 66)

On the 18th April, 1935, legislation came into effect whereby a Municipality is prohibited from exercising any of its powers to proceed with, authorize or provide any moneys for any undertaking, work, project, scheme, act, matter or thing, the cost of, or any portion of the cost of which is intended or required to be provided or raised by the issue of debentures of the Municipality, until the approval of this Board is first obtained. This enactment overrides the provisions of any general or Special Act and necessitates a great many applications to the Board. A list of the applications granted will be found in the Summary, included in the list indexed under "Orders issued by the Board".

1900 applications in respect to proposed expenditures totalling \$82,961,282.00 were considered by the Board. It should be noted, however, that since Municipal representatives are now aware of the fact they must obtain the Board's approval of proposed capital undertakings, a large percentage avail themselves of the opportunity of discussing their proposed borrowings with the Board and in many instances are

advised that the Board would not be willing to grant approval. Accordingly formal applications in these instances are not filed and do not show in the Board's records.

It should also be noted that the existence of this legislation gives the Board an opportunity to advise and control with regard to the type and term of the debentures to be issued. In this connection the Board has pursued the policy of approving only instalment debentures as opposed to sinking fund debentures and, believing that the saving of interest effected thereby accrues to the benefit of the municipal ratepayers, is generally requiring the term of repayment to be shorter than formerly.

The following list (generally speaking), shows the maximum debenture term allowed by the Board under this restrictive policy:—

Sidewalks	10	years
Curbs and Gutters	10	years
Pavements	10	years
Watermains		
Sanitary Sewers	15	years
Trunk Sewers	20	years
Buildings, including School	20	years

A recital in the debenture by-law of the Board's approval under said Section 70 is obligatory, pursuant to an amendment passed at the 1939 Session of the Legislature (Chapter 30, Section 17) adding paragraph (e) to subsection (1) of Section 305 of "The Municipal Act".

The re-enactment of subsection (1) of Section 70 in 1946, included authority to the Board to approve of an expenditure the cost or any portion of the cost of which is to be raised in a subsequent year or years without an issue of debentures. The Board has adopted the practice of restricting its approval of such an application to not more than 3 years.

APPROVAL OF RATEPAYERS

By Section 59 (f) of "The Ontario Municipal Board Act" the Board is given power to direct that before any approval is given to the exercise of any powers by a Municipality or to any By-law passed by it, the assent of the electors thereof or of those qualified to vote on money by-laws shall first be obtained, notwithstanding such assent is not otherwise requisite. By virtue of this legislation the Board is continuing its policy, adopted in 1938, of insisting that major capital expenditures, the cost of which would be met out of general rates, be submitted to the ratepayers for their approval before being presented to the Board, and further the Board is of opinion that a representative vote can be taken only at the same time as the municipal election. The result of this policy in many instances has been the rejection of the proposed expenditure by the ratepayers.

ANNEXATIONS AND AMALGAMATIONS

The dominant legislation governing herein in 1947 was Section 23 of "The Municipal Act", Section 20 having been repealed at the 1946 Session of the Legislature, effective April 5th, and Sections 16 and 17 repealed in 1947, effective June 1st. Subsection (1) of said Section 23 was re-enacted by Ontario Statutes 1947, Chapter 69, Section 2.

Thirty-six applications were filed in 1947 requesting annexation of additional lands.

A list of these will be found in the Summary.

ARBITRATIONS

In 1947 the Board was requested to act as Arbitrators in respect to seven matters brought before it; one under Section 22 of "The Power Commission Act"; two under Section 79 of "The Highway Improvement Act", and four pursuant to Section 356 (a) of "The Municipal Act" (enacted by O.S. 1946, C. 60, s. 47). A list of these will be found in the Summary indexed under "Arbitrations". A copy of the written Awards given by the Board in 1947 will be also found in the Appendix and indexed under "Arbitrations".

ASSESSMENT APPEALS

Under Section 84 of "The Assessment Act" (as re-enacted by O.S. 1946, C. 3, s. 21), appeals may now be made directly to this Board from the Court of Revision,

and in respect to an aggregate assessment without County organization \$5,000.00 or upwards, or in any other Municipality \$10.000.00 or upwards-and in 1947 nine appeals were filed involving property and business assessments of \$171,329.00. Formal Hearings were held in 1947 in respect to seven of these appeals.

Copies of the Board's written decisions issued in 1947 will be found in the Summary indexed under "Assessment Appeals" and "Decisions of the Board", also under the names of the Parties.

EXTENSION OF PUBLIC UTILITIES

Section 407, subsection (2) of "The Municipal Act". This legislation gives urban Municipalities authority to issue debentures in respect to Public Utilities without a vote of the ratepayers under certain circumstances set out in the legislation. In 1947 twenty-five applications were dealt with by the Board in a total amount of \$1,477,089.00. These are listed in the Summary under "Orders issued by the Board".

FLOATING INDEBTEDNESS

(Section 59 (d) of Part IV, R.S.O. 1937, C. 60, (as re-enacted by

O.S. 1939, C. 47, s. 26 (1)) .) Under this legislation the Board issued Orders in 1947 in respect to five Municipalities authorizing a debenture issue of \$114,400.00. It should be noted that this meant a considerable saving of expense to the Municipality concerned, as a Special Act of the Legislature would otherwise have been necessary.

IMPROVEMENT DISTRICTS

Under Section 44a of "The Municipal Act" as enacted by O.S. 1943, C. 16, Sec. 1 and amended by O.S. 1944, C. 39, s. 5 and 1946 C. 60, s. 8, the Board may by Order erect a locality into an Improvement District. In 1947 four such applications were considered. Copies of the Board's Orders, issued herein, will be found in the Summary indexed under "Orders of the Board", and "Improvement Districts".

PROVINCIAL RAILWAYS

Extensions to and improvements of Railways operating under Provincial Charter in 1947 as reported to the Board will be found in the Summary, arranged alphabetically under the names of the several systems reporting.

Annual Reports, to December 31st, 1947 by Railway Companies under the Board's jurisdiction were received, of which a summarized tabulation has been prepared for publication herein. The Board has no means of auditing these reports as received and cannot therefore guarantee that the figures taken therefrom are correct or accurate.

Under "The Railway Act" there were eleven applications to the Board in 1947.

A tabulation of Accident Reports received by the Board from Provincial Railways during the year 1947 is included in the Summary and shows that 15 were killed and 1818 injured during the year.

PUBLIC VEHICLE AND COMMERCIAL LICENSES

Pursuant to "The Public Vehicle Act" (R.S.O. 1937, C. 289), and "The Commercial Vehicle Act" (R.S.O. 1937, C. 290), no Public Vehicle or Commercial Vehicle License respectively, may be issued by the Department of Highways without the approval of the Board being first obtained as evidenced by a Certificate of Public Necessity and Convenience of the said Board furnished to that Department, and then only in accordance with such Certificate. Upon the granting of a Certificate by the Board the Department may then, in its discretion, issue or refuse a license.

The Board set aside fifty-four days during the year for hearing the applications for Certificates of Public Necessity and Convenience. In addition the Board set aside one morning each week to deal with the matter of transfers and other details brought before it by the Public Vehicle Division.

During the year one hundred and seventy applications were made for Public Vehicle Licenses and one thousand two hundred and one for Commercial Vehicle Licenses. These include applications for extensions to and clarification of existing licenses, and the following is a classification of these and the disposition made of same:

	Public Vehicle	School Vehicle	V	B	C	D	田	[1,	FS	Н	Total
Applications received	170 138 81.2%	363	57 32 56.1%	4	126 77 61.1%	93 58 62.4%	161 138 85.7%	629 560 89%	125 108 86.4%	6 2 33.3%	1,734 1,476 84.6%
Applications dismissed	26 15.3%		38.6%	4	39 30.9%	25 26.9%	3.7%	3.5%	15 12%	3 50%	162 9.4%
Applications cancelled for non-use					3.2%	7.5%	9 5.6%	44 7%	1.8%	1 16.7%	3.9%
Applications withdrawn by applicants	1 60%				1 8%	1100	1.6%	1.6%			5.4%
Applications on Reserved List as of Dec. 31st.	3 707		1 80%		2 1 6%		7 4 4 4 9%	1.6%			14 .9%
Applications on Adjourned List as of Dec. 31st	1.2%		3.5%		3.4%	2.1%		1.6%	1.8%		111.7%

In supporting an application before the Board, the applicant may appear in person or be represented by his solicitor, or, under exceptional circumstances, if unable to attend, may submit evidence in the form of letters, petitions, or affidavits. The Board hears and considers the evidence for and against and also takes into consideration the facilities extended by existing licensed operators, and its decision is based on whether public necessity and convenience require the service for which the application is made. The Board has required that sufficient evidence be filed with each application for a license or extension to a license to justify the application being listed for hearing. This has tended to shorten the list as well as to insure that applications are supported when listed for hearing.

All transfers of Public Vehicle and Public Commercial Vehicle Licenses are subject to the approval of the Board and care is taken to prevent anything that might appear to be trafficking in licenses. Transfers of important licenses are usually made the subject of a Hearing and evidence is heard for and against.

Through the co-operative efforts of the Department of Education and the Public Vehicle Division of the Department of Highways, an effort was made to have all motor vehicles carrying school children licensed under a school bus permit. These applications were dealt with by the Board and permits issued for which no fees were charged and the result has been that three hundred and sixty-three School Bus applications were received and granted during the year. The chief objective of this effort has been to require all such vehicles to carry insurance as provided by "The Public Vehicle Act".

REDEMPTION CLAUSE IN DEBENTURE BY-LAWS

("The Municipal Act" (R.S.O. 1937, C. 266, S. 305 (15) (d)).)

By an amendment in 1944 (C. 39, S. 22 (5)), to Section 305 (15) of "The Municipal Act" the inclusion in a debenture By-law of a provision for redemption of all or a portion of the debentures at the option of the Corporation is now mandatory. In addition to the Statutory Notice provided by paragraph (d) the Board shall approve of such further notice as the By-law provides.

RESTRICTED AREAS

Under Section 406 of "The Municipal Act" (R.S.O. 1937, C. 266), (as re-enacted by O.S. 1941, C. 35, S. 13 and amended O.S. 1946 C. 60, S. 50), the Board considered one hundred and thirty applications for approval of Municipal By-laws placing restrictions on certain areas as to use of land and the erection and use of buildings thereon; also one hundred and seventy-four applications for variation of restricted areas already established. The applications granted are shown in the Summary in the list of "Orders of the Board".

Under subsection 9 (a) of the 1946 amendment, if an application to Council for an amendment to a Restricted Area By-law is refused by the Council, or the Council refuses or neglects to make a decision thereon within one month, the applicant has the right of appeal to this Board.

RETIREMENT OF UNMATURED DEBENTURES

(Section 59 (dd) of Part IV, R.S.O. 1937, C. 60, as enacted by O.S. 1939, C. 37, s. 26 (1)).

Seven Municipalities took advantage of this legislation, which came into effect on April 27th, 1939 and applied to the Board for authority, without assent of the electors, to retire certain of their debentures redeemable before maturity. The total amount authorized by the Board in 1947 was \$10,598,505.98.

REVENUE

By Ontario Statutes, 1939, Chapter 47, Section 26 (3), Section 107 of "The Ontario Municipal Board Act" being the section respecting the Board's fees, was repealed and re-enacted. The new section came into effect on the 27th day of April, 1939, and the fees are now payable in cash ON THE APPLICATION instead of Law stamps on the Board's Order.

During 1947 the Board's fees on applications amounted to \$103,798.38. In this amount is included the fees on applications for Public Vehicles and Public Commercial Vehicle Licenses—collected by the Department of Highways and credited to the Board.

SUPERVISED MUNICIPALITIES

Pursuant to the provisions of "The Department of Municipal Affairs Act" the Board in 1947 considered plans for funding and refunding the bonded indebtedness of the Corporation of the Township of Sandwich West and the Board of Trustees for the Roman Catholic Separate Schools of the Town of Riverside.

VALIDATION OF MUNICIPAL BY-LAWS AND DEBENTURES

(Section 64 of Part IV, R.S.O. 1937, C. 60)

Two hundred and eighty-nine applications were made to the Board in 1947 for validation of Municipal By-laws and certification of the debentures authorized thereunder. The total of such debenture issues was \$32,739,784.94.

While purchasers of debentures are sometimes satisfied with Orders of the Board under Section 70 of the Board's Act, it has been found, particularly in regard to the large issues, that a further Order of the Board validating the By-law and providing for certification of the debentures, facilitates the marketing of the issue.

FORMS

The Board has (for distribution to parties interested) the following forms and specifications, namely:—

- 1. The Board's Rules of Practice and Practice Forms.
- 2. Memorandum of material required in support of application for approval of undertaking capital expenditure involving debenture issue, under Section 70 of "The Ontario Municipal Board Act" (R.S.O. 1937, Chapter 60).
- 3. Forms for Annual Reports by Railway Systems.
- 4. Forms for Reports as to Examination of Motormen.
- 5. Forms for Reports of Accidents by Railway Systems.
- 6. Directions for guidance of applicants under subsection (2) of Section 407 of "The Municipal Act".
- 7. Tariff of the Board's Fees.
- 8. "The Telephone Act".
- 9. Form of By-law to regulate the management and operation of a telephone system established under Part II of "The Telephone Act" (draft form).
- 10. Draft Form of By-law to regulate the management and business of a telephone company.
- 11. Form of Petition praying for the establishment or extension of a telephone company under Part II of "The Telephone Act".
- 12. Form of By-laws granting to a telephone company the right to use the highways of a Township.
- 13. Form for Return by Municipality, operating a telephone system.
- 14. Form for Return by Company, etc., operating a telephone system.
- 15. Form for Tariff of Tolls for telephone system.
- 16. Form for Return by telephone companies required by Order of the Board to set up a reserve for depreciation.

MISCELLANEOUS

Copies of the Board's written Decisions and a list of Orders issued in 1947 appear in the Summary. These include:—

Allocation of Clergy Reserve Funds-Section 330 of "The Municipal Act".

Amalgamation of Local Areas-Section 23 (b) of "The Municipal Act".

Annexations-Section 23 of "The Municipal Act".

Appeal re Land Subdivision Plans-"The Planning and Development Act".

Arbitrations-Section 356 (a) of "The Municipal Act".

Assessment Appeals-Section 84 of "The Assessment Act".

By-laws-Section 59 (c) of "The Ontario Municipal Board Act".

Change of Rate of Interest on Debentures—Section 310 of "The Municipal Act". Compensation for Expropriation—Section 356 (a) of "The Municipal Act".

Dispensation of Vote of Ratepayers-Section 69 of "The Ontario Municipal Board Act".

Extension of Municipal Utilities-Section 407 (2) of "The Municipal Act".

Extension of Time to pass By-law-Section 297 (5) of "The Municipal Act".

Highways, Narrow-Section 502 (2) of "The Municipal Act".

Improvement Districts-Erection of-Section 44 (a) of "The Municipal Act".

Increased Borrowing by Municipal Councils—Section 339, subsection (2) of "The Municipal Act".

Increase in Number of Councillors-Section 50 of "The Municipal Act".

License Fee—Approval of Fixing of, to residents of a Municipality owning and using a bicycle on any highway thereof—Section 420 (11) of "The Municipal Act".

Local Improvements—Apportionment of cost of—Section 27, subsection (3) and Section 29 (3) of "The Local Improvement Act".

Local Improvements-Part only of Work-Section 18 of "The Local Improvement Act".

Refunding Plan-Part III of "The Department of Municipal Affairs Act".

Release from Supervision—Part III of "The Department of Municipal Affairs Act."

Restricted Areas. Establishment of-Section 406 of "The Municipal Act" (as reenacted by O.S. 1941, C. 35, s. 13, as amended by O.S. 1946, C. 60, s. 50).

Restricted Areas-Repeal or amendment of-Section 406 of "The Municipal Act" (as re-enacted by O.S. 1941, C. 35, s. 13).

Revised Tariff of Fees-Section 177 of "The Railway Act".

Sinking Fund-Investment of-Section 326 of "The Municipal Act".

Sinking Funds-Transfer of Surplus-Section 321 (a) of "The Municipal Act".

Telephone Companies and Systems.

Validation of Municipal Debentures-Section 64 of Part IV of "The Ontario Municipal Board Act".

M. B. SANDERSON,

Secretary.

3

Toronto, the 15th day of March, 1948.

THE ONTARIO MUNICIPAL BOARD REPORT OF THE SUPERVISOR OF TELEPHONE SYSTEMS FOR THE YEAR 1947

The following applications under the provisions of "The Telephone (R.S.O. 1937, Chapter 261), were dealt with by the Board in 1947:	Act'
Under Section 27: For authority to pass municipal debenture by-laws to meet the cost of reconstructing, replacing or altering telephone systems	ie l
Under Section 31: For the approval of the purchase of an existing telephone system or any portion thereof, by a municipality	m 2
Under Section 51: For an Order approving appointment of Commissioner to fi	111

nder Section 56: For the approval of by-laws of a municipal telephone system	2
nder Section 58: For an Order prescribing the date for holding the annual meeting of subscribers	8
nder Section 79: For the approval of municipal by-laws granting the right to erect poles and wires upon the highways	2
nder Section 87: For the approval of by-laws of a telephone company	23
nder Section 96: For the approval of agreements providing for interchange of service	13
nder Section 101: For the approval of sale of telephone systems	14
nder Section 103: For the approval of charges for telephone service	95
nder Section 109: For authority to expend a portion of the moneys set aside for depreciation, upon new construction or extensions or in the purchase of securities	6
securities and section 110: For authority to issue stocks and bonds	1
enter Section 110. For authority to issue stocks and bonds	
otal Number of Applications	170

The continued policy of the Board in endeavouring to secure an amicable settlement in matters in dispute between the applicant and respondent has proved successful in the majority of cases.

In addition to the applications and complaints referred to, a vast amount of correspondence relating to telephone matters has been dealt with by the Board's Telephone Department, through the medium of which much information and assistance has been given to municipalities, companies and other persons interested, and many difficulties which might otherwise have necessitated a formal application and public hearing have been satisfactorily adjusted.

The number of telephone systems within the jurisdiction of Ontario of which the Board has record is 539, operating *151,462 telephones, *32,093 miles of pole lead carrying *214,726 miles of wire and representing an investment of about *\$13,000,000.

During the year the following changes were made in the Board's records of telephone systems coming within its jurisdiction:

The plant and assets of the Norfolk and Tillsonburg Telephone Company Limited were acquired by the Southern Ontario Telephone Company Limited.

The plant and assets of the Kerr Line Telephone Company Limited were acquired by the North Renfrew Telephone Company Limited.

The plant and assets of the Capreol Telephone Company Limited were acquired by the Docon Telephones Limited.

The Crediton Rural Telephone System was sold in part to the Municipality of the Township of Hay and the balance to The Bell Telephone Company of Canada.

The Board approved of the transfer of the plant and equipment of the following systems, operating about 658 telephones, to The Bell Telephone Company of Canada:

Rama Mara Telephone Company Limited,

Uhthoff Telephone Company Limited,

Fretts and Brisco Telephone Company Limited,

Section Telephone Association,

Mount Granite Telephone Company Limited,

Ayr Rural Telephone Company Limited,

Lanark and Carleton Counties Telephone Company Limited.

There are ten systems owned and operated by municipalities under the provisions of Part I of "The Telephone Act", viz: The Cities of Fort William and Port Arthur, the Towns of Cochrane, Dryden, Fort Frances, Kenora, Keewatin and Rainy River, and the Townships of Alberton and Caledon.

One hundred and sixteen systems are now established and operating under Part II of "The Telephone Act" and furnishing service in three hundred and fifty-five towns, villages and townships.

There are sixty-three systems owned and operated by individuals or partnerships of less than five persons, three hundred and thirty by Incorporated Telephone Companies, nine by Incorporated Companies other than Telephone Companies, and *eleven by Federal and Provincial Government Departments and Commissions.

In addition to the before-mentioned systems, the Forestry Branch of the Department of Lands and Forests, is operating an extensive system in connection with its work of fire prevention. This system comprises 843 telephone stations, 2,453 miles of pole lead, 953 miles of tree line, and 6,124 miles of wire, the total investment being \$362,842.

Detailed statistics and other information relative to these systems will be found in the appendix to this report, entitled "Telephone Systems, 1948".

JAS. A. McDONALD,

Supervisor of Telephone Systems.

*Note: Data as of December 31st, 1946; statistics for 1947 not yet available.

MEMORANDUM OF LEGISLATION

EXCLUSIVE OF SPECIAL ACTS, UNDER WHICH THE ONTARIO MUNICIPAL BOARD EXERCISES JURISDICTION

Additional Expenditures: By O.S. 1946, C. 66, being a re-enactment of s.s. 1 of Sec. 70 of "The Ontario Municipal Board Act" (R.S.O. 1937, C. 60) and amendments the authority for approval of capital expenditures by way of debenture issues is continued, and in addition authority is given to approve of expenditures which are to be raised in a subsequent year or years, without an issue of debentures.

Annexations: R.S.O. 1937, C. 266, Secs. 16, 17 and Sec. 23 as re-enacted by O.S. 1939, C. 30, Sec. 2, amended by O.S. 1946, C. 60, s. 30. (NOTE: Sec. 20 was repealed O.S. 1946, C. 60, Sec. 2.)

The Corporation of any municipality may, by By-law, ask the Municipal Board for amalgamation or annexation. After a hearing, the Board may make rules and regulations as to the Government, etc., of the municipality as formed.

Any Order of annexation or amalgamation (Subsection 2 of Section 14) shall take effect only after and when confirmed by Act of the Legislature.

Arbitrations: R.S.O. 1937, C. 62, Section 22.

Reference may be made to the Board for the fixing of the amount of compensation to be paid to owners for lands and rights-of-way taken by expropriation under "The Power Commission Act" where parties are not in agreement.

R.S.O. 1937, C. 56, Section 79:

Reference may be made to the Board for the fixing of the amount to be paid by the Department of Highways for land expropriated under "The Highway Improvement Act" where parties are not in agreement.

R.S.O. 1937, C. 56, Section 79a, as re-enacted by O.S. 1945 (1st Session) C. 9, Section 8:

Approval of closing, by the Department of Highways, of certain County, Township of other roads which intersect or run into a controlled access highway.

O.S. 1942, C. 34, Section 41:

An expropriating body may elect that the amount of compensation for lands taken shall be heard and determined by the Ontario Municipal Board.

By Sec. 356a of "The Municipal Act" enacted by O.S. 1946, C. 60, S. 47, a council may designate, by by-law, the Municipal Board as the sole arbitrator.

Assessment Appeals: R.S.O. 1937, C. 273, Sections 83 and 84, amended by O.S. 1946, C. 3, Sections 20 and 21.

The Board may hear an Appeal either from the decision of the County Judge or directly from the Court of Revision respecting the assessment of a telephone company or of a person in territory without county organization in an amount of \$5,000.00 or upwards, or in any other municipality \$10,000.00 or upwards. The appeal may be made by such company or person, the municipal corporation, the Assessor or Assessment Commissioner or any person assessed. "The Grand River Conservation Act"—O.S. 1938, C. 15, Sec. 15:

The Board is appointed to hear appeals from the findings of the Board of Engineers as to the compensation to be paid to owners for lands expropriated; also appeals from the Board of Engineers as to the amounts to be contributed by the separate municipalities toward the cost of the work.

Assessments, Fixed: O.S. 1942, C. 34, Section 42 (5 and 6):

The Ontario Municipal Board may, upon the application of certain municipalities approve of an agreement between the municipalities and Wartime Housing Limited, or may amend or vary the agreement for fixing the assessment and taxation of lands and houses erected by Wartime Housing Limited.

The Beaches and River Beds Act—R.S.O. 1937, C. 34:

Gravel may be taken from shores or streams, if approval therefor is given by the Ontario Municipal Board.

Bridges-R.S.O. 1937, C. 266, Section 480 (9):

The Ontario Municipal Board may grant relief from the rebuilding of a bridge, R.S.O. 1937, C. 266, Section 483:

Provides for the issue of debentures for re-flooring of a bridge, with the approval of the Ontario Municipal Board, without a vote of the ratepayers. R.S.O. 1937, C. 56, Section 30:

Where there is a disagreement between two or more municipalities in respect to a bridge or highway on a boundary line between Counties, the matter shall be decided by the Ontario Municipal Board.

Buses—R.S.O. 1937, C. 266, s. 424 (4):

The Ontario Municipal Board may from time to time increase or decrease the rates and fares charged once in any one year within a defined area within a Township on the application of the Township in consequence of any deficit or surplus resulting in the operation of the service.

By-Laws-R.S.O. 1937, C. 266, Section 560:

A municipality may apply to the Board for approval as to the form of a municipal by-law.

Capital Expenditures—R.S.O. 1937, C. 60, Section 70 (s.s. 1, re-enacted O.S. 1946, C. 66).

A municipality shall not proceed with or authorize any works or provide any moneys for any undertaking, the cost of which is to be provided for by the issue of debentures, until the approval of the Ontario Municipal Board has been obtained.

Cemeteries—R.S.O. 1937, C. 351, Sections 45 and 46:

A municipality may with the approval of the Ontario Municipal Board incorporate additional lands for cemeteries and close road allowances.

Closing of Roads—R.S.O. 1937, C. 56, Section 79:

Subject to the approval of the Ontario Municipal Board, the Department of Highways may close any County, Township or other road which intersects or runs into a Divided Highway.

The Damage by Fumes Arbitration Act—R.S.O. 1937, C. 51:

Under Section 4a of this Act as enacted by O.S. 1946, C. 16, s. 4 an appeal may be made to this Board from the Award of the Arbitrator fixing the damages to properties occasioned by sulphur fumes arising from the smelting or roasting of nickle-copper ore.

Detachment of Farm Lands—R.S.O. 1937, C. 266, Section 21:

The Board may hear and determine any application for the detachment of Farm Lands from any municipality.

Dissolution of Corporations—R.S.O. 1937, C. 266, Section 44 (e) enacted by O.S. 1943, C. 16, S. 2:

Upon the application of any municipality, the Board may dissolve the municipality after a public hearing.

Extension of Debenture Issue Period Under Money By-Law-R.S.O. 1937, C. 266, Section 305 (11 and 12):

The Board may, upon the application of any municipality, extend a debenture issue period.

Extension of Time to Pass Money By-Laws—R.S.O. 1937, C. 266, Section 297.

Where a By-Low has been passed with the approval of ratepayers, it must be passed by the Council within six weeks after the voting, but by subsection 5 the Municipal Board may, upon the application of the Council extend the time for the passing of the By-law.

The Federal District Commission Act—R.S.O. 1937, C. 276, Section 1:

The Councils of Ottawa, Carlton, Russell and any municipality in either of the said Counties, may, with the approval of the Municipal Board, convey to the Federal District Commission any Highway, etc., vested in the municipality upon such terms and subject to such conditions as may be agreed upon.

Fire Halls—Purchase of land for and erection thereof and purchase of Fire Engines by Urban Municipalities: R.S.O. 1937, C. 266, Section 407 (16) (b):

The Board's approval is required to an issue of debentures when debentures issued for the same purpose under a By-law previously passed are outstanding and unpaid.

Floating Indebtedness—R.S.O. 1937, C. 60, Section 59 (d), as re-enacted by O.S. 1939, C. 47, Section 26 (1) and amended by O.S. 1941, C. 40, Section 1.

The Board is given power to allow a municipality to issue debentures to cover a floating indebtedness.

Under the amendment of 1941, it is also provided that a municipality may issue debentures with the approval of the Board, but without the assent of the electors, for retiring debentures which are redeemable before maturity, and raising a sum sufficient to pay off the said debentures.

Franchise, Granting of—R.S.O. 1937, C. 277, Sections 4, 6 and 8.

A franchise for the construction of railway, or gas, heat, or light, shall not be granted by a municipality without the approval of the Board, after a hearing.

Fuel and Food—R.S.O. 1937, C. 266, Section 405 (38).

By-laws of municipalities may be passed for buying, storing and selling of fuel and food, providing the money therefor, with the approval of the Board.

Highways—R.S.O. 1937, C. 266, Section 468:

A County may abandon a Highway with the approval of the Board.

R.S.O. 1937, C. 266, Section 348 (12):

The Board may appoint one of three arbitrators for the fixing of compensation payable in respect to street widening.

R.S.O. 1937, C. 266, Section 502 (2):

A municipality may with the approval of the Board, open or establish a highway of less width than 66'.

R.S.O. 1937, C. 270, Section 12:

In lieu of the approval of the interested municipalities, no highway shall be established, laid out, widened, altered, diverted, stopped up or closed in any urban zone or joint urban zone, without the approval of the Board.

- Improvement Districts—Erection of. R.S.O. 1937, C. 266, Sec. 44a, enacted by O.S. 1943, C. 16, Sections 1 and 2, amended by O.S. 1946, C. 60, S. 8.
- Increased Borrowings by Municipal Councils—R.S.O. 1937, Chapter 266, Section 339 (2):

Provides with the approval of the Board for an increase in the amount to be borrowed by a Municipal Council in any one year to meet current expenses until taxes are collected.

Incorporation of Towns in Unorganized Territory—R.S.O. 1937, C. 266, Section 18, as amended by O.S. 1946, C. 60, S. 1.

Subject to Subsection (2) of Section 13 of the same Act.

Interest Decrease or Increase on Municipal Debentures—R.S.O. 1937, C. 255, Section 310 (as re-enacted by O.S. 1938, C. 22, Section 6):

Provides for a decrease or increase in the rate of interest on any municipal debentures with the Board's approval.

Interurban Administrative Areas—O.S. 1946, C. 60, Section 23 (b):

Approval of Board of application by municipality to enlarge, reduce, or dissolve any existing fire, police, sewage, water, transportion, local improvement or street lighting area or any other area created for any municipal purpose or to amalgamate any such area with any other area of a similar nature.

Land Subdivision Plans-O.S. 1946, C. 71, Section 28:

Where owners of lands, interested municipalities and Department of Planning & Development are not in agreement the Minister may, and on application shall refer the application to the Board for its decision.

License Fee for Bicycles—R.S.O. 1937, C. 266, Section 420 (11) as amended by O.S. 1941, C. 35, Section 15 (2):

The fixing of an annual fee for the operation of bicycles in municipalities by residents thereof must be approved by the Board.

The Local Improvement Act—R.S.O. 1937, C. 269:

Section 8:

Approval of the Board of Construction By-laws for local improvements. Section 27 (3):

Fixing of the apportionment of the cost by the Board.

Section 29 (3):

Approval by the Board of a By-law for the opening, etc., of lanes.

Section 29 (3):

Provides for the hearing by the Board of Claims for exemption from assessment for the opening, etc., of lanes.

Section 19:

Approval of the Board as to the deviation in the course or location of local improvements.

Section 6:

Hearing by the Board of objections against widening or extension of a street, or construction of a bridge.

Section 18:

A portion of the work may be abandoned with the approval of the Board.

Section 10 (2):

Where petitions are filed against a local improvement work, such objections will be considered by the Board.

Section 64 (a), enacted by O.S. 1946, C. 49, S. 4:

A local improvement area may, with the Board's approval, be enlarged, reduced, altered, dissolved or amalgamated with any other such area.

Ontario Municipalities Fund—R.S.O. 1937, C. 266, Sec. 330, as re-enacted by O.S. 1941, C. 35, Section 9:

Disposition of moneys held by a Council in the Ontario Municipalities Fund for educational purposes, with the approval of the Board.

Parks-R.S.O. 1937, C. 285, Section 12:

Approval of By-laws setting aside a part of a Park for athletic purposes.

The Public Utilities Act—R.S.O. 1937, C. 286, Section 32, s.s. (5):

Gives power to a municipality, with the approval of the Board, for disposing of properties purchased for the Public Utilities Commission and not required for public utilities.

The Public Health Act—R.S.O. 1937, Section 101, s.s. 11 to 19:

Provides for an application to the Municipal Board for an Order prescribing the manner in which a sewerage project shall be carried on. The Board has power to stop up and close highways, impose such terms and conditions as may seem just and remove restrictions where necessary, and fix compensation to be paid.

Railways-R.S.O. 1937, C. 259.

Redemption of Debentures—R.S.O. 1937, C. 266, Section 305 (15) (d): Approval of notice of.

Repeal of Money By-Laws as to Residue Not Required—R.S.O. 1937, C. 266, Section 311 (2).

Restricted Areas—R.S.O. 1937, C. 266, Section 406, as re-enacted by O.S. 1941, C. 35, Section 13, and amended by O.S. 1943, C. 16, s. 11 and O.S. 1946, C. 60, Sec. 50:

Approval of By-laws of municipalities prohibiting the use of land and the erection and use of buildings for certain purposes and regulating the cost and the type of construction thereof, which By-laws shall not come into force until approval is granted. By subsection 9 (a), enacted by O.S. 1946, C. 60, Sec. 50 s.s. 8, the Board may hear an appeal from an applicant for an amendment to a Restricted Area By-law when the Council neglects or refuses to act within a certain specified time.

Retirement of Unmatured Debentures—R.S.O. 1937, C. 60 as re-enacted by O.S. 1939, C. 47, Section 26, amended by O.S. 1941, C. 40, Section 1:

This amendment to the Ontario Municipal Board Act, gives the Board power to approve of the issue of debentures, without the assent of the electors, for the retirement of debentures which are redeemable before maturity, and of the issue of debentures to pay for the money required for such purposes.

Sewage and Sewage Disposal Works—R.S.O. 1937, C. 299, Section 101:

Subsection 12 provides for the stopping up of a highway for the purpose of sewage system, with the approval of the Board, upon an application made to it for such purpose, and imposing terms and conditions.

Sinking Funds—R.S.O. 1937. C. 266, Section 326:

Approval of the Board is necessary to the purchase of debentures by a municipality from its Sinking Fund. The total investment of Sinking Funds of a municipality in its own debentures is limited to 25% of the total fund. O.S. 1939, C. 30, Section 18, Sec. 321 (a) amended by O.S. 1946, C. 60, S. 44:

Use of surplus in the Sinking Funds, where there is sufficient to take care of all the debentures.

O.S. 1939, C. 30, Section 18:

Authority to a municipality, with the approval of the Board, to dispense with a further levy where the amount in the Sinking Fund is sufficient to take care of the debentures.

Sterling, Issue of Debentures in-R.S.O. 1937, C. 266, Section 306 (3):

Debentures may be issued in sterling with the approval of the Board.

Suburban area Development Act-R.S.O. 1937, C. 271, Section 6: .

Approval of the Board of an agreement with reference to setting up of a Suburban area development.

Supervision of Municipalities—R.S.O. 1937, C. 59.

Tariff of Board's Fees—R.S.O. 1937, C. 60, Section 107, as re-enacted by O.S. 1939, C. 47, Sec. 26 (3):

The fixing by the Board, with the approval of the Lieutenant-Governor-in-Council, of a tariff of fees to be collected by the Board for the performance of its duties.

Tax Rate—R.S.O. 1937, C. 266, Section 315, subsection (2):

A municipality may levy a sum greater than $2\frac{1}{2}\%$ on the dollar of the assessed value of properties, with the approval of the Board. This section provides that a Council may not levy more than $2\frac{1}{2}\%$ on the dollar for municipal purposes.

Telephones—R.S.O. 1937, C. 261:

Provides for the Board's jurisdiction over municipal and other telephones within the province.

Towns Erected Into Cities—R.S.O. 1937, C. 266, Section 19 (amended O.S. 1944, C. 39, Section 2):

The Municipal Board may erect a town having a population of not less than 15,000 into a City and declare the name which it is to bear.

Township—R.S.O. 1937, C. 266, Section 30:

Separation, by the Municipal Board, of a junior Township in unorganized territory from a union of Townships.

Townships Erected Into Cities—R.S.O. 1937, C. 266, Section 19 (amended O.S. 1944, C. 39, Section 2):

The Municipal Board may erect a township having a population of not less than 25,000 into a City and declare the name which it is to bear.

Townships, Incorporation of—R.S.O. 1937, C. 266, S. 24 (re-enacted O.S. 1944, C. 39, Sec. 3), amended O.S. 1946, C. 60, S. 6.

Townships, Unorganized—R.S.O. 1937, C. 266, Section 426:

Passing of By-laws by the Council of a Township in an unorganized territory, having a population of not less than 5,000 and which has been declared, by the Order of the Municipal Board, to be a Township, and the erection of such Township or part of it into a Town.

Validation of Debenture By-Laws-R.S.O. 1937, C. 60, Section 64:

Authority to validate debenture By-laws and to certify the debentures to be issued thereunder. After the issue of the validation Order the By-law is binding upon the Corporation and its validity may not be contested or questioned for any cause whatsoever.

Villages Erected Into Towns—R.S.O. 1937, C. 266, Section 19: (amended O.S. 1944, C. 39, Section 2):

The Municipal Board may erect a village having a population of not less than 2,000 into a Town and declare the name which it is to bear.

Villages, Police—R.S.O. 1937, C. 266, Section 527 (4):

Extension of the boundaries of Police Villages—where County Council does not act. (R.S.O. 1937, C. 266, Section 526 (3).)

Approval of formation of Police Villages-where County Council does not act.

Vote of Electors—R.S.O. 1937, C. 60, Section 69.

The Board may, where the assent of the electors qualified to vote on Money By-laws is required, dispense with the vote of the ratepayers after due enquiry, providing that a Public Hearing is held and that all the members of the Board are unanimous in dispensing with such vote.

Wards, Division of Cities, Etc., Into—R.S.O. 1937, C. 266, Section 44, as re-enacted by O.S. 1946, C. 60, S. 7.

The division of Cities and Towns into Wards, with the approval of the Municipal Board.

Water Rates, Fixing of—R.S.O. 1937, C. 60, Sec. 59 (ii), enacted by O.S. 1940, C. 20, Section 1:

The determination by the Board of the application by any municipality to confirm, vary, or fix rates charged or to be charged in connection with water supplied thereto by any other municipality.

Weigh Scales, and Weighing of Coal-R.S.O. 1937, C. 266, Section 406 (11).

With the approval of the Municipal Board, and within the limitations, restrictions and under the conditions prescribed by an Order of the Board,

Works Ordered by the Dominion Railway Board and the Ontario Municipal Board—R.S.O. 1937, C. 266, Section 307 (3) (4):

By-laws may be passed by municipalities as to the weighing of coal and coke.

Approval of the borrowing of money by a municipality for works ordered by either of these Boards.

In addition there is much legislation which comes before the Private Bills Committee, referring particularly to the municipalities asking for such legislation, in which certain matters are referred to the Board for approval.





DECISIONS OF THE BOARD

ARBITRATIONS

P.F. B-4298.

IN THE MATTER of Clause (ii) of Section 59 of "The Ontario Municipal Board Act" (R.S.O. 1937, Chapter 60), as enacted by O.S. 1940, Chapter 20, Section 1.

BETWEEN:

LAKESHORE WATER COMMISSION

Applicant

AND

THE OAKVILLE WATER AND LIGHT COMMISSION

Respondent

(Fixing of rates to be charged to the Applicant for water supplied by the Respondent.)

W. Judson, Esq. Counsel for the Applicant

F. E. Robinson, Esq., K.C., and

H. E. Manning Esq., K.C. Counsel for the Respondent

DECISION OF THE BOARD

This is an application by the Lakeshore Water Commission for the fixing by the Ontario Municipal Board of the rates to be charged by the Oakville Water and Light Commission for water supplied and delivered to master meters located at points at or near the boundaries of the Town of Oakville.

An appointment was given for the 11th day of December, 1945, for hearing this application. Mr. Judson appeared for the Lakeshore Water Commission and Mr. Robinson for Oakville Water and Light Commission.

After general submissions were made, the case was adjourned and it was agreed that written submissions would be made to the Board. These submissions were ultimately made to the Board and exchanged between the parties and an appointment for hearing was fixed for June 4th, 1947, at which time Mr. Wilfred Judson appeared for the Lakeshore Water Commission and Mr. H. E. Manning for Oakville Water and Light Commission.

Mr. Judson had retained Mr. Wm. Storrie, Consulting Engineer and Mr. Storrie had submitted Briefs as per Exhibits 1, 3 and 5.

Mr. Manning was supported by Mr G. H. Power, Engineer to the Oakville Water and Light Commission and Mr. W. B. Redfern, Consulting Engineer.

Mr. Power submitted his Brief (Exhibits 2, 8 and 9).

Mr. Redfern submitted Exhibit 4 and Schedule C.

Mr. Storric, in his Brief of March 20th, 1946, (Exhibit 1) states that the Township of Trafalgar (later became Lakeshore Water Commission) in June, 1926, entered into an agreement with the Oakville Water and Light Commission for a supply of water to services in the Township (to be metered) at a rate of 50 cents per 1,000 imperial gallons of water as registered at the master meters situated at the Town limits, with the proviso that should the registration of the master meter exceed that of the registration of all the domestic meters in the Township, then such excess quantity was to be paid by the Township at a rate of 35 cents per 1,000 gallons. It was further

provided that the said rate of 50 cents per 1,000 gallons "shall be altered from time to time in direct proportion to any alteration made in the water rates for domestic use in the Town of Oakville", and "This agreement shall remain in force and be binding upon the parties hereto for five years from the date hereof". This apparently is the only agreement entered into.

From time to time, it appears, the Oakville Commission made reductions in this rate voluntarily, as follows:

From 1930 to April 1938, the rate paid was 35 cents net per 1,000 gallons. The next four quarterly bills were at 35 cents less ten per cent discount or 31.5 cents net. The following four quarterly bills were rendered at 35 cents less twenty per cent of 28 cents net. From April 1940 to July 1945 the rate was 35 cents less twenty-five per cent or 26.25 cents net. Since July 1st, 1945, the rate has been 22 cents net per 1,000 gallons.

The Township during the last two years has used approximately three million gallons quarterly and Mr. Storrie submits that such an individual consumer in the Town of Oakville would pay approximately \$245.00 per quarter net, while the Township under the 22 cent rate established on July 1st, 1945, pays \$660.00.

In Table No. 1 of Exhibit 5 Mr. Storrie produces the cost of producing water in Oakville for the years 1942 to 1946, inclusive.

	Maintenance and		
Year	Operation	Debt	Total
1942	11.98	6.63	18.61
1943	9.71	3.80	13.51
1944	9.48	2.21	11.69
1945	7.57	0	7.57
1946	8.21	0	8.21

From this he deduces that the present cost of producing water is 8 cents per 1,000 gallons, observing that in the years 1945 and 1946 there were no debt charges. In those two years the percentage of the water metered to the Township was 7 and 6.8 per cent, respectively, of the total water pumped.

Page 5 of Exhibit 1-Mr. Storrie deduces that "in the five year period, 1940 to 1944, inclusive, the Township used 6.23 per cent of the total water pumped and paid 11 per cent of the total revenue received by the Commission".

Page 8 of Exhibit 5-Mr. Storrie reports "all water is sold by meter in the Township at a rate of 35 cents per 1,000 gallons with a discount of 10 per cent for prompt payment. Thus the rate to all consumers in the Township is 31.5 cents net per 1,000 gallons. In addition to the water rate all consumers in the Township pay an annual rate per foot frontage for mains constructed under The Local Improvement Act, and when the revenue received from same is not sufficient to meet the expenditure a mill rate is put on the general tax rate for water works purposes".

Mr. Storrie cites the following rates:

- (1) City of Toronto produces water around 12 cents per 1,000 gallons and sells to several outside municipalities at 16 cents or 331/3 per cent above cost of producing.
- (2) City of Ottawa produced water over a five year period for 12.48 cents per 1,000 gallons and the Ontario Municipal Board awarded 50 per cent added charges, making 18.72 cents per 1,000 gallons. (Decision January 7th, 1943.)
- (3) Windsor Utilities Commission sells to Sandwich East at 10 per cent in excess of cost of production and to Sandwich West, at 15 per cent added.
- (4) Town of Trenton sold to Airport at 12.8 cents where cost of producing was 12.2 cents.
- (5) Township of Scarborough sold to East York for 17 cents per 1,000, reduced last year to 16 cents, where cost of producing varied from 19.4 cents to 15.5 cents.

Mr. Storrie recommends a rate of 16 cents per 1,000 gallons with 1 cent discount for prompt payment as being reasonable and equitable to both parties (Exhibit 1, page

10), and in later report, January 11th, 1947 (Exhibit 3), recommends 13 cents per 1,000 gallons with 1 cent reduction for prompt payment.

Mr. Storrie also referred to serious wastage of water pumped for various purposes, such as overflowing from reservoir, large use in Sewage Treatment Plant, flushing and leakage and through failure to test meters, etc. He states that unaccounted for water should not exceed 5 per cent of the total water pumped and that the average loss through unaccounted for water in the Lakeshore system over a five year period is 9.6 per cent of the amount metered.

Mr. Manning calls:

C. H. Powers, Engineer to the Oakville Commission who has submitted his Brief (Exhibit 2). Agreements were entered into with the Township of Trafalgar in 1926 and again in 1930 and no renewal or formal agreement since. The policy of the Oakville Commission for some years had been to refuse to increase the debenture debt and to pay for all extensions, replacements and improvements from the profits of the joint operation of the water and light utilities. He therefore considered it right and proper to charge the operating costs of the water works with a sum equal to five per cent of such expenditures as a depreciation, and in lieu of debenture debt payments. This amounted to \$5,136.80 in 1940 and \$5,672.81 in 1944. (Exhibit 2, page 7.) During this period he states the average price received by the Commission was 21.97 cents per 1,000 gallons in 1940 and down to 16.20 cents in 1944, due to declining debenture debt charges, and that this represented a loss per 1,000 gallons of 5.49 cents in 1940 to .52 cents in 1944. His calculations for cost of water per 1,000 gallons used and sold were 27.46 cents for 1940 to 16.72 cents for 1944. This latter cost was arrived at by using the total number of gallons pumped less 19.000,000 gallons as the allowable loss in mains and pumphouse.

For the year 1945 Mr. Power calculates a cost per 1,000 gallons used and sold at 13.41 cents. In arriving at this figure he estimated 20,000,000 gallons as allowable loss and deducted this from total water pumped and divided this amount into the total cost, and this included an item of \$6,081.17 as being 5 per cent of \$121,633.30, being the total amount constructed from revenue of Water and Light Commission to the end of 1945. Also included in costs of operation is an item of \$1,989.08 as depreciation on assets financed.

Mr. Power states that three debenture by-laws 670, 882 and 905, were assumed by the Town of Oakville and were not charged to the operating costs of the water works, although he states they should have been. He states that approximately one-third of the present water works system of Oakville has been constructed from profits of the Commission's other utility. He contends that the Oakville Water Works System has always been operated at a loss until now that the debenture debt is paid and a favourable balance may be shown. He says that the Oakville Commission is facing an expenditure of \$200,000 for installing a filtration plant and other necessary extensions and the repayment of this debt will materially increase the cost of production.

Mr. Power contends that the present rate of 22 cents is fair as a residential rate and that a second rate might be considered for purely industrial purposes in the Township.

Mr. Manning calls:

N. B. Redfern, Consulting Engineer, who has submitted Brief (Exhibit 4). Mr. Redfern arrives at a cost of producing water of 8.21 cents per 1,000 gallons for 1946 by the same method as used by Mr. Storrie. Then he estimated the fair value of the water works system which is used to supply Trafalgar Township with water at \$350,000. He estimates a remaining life of the present plant at a period of thirty years on the average, and using an interest rate of 2¾ per cent, calculates that approximately 5 per cent or the sum of \$17,500 would be required annually to repay this debt. On the basis of the amount of water pumped in 1946 (203,435,000 gallons) he figures an amount for debt or fixed charges of 8.6 cents per 1,000 gallons. On similar calculation he arrives at 9.5 cents for 1945. By addition of cost of operation of 7.57 cents for 1945 and 8.21 cents for 1946 he arrives at a total cost of 17.07 cents for 1945 and 16.81 cents for 1946.

Mr. Judson in argument outlined the three methods used by the three witnesses in calculating operating costs. He referred to the Board's decision re Ottawa rates to

outside municipalities and he stated that the Township expected to pay a rate on the basis of cost of producing water, including debt charges where there are any.

Mr. Manning argued that the fixing of the proper rate to be charged to the Township is not a question of what Oakville does with the water pumped nor what it charges Oakville citizens nor what is most favourable rate in Oakville. He referred to the constantly recurring capital expenditures in larger systems that had the effect of keeping debt requirements fairly constant. He contended that the owner of the system is entitled to be compensated for capital invested. He referred to the Toronto-York case where Toronto's cost of producing water included more than 50 per cent for debt charges. He suggested a principle similar to that employed in maintenance of gaols and court houses where an amount such as $5\frac{1}{2}$ per cent covers interest and depreciation.

The Board finds:

(1) That the most satisfactory basis for arriving at a rate is to use the cost of producing the water by dividing the annual total expenditure involved in the production of the water by the annual total volume of the water produced.

By accepting this basis, the matter of what the producer does with its water or what charges are made for same are eliminated, and the Board believes, properly so.

(2) That debt charges created for the construction of a water works system are a necessary and proper charge against the cost of producing water.

In this case, the debt against the system has all been retired and in addition some \$141,266 has been invested in the system from other sources of income.

The Applicant Township contends their rate should be given the benefit of this fact that the system is debt free and agrees that when new debt is created, the annual debt charges will be a charge against operating costs and will result in a higher rate to the Township.

The Respondent contends that in lieu of debt charges an amount of 5 per cent of the appraised value of the system used to supply the water to the Township should be used to arrive at the proper cost of production for the purpose of fixing this rate.

The Board is of the opinion that it is in the interests of both parties to have a stable rate, at least for five year periods.

Fixed charges in 1925 and 1926 are given by Mr. Power as \$15,536.94 (Exhibit 2, page 4).

In 1940 annual repayments \$13,557.36 plus \$5,136.80, being 5 per cent depreciation on investment of monies from other sources of income, made a total of 18,694.16 (Exhibit 2, page 7).

Mr. Redfern calculates 5 per cent of \$350,000 or \$17,500 as annual charge on a thirty year basis.

(3) It appears to be agreed by both parties that some percentage should be arrived at, to be added to the cost of production, to cover contingencies and profit.

Reference has been made to the Board's decision in the Ottawa Rates case re 50 per cent addition to net cost of producing water and this has been referred to as profit. The Board's decision referred to 50 per cent being added to cover all contingencies including leakage. In Toronto-York case 33½ per cent was used. (Exhibit 1, page 9.) Windsor Utilities Commission used 10 per cent and 15 per cent. (Exhibit 1, page 9.)

These rates would appear to have been arrived at by agreement and the considerations given thereto are not now available.

The rate now charged to Lakeshore Water Commission is 22 cents per 1,000 gallons and if the 33½ per cent surcharge were used this would give a base rate of 16.5 cents. Cost of producing water now that debt charges are fully paid is agreed to be approximately 8 cents per 1,000 gallons. This would leave 8.5 cents for debt charges, or 5 per cent interest on appraised value or depreciation. In view of the fact that debt charges in 1941 were 9.25 cents per 1,000 gallons (Exhibit 3, page 4), before declining to nil in 1945, the above amount of 8.5 cents would not appear to be unreasonable.

The Board therefore finds the rate of 22 cents per 1,000 gallons for water delivered through the master meters to the Lakeshore Water Commission is reasonable in view of all the evidence submitted and orders that such rate be fixed for a period of five years, being the years 1947 to 1951, inclusive.

The Board directs that its fee of \$75.00 herein be paid by the Applicant, the Lakeshore Water Commission.

DATED at Toronto the 8th day of August, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

P.F. B-6067.

IN THE MATTER of Section 356 (a) of "The Municipal Amendment Act" as enacted by Ontario Statutes, 1946, Chapter 60, Section 47, and IN THE MATTER of an application by the Corporation of the City of London for determination by the Ontario Municipal Board of compensation to be paid to Florence Ariel Stroh, Elsie May Merriam and Irene Daisy Merriam, owners, in respect to land expropriated by the said Corporation, being Lot Number 2, on the east side of Elliott Street, as shown upon Registered Plan Number 251.

Counsel:

Miss E. Harrison, B.A. For the Claimants H. R. Davidson, Esq. For the Respondent

DECISION OF THE BOARD

This is an application for the determination by the Ontario Municipal Board of the amount of compensation to be paid to the claimants in respect to the expropriation by the City of London of part of Lot No. 2 on the east side of Elliott Street in the City of London.

The Municipal Corporation of the City of London applied to His Honour Judge MacRae for an Order pursuant to Section 346 of "The Municipal Act" for possession of the said lands, and by virtue of the Order dated the 9th September, 1946, it was ordered that on payment into Court of the sum of \$250 the said Corporation might enter upon the said lands and take possession thereof. The said sum of \$250 was paid into Court on the 14th day of September, 1946, and the Corporation took possession of the said lands on the 30th day of September, 1946.

The claimants filed a claim asking that they be paid \$200 for the land, \$250 for improvements made to the lands by them, and an unstated amount for loss of revenue.

The lot in question is part of a large block of land situated between Elliott Street, Oxford Street, Gammage Street and Grosvenor Street in the City of London, which with the exception of several lots on Oxford Street and Grosvenor Street on which houses had been erected, was required by the City for a housing scheme.

The land is low and marshy especially at the northerly portion, and drained from the north to the south to an open ditch. A few years ago an application was made to the Ontario Municipal Board for permission to issue debentures for the construction of a sewer to and through the property, but the application was refused because of the arrears of taxes and the fact that such a large expenditure was not warranted. The easterly portion of the block has been taken over by the City for arrears of taxes, and although lots in that section have for some time been offered for sale for \$50 each, very few have been sold, and those sold were at the north and south ends of the block. The only successful development of these lands was a housing scheme, such as is now being carried on, in which all lots are being built up, and construction of sewers and other services are warranted.

There are sufficient lots which are served within the City to take care generally of necessary building operations.

The property in question is a lot having a frontage of 30 feet on Elliott Street and a depth of 130 feet. It is assessed at \$90 and was purchased in 1929 for \$150. The only building on it is a small tool shed, 6 by 10. It has been operated by the owner as a garden plot, and on it have been planted some cedar trees, berry bushes and one grape vine. The claimants say they picked the fruit and berries and sold same.

A. C. L. Mercer, who says he is a professional valuator, valued the land at \$200 and the trees and bushes at \$250. He valued the land at \$200 for building purposes, but said that if used for building purposes it would be necessary to destroy most of the trees and shrubs.

For the respondent, it was shown that the City was offering lots at \$50 each, and that the lot in question could be serviced only at a great expense. These witnesses were of the opinion that this lot is not worth more than \$50 and even with the bushes, trees and fence it is not worth more than \$200.

Kenneth H. Frazer called by the respondent, said that in his opinion the land with the trees, hedge bushes and shed, would not be worth more than \$250 and that it would be difficult to sell it for that price.

Having carefully considered the evidence, the Board is of the opinion that the claimants should be paid \$250 for the land with the improvements thereon. They should also be paid \$25 for forcible taking and interest at 5% on \$275 from 30th September, 1946 to date of payment.

The sum of \$250 paid into Court shall be paid out to the respondent.

There will be no costs.

The respondent shall pay to the Board the sum of \$25 in full of the Board's

Judgment accordingly.

fees.

DATED the 1st day of August, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

P.F. B-6068.

IN THE MATTER of Section 356 (a) of "The Municipal Amendment Act" as enacted by Ontario Statutes, 1946, Chapter 60, Section 47, and IN THE MATTER of an application by the Corporation of the City of London for determination by the Ontario Municipal Board of compensation to be paid to Ethel M. Buchanan, Vera L. Bailey and Stanley Logg, owners, in respect to land expropriated by the said Corporation, being Lot Number 1 on the east side of Elliott Street, as shown upon Registered Plan Number 251.

COUNSEL:

Sai	nue	el Lerner, l	Esq.,	and					
В.	A.	Ramsay, E	.sq			For	the	Claimants	S
H.	R.	Davidson,	Esq.		 F	or tl	he R	espondent	t

DECISION OF THE BOARD

The claimants are the owners of parts of Lots one and two west of Oxford street in the City of London, which lands contain about an acre and are more fully described in the Order of His Honour Judge MacRae dated the 9th day of December, 1946, and which lands are a part of an area expropriated by the City of London for housing purposes.

Possession of the said lands was taken by the City on the 9th day of December, 1946, when the sum of \$5,500 was, pursuant to the said Order of His Honour Judge MacRae, paid into Court.

This block of land lying between Elliott, Oxford, Gammage and Grosvenor Streets and being lots 1, 2 and 3, west side of Elliott Street and 1, 2 and 3 east side of Gammage Street, is low, and except portions lying north of Oxford Street and south of Grosvenor Street, which are somewhat higher than the other, has not been developed owing to the cost of providing sewers and other drainage.

In the evidence it was suggested that if Brampton Street were opened up through this property it would provide forty-eight forty foot lots, twenty-four on Elliott Street and twenty-four on Brampton Street. It is estimated by the City that to provide the services to this area would cost each lot \$578 as local improvements and the cost to the City for each lot would be \$213. In addition to this the cost of constructing a road on the extensions of Grosvenor Street would be very high owing to the land being low.

E. Walter Gidley, a witness called by the claimants, estimated that if Brampton Street were opened up the owner should receive \$6 per foot for lots on both Brampton and Elliott Streets, or \$240 for a forty foot lot. Add to this \$578 for services and the cost to the purchaser would be \$818 for each forty foot lot. The City is now offering lots in this area for \$50 to anyone who will erect a house (no sewer). M. B. Percival, another London Real Estate agent, valued the lots fronting on Elliott Street at \$7 per foot and lots fronting on Brampton Street at \$4 per foot. In his opinion, if the services were put in, forty foot lots on Elliott Street would sell for \$800.

The evidence convinces the Board that even if services could be provided, this area could be developed only for low cost housing, and such housing could not carry the excessive cost of providing the services, unless the whole area were developed as a unit.

The ten acres to the east of the claimants' property has been taken over by the City for arrears of taxes and has been held by the City for many years.

Called on behalf of the City, Raymond Ashton, Associate Assessment Commissioner, said that the City has 2,718 vacant lots, taken for arrears of taxes, which are for sale, and private owners hold 2,369 vacant lots in London.

Mr. Graham, Real Estate agent, London, said that this area has had little appeal to the home builder. It is low and transportation is not convenient. He valued the property at \$5,400. He considered that subdivision was the best use, but the value he placed on lots was \$100 to \$125 each, although he thought this was "plenty high", and in his opinion, only a builder who could complete the whole development within two years would consider paying that price.

Mr. Frazer, another Real Estate agent, London, said that in his opinion this land is not worth more than \$5,500.

Stanley Legg, one of the claimants said that he had erected a house on Oxford Street some years ago, and because he thought Brampton Street would some day be opened through the area, built his garage facing on the area that would be Brampton Street. He claimed he was therefore damaged because Brampton Street will not now be opened. The Board can see no justification for this claim.

It has not been shown what use, if any, had been made by the owners of this land prior to expropriation and no claim has been made out for damages for severance or for compulsory taking.

Having carefully considered the evidence adduced and what was alleged by Counsel, the Board finds that the value of the said lands is \$5,500, the amount paid into Court.

Having refused to accept the amount so paid into Court, the claimants are not entitled to costs.

An Order shall go providing for the payment out of Court to the claimants of the sum of \$5,500 with interest at 5% thereon from 30th of September, 1946, to date of payment, in full payment for the lands so expropriated.

The respondent shall pay to the Board the sum of \$25 in full of the Board's fees.

DATED at Toronto this 31st day of July, 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

P.F. B-6069.

IN THE MATTER of Section 356 (a) of "The Municipal Amendment Act" as enacted by Ontario Statutes, 1946, Chapter 60, Section 47, and IN THE MATTER of an application by the Corporation of the City of London for determination by the Ontario Municipal Board of compensation to be paid to Martin Connolly and Mary Connolly, owners, in respect to land expropriated by the said Corporation being Lot Number 3 on the east side of Elliott Street, as shown upon Registered Plan Number 251.

Counsel:

G.	L.	Mitchell,	Esq.,	K.C.	 F	or t	he	Claimants
H.	R.	Davidson	, Esq.		 For	the	R	espondent.

DECISION OF THE BOARD

This is an application for determination by the Ontario Municipal Board of the amount to be paid to the claimants in respect to the expropriation by the City of London of Lot No. 3 on the east side of Elliott Street in the City of London.

Pursuant to an Order of His Honour Judge MacRae, Judge of the County Court of the County of Middlesex, dated the 9th day of September, 1946, the respondent paid into Court the sum of \$5,750 and took possession of the said lands on the 30th September, 1946.

The parcel in question containing about 4¾ acres is part of an area between Oxford, Elliott, Grosvenor and Gammage Streets in the City of London. The lands facing on Oxford Street and Grosvenor Street had been partially subdivided, but most of the subdivision had been taken by the City for arrears of taxes. Seven houses had been erected on Oxford Street and a few houses had been erected on Grosvenor Street. Between these subdivisions the land was too low and wet for subdivision purposes. The easterly half had been taken by the City for arrears of taxes. The Connolly lands faced on Elliott Street and on them had been erected a four room house in the south-east corner. A tile drain had been constructed along the southerly limit of these lands to a ditch on Elliott Street. The whole area is very flat. An open ditch three feet deep with a fall of about 2½″ to 100 feet had been constructed through the land from east to west near the centre of the Connolly property.

The claimants purchased the property in 1939 for \$839 under an agreement for sale and received the conveyance on March 15th, 1945. When he purchased, the house had been vacant and was in poor repair. In October 1940 he enlisted and remained in the Army until April 11th, 1946. During this time he lived at home, cleared the land, which had been covered with undergrowth, gardened and raised chickens and broilers which he sold to the Hunt Club. He says that in the spring of 1946 he had his land cultivated and by the middle of April had put in crops on three acres, when he was told that the land was to be expropriated. He had planted strawberry and raspberry, currant bushes and asparagus as well as some cherry trees, cedars and red maples. These were near the house,

The claimant says that his property was first class garden land and is worth \$1,000 per acre because of its proximity to the City and its fertility.

Harold Lucas, a market gardener, valued the land at \$1,000 per acre as a market garden owing to the fertility of the soil and its proximity to the City. In cross examination he admitted that when he inspected the property it had been torn up by bulldozers in preparation for the erection of houses and that in his valuation he took no previous sales into consideration, and that he valued the raspberries and strawberries after he had counted the canes at \$1.50 per dozen, and the asparagus plants at \$3.50 per hundred.

W. R. Trott, also a market gardener, inspected this land in the latter part of October 1946, with Lucas, after it had been torn up and levelled and some houses

had been constructed. He said part of the land had not been worked in 1946. He had no experience in sales of market garden lands, but he valued this land at \$1,000 per acre because he valued his market garden land at that price. He admitted that they did not go to the back part of the property. He admitted that as executor of an Estate he sold ten acres with an old house adjoining his farm three years ago for \$4,000.

A. A. McLeish, real estate valuator, said that he examined this property. The house was small, 18 by 18, with a leanto 10 by 26, frame with stucco, four rooms. He valued the land at \$1,000 per acre, \$4,750, the house at \$2,000 and loss and inconvenience at \$1,200. In this he valued the Elliott Street frontage at \$6 per foot, \$2,650, and the frontage on Brampton Street (when extended) at \$3.75 per foot, \$3,320 or \$5.978 as building lots. He said that near Leamington garden land is sold from \$500 to \$1,500 per acre.

In cross examination Mr. McLeish admitted he knew Connolly had paid \$839 for the property in 1939 and that it is better as a market garden than as building lots because it would take longer to get \$8,000 for this as building lots. He said there was water in the cellar when he saw it. He said his experience in market garden sales was in Leamington and the Niagara Peninsula area and that he knows of no higher values than there and that those sections are in a class by themselves. He said this land could not be sold for subdivision purposes.

Mrs. Connolly said that she looked after the finances, and she thinks they spent more than \$4,000 on the house.

For the respondent, Roy W. Garrett, Assistant City Engineer, said that this property is low and not suitable for subdivision purposes and that some years ago a sewer was projected to open up this area, but that due to the high cost of the sewer compared with the assessment of the property and the high tax arrears on same the proposal was turned down.

Mr. Graham, Real Estate valuator, said this property is low, and there has been no development in the area. He said that for market garden purposes people would not pay more than \$200 per acre, and that if it were suitable for subdivision purposes that would be the best use for this property, but it is not suitable for that owing to the cost of sewers and water. He said he had many better properties for sale and that this land, in his opinion, is worth, at the greatest valuation \$3,000 and the house is worth not more than \$2,500. He valued the chicken house at \$250.

Mr. Frazer, a builder and contractor in London, said he examined this property and first valued it by the acre, and later for subdivision purposes, and he found that it would be more valuable for subdivision purposes and divided it into:

30 lot	s a	\$100	each		\$3,000
House				 	2,500

He said the land might be sold to a builder for \$3,000, otherwise it would be hard to sell

The City had many lots in this area which had been taken under tax sale and these lots were being offered by the City to anyone who would erect a house, at \$50 each.

The Board, at the request of the parties, viewed the property. If the claimants have expended \$4,000 on this house as was sworn to by Mrs. Connolly, it is evidence of the futility of trying to renovate an old house. In the opinion of the Board, based on the evidence and its view of the property \$2,500 is its very outside value at the present time.

The Board cannot imagine any person purchasing this 4½ acres of land at \$1,000 per acre for a market garden. It is low, an open ditch runs through it, it is partially flooded in the spring and liable to flooding throughout the year. Nor is it suitable for subdivision owing to the great cost of providing sewers and other services. The lands to the east were cultivated and used for years by a florist and then allowed to go to the City for tax arrears.

The evidence given on behalf of the respondent by one witness gives the value of the land and buildings as \$5,500 and another at \$5,750, and the Board finds that \$5,750 is fair to the claimants.

The respondent shall pay to the claimants the sum of 85,750 for the land and buildings with interest at 5% from the 30th day of September, 1946, to date of payment and 10% or 8575 in addition for compulsory taking, making a total of 86,325 for land and buildings, damages and all other claims of every nature.

The respondent shall pay to the claimants \$100 for costs.

The money paid into Court by the respondent to the credit of this matter shall be paid out to the respondent.

The respondent shall pay to the Board the sum of \$25 in full of the Board's fees.

DATED at Toronto this 1st day of August, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

P.F. B-7042.

IN THE MATTER OF "The Power Commission Act" (R.S.O. 1937, Chapter 62).

BETWEEN:

THOMAS E. ROBERTSON

Claimant

AND

THE HYDRO ELECTRIC POWER COMMISSION OF ONTARIO

Respondent

(Appeal from the Award of Harry W. Cooke, Valuator for the Hydro Electric Power Commission of Ontario, in respect to the exercise of the powers of the Commission as relating to certain property of the Claimant, being described as part of Lots 8 and 9, Concession II O.F., and Lot 35, Concession V R.F., in the Township of Nepean in the County of Carleton and Province of Ontario.)

Ralph D. Sweet, Esq. Solicitor for the Claimant Cecil Carrick, Esq. Solicitor for the Respondent

DECISION OF THE BOARD

This is an appeal from the award of Harry W. Cooke, the Valuator under "The Power Commission Act" of 1931 and dated the Twenty-five day of July 1947.

In his award the Valuator stated that the farm is situated about ten miles from the City of Ottawa, consists of three hundred and thirty acres more or less of which about two hundred acres are under cultivation. There is a brick house in first-class condition and a large bank barn standing on the property. The farm is severed by The Canadian Pacific Railway and the King's Highway and is crossed by the Hydro tower line, consisting of four steel towers and running parallel to the foregoing line is the twin wooden pole line of nine structures which is the cause of the present dispute. It is also stated that, in 1940, the property was valued at about eighteen thousand dollars for succession duty purposes, and that the 1944 assessment of the property was as follows:

1944 Assessment

150 acres, north side land	3,900.00
Total Assessment	10,775.00

which figures show \$32.60 per acre or \$23.00 per acre exclusive of buildings.

None of these statements were disputed by the Claimant.

The Valuator then goes on to determine the compensation due the Claimant as follows:

Award of Valuator dated July 29th, 1947

(1)	To compensation for perpetual easement rights, Lots 8 and 9 Concession II O.F. and Lot 35 Con- cession V R.F. Township of Nepean, 9.5 acres @	
	\$65.00 per acre	617.50
(2)	To damage to fences	10.00
	To trees cut down-timber used	160.00
(4)	Extra to cover proximity of structure No. 221 to fence, etc.	100.00
	T T	887.50
(5)	To interest @ 5% for 7 years	310.60

\$1.197.10

At the hearing, held in the Court House of the County of Carleton on October 30th, 1947 before W. J. Moore and R. C. Rowland. Members of The Ontario Municipal Board. Thomas Robertson, the owner of the property in question testified that—

- (1) he admitted the accuracy of the three maps or plans filed by Mr. Carrick, the Solicitor for the Respondent and entered as Exhibits 1, 2 and 3;
- (2) he had served notice of the hearing on the mortgagees, Mrs. V. E. Campbell and G. E. Robertson on Monday, the 27th day of October, 1947;
- (3) he was satisfied with items 2, 3, 4 and 5 of the award of the Valuator but could not accept item 1 for the reasons
- (a) that the wooden pole line built in 1940 and having nine structures placed on his land in comparison with the four structures placed thereon by the construction of the steel towers line in 1932 created a far greater nuisance in cultivating and keeping the land cleared of weeds around the wooden structures;
- (b) that the waste land around each wooden structure amounted to more than twice as much as around each of the 1932 steel structures;
- (c) that the lines were 75 feet apart, centre to centre and that there was a fifty foot strip between the edges of the structures which was difficult to work;
- (d) he is a grower of certified seed and the fact that weeds have been growing around the structures has a tendency to lower the value of his product;
- (e) that he believes that 125.00 per acre would be a fair value for the part covered by the easement.

On being cross-examined Mr. Robertson stated that the land not being cultivated around the wooden structures amounted to one-half acre and that in 1935 he had purchased his brother's half interest in the farm for \$9,000.00, which he considered a fair price.

Mr. Sweet then called M. J. Scobie who testified that he was born on a farm, had engaged in farm work before World War I and later has been a Valuator for the Federal Government. He had examined the pole lines in question and found that of the nine wooden pole structures four of them, numbered 218, 219, 220 and 221 on Exhibit 3 were each stayed by four wires while the remainder were each stayed by two wires. He said that each wooden pole structure occupied twice as much land as each steel tower structure; that pole structures 220 and 221 situated close to The King's Highway prevented possible subdivision of the land into lots and that, in his opinion, the proper compensation for the right and easement would be:

For 2 structures near the highway No's 220 and 221\$	400.00
For 2 structures east of highway No's 222 and 223	300.00
For structure No. 219	150.00
For structures 215, 216, 217 and 218	600.00
_	
Total SI	.450.00

On cross-examination Mr. Scobie said that the woods growing around the structures were a menace but could be kept down. He stated that the value of \$1,450.00 was for the present and that \$725.00 would be a fair value in 1932. He was not prepared to say what the value would be in 1940.

Mr. Sweet then called Howard C. Henry, a graduate of Kemptville Agricultural School and of the O.A.C. and now Chief Inspector for the V.L.A. in the territory east of Peterborough. His evidence was that he was acquainted with the Robertson farm, having been born and brought up in the neighbourhood. He stated that the loss in the value of the farm was from \$3,000.00 to \$3,500.00 due to the two pole lines; that there was an increase in land values of 60 per cent between 1932 and 1940, and that he agreed with Mr. Scobie's valuation. He testified that in 1940 Mr. Thos. Dolan received \$70.80 for one two-pole structure erected on his farm.

Cross-examined by Mr. Carrick, Mr. Henry said he did not know that the pole structure on Dolan's farm was originally one having four guy wires. He is now 30 years of age.

For the Respondent Mr. Carrick called-

W. H. Williams, O.L.S., who certified as to the accuracy of the plans being Exhibits 2 and 3.

David H. Richardson, Surveyor, who made most of the measurements from which the plans were compiled. He stated that the land taken from cultivation by each of the four pole structures having four guy wires measured 48 feet x 60 feet, but could not give the measurements for the two guy wire structures.

S. W. Johnson in charge of the property department of the H.E.P.C.O. who testified that the pole structure on the Dolan farm had been changed from a 4 wire structure to one of 2 wires but settlement was not changed on that account.

Mr. Carrick filed the Grant of Easement 1932 as Exhibit 4.

Mr. Johnson identified photographs marked "Exhibits 5 to 9 inclusive" as having been taken by himself about a week before. These showed three pole structures on Robertson's farm and two from the Switzer farm.

Mr. Johnson also produced a plan marked "Exhibit 10", but this was objected to by Mr. Sweet as showing a compilation of valuation figures without having the original documents on hand to verify the plan.

On November 13th, 1947, Mr. Carrick, Counsel for the Hydro-Electric Power Commission of Ontario. deposited with the Board, the original grants of easement across nine farms shown on the plan marked "Exhibit 10".

Mr. C. W. Ross, a real estate broker in Ottawa since 1910, and having considerable experience in the valuation of farm lands testified that he had visited the Robertson farm on October 22nd and 23rd. After taking into consideration the facts that the area of land taken out of cultivation was small,, that the value of the farm suffers some depreciation due to the erection of the pole line, that the line did not go near the buildings and that some inconvenience was caused in cultivating around the structures, he came to the conclusion that a proper valuation would be as follows:—

½ acre taken from cultivation	\$ 50.00
2 towers, \$125.00 each	250.00
7 towers, \$50.00 each	350.00
Total \$650,00	

Mr. Alex H. Fitzsimmons, a Valuator and real estate broker of Ottawa with many years of experience in the valuation of both city and farm property testified that he had visited and inspected the pole line across the Robertson farm as well as on some neighbouring farms and had collaborated with Mr. Ross in making his estimate. He placed the total value of the easement at \$700.00. He stated that farm land values did not appreciate very much between 1932 and 1940.

Both Messrs. Ross and Fitzsimmons admitted that they had more experience in the valuation of City property than of farm lands.

The two members of the Board, present at the hearing, inspected the pole line later on the day of the hearing.

After carefully considering the evidence and examining the exhibits filed the Board has each reached the following conclusions:

I. The land taken-

All the witnesses seem to be in agreement that the area of land taken out of easy cultivation and surrounding the nine pole structures is one-half acre and the Board accepts this figure.

The width of the strip of land to be acquired for the pole line easement is 75 feet and the total area of this is 7.1 acres, but as one-half acre is the measure of the land wholly taken out of cultivation, this leaves 6.6 acres of land which may be cultivated practically in the same manner as it was before the pole line was constructed. Some mention was made of the difficulty of cultivating a fifty foot strip between the 1932 and the 1940 lines, but if such difficulty exists it could only occur at four places: that is in the vicinity of the four steel towers of the 1932 line.

This area of 6.6 acres is subject only to the right of the Commission to use it as required for the proper maintenance of its lines and structures and may be cultivated or pastured as the owner of the farm desires.

II. The value of the land in 1940.

The evidence given shows quite a diversion of views as to what was the actual value of the land in 1940 which is the year in which the Commission took possession of the wooden pole line easement.

Robertson said that \$125.00 per acre was a fair value for 200 acres of his farm. He also said that \$18,000.00 was a fair value for the whole farm of 330 acres including buildings in the year 1935 when he acquired his brother's half interest for \$9,000.00. Scobie placed a valuation of \$1,450.00 on the right of easement but when cross-examined he explained that this was the 1947 value and that, in his opinion the value in 1932 was \$725.00 but could not say what it was in 1940.

He placed a higher value on the land near the highway because of the possibility of subdividing this land into building lots. The farm, however, is about ten miles from the City of Ottawa and about a mile west of the hamlet of Bells Corners which has not shown any appreciable growth in the past fifty years.

The possibility of a boom in land values accruing from subdivision seems rather remote, but the Commission's Valuator has recognized this possibility by allowing \$100.00 extra to cover it. (Item No. 4 in Mr. Cooke's award.)

Henry said that the sale value of the farm had been depreciated by \$3,000.00 or \$3,500.00 due to the construction of the two lines: that land values had increased 60% between 1932 and 1940 and that he agreed with Scobie's valuation. But Scobie said that the nuisance value of the wooden pole line was twice as great as that of the steel tower line. This would leave the value of the latter \$725.00 in 1947 and the valuation of the two easements this year \$2,175.00, which does not agree with Henry's estimate of \$3,000.00-\$3,500.00.

Ross and Fitzsimmons collaborated in making their valuation and hence the values placed by them on the wood pole line easement for the year 1940 are nearly equal, that of Ross being \$650.00 and that of Fitzsimmons being \$700.00.

The Board is of the opinion that in setting a valuation on the right of easement in question and where only item 1 of the arbitrator's award is in dispute it is only necessary to settle two questions—

- (1) What is the area taken from cultivation around the wooden pole structures and what is a fair value to place on this? In the opinion of the Board the area is one-half acre and a fair value would be \$125.00 per acre.
- (2) What is the total area of the easement required less (1) and what would be a fair value to place on this to compensate the owner for any inconvenience to which he is put in carrying on his farming operations and any loss which he might suffer through the depreciation of the value of his farm or extra work entailed in properly working around the structures.

The area is 6.6 acres and in the opinion of the Board a fair price per acre would be \$95.00 per acre.

THE BOARD THEREFORE ORDERS that The Hydro Electric Power Commission of Ontario pay to the Claimant the sum of \$1,295.33 in accordance with the following statement:

(1) To one-half acre of land taken from cultivation by reason of the construction of nine pole structures @ \$125.00 per acre	62.50
(1a) To compensation for perpetual easement rights, Lots 8 and 9 Concession II O.F. and Lot 35 Concession V R.F. Township of Nepean. Total area of easement 7.1 acres—6.6 acres	
@ \$95.00	627.00
(2) To damage to fences	10.00
(3) To trees cut down-timber used	160.00
(4) Extra to cover proximity of structure No. 221 to fence, etc.	100.00
\$	959.50
(5) To interest @ 5% for seven years	335.83
Total	1.295.33

As to costs, there will be no costs but the Commission shall pay the fees of the Board fixed at \$50.00.

DATED this 19th day of November, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

(Sgd.) W. J. MOORE, $\label{eq:Member.} \textit{Member}.$

ASSESSMENT APPEALS

P.F. B-5887.

IN THE MATTER of Section 84 of "The Assessment Act" (R.S.O. 1937, Chapter 272) as re-enacted by O.S. 1946, Chapter 3, Section 21.

BETWEEN:

THE CORPORATION OF THE TOWNSHIP OF NEPEAN

Appellant

AND

ALEXANDER FLECK, LIMITED

Respondent

C. C. Gibson, Esq., K.C. Counsel for the Appellant Alastair Macdonald, Esq. Counsel for the Respondent

DECISION

This is an appeal from the Decision of His Honour, the County Judge for the County of Carleton, respecting the assessment of the lands of the Respondent in the Township of Nepean consisting of 18.61 acres and located immediately west of Parkdale Avenue and northerly from the Canadian Pacific Railway right-of-way. The lands on the easterly side of Parkdale Avenue and the southerly side of the Canadian Pacific Railway right-of-way lie in the City of Ottawa.

These lands are included in a larger area that was known as Tunney's Pasture and had been subdivided into building lots. Later the taxes fell in arrears and through tax sales largely came into the possession of the Township of Nepean. Four houses were built on lots on the west side of Parkdale Avenue and these lots project into the block of land purchased by the Respondent. See blueprint, Exhibit 5.

Alexander Fleck Limited purchased 18.61 acres from the Township of Nepean by deed dated April 1st, 1943, for the sum of \$1.861 or at the rate of \$100 per acre. This area included the area of the streets and lanes which had been closed. The evidence shows that negotiations by Respondent for the purchase of the lands in question began in September 1942. At that time the lands were subdivided. In the course of the negotiations and before the deed was given the Township Council took proceedings to secure a Judge's Order to cancel the subdivision plan, with some exceptions, to permit the lands in block to be conveyed to the Respondent. The Judge's Order was dated March 26th, 1943 (see Exhibit 9). Subsequent to this sale the lands in question were assessed at \$1,875 (Exhibit 8) and remained at this amount until the assessment under appeal was made (Exhibit 1). Assessment under appeal is \$19,775 for 1946 taxes and Assessment Field Sheet (Exhibit 11) gives a breakdown of this amount by assessing 9 lots at \$250 per lot, 1 lot at \$400, making a total area of 10 lots of 1.13527 acres assessed at \$2,650, 17.47 acres (balance) at \$980 per acre, \$17,125, a total of \$19,775. A further breakdown of 17.47 acres gives Parkdale Avenue frontage to 135 ft. depth, whose

Area is 1.6953 acres @ \$2,425	\$ 4,125
Balance railroad frontage, etc., 15.77 acres @ \$825	13,000
Total	.\$17,125

Mr. Gibson called Mr. Hill, Assessment Commissioner for Township of Nepean since July 1943, and for some ten years prior to that was employed in the Department. Mr. Hill explained that a re-assessment in the Township has been undertaken to accomplish an equalization of assessments. Up to the present time this has concerned build-

ings and certain lands have been corrected where inequalities have been found. The lands in question were found to be assessed at \$100 per acre, while lands adjoining were assessed at \$800 per acre and hence, came the new assessment. Mr. Hill could not explain how the assessment of \$1,875 was established other than to say there had been some confusion in the Department due to changes in staff.

Mr. Hill stated that Plan 396, owned by the Township was assessed at \$62,785 or an overall assessment of \$628 per acre and that due to the Fleck Sale this assessment on the remaining Township owned lands in Plan 396 was reduced by \$14,750 and, at the same time for some unexplained reason the Fleck lands were assessed at \$1,875, slightly more than the purchase price of \$1,861.

Mr. Hill cited the sale to the Burgess Tool Company from the Township in 1945 of 13.3 acres for the sum of \$2,000 or approximately \$150 per acre. These lands were assessed for 1946 at \$10,650 or at the rate of 800 per acre. Witness stated that the lands remaining in the ownership of the Township after the Burgess sale had their assessment reduced by \$8,750 and justified the increased assessment of the Burgess lands at \$10,650 largely by virtue of the increased value and increased area due to the closing of the streets in the block sold.

Witness cited sale by Township to McLelland in 1944-5 of four lots for the sum of \$800 and stated that this worked out to \$2,450 per acre for the two lots on west side of Parkdale Avenue and \$1,475 per acre for the two lots on the east side of Kensington. This land is to the north of the Fleck property. The McLelland lands are assessed at \$800 per acre.

Witness also cited sale by Township to Twin Pin Company in 1943-44 of four lots on the west side of Parkdale Avenue for the sum of \$800 and these are assessed at \$800. The Fleck property has a frontage on the Canadian Pacific Railway of 795.65 feet and a frontage on Parkdale Avenue of 891 feet. Parkdale Avenue is City Boundary and City sewer and water are said to be available to this frontage. Parkdale Avenue is a hard surfaced roadway and the area in the City of Ottawa to the east is a workingman's home area. Witness states that the Canadian Pacific Railway right-of-way is assessed at \$800 per acre. Witness cites other industrial or commercial lands in the vicinity assessed at \$700, \$750 and \$1,050 per acre.

Mr. Gibson called Blyth McDonald, Assessment Commissioner for the City of Ottawa, who stated that the City sells water to Burgess Tool Company and for the purpose of establishing the water rates, he had assessed the Burgess lands at 3c per square foot or \$1,300 per acre, for a part of the Burgess site on which some buildings are erected, and he was of the opinion that this represented a fair assessment. He stated that the City frontage on the east side of Parkdale Avenue was assessed at \$6 per foot frontage and that depth of lot is 98.12 feet.

Mr. Gibson called Mr. Quinlan, Chief Assessor since August 1945 for the Township of Nepean. He participated in making the assessment under appeal and confirmed his opinion that \$19,775 was a fair assessment in comparison with other assessments in the Township of Nepean. He stated that he could not give consideration to sales as they were all Township sales of lands acquired in tax sales. He stated that the Fleck property is the best location for heavy industry in the Township and that the soil conditions are excellent for that purpose. Witness stated he considered the frontage on Parkdale Avenue the same as lots and the balance as an acreage fronting on the railroad.

Mr. Gibson called S. J. Munroe, realtor in Ottawa, who had experience with lands some 1,600 feet west of the Fleck property and stated that \$300 per lot is low on the Wright property. He calculated this would give a value for Wright's lands of \$2,500 per acre and eliminating street area, would further reduce this to \$2,200 per acre. He calculated \$100 per house extra cost on Fleck lands and hence, deducted a further \$600 per acre, leaving \$1,600 per acre as his valuation of the Fleck property.

Mr. Gibson called ex-Reeve Cumming and Township Clerk Morris to show that the Fleck lands were subdivided when negotiations began, that the streets were closed at the request of Fleck, the purchaser, that the Township had a large amount of tax sale lands on their hands and that the policy of Council was to sell these lands at nominal prices to get the lands back into private ownership.

Mr. Macdonald for the Respondent, called Mr. A. Fitzsimmons, realtor of Ottawa, who stated that he had considered the Fleck lands in comparison with other lands; that it was rocky and rolling; that no other sales were of sufficient importance to establish a value for the Fleck lands; that Township has a large area still left on its hands; that the price paid by Fleck is not the value, but witness states that \$250 to \$300 per acre is a fair value, and that if Fleck intended to sell that he would advise the sale at this price and that such a sale would yield Fleck a good margin of profit.

Mr. Macdonald called Mr. Bryce, sewer and mechanical engineer for the City of Ottawa, who had made a survey of the area in question last year with a view to extending sewer services to serve the area. He estimated a 15" and 12" sewer constructed under the Canadian Pacific Railway and back some 650 feet into the Fleck property to cost \$13,350. The large cost was due to the rock excavation.

The Board inspected the property in question and the surrounding area referred to by the various witnesses and finds as follows:

- (1) That, while the weight of evidence submitted supports a basic assessment of \$800 per acre for lands industrially used in this locality, yet the lands in question are not used and remain bare lands and more or less barren lands.
- (2) The small blocks of lands in question that front on Parkdale Avenue are separated from the acreage by a lane and should be assessed as building lots facing on Parkdale Avenue.
- (3) That the assessment per acre allowed by the County Judge is fair under all the circumstances as applied to the acreage in its bare unused condition.

The Board therefore directs that the assessment of the lands in question be as follows:

Lot 2986, West Parkdale Avenue	\$ 350.00
Lots 2987-8-9 2996-7-8-9 3000-1	
3000-1 West Parkdale Avenue	1,800.00
Balance 17.475 acres @ \$350	
	\$8,266.25

And the Board directs that the Appellant shall pay a further tariff fee of \$25.00. DATED at Toronto the 15th day of August, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

(Sgd.) W. J. MOORE,

Member.

P.F. B-6032.

IN THE MATTER of Section 84 of "The Assessment Act" (R.S.O. 1937, Chapter 272) (as re-enacted by O.S. 1946, Chapter 3, Section 21).

BETWEEN:

F. W. WOOLWORTH COMPANY LIMITED

Appellant

AND

THE CORPORATION OF THE TOWN OF LINDSAY

Respondent

(Appeal from decision of His Honour the County Judge respecting the business assessment of the F. W. Woolworth Company Limited, by the Town of Lindsay.)

COUNSEL:

E. S. Livermore, Esq., K.C. For Appellant A. M. Fulton, Esq., K.C. For Respondent

DECISION OF THE BOARD

This is an appeal from the Judgment of His Honour Judge McGibbon and was heard by the Board on the 9th April, 1947.

The Appellant contends that it should be assessed for business under Section 8 (1) (i) and not under Section 8 (1) (f) of "The Assessment Act".

Section 8 of "The Assessment Act" provides:-

- "(1) Irrespective of any assessment of land under this Act, every person occupying or using land for the purpose of, or in connection with, any business mentioned or described in this section shall be assessed for a sum to be called 'business assessment' to be computed by reference to the assessed value of the land so occupied or used by him, as follows:
- "(f) Every person carrying on the business of what is known as a departmental store or of a retail merchant dealing in more than five branches of retail trade or business in the same premises or in separate departments of premises under one roof, or in connected premises, where the assessed value of the premises exceeds \$20,000 or of a retail coal or wood or lumber dealer, lithographer, printer or publisher, except the publisher of a newspaper, for a sum equal to fifty per centum of the assessed value; . . .
- "(i) Every person carrying on the business of a retail merchant in cities having a population of 50,000 or over for a sum equal to twenty-five per centum of the assessed value; in other cities and towns having a population of 10,000 or over for a sum equal to thirty per centum of the assessed value, and in all other municipalities for a sum equal to thirty-five per centum of the assessed value."

The Town of Lindsay has a population of less than 10,000.

The assessment of the real property of the Appellant in Lindsay is \$31,200. Its business is carried on in the same premises or in separate departments of premises under one roof or in connected premises.

A. J. Hannon, who has been Manager of this store for twenty years, said that it is a Variety Store and has been known as such for as long as he can remember; that there are twelve counters, each numbered (except the candy counter which has no number), all on one floor; that he has an assistant manager, and one girl at each counter; that each week he reports his sales to Head Office, describing the classification of goods sold; that the hardware is displayed on one counter, but that Hardware Stores in Lindsay carry a much larger stock of hardware (and carry items of hardware such as stoves, heaters, etc.) than are carried by the Appellant; they carry some lines of toilet goods but Drug Stores carry a larger stock; they do not carry ladies' dresses but do

carry some children's dresses; they carry some jewellery; that they started with goods selling at 15c or less but now carry some goods of higher prices and are gradually going into the sale of higher-priced goods and a greater variety.

- E. A. Hallum, Merchandising Supervisor for Woolworth Stores, said that they are a Variety Store, and filed exhibits to show that they are so designated in Trade Journals and Telephone Directories. He said they do not carry 10% of the items carried by Hardware Stores. In cross-examination he said they deal in some (1) Hardware; (2) Electrical Appliances; (3) Toiletries; (4) Jewellery; (5) some Boots and Shoes; (6) some Dry Goods; (7) Confectionery; (8) Toys; (9) Glassware; (10) Household Appliances; and (11) Crockery; and said that these goods, if carried separately, would be branches of the retail trade. He said they keep the weekly returns by units or class of merchandise.
- Geo. H. Baker, General Sales Manager for Simpsons Limited, says that this store is known as a Variety Store. In Simpsons Limited, they have about one hundred departments, each a separate unit, and each department tries to carry what most people would want.
- D. A. Parrish, of Lehn & Fink (Canada) Limited, said that Woolworth's is known as a Variety Store.
- M. T. Graham, of Canadian General Electric, sells electrical products to Woolworth's, who are known as a Variety Chain Store. In cross-examination he said that "they are dealing in several branches of the retail trade".
- E. F. K. Nelson, Assistant General Manager, Canadian Retail Federation, called this a Variety Store, and in his opinion a Variety Store is a branch of the retail trade. In cross-examination, he admitted that Hardware, Toiletries, Jewellery, Stationery, Confectionery, Household Appliances, Clothing and Boots and Shoes were branches of the retail trade, if carried separately.
- Mr. Fulton, for the City, called no witnesses, but relied on the list of articles filed as Exhibit 1 and the evidence given on behalf of the Appellants.

That part of Section 8, subsection (f), dealing with this matter was enacted in 1904, and has been carried in the same wording in our Statutes without amendment. In 1908, the question as to the assessability of S. H. Knox and Company under this Section came before the Court of Appeal on a case stated by the Lieutenant-Governor-in-Council, and it was held, re S. H. Knox and Company Assessment, 17 O.L.R., p. 175, that "the question being one of fact the Court should not answer the question submitted".

In 1909, the Ontario Railway and Municipal Board heard an appeal by the S. H. Knox and Company from the Court of Revision of the City of Toronto. In its Judgment, Third Annual Report of the Ontario Railway and Municipal Board (1906), the Board said at p. 147, "The applicants sell at their store articles limited in price to 5, 10 and 15 cents, but they are articles found in more than five branches of the retail trade. They do not keep in their store a complete line in any branch of retail trade or business. For instance, in boots and shoes they only deal in dolls' shoes and moccasins, or children's shoes; in hardware they only deal in small wares, such as tack hammers or files, and small articles of that kind. A customer of their store could not buy a pair of boots or a saw or a jack plane. The same applies to the other articles kept in the store. They belong to different branches of the retail trade, but no article is carried or dealt in that costs more than 15 cents. There are no departments in the store. The whole store is under the direction of a manager, who has floor managers in charge of the floors assigned to them. The Board are of the opinion that the Appellant does not carry on the business of what is known as a departmental store, or of a retail merchant dealing in more than five branches of retail trade or business in the same premises or in separate departments of premises under one roof, or in connected premises, and this Board so finds as a fact upon the evidence, and the appeal was allowed.

The City of Toronto applied for leave to appeal to the Court of Appeal on the ground that the Board had erred in the construction and application of The Assessment Act. The Court refused the application, 19 O.L.R., 645, on the ground that the question decided by the Board was one of fact and that there was no appeal.

The words of the Statute are clear. It says: "A person carrying on the business of a retail merchant dealing in more than five branches of the retail trade, or business". If he carries on business in the same premises or in separate departments of premises under one roof or in connected premises, where the assessed value of the premises exceeds \$20,000, he shall be assessed for a sum equal to fifty per centum of the assessed

The Appellant is a retail merchant, carrying on business in the same premises or in separate departments of premises under one roof, or in connected premises, and the assessed value of the premises exceeds \$20,000.

The list of merchandise offered for sale by the Appellant is filed as Exhibit 1.

Mr. Livermore contends:

- 1. That to carry on a branch of a retail trade or business, a person must operate a store which is reasonably equipped with goods which are classed in that branch, and that where a person is offering for sale a limited number of those goods, and at a limited price range, he is not dealing in that branch of the retail trade or business.
- 2. That the Appellant operates a variety store; that he offers for sale only variety store merchandise; and that a variety store is a branch of the retail trade or business because it offers for sale only variety store merchandise.

There are no words in the Statute limiting its operation. It does not say that to be dealing in a branch of the retail trade or business a person must carry a complete line of merchandise in that branch, or that if he carries only an incomplete line of that merchandise, he does not come within the wording of the Statute. Nor does the Statute say anything about the price ranges, and the Board has no authority to read those words into the Statute. The words of the Statute are not ambiguous, nor are they capable of being construed as having more than one meaning. There can be no doubt that if a retail merchant offers for sale goods or merchandise belonging to the hardware trade or business, he is dealing in hardware.

A "variety store" is not mentioned in the Statute, and whether this store is called a variety store or variety chain store or a chain store, it makes no difference, if it deals in more than five branches of the retail trade.

Counsel for the Appellant argues that it deals in only one branch of the retail trade or business, that is, variety store merchandise. The evidence does not satisfy the Board that there is such a merchandise as variety store merchandise. The merchandise carried by the Appellant may be found in many stores which do not call themselves variety stores. It surely cannot be argued that Pond's Cold Cream and other merchandise mentioned in Exhibit 1, are only variety store merchandise, or are sold only by variety

Having carefully considered the evidence and arguments of Counsel, the Board finds that the Appellant is a person carrying on the business of a retail merchant dealing in more than five branches of the retail trade or business, in the same premises or in separate departments of the same premises under one roof, or in connected premises, and that the assessed value of those premises exceeds \$20,000, and that they are assessable for a sum to be called "business assessment", to be computed by reference to the assessed value of the land occupied, namely fifty per cent of \$31,200.

The appeal is therefore dismissed. The Appellant shall pay the Board's fees fixed at \$50. Otherwise there will be no costs.

DATED at Toronto this 21st day of November, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

(Sgd.) W. J. MOORE,

Member.

P.F. B-6033.

IN THE MATTER OF Section 84 of "The Assessment Act" (R.S.O. 1937, Chapter 272) (as re-enacted by O.S. 1946, Chapter 3, Section 21).

BETWEEN:

ZELLER'S LIMITED

Appellant

AND

THE CORPORATION OF THE TOWN OF LINDSAY

Respondent

(Appeal from Decision of His Honour the County Judge respecting business assessment of Zeller's Limited by the Town of Lindsay.)

COUNSEL:

O. W. Durdin, Esq. For the Appellant A. M. Fulton, Esq., K.C. For the Respondent

DECISION OF THE BOARD

This is an appeal by Zeller's Limited from the Judgment of His Honour Judge McGibbon, dismissing an appeal from the Decision of the Court of Revision, in which it was held that the Appellant should be assessed for business tax under Section 8, (I), (f) of "The Assessment Act".

The Appellant is a retail merchant carrying on business in premises within the description provided under Section 8, (1) (f), which premises are assessed for more than \$20,000. A list of the merchandise carried was filed as Exhibit 3. The prices of the different articles offered for sale range from 5 cents to \$29.95. The list shows that Toilet Articles are sold at counters 1 and 3; that Notions are sold at counter 2; that Jewellery is sold at counter 3; Toys, counter 4; Hardware, counter 5; Woodware, counter 6 (paints, enamels, etc.); Fancy Goods, counter 7, and so forth, in all eleven counters of different classes of merchandise.

The Appellant claims:

- 1. That it is not dealing in more than five branches of the retail trade.
- 2. That it is a variety store and deals in only one branch of the retail trade, i.e., variety store goods.
- 3. That if it is not a variety store and dealing in only one branch of the retail trade, that it is dealing in only two branches of the retail trade, (a) Dry Goods, and (b) House Furnishings, and that (a) Dry Goods, includes anything made from textiles, such as women's clothing and apparel, including shoes, men's clothing and furnishings, including boots and shoes, gloves, etc.. and that (b) House Furnishings, include pails and any other hardware that may be used in a house, cosmetics, notions of all kinds, toys, paints, glassware, stationery, jewellery, etc.

Whether a person is carrying on the business of a retail merchant dealing in more than five branches of the retail trade is a question of fact to be determined by the Board on the evidence as to the merchandise offered for sale. That merchandise is shown in Exhibit 1.

The Appellant may call itself a variety store, and it may even be known to the trade as a variety store, but if it is dealing in more than five branches of the retail trade, it comes within the Statute.

The Board is unable to find that it deals only in variety store merchandise, which is a separate branch of the retail trade. The articles mentioned in Exhibit 1 are

to be found in many stores which do not call themselves variety stores. They are not merchandise manufactured only for those stores calling themselves variety stores.

The Board is unable to accept the argument that two branches of the retail trade, Dry Goods and House Furnishings would cover the merchandise carried by the Appellant. To hold, for instance, that the toilet articles mentioned in Exhibit 1-are either House Furnishings or Dry Goods, would certainly be drawing upon one's imagination. To say that women's dresses, men's clothing and furnishings, boots and shoes, jewellery, and the other goods should be classed as either Dry Goods or House Furnishings, would be most unreasonable.

Neither can the Board accept the argument that to determine whether a merchant is dealing in hardware, the Board must be guided by the amount of hardware or the number of hardware articles offered for sale.

After a careful consideration of the evidence and Exhibit 1, and the ingenious argument of Counsel for the Appellant, the Board has come to the conclusion that the Appellant is carrying on the business of a retail merchant dealing in more than five branches of the retail trade, and should be assessed for business assessment under Section 8 (1) (f) of "The Assessment Act". The appeal is therefore dismissed.

The Appellant shall pay the Board's fees fixed at \$50. Otherwise there shall be no costs.

DATED at Toronto this 21st day of November, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

(Sgd.) W. J. MOORE,

Member.

P.F. B-6062.

IN THE MATTER OF Section 84 of "The Assessment Act" (R.S.O. 1937, Chapter 272) (as re-enacted by O.S. 1946, Chapter 3, Section 21).

BETWEEN:

THE CORPORATION OF THE CITY OF KINGSTON

Appellant

AND

F. W. WOOLWORTH COMPANY, LIMITED

Respondent

(Appeal from Decision of His Honour the County Judge of the County of Frontenac respecting the assessment of property of F. W. Woolworth Company Limited, located on the south side of Princess Street, and in respect to the nature of business.)

COUNSEL:

T. J. Rigney, Esq., K.C., and H. F. Gibson, Esq. For the Appellant E. S. Livermore, Esq., K.C. For the Respondent

DECISION OF THE BOARD

This is an appeal by the City of Kingston from the Judgment of His Honour Judge Reynolds. in which he allowed an appeal by the Respondent herein from the decision of the Court of Revision.

The Respondent carries on business in the City of Kingston, and their real estate assessment is in excess of \$50,000. The population of Kingston is in excess of 30,000.

Exhibit 2, filed, is a statement showing the different goods or merchandise offered for sale by the Respondent. There is no dispute as to the facts. The Respondent does not deny, and the learned Judge has found, that it sells goods described as "dry goods, stationery, music, jewellery, hardware, crockery, toys, drug store goods, notions, men's furnishings, confectionery and other miscellaneous goods" (page 3). Section 8 (1) (f) of "The Assessment Act" provides:

"Every person carrying on the business of what is known as a departmental store or of a retail merchant dealing in more than five branches of retail trade or business in the same premises or in separate departments of premises under one roof, or in connected premises, where the assessed value of the premises exceeds \$20,000 or of a retail coal or wood or lumber dealer, lithographer, printer or publisher, except the publisher of a newspaper, for a sum equal to fifty per centum of the assessed value. . . ."

It is not argued that the Respondent is a departmental store, but the Appellant contends that it is a person carrying on the business of a retail merchant dealing in more than five branches of the retail trade or business. His Honour said (page 1), "Although the language of clause (f) appears to be plain and unambiguous, there is a conflict of opinion as to the interpretation and application of the expression "dealing in more than five branches of the retail trade". He then cites some canons of construction in dealing with the construction of Statutes. Those canons of construction are useful in dealing with Statutes, but only in such Statutes as are plain and unambiguous.

The only conflict of opinion as to the interpretation of those words is on the part of the Respondent herein, who attempts to construe the words as meaning something other than their ordinary meaning, and an attempt by it to read into the Statute words and expressions not contained in the Statute.

Notwithstanding the able arguments of Counsel for the Respondent, the Board must, as stated by Leigh, J., in Attorney-General versus Salt Union Limited, 1917, 2 K.B., 488, referred to by His Honour, "construe words in their ordinary sense and give ordinary effect to them".

The contentions of the Respondent are:

- 1. That the words "dealing in five branches of the retail trade" do not mean what an ordinary person would suppose, but means that they offer for sale a complete line of merchandise in each of more than five branches of the retail trade.
- 2. That because they offer for sale some merchandise in each of more than five branches of the retail trade, they are not dealing in more than five branches of the retail trade.
 - 3. That a branch of the retail trade is an institution, not the type of goods.
- 4. That the Respondent is a variety store and that it deals in only one branch of the retail trade, i.e., variety store merchandise.

The Statute does not say a complete line of goods in a branch of the retail trade, and this Board has no right to read those words into this Statute, nor to say that that is what the Legislature meant. What is a complete line of goods? Would a hardware merchant's line of hardware be incomplete if it can be shown that another hardware merchant carries some items of hardware that he does not carry? Does any hardware merchant then carry a complete line of hardware, and therefore, because he does not carry a complete stock, he does not deal in hardware? If it could be held that if a merchant offers for sale a few of the long line of hardware merchandise, he is not dealing in hardware, how many of the hardware items would he carry before he could be held to be dealing in hardware? Such a contention cannot be sustained.

The contention that a branch of the retail trade is an institution, not a class of goods, is equally untenable. A retail merchant does not deal in hardware stores or hardware institutions. Could it be suggested that this Board should read this Section as follows:

"Every person carrying on the business of a retail merchant dealing in hardware stores"?

Does the Respondent deal in only one branch of the retail trade, i.e., variety store merchandise? It cannot be contended that the goods which it carries for sale, are goods to be found only in variety stores. The hardware which it carries is also found in hardware stores. So with stationery, music, jewellery, crockery, toys and its other classes of merchandise. They are not goods peculiar only to so-called variety stores.

The Respondent filed Exhibit 9, Directory of the Variety Market, to show that it is a variety store. On page 10 of that Exhibit "Sales by Merchandise Lines" shows those lines to be:

Ready-to-Wear Accessories
Women's, Misses' and Juniors' Clothing
Men's and Boys' Clothing
Confectionery and Cookies
Stationery
Notions and Smallwares
Drugs and Toiletries
Toys, Games and Books
Home Furnishings
Fountains and Luncheonettes
Dry Goods and Domestics
Hardware, Paint, etc.
Jewellery
Electrical Goods
Misc. (including foods).

The Board finds that the words of the Statute are plain and unambiguous, notwithstanding the efforts of Counsel to throw some doubt on their meaning.

The evidence shows that the Respondent is dealing in more than five branches of the retail trade or business, and that they should be assessed under clause 8, (1), (f), of "The Assessment Act". The appeal is therefore allowed.

The Respondent shall pay the Board's fees fixed at \$50, otherwise there will be no costs.

DATED at Toronto this 25th day of November, A.D. 1947.

(Sgd.) R. S. COLTER, Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

(Sgd.) R. C. ROWLAND,

Member.

P.F. B-6063. P.F. B-6064.

IN THE MATTER OF Section 84 of "The Assessment Act" (R.S.O. 1937, Chapter 272) (as re-enacted by O.S. 1946, Chapter 3, Section 21).

BETWEEN:

THE CORPORATION OF THE CITY OF KINGSTON

Appellant

AND

S. S. KRESGE COMPANY LIMITED

Respondent

(Appeal from Decision of His Honour the County Judge of the County of Frontenac respecting the assessment of property of S. S. Kresge Company Limited, located on the south side of Princess Street, and in respect to the nature of business.)

and

IN THE MATTER OF Section 84 of "The Assessment Act" (R.S.O. 1937, Chapter 272) (as re-enacted by O.S. 1946, Chapter 3, Section 21).

BETWEEN:

THE CORPORATION OF THE CITY OF KINGSTON

Appellant

AND

THE METROPOLITAN STORES LIMITED

Respondent

(Appeal from Decision of His Honour the County Judge of the County of Frontenac respecting the assessment of property of The Metropolitan Stores Limited, located on the south side of Princess Street, and in respect to the nature of business.)

Counsel:

T. J. Rigney, Esq., K.C., and

H. F. Gibson, Esq. For the Appellant

J. B. Givins, Esq., K.C., and

E. S. Livermore, Esq., K.C. For the Respondents

DECISION OF THE BOARD

These are two appeals heard immediately after the F. W. Woolworth Company Limited appeal.

The parties filed a memorandum, Exhibit I, as follows:

"MEMO OF AGREEMENTS REACHED BY COUNSEL FOR ALL PARTIES ON THE APPEALS OF THE CORPORATION OF THE CITY OF KINGSTON AGAINST THE JUDGMENT OF HIS HONOUR JUDGE REYNOLDS AND CASES OF KRESGE'S, METROPOLITAN STORES.

1. It is admitted that, in the store records and reports used by the respective managements of the two stores there are classifications of stock in trade and merchandise sales.

- 2. That the above store records and reports classify stock in trade and sales by six or more classes of commodities.
- 3. That in the evidence adduced in the Woolworth case they are shown to sell six or more different classes of commodities by retail and that the same applies to both the Kresge and Metropolitan Stores in Kingston.

(Sgd.) JOHN B. GIVINS.

Kresge and Metropolitan.

(Sgd.) T. J. RIGNEY,

Solicitor for The Corporation of the City of Kingston."

When asked by the Board whether "classes of commodities" meant "branches of the retail trade", as mentioned in the Statute, the Appellant said "yes" and the Respondents said "no".

There was also filed in each case a list of the merchandise carried for sale by each of the Respondents. These lists do not mention similar goods, but in each there are more than five different classes of merchandise.

Each of the Respondents is assessed on real property for more than \$20,000 and the City of Kingston has a population in excess of 30,000.

The arguments of Counsel in each of the three appeals were similar and the decision of this Board in F. W. Woolworth Company Limited versus City of Kingston applies equally in these appeals.

Each appeal is therefore allowed and the decision of the Court of Revision is restored.

Each Respondent shall pay \$50, the Board's fees. Otherwise there will be no costs.

DATED at Toronto this 25th day of November, A.D. 1947.

(Sgd.) R. S. COLTER,

Chairman.

(Sgd.) W. P. NEAR, Vice-Chairman.

(Sgd.) R. C. ROWLAND,

Member.

P.F. B-6945.

IN THE MATTER OF Section 84 of "The Assessment Act", (as re-enacted by Ontario Statutes 1946, Chapter 3, Section 21).

BETWEEN:

R. P. QUANCE, ESQ. County Assessor of the County of Norfolk

Appellant

AND

T. A. IVEY AND SONS LTD.

Respondent

DECISION OF THE BOARD

This is an appeal by the Corporation of the County of Norfolk from the decision of His Honour Judge Brickenden, Judge of the County of Norfolk, dismissing an appeal from the decision of the Court of Revision of the Village of Port Dover, relative to the assessment of the lands and premises of the said respondent, T. A. Ivey and Sons, in the Village of Port Dover.

The Assessor of the County of Norfolk, appeals the decision of His Honour Judge Brickenden, upon the following grounds:

- I. (a) That the buildings and greenhouses of the Respondent in the Village of Port Dover are assessed too low in comparison with similar commercial buildings in the Village of Port Dover.
- (b) Greenhouses assessed too low in comparison with assessment rating of tobacco greenhouses in view of cost, value to owner and use to owner.
- 2. Business assessment should be added, computed on basis of realty assessment under Section 8, subsection I, clause (k) of "The Assessment Act", being Revised Statutes of Ontario, 1937, Chapter 272, and its amending Acts.

On the hearing which came on before this Board on Thursday, the 11th day of September at the Village of Port Dover, the Appellant, R. P. Quance, Esq., the Assessor for the County of Norfolk, called P. L. Kindree, Assessor for the Village of Port Dover, to show that the assessment of T. A. Ivey and Sons, was comparable with the assessment of other industrial and commercial buildings in the Village of Port Dover. Mr. Kindree pointed out that the present assessment on the land of the Respondent Company was \$3,000 and on the buildings, \$36,000.00 (having been increased from \$33,000 to \$36,000 by the Court of Revision of the Village of Port Dover).

Mr. Kindree endeavoured to show that the lands and buildings were comparable to that of Penman's Limited, Norfolk Knitters Limited, Colby Company, which is a commercial fishing company, and the Beaver Lumber Company. With this the Board cannot agree, and finds that the lands of T. A. Ivey and Sons is not comparable to those lands heretofore mentioned.

Mr. R. P. Quance, gave evidence as County Assessor, and stated that he personally examined the premises and found that the respondent was engaged in the business of selling cut flowers mostly to the retail trade but was also engaged in the business of selling insecticides and fertilizers that would be merchandised to the general public. He further stated that he did not find any evidence of trees or shrubs being raised for nursery stock nor produce commonly associated with market gardening. Mr. Quance is asking that the Board increase the realty assessment from \$39,000 to \$67,700 and stated that these figures which he is asking the Board to approve were taken from

an estimate manual prepared in Toronto in 1940 and it had been suggested that this manual was more equitable than any other method of computation of assessment.

A plan of the premises of the Respondent was prepared by Mr. Quance and was submitted to the Board, Exhibit 4. This plan shows the land and premises of the Respondent Company to be situated on Blocks 99, 100, 26 and 25 in the Village of Port Dover on the shore of Silver Lake and abutting the Canadian National Railway. The buildings on these lands comprise twenty-four greenhouses built at different times from 1910 to 1935, also boiler house, pump house, pipe shed, workshop, shipping rooms and other small buildings built at different times from 1914 on.

Mr. W. P. Mackay, K.C., Counsel for the Respondent, called Mr. T. J. Ivey, President of the Respondent Company. Mr. Ivey gave some figures as to the cost of some of the greenhouses and other buildings from the time of the inception of the Company to the present time. Mr. Ivey stated that his Company were agriculturists, operating chiefly under glass, consisting in all of about ten acres. He stated that besides the sales of cut flowers for the retail trade, that they sell approximately 50,000 roses through their sales force. His Company had also raised tomatoes. Some two or three years ago they then branched out in the supply business and sold insecticides, tomato stakes, etc. Under the Company Charter it is authorized to carry on the business of nursery stock and vegetables, both inside and out, and also agricultural supplies. Counsel argued that T. A. Ivey and Sons should be exempt from business tax, as the Respondent's business would come under the heading of market garden or nursery. With this contention the Board cannot agree since the Respondent sells direct to the retailer florist and sells rose bushes, insecticides, tomato stakes and other articles to the consumer. The Board therefore finds that the Respondent is liable to business tax and should be assessed under Section 8, subsection 1, clause (k) of "The Assessment Act", which reads:

"Every person carrying on . . . any business not before in this section or in clause 1 specially mentioned, for a sum equal to twenty-five per centum of the assessed value."

The Board has carefully considered the evidence taken and has perused the written arguments submitted by Mr. Quance and Mr. W. P. Mackay, K.C., Counsel for the Respondent, and the cases therein cited, and also the exhibits filed at the hearing, and finds that the greenhouses of the Respondent Company should not be classed in the same category as tobacco greenhouses. The Board, however, has taken into consideration the varying periods of time in which the greenhouses were erected and the cost of erection during such periods, less depreciation, and finds that the present asssessment is too low. The Board therefore finds and declares accordingly, that for the year 1947 the following assessment should be made on the lands of the Respondent Company:

 Land
 \$ 3,000.00

 Buildings
 42,000.00

 Business
 25%

The Appellant is entitled to recover costs against the Respondent which are hereby fixed in the sum of \$25.00.

DATED at Toronto this 14th day of November, A.D. 1947.

(Sgd.) W. P. NEAR. Vice-Chairman.

(Sgd.) R. C. ROWLAND,

Member.

B-6945.

Friday, the Fourteenth day of November, A.D., 1947.

BEFORE:

R. S. Colter, Esq., K.C., Chairman, and

R. H. Yeates, Esq., Member IN THE MATTER OF Section 84 of "The Assessment Act", (as re-enacted by Ontario Statutes 1946, Chapter 3, Section 21).

BETWEEN:

R. P. QUANCE, ESQ.
County Assessor of the County of Norfolk

Appellant

AND

T. A. IVEY & SONS LIMITED

Respondent

DECISION

The Appellant having appealed from the decision of His Honour Judge G. A. P. Brickenden, Judge of the County of Norfolk, dismissing an appeal from the decision of the Court of Revision of the Village of Port Dover, relative to the assessment of lands and premises of the said Respondent, T. A. Ivey & Sons Limited in the Village of Port Dover, the Ontario Municipal Board did appoint Thursday, the Eleventh day of September, A.D., 1947 at the hour of 10.00 o'clock in the forenoon, Daylight Saving Time at the Council Chambers in the Village of Port Dover for the hearing herein, and the appeal being at that time heard in the presence of the Appellant and W. J. T. Ivey, Esq., president of the Respondent Corporation and of W. P. Mackay, Esq., K.C., Counsel for the Respondent, albeit the place of hearing being the Parish Hall of St. Paul's Anglican Church in the Village of Port Dover, upon hearing the evidence adduced and what was alleged and judgment having been reserved until this day

1. The Board therefore finds and declares that for the year 1947 the following assessment should be made on the lands of the Respondent Company

Lands	S	3,000.00
Buildings	•••••	42,000.00
Business		25%

2. The Appellant is entitled to recover costs against the Respondent which are hereby fixed in the sum of \$25.00.

SIGNED this Fifth day of December, A.D. 1947.

(Sgd.) R. S. COLTER,

Chairman.

ORDERS OF THE BOARD

ORDERS ISSUED BY THE BOARD UNDER SECTION 70 OF "THE ONTARIO MUNICIPAL BOARD ACT" (R.S.O. 1937, CHAPTER 60), APPROVING OF THE UNDERTAKING OF CAPITAL EXPENDITURES

NOTE: Where approval granted under additional legislation, applications marked as follows:

"THE LOCAL IMPROVEMENT ACT"

(a) Section 8

(b) Section 29 (3)

Approval of undertaking of work

Assessment for opening of lane

"THE MUNICIPAL ACT"

Section 297 (5) 9

Section 305 (15) (d)

Section 315 (2) Section 310 <u>و</u> \oplus

Section 407 (2)

Approval of by-law-Extension of Municipal Utilities Approval of further debt and levies

Reduction in rate of debenture interest

Extension of time for passing by-laws

Redeemable before Maturity

"THE ONTARIO MUNICIPAL BOARD ACT"

Section 49

Section 59 (c)

Section 59 (dd) Section 59 (d) 3

Section 64 (Part IV)

Section 63 (m)

Section 69

Amendment of Board's Order

Approval of Floating Indebtedness Approval of by-law

Approval of retirement of unmatured debentures

Validation of debenture by-laws

Dispensation of 30-days' stay prior to validation of debenture by-law Authority to dispense with vote of electors

Additional Legislation	Municipality	Purpose (Continued)	Amount	Procedure File
	Barton, Township	Construction of watermain, Lawrence Road, etc., as local improve-	\$ 10,752.27	B-6663
	Barton, Township Barton, Township	Cement sidewalk on Scotia Avenue, local improvement Cement sidewalk on Woodbridge Road, etc., local improvements	1,976.28 5,906.75	B-6709 B-6823
	Barton, Township Barton, Township	Watermain on Fartheld Avenue, local improvement Watermains and sewers on Crosthwaite and Garside Avenues	52,512.39	B-7556
(d) (f) (l)	Beamsville, Village	Construction of fire hall	8,000.00	B-7434
	Beardmore, Improvement District	Additional costs of completion of public school	13,000.00	D-3001
(E)	Beardmore, Improvement	Cement sidewalk on Main Street, local improvement	5,500.00	B-6810
(d)	District Belle River, Village	Erection of a high school	360,346.00	B-6490
	Belleville, City	Purchase of additional fire fighting equipment	45,000.00	B-6104
€: E:	Belleville, City	Public school purposes Douglass of Lots & and O. Counchin of Thurlow, First Concession	25,000.00	B-6148 B-6394
	Belleville, City	Sanitary sewer on Benjamin Street	5,840.00	B-6407
		Sanitary sewer on Dufferin Avenue, local improvement	2,664.00	B-6432
	Belleville, City	Sanitary sewer on Dufferin Avenue, local improvement	2,340.00	B-64/4 R-6619
	Belleville, City Belleville, City	Sewers in Wellington Street Subdivision, local improvement Sanitary sewer. McDonald Avenue, local improvement	5,300.00	B-6953
	Belleville, City	Sanitary sewer, Wilkins Street	9,039.52	B-7049
(d) (l)	Black River, Township	Public school purposes	12,700.00	B-5263 B-6643
	Blenheim, Town	Fraction of school house S.S. No. 10	6.000.00	B-5992
(g)	Bosanquet, Lownship Bosanquet Township	Construction of Robinson-Monkhouse drain	821.00	B-6612 (a)
9 9	Bosanquet, Township	Repair of Sullivan drain	798.00	B-6612 (b)
	Bosanquet, Township	Repair of Elliott drain	1,625.00	B-/1/8 B-6073
(E)	Bowmanville, Town	Extension of sewage treatment plan and trunk sewer Ruilding of a nower plant at High Falls	150,000.00	B-4464
<u> </u>	Bracebridge, Town	Construction of recreational centre (war memorial)	110,000.00	B-6838
(d) (f) (g) (l)	Bradford, Village	Extensions to waterworks system	32,000.00	B-6185
(p)	Brampton, Town	Construction of a community centre	30,000.00	B-6213 R-6458
	υŁ	Acquisition of land for public school purposes	14 720 50	B-6873
(a)	Brantford, City	Construction of concrete curbs on Crown Street, etc.	3,308.54	B-7498
		Construction of sewers and pavements, Pearl Street, etc., as local	7,662.00	B-5768
	Brockville. Town	improvements. Purchase of garbage collection unit	00.008,9	B-5975
		Purchase of heavy duty truck	6,550.00	B-6377
SE	Brockville, Town Brockville, Town	Construction of concrete sidewalk, Brock Street, local improvement Construction of granolithic sidewalk, Pearl Street, as a local improve-	759.00	B-7310
		ment		

B-7310 (b) B-7334 B-7491 B-7492		B-6/34 (b) B-6/34 (c) B-6/34 (d)	B-6734 (e) B-7527 (a)		B-7527 (c) B-6819	B-6852	B-6395	B-6471 B-6543	B-7303 B-7520	B-5962	B-7016	B-7097 B-6186 (a)	B-6186 (b) B-6233	B-6542 B-7346	B-7499	B-7537 B-6358 B-5870 (a) B-5870 (b) B-5870 (c)	B-58/0 (e)
528.00 16,700.00 45,313.20	6,137.00 6,137.00 2,388.55 975.00	4,730.00 1,296.00 910.00	1,339.00 1,203.00	1,133.00 780.00 1,504.00	605.00 45,000.00	14,000.00	2,500.00 2,000.00	1,045.00 52,000.00	43,296.00	2,914.25	10,000.00	10,992.94 1,320.00	725.00 670.32	615.00 15,595.00	35,072.25	2,724.19 8,000.00 1,192.00 1,212.00 2,278.00 1,823.00	1,112.00
Granolithic sidewalk, Brock Street, local improvement Floating indebtedness—surfacing King Street Construction of sewers, North Augusta Road and Broadway Avenue. Construction of storm sewer Brock Street	Repair of 10-11 Concession Raad drain Repair of 15-16 Sideroad drain Repairs to Edgar-Kelly drain	Repairs to O-7. Sideroad drain Repair to Parker-Kidd drain Repairs to Orange drain No. 1	Repairs to west section 4-5 Concession Road drain Repair of Bryan-Johnston, Brooke-Euphenia Townsline and Martin Creek drain	Repair and improvement of White drain Repair of 4-5 Concession drain Repair of Rilett drain	Construction of access drain across Weidman drain Erection of new public and continuation school	Installation of waterworks system Construction of East Parry Sound Red Cross Hospital	Remodelling and repairing police hall, Inglewood Purchase of fire engine and appliances, Inglewood	Repair and improvement of Norton drain Alterations to public school	Construction of watermains and sewers	Repair of Hendry drain	Fire fighting equipment Construction of municipal waterworks system	Repair and improvement of St. Raphael's drain Construction of combined sewer on Bedford Street, local improvement	Construction of sidewalk on Bedford Street, local improvement Construction of concrete sidewalk on Hazel Street, local improvement	Construction of watermain, Llydican Avenue, local improvement Construction of watermains and sanitary sewers, Mary Street, etc., as	local improvements Construction of watermains, etc., on Dovercourt Street, etc., as local improvements	Establishment of park, athletic and exhibition Purchase of fire fighting equipment Repair of John Arner drain Repair of Morin drain Repair of Morin drain Repair of Mulder drain	Repair of Langlois drain
Brockville, Town Brockville, Town Brockville, Town Brockville, Town	Brooke, Township Brooke, Township Brooke, Township	brooke, 1 ownship Brooke, Township Brooke, Township	Brooke, Township Brooke, Township	Brooke, Township Brooke, Township Brooke, Township	Brooke, Township Bruce Mines, Town	Burk's Falls, Village	Ĕ	Camden, Township Campbellford, Town	Campbellford, Town	Caradoc, Township	Carleton Place, Town Cayuga, Village	Charlottenburgh, Township Chatham, City	Chatham, City Chatham, City	Chatham, City Chatham, City	Chatham, City	Chesley, Town Clifford, Village Colchester South, Township Colchester South, Township Colchester South, Township Colchester South, Township	Colchester South, Township
(£) (£) (£)	999 3	999	(P (P)	වලල	(р) ((I) (b)	(p)	(B)		(E) (E) (E) (E)	(I) (P)		(a)		(d)	

Procedure File	B-5870 (f) B-6314 B-7420 (a) B-7420 (b) B-7420 (c) B-6044	B-6521 B-6618 B-7023 B-7024	B-7376 (a) B-7376 (b) B-5673 B-6839 B-6077 B-6120 (1)	B-6120 (2) B-6854 B-6995 B-5341	B-6174 B-6272 B-6624 B-6912 B-7014	B-722 B-6842 B-6865 (a-b-c)	B-4771 B-6430	B-6442 B-6859 B-7001	B-6171 B-5675 (a)
Amount	\$ 1,833.89 5,000.00 21,533.00 6,055.00 2,227.00 5,000.00	504.50 1,926.70 1,035.00 5,648.73	2,266.20 1,665.00 165,000.00 4,000.00 25,000.00 63,692.00	32,884.00 35,000.00 31,631.00	20,000.00 4,394.50 13,000.00 35,183.19 36,502.10	5,205.60 135,000.00 15,000.00 54,211.32	59,221.00 6,100.00	2,499.20 12,495.00 4,000.00	3,000.00
Purpose (Continued)	Repair of Charles Shepley drain Grant to Canadian Legion, Colchester Branch, No. 38 Repair of Richmond drain Repair and improvement of Shepley drain Construction of Bowie drain Reconstruction, replacements, alterations and improvements to the	telephone system of the Township Repair and improvement of the Richmond drain Repair and improvement of East End and Seventh Concession drains Construction of Beneteau drain Construction of curb and widening of pavement, McGregor Road, as a	Repair and improvement of Batten drain Repair and improvement of Walls drain Construction of artificial ice arena Erection of school house, S.S. No. 1 Purchase of Arnold Smith property for Canadian Legion Construction of sewers, pavements and sidewalks, McLennan Avenue,	Construction of severs and watermains, Marlborough St., etc. Purchase of Diesel motor grader and other equipment Repairing and resurfacing Pit Street	Construction of successions and sewers, then St., co., Caratto to the Canadian Legion Construction of sewers on Fifth Street, as a local improvement Addition to school and equipment, P.S. No. 4 Construction of concrete roadways and sidewalks, Alice St., etc. Construction of sewers, Belfort and Belmont Streets	Construction of sewer on Dunbar Street School purposes Grant to Welland-Crowland health and recreational centre Construction of sewers, watermains and sidewalks, McAlpine Avenue,	etc., as local improvements Construction of certain asphalt pavements Construction of alterations and improvements of waterworks and Sewage systems	Construction of sewer on Humberstone Road, local improvement Construction and repair of Savage drain Construction of a school	Purchase of fire truck Construction of sanitary sewers, James Street, etc.
Municipality	Colchester South, Township Colchester South, Township Colchester South, Township Colchester South, Township Colchester South, Township Colchester North, Township	Colchester North, Township Colchester North, Township Colchester North, Township Colchester North, Township	Colchester North, Township Colchester North, Township Collingwood, Town Conmee, Township Cornwall, City Cornwall, City		Cornwall, Township Cornwall, Township Cornwall, Township Cornwall, Township Cornwall, Township Cornwall, Township	Cornwall, Township Cornwall, Township Crowland, Township Crowland, Township	Crystal Beach, Village Crystal Beach, Village	Crystal Beach, Village Cumberland, Township Dalhousie and North Sherbrooke	Omea Townships Delaware, Township Delhi, Village
Additional Legislation	<u>୍ଟିପ୍ଟିପ</u>		(C) (C) (D) (D) (D) (D) (D) (D)	(t) (b)	(E) (E) (E) (E) (E) (E) (E) (E) (E) (E)	(f) (g) (d) (d) (d)	(a) (d) (h) (l)	(p)	(d) (a) (d) (n)

	Delhi, Village Delhi, Village Delhi, Village	Construction of watermains as local improvements Construction of watermains on Imperial Street as local improvements Construction of watermains on James Street, etc., as local improvements ments	153,575.00 5,290.00 5,260.00	B-5675 (b) B-7217 B-7307
Dorion, Uno Township	Dorion, Unorganized Township	Public school purposes	21,000.00	B-5926
Douro, Dover,	Douro, Township Dover, Township	Erection of school in U.S.S. No. 12 of Douro and Dummer Repair and improvement of Fifth Concession mechanical drainage works	6,500.00	B-7394 B-6505 (a)
Dover, Dover, Dover, Dover,	Dover, Township Dover, Township Dover, Township Dover, Township Dover, Township	Repair and improvement of Bechard mechanical drainage works Repair and improvement of Fourth Concession and Ouellette drain Repair and improvement of part of Gowrie drain Repair and improvement of Porter drain Construction of the Wilson drain	3,080.00 750.00 3,800.00 800.00 550.00	B-6505 (b) B-6505 (c) B-6505 (d) B-6505 (d) B-6505 (f)
Dryde	Dryden, Town Dryden, Town	Construction of sanitary sewers, Florence St., etc., as a local improvement ment Construction of sanitary sewers, Victoria St., etc., as a local improvement	24,350.00 52,250.00	B-6486 (a) B-6486 (b)
Dryden, Dundas,	en, Town as, Town	Construction of sanitary sewers on York Street, etc., as local improvement Construction of sanitary sewers on York Street, etc., as local improvements	12,000.00 22,464.49	B-6591 B-6263
Dundas, Dundas, Dundas,	as, Town as, Town as, Town	Construction of sanitary sewer on Alma Street Construction of sanitary sewer on Alma Street Construction of sanitary sewers, pump house and force main on Hope Street, as local improvements	4,627.60 4,880.60 12,345.50	B-6773 (a) B-6773 (b) B-6773 (c)
Dund Duny Duny Duny Duny Duny Duny Dysa East East East East East East East Ea	Dundas, Town Dunwich, Township Dusart, United Township East Nissouri East Nissouri East Vissouri Eastview, Town East Whitby, Township East Williams, Township East Williams, Township	Construction of sanitary sewer on Napier Street Construction of McKeller drain Construction of McKeller drain, No. 1 Branch Repair and improvement of McFarlane Salmon drain Repair and improvement of McFarlane Salmon drain Repair and improvement of McFarlane drain extension Repair and improvement of Gilbert drain Repair and improvement of Tolman Drain Repair and improvement of Sapelje drain Repair and improvement of Bapelje drain Purchase of one new K B 8 International truck Construction of Buchner drain Purchase of fire equipment Purchase of fire quipment Purchase of land for high school purposes Construction of sewer on Centre Street, as local improvement Public school purposes Recleaning and extending the McIntyre drain Construction of Watermain on Yardley Avenue	943.00 887.00 756.26 4,107.00 2,341.00 1,250.00 1,304.00 1,304.00 4,8000.00 2,952.00 4,006.00 2,5000.00 2,172.00 3,000.00 6,260.00 2,236.00	B-7117 B-6159 B-6644 B-7146 (a) B-7146 (b) B-7146 (c) B-7146 (d) B-7451 (a) B-7451 (a) B-7451 (b) B-7454 B-7655 B-6345 B-6345 B-6322 (a) B-6322 (b) B-6322 (b) B-6322 (c) B-6322 (c)

Procedure	File	B-6286	B-6949 (a-b-c) B-6950 (a-b)	B-7177 B-7379 (a-b-c)	B-5961 B-6351 B-6538 B-6530 (a) B-6930 (b) B-6428 (b) B-6428 (c) B-6428 (c) B-6428 (c)	B-5889 B-6683 B-6684 B-6858 B-687 B-6858	B-6065 B-7064 (a) B-7064 (b)	B-5268 B-5441 B-5539	B-5800 B-6046 B-6874 B-6875 B-6876 B-6880
	Amount	\$ 2,440.00	4,756.00 2,489.40	1,630.62 10,270.00	1,195.00 888.07 2,670.00 3,000.00 1,700.00 7,905.00 2,225.00 886.00 7,928.45	4,100.00 25,000.00 9,500.00 11,000.00 26,425.00	10,000.00 14,000.00 16,000.00	50,000.00 191,000.00 100,913.00	143,000.00 20,000.00 9,270.00 30,275.00 87,552.00 8,500.00
٠	Purpose (Continued)	Construction of curb on Heathbridge Park Drive and Road as a local	Improvement Concrete sidewalks, Barbara Crescent, etc., local improvements Concrete sidewalks on Virginia and Cosburn Avenues, as local improvements	Sidewalks, curbs and watermain, Ventnor Avenue, etc. Sidewalks, curbs and sewers, Nesbitt Drive, etc., as local improvements	Repair and improvement of McGregor drain Repair and improvement of Pierce-Nicolls drain Improvement of McArthur Award drain Construction of a tile stone or timber drain Repair and improvement of Cameron drain Repair and improvement of Cawston drain and branches Repair and improvement of Cawston drain and branches Repair of Branches 1, 2, 3 and 4 of East Black Creck drain Construction of Alexander drain Repair of Peffers drain Repair and improvement of Gilkinson-Peffers drain	Repair and improvement of McCourt drain Improvement, extension and alteration of waterworks system Floating indebtedness Concrete sidewalk on parts of Factory Street, etc. Construction of waterworks and sewerage system Sewers, watermains and private drain connections on Second Avenue,	erc. Grant for bridge crossing Chemong Lake Purchase of road making machinery and appliances Erection of building for repair and storage of machinery and remodelling of township half	Building additional rooms in Islington Public School Sanitary sewer immediately north of the Queen Elizabeth Way Watermains, sanitary sewers and sidewalks, Donnybrook Lane, etc., as local improvements	Additional six rooms to schoolhouse, P.S.S. No. 15 Addition to fire hall, Islington Fire Area Watermains and sanitary sewers, Munster Avenue, etc. Watermains, Munster Avenue West, etc., local improvement Storm sewers, Glenaden Avenue West, etc., local improvement Purchasing and equipping Quonset Huts for school accommodation,
	Municipality	East York, Township	East York, Township East York, Township	East York, Township East York, Township	Ekfrid, Township Ekfrid, Township Ekfrid, Township Eldon, Township Ellicc, Township Ellicc, Township Ellicc, Township Ellicc, Township Elma, Township Elma, Township Elma, Township	Elma, Township Elmira, Town Elmira, Town Elmira, Town Elora, Village Englehart, Town	Ennismore, Township Esquesing, Township Esquesing, Township	Etobicokc, Township Etobicokc, Township Etobicokc, Township	Etobicoke, Township Etobicoke, Township Etobicoke, Township Etobicoke, Township Etobicoke, Township Etobicoke, Township
Additional	Legislation	(f)	(a) (a)	(a) (a) (f)	<u> විලි</u> ලි	(d) (g) (l) (d) (d) (d) (d) (d) (d)	(d) (b)	(d) (e) (h) (a) (h) (a) (h)	(d) (b) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d

B-7017 (a-e)	B-7220 B-7242 (a-b-c)	B-7444 B-6522 B-7359 B-6080 (2-4)	B-4179 B-4897 B-5913	B-6227 B-6367	651	B-6780 B-6864 (a-c-d-c-f)	B-7221 B-7356	B-7518	B-6116 B-6404 B-7136	B-7137	B-7138 B-5927 B-6256 B-6290 B-6532	B-3281 B-6121 B-6127 B-6222 B-6736 B-6811
424,080.00 B-70	100,000.00 B-7220 10,617.00 B-7242	4,000.00 B-7. 16,000.00 B-6, 6,700.00 B-7.				10,275.00 B-6 6,945.00 B-6 30,835.00 B-6		,	124,000.00 B-6 20,000.00 B-6 2,848.08 B-7	9,982.00 B-7	45,000.00 B-7 70,000.00 B-5 3,136.40 B-6 14,000.00 B-6 8,300.00 B-6 25,000.00 B-7	764,000.00 B-3 26,769.93 B-6 300,000.00 B-6 7,784.00 B-6 22,000.00 B-6 84,023.00 B-6
Construction of sewage treatment plant, sanitary sewers, watermains and sidewalks Westrose Avenue etc. as local improvements	çe Area,	Floating indebtodies and a suctionary of the Floating indebtodies incurred in 1944-1946. Wartime housing project Purchase of fire engine and equipment for Elmvale Village Construction of undermosting Firmert Ave. etc. Local improvements	Constitution of water mains, branches are, see, social improvements. Cravelling of Castlefad Avenue, local improvement. Widening Rosebury Road, local improvement. Erection of ornamental street-lighting standards, Eglinton Avenue.	Asphalt pavement on Rosebury Road, local improvement Installation of ornamental street lighting on Warren Road, as local improvement	Ornamental street lighting, Forest Ridge Drive, and pavements on Forest Ridge Drive, etc.	Asphalt pavement, Lonsmount Drive, as a local improvement Pavements and sidewalks, Lonsdale Road, etc., local improvements	Aspirati pavement, Lyon Avenue Storm and sanitary sewers, Castlefield Avenue, local improvements Sidewalk on Lonsdale Road, as local improvement	Construction of an asphalt pavement on concrete base with catch basins and sewer connections in a lane at rear of lots on north side of Eglinton Avenue	Retirement of unmatured debentures Construction of certain works, services to wartime houses Construction of sanitary sewers on Dominion Road and Joseph Street, as local improvements	Sanitary sewer, watermain and roadway with storm drains on Adelaide Street as local improvements	Erection of memorial arena Addition to Alexander Mackenzie School Construction of watermain, Victoria Ave., local improvement Purchase of road machinery and appliances Construction of watermain through Pithers Point Park Construction of rip rap for protection of residents along the Sand Bay Shore	Purchase and installation of complete modern dial telephone system Construction of private sewer connections Construction of skating rink Paving of Norah Street, as a local improvement Purchase of 400 Catherine Street for Board of Education offices Paving of Kingsway, Brock and Brown Streets
Etobicoke, Township	Etobicoke, Township Etobicoke, Township	Etobicoke, Township Exeter, Village Flos, Township	Forest Hill, Village Forest Hill, Village Forest Hill, Village	Forest Hill, Village Forest Hill, Village		Forest Hill, Village Forest Hill, Village	Forest Hill, Village Forest Hill, Village Forest Hill. Village	Forest Hill, Village	Fort Eric, Town Fort Eric, Town Fort Eric, Town	Fort Erie, Town	Fort Eric, Town Fort Frances, Town	Fort William, City Fort William, City Fort William, City Fort William, City Fort William, City Fort William, City
(a) (h)	(a)	(n) (l) (b)	(f) (h) (d) (f) (h) (a) (f)	££ :	(L)	(£)		(a) (f)	(d) (f) (k) (l) (f)			(d) (l) (d) (d) (a)

Procedure	File	B-7189	B-7598 B-5897 (a) B-5897 (b) B-7298	B-7549	B-6569 B-6570 B-6357 B-6890	B-7239 B-6664 B-6867 B-7318	B-6501 B-7172 B-5898	B-5920 B-5995 B-6918	B-7050 B-7368 B-4913 B-6267	B-6568 (a) B-6568 (b) B-6568 (c) B-6568 (d)		B-7419 (c) B-7485 B-5779 B-5846 B-6421
_	Amount	\$175,000.00	70,000.00 12,663.00 10,936.46 16,603.25	10,762.59	53,000.00 62,000.00 375,000.00 30,000.00	2,500.00 140,000.00 285,000.00 8,195.00	8,312.20 3,000.00 6,015.00	2,390.05 914.00 1,034.50	985.00 1,874.50 1,738.39 4,157.00	776.00 737.50 1,059.00 1,093.80	1,500.00 10,250.94 2,611.00 2,702.00 3,099.00	532.00 4,309.00 1,525.00 76,000.00 30,600.00
	Purpose (Continued)	Change-over of transportation system from a street railway to trolley	Construction of sewers, sidewalks and pavements, River Avenue, etc. Construction of sanitary sewers, Pollock Avenue, etc. Construction of watermains, Pollock Avenue, etc. Construction of sanitary sewers on Elgin Street, etc., as local improve-	ments Construction of watermains on Elgin Street, etc., as local improve- ments	Archals Applied to Stone Street, etc. Surfacing of asphalt pavement on Stone Street, etc. Construction of sewage system and disposal plant Installation of artificial ice in memorial arena	Public school purposes Addition to Overbrook Public School, School Area No. 2 Erection of Alta Vista School, School Area No. 1 Alteration and improvement of grade and surface of Glin Avenue in profession and surface of Origin Avenue in police village of Overbrook as a local improvement	Construction of sidewall around Markt Square Acquisition of lands for wartime houses Repair and improvement of Centre Branch drain	Repair of Ninth Concession drain Repair and improvement of Boose drain Drainage work	Cleaning and improving the Loyst drain Repair and improvement of Graham Sideroad drain Repair of Conklin drain Proving and improvement of contro breach of No. 47 drain	Repair and improvement of Matlock drain Repair and improvement of Matlock drain Cleaning and improvement of Nelson drain Repair and improvement of Malott drain Repair and improvement of Boose drain	Drainage work Drainage work Repair of Fourth Concession drain Repair and improvement of Esseltine drain Repair and improvement of Lane drain	Repair and improvement of Loyst drain Repair and improvement of Third Concession Road drain Watermain on Lincoln Avenue, Jocal improvement Watermains in Niagara Street Water System Area, local improvement Watermain in Geneva Street Water System Area, local improvement
	Municipality	Fort William, City	Fort William, City Galt, City Galt, City Galt, City	Galt, City	Gananoque, Town Gananoque, Town Georgetown, Town Georgetown, Town	Gillies, Township Gloucester, Township Gloucester, Township Gloucester, Township	Goderich, Town Goderich, Town Gosfield North, Township		Gosfield North, Township Gosfield North, Township Gosfield South, Township			Gosfield South, Township Gosfield South, Township Grantham, Township Grantham, Township Grantham, Township
Additional	Legislation	(u) (p)	(a) (a) (a) (b)	(a)	(d) (n) (d) (f) (f) (f) (f) (f)	(E)	999	TEE	ভভভ	= = 9999	<u>මුලුමුම</u>	= ====================================

20,000.00 B-6462 1,200.00 B-6470 8,500.00 B-6775 2,100.00 B-7021 5,400.00 B-7021 3,000.00 B-706 40,000.00 B-4089 1,150.00 B-5088 (a) 17,040.00 B-5088 (b) 17,000.00 B-6695		10,500.00 B-7399 10,200.00 B-7442 1,163.02 B-7475 98,000.00 B-7476 5,981.00 B-7477 7,362.00 B-7604	15,634.00 B-7605 20,082.00 B-7501 (a) 7,581.00 B-7501 (b) 9,405.00 B-7501 (c) 4,040.00 B-7501 (c) 2,100.00 B-7501 (c) 8,330.00 B-7501 (f) 14,723.00 B-7501 (g) 5,610.00 B-7513 (a) 6,100.00 B-7513 (b) 6,400.00 B-7513 (c) 11,896.00 B-7513 (c)
School purposes Waterworks on Ashland Avenue North, local improvement Watermains in Maple Grove Park Subdivision, local improvement Watermain on Bloomfield Avenue, local improvement Sewers on Lily Street, etc. Watermains on Barton and Bridge Streets, local improvements Construction of Sewage disposal plant Construction of Gordon drain Repair and improvement of Beauchamp Creck drain Construction of sidewalk, watermains and sewers, Kingsway Blvd.,	etc., as local improvements Improvements and additions to sewage disposal plant Construction of watermain on Parkdale Avenue Construction of watermain on Thorndale Street Construction of watermain on East 11th Street Construction of watermain on East 12th Street Construction of watermain on East 12th Street Construction of sewer on Main Street, local improvement Construction of sewer on Norfolk Street, local improvement Construction of sewer, Thorndale Ave., local improvement Construction of pipe sewer, Fennel Avenue, local improvement Construction of cenent walk and curb, East 12th Street, as local improvement	Construction of pipe sewer, East 11th Street, as local improvement Watermain, Queensdale Avenue Cement walk and curb, Jarvis Street, local improvement Installation of pumps, motors and switching gear at Ferguson Avenue Pumping Station Construction of pipe sewer, East 12th Street, local improvement Construction of concrete alleyway between King Street and King William Street, as a local improvement Private drain connections, Queensdale Avenue, as a local improvement	Asphalt on concrete roadway, Tuxedo Avenue, local improvement Asphalt roadway, Glennount Avenue, local improvement Asphalt roadway, Kingsmount Street, local improvement Asphalt roadway, Hollywood Street, local improvement Pipe sewer, Hollywood Avenue, local improvement Watermain, Hollywood Avenue, local improvement Pipe sewer, Cline Avenue and Westwood Avenue, local improvement Asphalt on concrete roadway, Barnesdale Avenue, local improvement Watermain, Fennel Avenue and East 22nd Street Watermain, East 25th Street Watermain, East 26th Street Asphalt roadway, Norfolk Street, local improvement
Grantham, Township Grantham, Township Grantham, Township Grantham, Township Grantham, Township Grantham, Township Gravenhurst, Town Grey, Township Grey, Township Grey, Township	Grimsby, Town Hamilton, City	Hamilton, City	Hamilton, City

Procedure File	B-7531 (a) B-7531 (b) B-7531 (c) B-7531 (c) B-7531 (c) B-7531 (d) B-7531 (d) B-7531 (d) B-7531 (g) B-7531 (g) B-7545 (a) B-7545 (c) B-7546 (d) B-7561 (c)	B-7621 (a) B-7621 (b) B-621 (b) B-6248 B-7448 B-7448 B-7305 B-578 B-578 B-5739 B-6011 B-6482 B-6483 (b) B-6483 (b) B-6483 B-6844 B-6844 B-6844
Amount	\$ 8,461.00 15,080.00 4,556.00 4,387.50 11,438.00 3,958.00 8,073.26 4,773.26 4,773.26 5,981.56	3,179.00 3,072.00 9,000.00 2,000.00 5,770.80 20,000.00 44,500.00 350,000.00 44,500.00 62,000.00 10,000.00 15,000.00
Purpose (Continued)	Cement walk and curb, Shelby Street, local improvement Cement walk and curb, Burlington Street, local improvement Cement walk and curb, Burlington Street, local improvement Cement walk and curb, East 14th Street, local improvement Cement walk and curb, Fast 14th Street, local improvement Cement walk and curb, Tolton Avenue, local improvement Asphalt pavement roadway, Thorndale Street, local improvement Private drain connections from sewer to street line, Brucedale Avenue and East 13th Street, local improvement Cement walk and curb, Main Street East, local improvement Cement walk and curb, Norfolk Street, local improvement Cement walk and curb, Rast 13th Street, local improvement Cement walk and curb, East 13th Street, local improvement Cement walk and curb, Thorndale Street, local improvement Cement walk and curb, Thorndale Street, local improvement Cement walk and curb, James Street South, local improvement Cement walk and curb, Hollywood Street, local improvement	Cleaning and improving of Richmond drain Cleaning and improving of P. Ferriss drain Cleaning and improving of P. Ferriss drain Cleaning and improving of P. Ferriss drain Telephone purposes Grant to Canadian Legion Construction of sewerage system and sewage disposal plant Construction of sewerage system and sewage disposal plant Erection of two-room extension to high school Rebuilding existing sidewalks Erection of a residence for high school teachers Erection and equipment of additions and extensions to high school Construction of watermains and copper private water services on Montgomery Avenue, etc., as local improvements Construction of sewage disposal works Construction of sewage disposal works Construction of Legion Memorial Hall Extension of Keewatin municipal telephone system cable plant and switchboard Construction of waterworks and sewerage systems Construction of system of waterworks
Municipality	Hamilton, City	Harrow, Town Harrow, Town Hay, Township Hensall, Village Hespeler, Town Ingersoll, Town Ingersoll, Town Iroquois, Town Iroquois, Town Kapuskasing, Town
Additional Legislation		(i) (i) (ii) (ii) (ii) (ii) (iii) (i

1,500.00 B-6282 46,900.00 B-6668 (a-b) 19,900.00 B-7045 63,000.00 B-577 8,000.00 B-5512 3,674.00 B-5577 5,727.50 B-6161		198.00 B-6508 3,672.00 B-6512 (a-b-c) 12,146,44 B-6513 (a-b-c) 5,280.00 B-6514 59,000.00 B-6516	2,500.00 B-6654 3,130.00 B-6655 3,907.10 B-6656 65,000.00 B-6661 2,583.00 B-6742 600.00 B-6743 16,775.00 B-6744 (a-b)	173.00 B-6745 9,000.00 B-6751 23,000.00 B-6759 14,000.00 B-6760 124,717.75 B-6834	12,000.00 B-6920 693.40 B-7113 38,000.00 B-7270 3,806.75 B-7304 12,575.00 B-7324 7,778.80 B-7347 3,740.00 B-7466 10,000.00 B-7466
Purchase of fire engines and appliances Purchase of school site and construction of two additional rooms, U.S.S. No. 1, King and Whitchurch Purchase of school site and construction of two additional rooms, U.S.S. No. 1, King and Whitchurch Additional cost of erection and improvement of school buildings Additions to Kingston Public Library Erection of a suitable building for tools and equipment in city park Construction of tile sewer, Helen Street Construction of sewer, southern loop of College Street in Earlscourt	Subdivision, as a local improvement Purchase of trucks for garbage collection purposes Asphalt pavements, College Street and Durham Street, as local improvements Construction of macadam road, Helen Street, local improvement Concrete walk, Helen Street, east side, local improvement	Concrete walk, College Street Concrete walks, Mack and Helen Streets, local improvements Resurfacing pavements on King, Queen and Ontario Streets Macadam roadway on Helen Street, local improvement Purchase of additional incinerator units and extension of building to	Conscribed walks on Park Street, as local improvements Conscribed walks on Park Street, as local improvements Asphalt pavement on black base, Durham Street, local improvement Widening of Montreal Street, etc. Construction of sewer, part of Park Street, local improvement Construction of sewers, part of Park Street, local improvement Construction of sewers, Division and College Streets, as local improve-	ments Construction of tile sewer, College Street Storm relief sewer, Russell Street Purchase of a snow blower Reconstruction of certain sidewalks Construction of sewers, pavements, concrete walks and curbs, as local	Improvements Construction of storm relief sewer, Macdonnell Street Construction of sewer, part of Dunlop Street, local improvement Extension of watermain, Division Street, local improvement Resurfacing of part of Ontario Street, local improvement Sheet asphalt pavement, College Street, local improvement Sheet asphalt pavement, Mack Street, local improvement Macadam roadway, Railway Street, local improvement Operation of garbage and ash collection Construction of tile sewer, Railway Street, local improvement
King, Township King, Township Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City		Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City	Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City	Kingston, City Kingston, City Kingston, City Kingston, City Kingston, City	Kingston, City
(a) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	(t) (b)	(a) (a) (I)	(p)	(E) (E) (E)	(d) (g) (l) (d) (d) (d) (d) (e) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e

Procedure		0 B-7557	0 B-7562 5 B-4855 (t) 0 B-4934	D-6149 D-6630	B-6631 B-6808 (a) B-6808 (b)				0 B-5067	7 B-6727 (a-b) 0 B-7106 0 B-7309 7 B-6674		D B-6678 D B-6679) B-6927 (a)	0 B-6927 (b) 0 B-6928 0 B-7370	8 B-5402	0 B-6415 0 B-6554 0 B-6671
Amount	Amount	\$ 2,710.00	1,823.00 53,742.45 890,000.00	4,587.60 396,750.00	17,320.00 23,512.00 7,540.60	98,407.00	56,988.31	150,000.00	17,500.00	156,848.17 18,500.00 12,000.00 7,915.17	32,984.00 11,047.00	5,438.00	1,216.00	1,306.00 9,278.00 160,000.00	78,430.28	300,000.00 150,000.00 16,292.40
Discontinuity	ruipose (commuea)	Construction of sewers, Westdale Avenue and Franklin Place, as local improvements	Construction of sewer, Regent Street Construction of curb and gutter, bituminous pavement, Russell Street Permanent improvements of Kitchener and Waterloo Collegiate	Construction of sanitary sewers and concrete walk, Sheldon Street, etc. Construction of sanitary sewers and concrete walks, bituminous roadway, resurfacing, etc., Dundas Avenue, etc.	Concrete walks, pavement, grading, drainage, on Garden Avenue, etc. Construction of watermains, sewers, grading, etc., Sidney Street, etc. Construction of bituminous pavement, concrete walk, watermain, early and outter. Russell Street, etc.	Grading and gravelling, curbs and gutters, pavements, etc., Victoria Street, etc.	Bituminous roadway, curb and gutter, concrete walks, etc., Dunbar Street, etc.	Providing the Public Utilities Commission with moneys to carry out the purpose of the City of Kitchener Act	Engineering services, fire engine, and replacing heating system in memorial hall	Construction of waterworks system and sewage disposal system Construction of sewers, Sixth Avenue, etc. Construction of extension to waterworks system Renair and improvement of Selkirk drain	Resurfacing of part of Eric Street and Talbot Street Construction of sidewalks on Whitman Avenue, etc., local improve-	Construction of sewer, Churchill Avenue, local improvement Construction of sewer, Whitney Avenue, Ivan and Foundry Streets, as local improvements	Construction Sidewalks, Foundry Street and Whitney Avenue, as	Construction of sewer on Maple Avenue, local improvement Construction of watermains on Whitman Avenue, etc. Erection, establishment, maintenance and equipment of a public howital	Property sidewalks and widening pavement, Hanna Road, etc., as local innerwoments	Addition to Northlea School Erection of municipal building Construction of sidewalks on Bessborough Drive, etc.
	Municipality	Kingston, City	Kingston, City Kitchener, City Kitchener, City	Kitchener, City Kitchener, City	Kitchener, City Kitchener, City Kitchener, City	Kitchener, City	Kitchener, City	Kitchener, City	Lakefield, Village	Larder Lake, Township Larder Lake, Township Larder Lake, Township	Leamington, Town Leamington, Town Leamington, Town	Leamington, Town Leamington, Town	Leamington, Town	Leamington, Town Leamington, Town Leamington, Town	Leaside, Town	Leaside, Town Leaside, Town Leaside, Town
Additional	Legislation		(E)(a)	(a)	(a) (h)	(a)		(p)	(c) (J)	<u> </u>	(a)				(a)	(d) (a) (a)

00 B-6901 00 B-7051 00 B-6836 00 B-6168	00 B-7095 (a) 00 B-7095 (b) 00 B-6039 00 B-6180 00 B-5939	8 B-5823 (a-d) 57 B-5829	90 B-5918 (a-b-c) 20 B-5919		08 B-6207 88 B-6252 (a) 23 · B-6252 (b) 11 B-6617 (a-h)	14 B-6747 (a-d) 11 B-6947 51 B-7110 (a) 65 B-7110 (b-h)	90 B-7456 (a-b) 58 B-7456 (c-i) 5 B-7566 (a-c)	27 B-7566 (d-h) 80 B-7566 (i-j) 00 B-3476 (a) 00 B-3476 (b)
4,150.00 11,840.00 9,250.00 2,200.00	3,160.00 5,100.00 1,364.90 1,375.00 650,000.00	5,702.68	2,792.30	3,327.21 526.35 5,691.27 97,532.40	2,864.08 4,316.08 2,813.23 7,617.41	3,338.54 12,288.61 329.61 5.819.66	2,187.00 9,719.58 3,622.75	4,721.27 4,348.80 5,100.00 6,425.00
Construction of sanitary sewers on Bayview and Broadway Avenues Construction of concrete sidewalks, Bayview Avenue, etc. Purchase of lands for Wartime Housing Limited project Maintenance and improvement of Glen Robertson Branch of	Deepening, widening or improving of McRac-Wylic award ditch Deepening, widening and improving the Vogan-Pichic award drain Repair and improvement of Dillon drain Repair and improvement of Cameron drain Retirement of all outstanding debentures maturing in years 1947 to 1000 in the control of	Construction of canner and such and gutter and sanitary sewer, East Hale Street, as local improvements Construction of sanitary sewer system, Victoria Street, etc., as a local	Improvement Construction of sanitary sewer and private drain connections, Thompson Road, etc., as local improvements Construction of private drain connections to Lots 120 and 127, West	Giles Street Construction of sanitary sewer, Elgin Street, local improvement Connent walk, West Wellington Road, local improvement Sewer, Durham Street and Brant Street, local improvement Sanitary sewers, Grosvenor Street, etc., local improvement	Cement walks, Highbury Avenue, etc., local improvement Combined sewer, Thompson Road, local improvement Cement walk, West Edgerton Street Cement walks, curb and gutter, and ornamental lighting, South	Cament walk, private drain connection, sanitary sewer and ornamental street lighting, Highbury Ave, etc., as local improvements Construction of sanitary sewer, curb and gutter, private drain connections, and cement walks, Wilson Lane, etc. Construction of cement walk, North South Street Private drain connections, early and entirer, and cement walks. South	Langmuir Avenue, etc., as local improvements Cement curbs and gutters, West and East Adelaide Streets Private drain connections, cement curb and gutter, sanitary sewer, and cement walks, East McCormick Blvd., etc., local improvements Cement walks and sanitary sewer, Highbury Ave., etc., as local	Improvements Cennent walks, sanitary sewers, drain connections, North Eastmount Avenue, etc., local improvements Cement curbs and gutters, West Hale St. and East Hale St. Storm sewer, Oxford Street, etc. Repair and reconstruction of flood municipal drain
Leaside, Town Leaside, Town Lindsay, Town Lochiel, Township	Lochicl, Township Lochicl, Township Logan, Township Logan, Township Long Branch, Village	London, City London, City	London, City London, City	London, City London, City London, City London, City	London, Citý London, City London, City London, City	London, City London, City London, City	London, City London, City London, City	London, City London, City London, Township London, Township
(a) (a) (b)	(d) (h) (k)	((a)				(a)	(E)(E)

Procedure Amount File	\$ 7,200.00 B-5885 1,000.00 B-6813 30,540.00 B-6419 (a-j) 8,570.00 B-7207 45,000.00 B-7208 9,000.00 B-7209 50,000.00 B-7210	31,925.00 B-7349 (a) 700.00 B-7349 (b) 18,600.00 B-7349 (c) 1,831.00 B-6342 10,400.00 B-3907	5,534.10 B-5794 5,015.00 B-7059 65,000.00 B-6691 12,000.00 B-5504	3,517.45 B-6245 (a) 6,567.54 B-6245 (b) 2,478.50 B-6735 (b) 1,672.00 B-6735 (c) 8,244.70 B-6735 (c) 8,244.70 B-6872 (a) 1,600.00 B-6872 (a) 2,700.00 B-6872 (a) 2,700.00 B-6872 (b) 3,600.00 B-5987 (c) 3,510.74 B-6593 1,605.51 B-6814 3,800.00 B-7302 4,000.00 B-7302	32,000.00 B-5988 110,000.00 B-5915 15,000.00 B-6320 4,060.00 B-7034 6,000.00 B-5945
Purpose (Continued)	Construction of storm sewer, Adelaide Street Construction of Marshal Place drain Construction of watermains, Wethered Street, etc. Construction of watermain, Hale Street Public school purposes Public school purposes Public school purposes Addition of two rooms, Argyle Park Public School, with equipment and furniture, S.S. No. 23	Repair and reconstruction of Argyle Park municipal drain Construction of storm sewer, Third Street Storm sewer and cellar drain, Trindell Subdivision Balance of cost of fire fighting equipment Construction and equipment of a public school	Repair and improvement of Dillon drain Repair and improvement of Johnston-Irvine drain Alterations and additions to P.S.S. No. 5 Construction of sanitary sewer, Third Street East, as a local improvement	Construction of watermain on Rourke Line Road Construction of watermain on Elm Grove Drive Repair and improvement of Middle Road drain Repair and improvement of Stowe drain Repair and improvement of Klingbile Award drain Repair and improvement of Klingbile Award drain Repair and improvement of Sth Concession drain Repair and improvement of Sth Concession drain Public school purposes School purposes Gravel roads, South Drive, as a local improvement Gravel roads, Carlton Road and Pomander Road, local improvement Erection of memorial hall Construction of Denstedt municipal drain Construction of the Belle and Stinson drain Repair of Municipal Drain No. 2 Erection of a public school	Waterworks extension and water storage tank Construction of waterworks system Construction of sewers, Clark Street, etc. Paving of part of Lincoln Avenue Purchase and installation of fire engine and appliances
Municipality	London, Township	London, Township London, Township London, Township Louth, Township Lybster, Unorganized Township	McKillop, Township McKillop, Township McKim, Township McIrvine, Township	Maidstone, Township Maidstone, Township Maidstone, Township Maidstone, Township Maidstone, Township Markham, Township Maryborough, Township Maryborough, Township Maryborough, Township Maryborough, Township Maryborough, Township Maryborough, Township	Meaford, Town Merrickville, Village Merritton, Town Merritton, Town Mersea, Township
Additional Legislation	<u>4</u> 99999999	(g) (g) (g) (g) (g)	<u>@@</u> ⊕⊕	ට ලිලිලි ලි ලිලිලිලිලිබු මෙසිම් සිත්ප්රිත්වෙන්න	(d) (g) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d

	17,000.00 B-6881 (a) 3,175.00 B-5940 (b) 3,175.00 B-5940 (b) 355.00 B-6590 (a) 4,950.00 B-6489 4,000.00 B-6689 (a) 3,902.00 B-6689 (a) 4,000.00 B-6694 (a) 787.43 B-7235 (a) 6,000.00 B-7322 (a) 6,000.00 B-7322 (a) 6,000.00 B-7322 (a) 6,000.00 B-7322 (a) 6,000.00 B-6808 (a) 6,000.00 (a) 6,000.00 (a) 6,000.00 (a) 6,000.00 (a) 6
Granting aid to Leamington District Memorial Hospital for ercction and equipment of a public hospital Repair and improvement of Brigham-Watt drain Purchase of fire engine Construction of pavement, storm sewers, curbs and gutters on Miles Road, as local improvements Construction of Incinerator Repair and improvement of Morrison drain Repair and improvement of Morrison drain Repair and improvement of Sinclair drain Repair and improvement of Wellington drain Repair and improvement of Wellington drain Repair and improvement of the Mannen drain Repair and improvement of the Mannen drain Repair and improvement of the Beckwith Street drain Repair and improvement of the Beckwith Street drain Repair of the Chalmers drain Repair of the Chalmers drain Repair of the Hamilton-Ranney drain Repair of the Hamilton-Ranney drain Repair of Nether Black Greek drain Repair of Ouerin drain Construction of the Hamilton-Ranney drain Repair of Ouerin drain Construction of Sewer on north side of Annette Street as a local improvement	Fire protection purposes Repair and improvement of Government drain No. 5 and 6 Repair and improvement of Sheriff-Bristow drain Construction of the Grainger drain Repair and improvement of the Hugh McLachlan and Reycraft- Winship drains Construction of the Barkley-Simzer drain Purchase of fire engine and appliances and water supply Construction of Shaver-Harper drain Repair and improvement of the Cinnamon drain Improvement of the Casselman drain Construction of a sanitary trunk sewer Erection of public hospital in town of Trenton Construction of watermains Improvements to municipal building, and paving of Broadway Avenuc
	(1) Morrisburg, Village Mosa, Township Mosa, Township Mosa, Township Mosa, Township Mosa, Township Mountain, Township Mountain, Township Mountain, Township Mountain, Township Mountain, Township Murray, Township Murray, Township Murray, Township Mount Forest, Town Murray, Municipality

Procedure File	B-6553	B-6793	B-7140 (a-b)	B-7449 B-6338 B-6774	B-6955 B-7181 (a) B-7181 (b)		B-7333 (b) B-5922	B-6424 (a-i)	B-6549	B-7060 B-7120	B-7299 B-6298 (a-b)	B-7481 B-7400 B-6049 B-6829 B-7464	B-6824 B-6966 B-7130 B-6236 B-1703 (c) B-3712 B-6726 B-6764
Amount	\$ 68,938.00	11,488.32	94,361.00	550,000.00 6,400.00 7,000.00	3,300.00 15,648.00 18,759.00	6,883.00 1,150.00 5,400.00	75,000.00	10,160.65	31,015.42	9,164.18 8,000.00	3,000.00 43,947.01	12,000.00 5,000.00 60,000.00 13,560.00 5,074.38	800.00 1,671.46 849.38 27,000.00 1,500.00 25,000.00 5,700.00 3,263.16
Purpose (Continued)	Construction of waterworks system on the Sudbury Falconbridge	Road, etc., as rocal improvement Construction of watermains on Leighland Road, etc., as a local improvement	Construction of sewers and watermains, Uplands Avenue, etc., as a	High school purposes Erection of new vault and chapel at town cemetery Purchase of combination pumper and hose wagon	Purchase of certain lands for erection of wartime houses Construction of sewers, Haliburton Avenue, etc., local improvements Installation of watermains and house services, Golding Street, etc.	Public school purposes Sanitary sewer, 15th Street Construction of pavements, 17th Street, etc.	Construction of incinerator Purchase of site and erection thereon of branch library	Construction of sewers, sidewalks, macadam roads and curbs and	Construction of sewer, macadam pavements, sidewalks, and water-mains, North Street, etc.	Construction of storm sewer, Slater Avenue Extensions of watermains, fire protection, services and improvements to waterworks system	Construction of sewer, Ricardo Street Construction of sewage treatment works and sewers as local improvements	Repair and improvement of Routh drain, local improvement Erection of one-room school, P.S.S. No. 1 Acquisition of arena and auditorium Purchase of power grader, etc. Construction of watermains, Park and First Avenues, as local improvements	Repair of the Bishop drain Repair of Scott municipal drain Repair of Scott municipal drain Repair of Branch Creek drain Purchase of school busses Construction of roadway, DeVere Gardens Completion and furnishing of C. B. Parson's School Construction of sanitary sewer, Mason Boulevard Construction of watermain, Argyle Avenue, as local improvements
Municipality	Neelon and Garson, Townships	Nelson, Township	Nepean, Township	Nepean, Township New Liskeard, Town New Liskeard, Town		Newmarket, Town New Toronto, Town New, Toronto	New Toronto, Town Niagara Falls. City		Niagara Falls, City	Niagara Falls, City Niagara Falls, City	Niagara, Town Niagara, Township	Niagara, Township Norman, Township North Bay, City North Easthope, Township North Grimsby, Township	North Norwich, Township North Norwich, Township North Norwich, Township North Walsingham, Township North York, Township North York, Township North York, Township North York, Township
Additional Legislation	(a)		(a)	(a) (b) (d) (d)	$\begin{pmatrix} d \\ d \end{pmatrix} \begin{pmatrix} d \\ d \end{pmatrix}$	(E)	3 DEE		(n).	(p)	(f)	(d)	ට විවිදුට ට

21,762.50 B-6765 (a-d)	12,000.00 B-6778 7,000.00 B-6861 17,399.06 B-6943		14,985.20 B-7068 1,935.83 B-7082 3,177.50 B-7083	1,350.00 B-7103 (a) 1,800.00 B-7103 (b) 3,000.00 B-7109	17,627.71 B-7231 (a-h)	2,409.75 B-7244 250,000.00 B-7247	6,900.00 B-7296 4,350.88 B-7330 82,000.00 B-7331	800.00 B-7383 540,000.00 B-7473	35,000.00 B-6933 5,000.00 B-7361 265,000.00 B-4571 1,387.24 B-6925	4,624.32 B-7013	2,963.40 B-7328 150,000.00 B-7374 85,998.59 B-7550 85,191.15 B-7633 49,701.41 B-6293 60,120.00 B-6787 (abc)
Construction of watermains and gravelled roadway, Johnston Avenue,	Erection of addition to Humber Summit Public School Construction of watermain, Avondale Blvd. Construction of watermains, grading and gravelling and ditch widening as local invarionements	Construction of watermain, Sultana Avenue Construction of watermain, Russell Avenue, local improvement Construction of watermain, Sheppard Avenue, local improvement Construction of stone and gravel roadway, Beaver Avenue	Construction of watermain, Dufferin Street Construction of gravelled roadway, Downsview Avenue, as a local improvement Construction of sanitary sewer, Bidewell Avenue, as a local improve-	Construction of watermain, DeVere Gardens Construction of sanitary sewer, DeVere Gardens Construction of watermain, Cheltenham Avenue and Bayview Wood	Construction of sanitary sewer, storm sewer, graded and gravelled roadways, and sidewalk, Bedford Park Avenue, etc., as local improve-	Construction of watermain, Jay Street Extensions and improvements to Hydro-Electric Commission	Construction of gravel roadway, Jay Street, as local improvement Construction of sanitary sewer, Argyle Avenue, local improvement Construction of garage and storage space for road machinery and township varied at Willowdale	Construction of sanitary sewer, Yonge Blvd., local improvement Construction of underground reservoir and elevated tank on Wilson	Avenue, and indeptround reservoir, ronge and rine if Avenue Construction of new Central School Improvements to sewage disposal plant Construction of new sewage treatment plant Construction of sanitary sewer, Western Avenue, as a local improve-	Construction of concrete sidewalks, Blecker Street, etc., as local	Construction of sanitary sewer, Clinton Street, local improvement Public school purposes Storm and sanitary sewers and sidewalks, Ritson Road South, etc. Pavements on Ritson Road South, etc. Concrete sidewalks, Caroline Street, etc. Asphalt pavements, Flora Street, etc., local improvements
North York, Township	North York, Township North York, Township North York, Township	North York, Township North York, Township North York, Township North York, Township	North York, Township North York, Township North York, Township	North York, Township North York, Township North York, Township	North York, Township	North York, Township North York Township	North York, Township North York, Township North York, Township	North York, Township North York, Township	O'Connor, Township Orangeville, Town Orillia, Town Orillia, Town	Orillia, Town	Orillia, Town Oshawa, Gity Oshawa, Gity Oshawa, Gity Ottawa, Gity Ottawa, Gity
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Additional				Procedure
Legislation	Municipality	Purpose (Continued)	Amount	File
(a) (a)	Ottawa, City Ottawa, City	Construction of concrete sidewalk, Putman Avenuc Construction of concrete sidewalks, Dalhousie Street, etc., as local	\$ 1,000.00 21,553.00	B-6789 (d) B-6790 (a-i)
(d) (n) (a)	Ottawa, City Ottawa, City Ottawa, City Ottawa, City	Improvements Construction of pavements on Booth Street, etc. Playgrounds purposes Construction of concrete sidewalks, Beech Street, etc. Construction of concrete sidewalks, Bayswater Place, etc., as local	155,000.00 85,000.00 3,957.00 4,192.00	B-6840 B-6866 B-6984 (abc) B-6998 (a-b)
(a) (a)	Ottawa, City Ottawa, City	improvements Asphalt pavement, Harmer Avenue, etc., local improvements Construction of sidewalks, Beechwood Avenue, etc., as local improvements	21,791.00	B-7080 (a-b) B-7081
<u>ම් ලිලිඩ</u>	Ottawa, City Ottawa, City Ottawa, City Ottawa, City Ottawa, City Ottawa, City	Sidewalk, Mutchmor Road, local improvement Relief sewers, Bayswater Avenue, etc. Purchase of roadmaking machinery and appliances Purchase of fire fighting and fire protection apparatus Construction of concrete sidewalks, Loretta Avenue, etc.	900.00 110,000.00 385,000.00 15,000.00 3,500.00	B-7142 B-7184 B-7186 B-7190 B-7276
(a)	Ottawa, City Ottawa, City	Construction of asphalt pavements, Bullock Avenue, etc., as local improvements Construction of asphalt pavements, First and Laurier Avenues, as local	92,500.00	B-7277 B-7277 B-7445
(a)	Ottawa, City	improvements Construction of concrete sidewalks, Caroline Avenue, etc., as local	29,803.00	B-7457
(d) (k) (l) (d) (m)	Ottawa, City Owen Sound, City Owen Sound, City Owen Sound, City Owen Sound, City	improvements Construction of sewer, Chestnut Street, local improvement Retirement of certain unmatured debentures Enlargement of public school buildings and sites Construction of bridge over the Sydenham River at Ninth Street Purchase of truck and street flusher	900.00 67,544.18 209,000.00 36,000.00	B-7580 B-6380 B-6454 B-6652 B-6652
(c) (d)		Grant to Owen Sound General and Marine Hospital for nurses' residence Purchasing of annuities in respect to services prior to the effective date	35,000.00	B-7182
	Owen Sound, City	of the pension plan for employees of the city Purchase of truck chassis for works department and buildozer for use in connection with gathered disoned	13,085.25	B-7572
(p)	Oxford, Township Oxford, Township Oxford, Township Oxford, Township Paris, Town	Improvement of the McClaren drain Repairing and improving of the Austin drain Repairing and improving of the Austin drain Repairing and improving of the Ashton outlet drain Construction of sewerage system, including sewage treatment plant	430.00 703.75 750.00 862.00 360,000.00	B-7565 (a) B-7565 (b) B-7565 (c) B-7565 (d) B-5097
(d) (f) (d) (f)	Paris, Town Parkhill, Town	and two pumping stations Remodelling the Paris Public Library building Purchase of a school site	20,000.00 5,000.00	B-7568 B-7415

(h) (d) (l)	Parry Sound, Town Pelec, Township	Construction of sewers on Cascade Street, etc., as local improvements Installation of new pumping equipment at North Pumping Station and repair of the present pump, and conversion of steam plant to	13,946.00 22,050.00	B-3449 B-6003
(d) (k) (l) (a)	Pelham, Township Pembroke, Town Pembroke, Town	diesel, jug Marsh dranage system Deepening and widening the Ridgeville branch of Big Creek drain Retirement of certain callable debentures Construction of bituminous macadam roads, Christic Street, etc., as	6,208.12 50,000.00 80,950.00	B-7066 B-6688 B-6900
3999	Penetang, Town Penetanguishene, Town Penetanguishene, Town Penetanguishene, Town	local improvements Widening of pavements on Fox Street and resurfacing with asphalt Construction of sewers, Alexander Crescent, etc. Construction of sewers, Fox Street, etc., local improvements Purchase of truck and equipment for streets maintenance and snow	20,000.00 10,240.00 7,260.00 14,375.00	B-6770 B-6985 (a) B-6985 (b) B-6986
(f)	Penetanguishene, Town	removal Construction of sewer on Penetanguishene Road, as a local improve- ment	6,300.00	B-7351
	Perth, Town	Grant to a war memorial Grant to Canadian Legion	3,000.00	B-6531 (a-b)
(u) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D		Purchase of certain lands for Housing Enterprises Limited Purchase of land for industrial sites Improvement and completion of sawage disposal works	11,950.00 24,500.00 375,000.00	B-5844 B-5845 B-5886
(d) (b)	reterborough, County Peterborough, County	Construction of santary sewer, Wilson Avenue, local improvement forant towards construction of a bridge or causeway across Chemong 1.45.	2,212.80	B-5942 B-6025
(l) (g) (b) (l)	Peterborough, City Peterborough, City Peterborough, City	Extension and improvement of waterworks Construction of sanitary sewers, McKellar Street, etc., as local	198,000.00 100,000.00 32,035.52	B-6131 B-6296 B-6378
(d) (l)	Peterborough, City	in provenients Peterborough Collegiate and Vocational Calcol	40,000.00	B-6692
(p)	Peterborough, Gity Peterborough, Gity Peterborough, Gity	Enlargement of Confederation School Building Construction of sanitary sewer, Carlisle Street, local improvement Construction of sanitary sewer, Beverly Street and Caddy Street, as a	110,000.00 1,170.00 4,102.13	B-6693 B-6979 (a) B-6979 (b)
(I) (J) (P)	Peterborough, Gity Peterborough, County Petrolia, Town	Construction of Sanidary sever, McKellar Street, local improvement Purchase of a Sicard truck Construction of building and plant for disposal of ashes, garbage and	1,718.00 16,700.00 4,000.00	B-7015 B-7584 B-6098
(f)	Petrolia, Town	other retuse Construction of asphalt mix sidewalk, north side of Florence Street, as	328.00	B-6099
(J)	Petrolia, Town	a local improvement. Construction of asphalt pavement, concrete curbs and gutters, tile drains and replacement of certain sidewalks, Dufferin Street, as local	13,119.00	B-6115
(1) (p) (p) (p)	Pickering, Township Plympton, Township Plympton, Township	improvements Erection of school house, equipment, S.S. No. 7 Repair of the 30 Creek main drain Construction of DeFriez-Delmage drain	17,000.00 1,270.00 400.00	B-7332 B-7089 B-7090

Procedure Amount File		95,000.00 B-6088 130,000.00 B-6089 100,000.00 B-6164 30,000.00 B-6349 15,400.00 B-6418 (a-d)	225,960.00 B-6579 140,290.00 B-6635 (a-c)		400,000.00 B-6707 30,200.00 B-6762 137,000.00 B-6956 17,700.00 B-7291 17,700.00 B-7369 2,133.00 B-7416			951.35 B-7525 150,000.00 B-6362 65,000.00 B-7467	1,000.00 B-6147 8,000.00 B-7418 55,000.00 B-6439 2,540.00 B-6027 (a)
Purpose (Continued)	Repair of the Elliott drain Repair of McDonald-Gillatly drain Repair of the Tierney drain Construction of sanitary sewer, Dorothy Street, local improvement	ion to Current River School ion to Shuniah School to General Hospital ruction of bridge over McIntyre River on Fort William Road ruction of sanitary sewers, Lillian Street, etc., as local improve-	Retirement of certain callable debentures Construction of pavements, curbs, sidewalks and sanitary sewers on	t erland Street, etc. connections	nd community centre sm c, Killaly Street, as a local improvement r with lateral house connections on Bell	Street, as local improvements Construction of Watermain, Minnewawa Road, local improvement Construction of storm sewers, Cumberland Drive, etc. Public school purposes Construction of sanitary sewers, Percival Street, etc., and sidewalks,	Victoria Street, etc., as local improvements Construction of sanitary sewers, Elgin Street, etc., local improvement Construction of sanitary sewer on Peter Street Construction of roads, etc., and purchase of roadmaking machinery, truck and land for Wartime Housing Project No. 2	Construction of sanitary sewer, Victoria Street South, as a local improvement Construction of waterworks system Acquisition of a source of water supply and construction of a main	connecting that supply with existing waterworks system Grant to Canadian Legion Branch No. 3790 Erection of schoolhouse, Union School Section 15 Installation of additional diesel unit in power house and extending power house building Repair and improvement of the Phipps drain
Municipality	Plympton, Township Plympton, Township Plympton, Township Port Arthur City	Port Arthur, Giy Port Arthur, Giy Port Arthur, Giy Port Arthur, Giy Port Arthur, Giy	Port Arthur, City Port Arthur, City	Port Arthur, City Port Arthur, City Port Arthur, City	Port Arthur, City Port Arthur, City Port Arthur, City Port Colborne, Town Port Colborne, Town Port Colborne, Town	Port Credit, Village Port Credit, Village Port Dalhousie, Village Port Hope, Town	(a) (h) Port Hope, Town Port Hope, Town (d)(f)(l)(m)(n)Port Hope, Town	Port Hope, Town) Port McNicoll, Village Port Perry, Village	Port Rowan, Village Proton, Township Rainy River, Town Raleigh, Township
Additional Legislation	(1000)	(d) (h) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	(d) (k) (l)	(a) (a)	(i) (ii) (ii	(d) (a)	(a) (h) (d)(f)(l)(m)(r	(f) (d) (f) (n) (d) (f)	(d) (f) (l)

B-6027 (b) B-6027 (c) B-7284 (a) B-7284 (b) B-7284 (c) B-7284 (d) B-7284 (d) B-7284 (d) B-7284 (f) B-7284 (g) B-7284 (g)	B-7340 B-4849 B-7157 B-7227	B-7254 B-5723 B-6356 B-6440 B-7170 B-7345	B-7294 B-7096	B-7297 B-7342 B-7529	B-6350 B-6729	B-6951 B-6959 B-6960	B-7055 B-7056	B-7195 B-7215	B-7216
1,261.00 8,381.00 2,994.00 9,794.00 3,600.00 1,746.00 516.00 885.00 240,000.00	13,500.00 12,000.00 12,000.00 27,016.63	3,323.51 15,000.00 2,000.00 2,225.00 14,492.80 15,335.00	2,000.00 113,660.00	10,400.00 2,328.00 31,850.70	20,000.00	15,000.00 74,716.18 1,494.00	6,011.00	69,500.00 2,750.00	19,664.00
Repair and improvement of the Rice drain Improvement and repair of Pike drainage Embankments Repair and improvement of the Simpson drain Repair and improvement of the Chinnick drain Repair and improvement of the Slagg drain Construction of drainage works known as the Millus drain Construction of lifth Concession drain Repair and improvement of the Griffin drain Construction of the Lacroix Street drain Construction of waterworks, sewers, electric lighting and power	certain floating indebtedness Certain floating indebtedness Public school purposes (addition to school) Purchase of fire protection equipment Purchase of watermains from Windsor Utilities Commission	Construction of waterinain on Wood Avenue, local improvement Construction of waterinains and pumphouse Installation of sanitary conveniences, municipal community hall Repair and improvement of Tunnel drain west Improvement and maintenance of Big Creek drain Repair and improvement, No. 4 Government drain Construction of Jacobs drain	Grant to East Parry Sound Red Cross Hospital Construction of concrete pavements, sewer, sidewalk and private drain connections. Welland Avenue etc., as local immogrants	Grandon, Action Monte, etc., as local improvements Grant to the Canadian Legion and Canadian Corps Association Construction of sanitary sewer, Henry Street, local improvement Better maintenance of David Carr drain, and repair of portion of the Smith-Carr outlet drain	Remodelling of Confederation Street School Construction of storm relief sewer, Cotterbury Street, additional expenditure	Hospital purposes Construction of pavement, curb and gutters, Talfourd Street, etc., as local improvements Construction of combined sewer and laterals, Porter Street, as local	improvements Construction of sidewalks, Exmouth Street, etc., as local improvements Construction of concrete sidewalk, Exmouth Street, as local improve-	Construction of storm sewers, East Street, etc. Construction of sanitary sewer and laterals, East Street, as a local	Construction of concrete curbs and gutters, Maple Avenue, etc., as local improvements
Raleigh, Township Raleigh, Township	Renfrey Town Richmond Hill, Village Ripley, Village Riverside, Town	Kockelife Park, Village Rockeliffe Park, Village Rodney, Village Ronney, Township Ronney, Township Romney, Township	Rycrson, Township St. Catharines, City	St. Catharines, Gity St. Thomas, Gity St. Thomas, City	Sarnia, City Sarnia, City	Sarnia, City Sarnia, City Sarnia, City	Sarnia, City Sarnia, City	Sarnia, City Sarnia, City	Sarnia, City
<u> </u>	(3) (3) (3) (4) (5)	(d) (f) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	(a)	(p)	(d) (h) (d) (h)	(a) (b)	(1)	(p)	(a)

Pro	Amount File	\$ 24,500.00 B-6035	2,900.00 B-7025 2,000.00 B-7124 (a) 2,340.00 B-7124 (b)		210,000,00 B-4804 28,000,00 B-6910 3,070,61 B-6963 (a)	379.50 B-6963 (b) 7,964.15 B-6963 (c) 15,540.86 B-6963 (d) 1 319 31		3,725,00 B-7029 439,52 B-7111 6,893,63 B-7156	1,873.86 B-7222 11,104.90 B-7292 801.05 B-7386 349.24 B-7387 7,935.66 B-7406 3,000.00 B-6999		12,000.00 B-7185 75,000.00 B-4351 94,000.00 B-7132 11,500.00 B-7250 70,000.00 B-7538 20,000.00 B-7231 699.00 B-7402 2.507.00 B-7412
	Furpose (Continued)	Construction of new room and alterations, school house, Ninth	Repair of Vidal Street drain Repair and improvement, Downie drain Repair of the Porter Creek drain Construction of watermain algoring Construction of watermain	Purchase of school site and improvements to Clark and Guthric schools	Completion of Queen Elizabeth and William Merrifield V.C. Schools Architects' fees for addition to collegiate and equipment Construction of combined sewer, Rhydwen Avenue, local improvement	Construction of graded road, Rhydwen Avenue, local improvement Construction of pavement, curb, Meadow Avenue, local improvement Construction of pavement, Briar Dale Blvd., local improvement Construction of oracle road.	Construction of graded road, Morna Avenue, local improvement Purchase of road-making machinery and appliances Construction of sewer, Prairie Drive, local improvement	Construction of sewer, Kingston Koad, local improvement Construction of sidewalk, Prairie Drive, local improvement Construction of sidewalk and curb, Manderley Drive, local improvement	Construction of graded road, Minnacote Avenuc Construction of watermain, Danforth Road, local improvement Construction of sidewalk, Mack Avenuc, local improvement Construction of watermain, McCowan's Side Road, local improvement Construction of watermain, Eglinton Avenuc, local improvement Construction of cenent sidewalk. Ontario Street, local improvement	Construction of percent and sidewalks, Kent Street Providing for temporary housing accommodation Providing part of cost of constructing an arena Construction of bridge, Argyle Street, over the River Lynn, and a bridge on Hunt Street over Upper Mill Pond	Construction of sanitary sewers, Everett St., etc. Erection of a memorial community hall Erection of addition to Elgin Public School Purchase of fire pumper and sidewalk snow plow Floating indebtedness Construction of tile, timber or stone drains Repair and improvement of the Churcher drain Repair and improvement of the Modfat drain
	Municipality	Sarnia, Township	Sarnia, Township Sarnia, Township Sarnia, Township Sarnia, Township	Sarnia, Township	Sault Stc. Maric, City Scarborough, Township Scarborough, Township	Scarborough, Township Scarborough, Township Scarborough, Township Scarborough, Township		Scarborough, Township Scarborough, Township Scarborough, Township	Scarborough, Township Scarborough, Township Scarborough, Township Scarborough, Township Scarborough, Township Schreiber, Township		Simcoe, Town Smith's Falls, Town Smith's Falls, Town Smith's Falls, Town Smith's Falls, Town Sombra, Township Sombra, Township
Additional	Legislation	(I) (b)	(p)	(p)	(Q)					(u) (l) (J) (p) (j) (j) (l) (j)	(1) (2) (3) (3) (4) (5) (5) (6) (7) (7) (7) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9

(a) Sombar, Township Repair and improvement of the Bornett drain Sombar, Township Repair and improvement of the Bornett drain Sombar, Township Repair and improvement of the Bornett drain Sombar, Township Repair and improvement of the Bornett drain Sombar, Township Purchase of a truck of the Currie drain South Norwich, Township Purchase of a truck and snow plow Southampton, Town Construction of the McNeil drain extension Southampton, Town Houries of truck and snow plow Southampton, Town Construction of the McNeil drain extension Southampton, Town Housing indebedenss who plow Southampton, Town Public school purposes Industrial indebedenss who proved the Currie drain Stanford, Township Public school purposes Industrial indebedenss who proved the Construction of sidewalks and widening of pavenent, as local improvements and permanent improvement to Arena Gardens Construction of sonit sewers and swage treatment plant Construction of sonita sewers and swage treatment plant Construction of sanitary sewer system and pumping station Furchase of truck, Irracor, anow plow, sirect sweeper, Hullage Construction of sanitary sewer system and pumping station Evaluate. Stadbury, City Purchase of truck, Irracor, and pumping station and pumping station Construction of sanitary sewer, Boal Studbury, City Purchase of construction of sanitary sewer, Boal Studbury, City Construction of sanitary sewer, Boal Studbury, City Construction of sanitary sewer, Boal Kingway, local improvement Swansea, Village Construction of sanitary sewer, DArce Crescut, as a local improvement Swansea, Village Construction of sanitary sewer, DArce Crescut, as a local improvement Swansea, Village Construction of sanitary sewer, DArce Crescut, as a local improvement Swansea, Village Construction of sanitary sewer, DArce Crescut, as a local improvement Swansea, Village Construction of sanitary sewer, DArce Crescut, as a local improvement Treenmech, Town Construction of sanitary sewer, DArce Crescut, as a local improvement Treenmech, Town Construction of sanitary	2,473.00 B-7435 (a) 2,676.00 B-7435 (b) 2,490.00 B-6944 (a) 1,790.00 B-6944 (b) 16,000.00 B-7061 5,350.00 B-7061 4,370.00 B-724 4,700.00 B-7424 4,700.00 B-7427 15,000.00 B-7426 115,000.00 B-7426	5,081.00 B-7344	75,000.00 B-7639 25,000.00 B-6942 100,000.00 B-6544 5,000.00 B-7500 4,902.09 B-3149 71,238.97 B-6914	41,658.62 B-7482 112,164.00 B-7483	73,561.73 B-7484		3,300.00 B-7234 2,875.00 B-7567 (a) 3,030.00 B-7567 (b) 600.00 B-7620	6,000.00 B-7143 11,724.00 B-7019	70,000.00 B-5885 16,000.00 B-7218 (a-d) 1,051.00 B-7219 2,920.00 B-7259
€	in n n oducing, transmitting or 10	ening of pavement, as local	Arena Gardens station per, International	ster and equipment ruction of concrete walks, Leslie Street, etc., as local improve- ruction of sanitary sewers, Bond Street, etc., as local improve-	uction of watermains, Melvin Avenue, etc., as local improve-	ర్		choolhouse No. 4 of concrete sidewalks, Main Street, etc., as local	l drain
	Sombra, Township Sombra, Township Sombra, Township Sombra, Township South Norwich, Township South Fredericksburg, Township South Dorchester, Township Southampton, Town Southampton, Town Southampton, Town (i) Stamford, Township Stamford, Township Stamford, Township	Stratford, City	Ξ	Sudbury, City Sudbury, City	Sudbury, City	Swansea, Village Swansea, Village	Swansca, Village Swansca, Village Swansca, Village Swansca, Village	Tarentorus, Township Teck, Township	

	0000	
Procedure File	B-7260 B-7261 B-7248 B-6816 B-7398 B-7398 B-7394 B-7447 (a) B-7447 (b) B-6955 (a) B-6955 (b) B-6955 (b) B-6868 B-6868 B-6868 B-6868 B-6939 (a) B-6868 B-6939 (b)	B-6939 (c) B-6940 (a) B-6940 (b) B-6940 (b) B-7363 (a) B-7363 (a) B-7363 (a) B-7293 (a) B-7293 (b) B-5310 (a) B-7293 (a) B-7293 (b) B-7194 (b) B-7164 (b) B-7164 (b) B-7164 (c)
Amount	\$ 1,136.00 1,771.00 15,000.00 1,000.00 1,800.00 35,000.00 36,000.00 1,088.00 2,380.52 2,041.00 2,187.26 2,640.00 12,600.00 12,	20,543.12 37,000.00 22,500.00 31,500.00 11,300.00 5,000.00 1,300.00 1,300.00 1,300.00 1,506.00 1,506.00 1,506.00 1,746.00 15,268.00 17,746.00 15,769.00 12,769.00
Purpose (Continued)	Construction of storm sewer, St. Joseph Street Widening and resurfacing of Lesperance Road Extension of distribution system, municipal electric works Repair of waterworks system Erection of school, U.S.S. No. 2 Construction of watermain, Sharpe Avenue, local improvement Erection of new school Construction of pavement, Stewart Avenue, as a local improvement Repair and improvement of David Burgess drain Repair and improvement of Sinclair drain Repair and improvement of McGuire drain Repair and improvement of McGuire drain Repair and improvement of McGuire drain Repair and the improving of No. 4 Government drain Constructing, deepening, enlarging and improving east branch of Big Creek drain and the improving of No. 4 Government drain Purchase of high school site Purchase of site for public school Acquisition of certain lands Construction of pavements, Algonquin Blvd. East, etc. Construction of concrete sidewalks on Elm Street North, etc., as local	improvements Construction of sanitary sewers on Willow Avenuc, etc. Extension of waterworks, Poplar Avenue, etc. Extension of waterworks, Main Avenue, etc. Extension of lands for wartime housing project Watermain extensions, Spruce Street, etc. Construction of sanitary sewers, Spruce Street, etc. Improvement of Ladontaine Continuation School, and equipment Improvement of School Section No. 13 school and equipment High school purposes Replacement of watermains, sanitary and storm sewers, Bruce Avenue Installation of street lighting Repairs to South St. Lawrence Market building Construction of concrete pavement, sidewalk, sewer, Leeds Street, and concrete curbing on Glen Oak Drive Reconstruction and widening pavement, Spadina Road Widening of pavement, Donlands Avenue Construction of pavement, Donlands Avenue Parks purposes Addition to Jarvis School for Boys Widening of pavements, Landsdowne Avenue, etc.
Municipality	Tccumsch, Town Tccumsch, Town Thessalon, Town Thorold, Township Thorold, Township Thurlow, Township Tibury, Township Tilbury, Township Tilbury East, Township Tilbury East, Township Tilbury East, Township Tilbury East, Township Tilbury North, Township Tilbury North, Township Tilbury North, Township Tilbury North, Township Tillbury North, Township Tillbury North, Township Tillmurins, Town Timmins, Town Timmins, Town Timmins, Town Timmins, Town	Timmins, Town Timy, Township Tisdale, Township Tisdale, Township Tistale, Township Toronto, City
Additional Legislation	(a) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c

	Toronto, City	Construction of pavement, portion of Weybourne Crescent, as a local	12,115.00	B-7263 (b)
(n)	Toronto, City Toronto, City Toronto, City	Improvement Construction of concrete sidewalk, Craven Road Parks purposes Construction of 1947 road construction by Toronto and York Roads	3,389.00 17,000.00 75,000.00	B-7283 B-7339 B-7460
	Toronto, City	Commission Construction of pavement, McRoberts Avenue, etc., local improve-	138,194.00	B-7479
	Toronto, City Toronto, City	ment Addition to Park School Widening of Iane first west of Yonge Street, south of Elm Street, and	26,000.00 10,997.00	B-7558 B-7590
(£)	Trenton, Town	construction of concrete sidewalk, byron Avenue Purchase of garbage truck, compactor, truck and snow plow attach-	13,326.57	B-7301 (a)
(f) (n)	Trenton, Town	ments Acquisition of lands for crection of houses by Central Mortgage and	13,000.00	B-7301 (b)
	Trenton, Town Trenton, Town	Housing Corporation Opening of certain streets, construction of sidewalks and sewers Installation of watermains and services in connection with wartime	11,999.00 35,000.00	B-7301 (c) B-7301 (d)
(d) (l) (b)	Uxbridge, Town Uxbridge, Town	housing project Purchase of building lots for wartime housing project Construction of system of sewers and sewerage disposal plant	6,000.00	B-6545 B-7336
(£)	Vankleek Hill, Town Vaughan, Township	Construction of sewers, High Street, as local improvements Construction of watermains, Weston Road, local improvement	3,340.00 $21,000.00$	B-6429 B-5562
	Vespra, Township Victoria Harbour	Balance of cost of road maintainer Extension of water system	8,000.00 55,000.00	B-7597 B-6779
(d) (f) (d) (f) (g)	Walkerton, Town Wallaceburg, Town	Construction of a war memorial Construction of extensions to sewerage system	40,000.00 25,500.00	B-6700 B-5648
(a) (d) (f) (l)		Construction of storm sewers, Forham Street, ctc., as local improve-	16,500.00	B-6704
(d) (l)	Ware and Forbes, Unorganized	ments Erection of a school house	10,000.00	B-5698
	Townships Warwick, Township Warwick, Township	Construction of Roder drain Construction of Lester extension drain	1,325.00	B-7439 (a) B-7439 (b)
	Warwick, Township	Repair and improvement of Archer drain Construction of the Edgar drain No. 1	966.00	B-7439 (c) B-7439 (d)
	Warwick, Township	Construction of the Parker drain	1,408.00	
	Warwick, Township Warwick, Township	Construction of the Mellon drain	2,140.00	
	Warwick, Township Warwick, Township	Construction of the Blake drain Repair of the Attwood drain	1,665.00	
(p)	Warwick, Township Warwick, Township Wasaga Beach, Improvement	Construction of the Thompson-Cooper drain Construction of access bridges on the McGill drain Purchase of fire truck and booster, construction of municipal building	1,486.00 2,463.00 16,000.00	B-7439 (J) B-7439 (k) B-7384
(1) (2) (1)	District William	and widening of Mosely Street	31 542 96	B-6234
(u) (g) (n)	wateriord, village	Construction of watermans and connections and instanation of agentional hydrants, Main Street, etc.	01,012	

Additional Legislation	Municipality	Purpose (Continued)	Amount	Procedure File
(B)	Waterloo, Town Waterloo, Town Waterloo, Town	Construction of a memorial arena Fire fighting equipment Construction of concrete sidewalk, Devitt Avenue, as a local improve-	\$ 40,000.00 20,000.00 280.00	B-6029 B-6443 B-6968
(J) (P)	Waterloo, Town	ment Construction of concrete curb and gutter, Devitt Avenue, as a local	3,007.20	B-6969
(a) (d) (f)	Waterloo, Town	Widening and resurfacing of King Street, and construction of storm	125,875.00	B-6978 (a-b)
(f) (d) (f)	Waterloo, Town Waterloo, Town	sewers on King Surect, local improvements Construction of extensions to sewage disposal plant Construction of watermains, Jefferson Avenue, etc., as local improve-	160,000.00 7,363.92	B-7038 B-7141 (a-d)
S S S S S S S S S S S S S S S S S S S	Waterloo, Town Waterloo, Town Waters, Township Welland, Gity Welland, City	ments Grading and gravelling Roslin Avenue, local improvement Construction of sewers, Roslin Avenue, etc., local improvements Public school purposes Addition to Welland High and Vocational School Construction of combined Storm Relief Sewer, Young Street, as a local improvement	3,990.00 8,308.24 32,000.00 70,000.00 14,965.00	B-7245 B-7487 B-6177 B-7214 B-6251
(d) (1) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Welland, Gity Welland, Gity Wellesley, Township West Lorne, Village West Luther, Township West Luther, Township	Purchase and development of lands for erection of 40 wartime houses Grant to Welland-Crowland Health and Recreational Centre Repair and improvement of the Beggs drain Erection of Municipal Park Memorial Community Centre Repair of drain No. 23 Repair of drain No. 16 Repair of drain No. 14	12,000.00 60,000.00 7,226.00 20,000.00 3,770.81 1,709.70 1,735.32	B-6547 B-6831 B-6530 B-6229 (a) B-6529 (b) B-6529 (c)
(p)	West Luther, Township Westminster, Township Westminster, Township Westminster, Township Westminster, Township Westminster, Township Westminster, Township	Improvement of outlet and extension of municipal drain No. 23 Erection of three-room school, P.S.S. No. 2 Purchase of fire equipment and apparatus for Police Village of Byron Construction of storm sewer, Iroquois Avenue, local improvement Construction of sanitary sewer, Iroquois Avenue, local improvement Purchase of fire protection appliances for Police Village of Lambeth Construction of firehall, furnishings and equipment, Police Village of Byron	3,040.51 50,000.00 3,000.00 1,240.00 3,630.00 4,200.00 3,000.00	B-7062 B-5826 B-6188 B-6584 B-7194 B-7290 B-7454
(d) (l)	West Nissouri, Township	Repair and improvement of the Rawlson, Caddy-Bott, Dyer and Judge drains	3,912.05	B-6190
(a) (a)	West Oxford, Township West Oxford, Township Weston, Town Weston, Town	Construction of James Pullin drain Repair and improvement of the Sweaburg drain Construction of watermain, Edmund Avenue and Centre Road Construction of sanitary sewer, Monkland Avenue and Edmund Avenue	935.10 1,953.05 2,940.00 4,780.00	B-6586 B-6721 B-7251 (a) B-7251 (b)
(a) (d) (h)	Weston, Town Weston, Town	Construction of concrete sidewalks, Vimy Avenue, local improvement Construction of sewers	1,500.12	B-7252 B-5400

	Westport, Village	Installation of heating and plumbing system in Westport Public and Continuation School, U.S.S. No. 4	5,000.00	B-7335
(J) (P)	Whitby, Town	Construction of sewage treatment plant	158,000.00	B-7592
(J) (p)	Whitby, Town	Construction of watermains, St. John Street, etc., completion of elevated tank, and installation of new gasoline driven standby pump	25,000.00	B-7593
(I) (P)	Whitney, Township	Waterworks and sewerage purposes	106,000.00	B-4939
(p)	Whitney, Township	Construction of waterworks system	20,000.00	B-6902
(J) (P)	Whitney, Township	School purposes	74,000.00	B-7197
(c) (d)	Wiarton, Town	Erection of community centre building and rink	35,000.00	B-5947
	Wiarton, Town	Grant to the hospital at Wiarton	5,000.00	B-6082
	Widdifield, Township	Construction of watermains, Elmwood Avenue, etc., local improvements	35,000.00	B-6166
(p)	Winchester, Township	Maintenance and improvement of Black Creek drain	13,220.00	B-7107
(p)	Winchester, Township	Maintenance, improvement and extension of Cinnamon drain	8,348.57	B-7108
	Wingham, Town	Construction of sewer, Leopold Street, etc., local improvements	19,678.60	B-7267
(d) (g) (b)	Woodbridge, Village	Extension of waterworks system	25,000.00	B-5707
(I) (P)	Woodbridge, Village	Permanent improvements to school property	165,000.00	B-6974
(d) (n)	Woodstock, City	Construction of covered watercourse, Hatch's Creek	18,500.00	B-4107
(ir)	Woodstock, City	Construction of sanitary sewer, Raglan Street, local improvement	345.00	B-5087
(d)	Woodstock, City	Purchase of Woodstock Arena	28,000.00	B-6321
(c) (l)	Woodstock, City	Repairs, alterations and improvements, market building	12,000.00	B-6878
(J)	Woodstock, City	Construction of sanitary sewers, curb and gutter, asphalt and bituminous pavement and concrete sidewalk, Dufferin Street, etc.	18,897.40	B-6921
(a) (f)	Woodstock, City	Construction of pavement and concrete sidewalk, Dundas Street, as local improvements	42,519.00	B-6929 (a-b)
	Woodstock, City	Construction of bituminous pavement, sanitary sewer and concrete sidewalk, Stoney Road	3,288.00	B-7224 (a-c)
	Woodstock, City	Construction of concrete sidewalks and sanitary sewer, Wilton Crescent, etc., as local improvements	3,201.25	B-7396 (a-c)
	Wyoming, Village	Repair of Broadway Street drain	17,110.00	B-6750
(p)	Yarmouth, Township	Construction of the David Carr drain	28,942.00	B-7413

improvements

Additional				Procedure
Legislation	Municipality	Purpose (Continued)	Amount	File
(p)	York, County	Enlarging of County Registry Office	\$ 51,200.00	B-6128
(p)	York, County	Construction and improvement of highways	75,000.00	B-6129
(d) (f) (k) (l)	(d) (f) (k) (l) York, Township	Retirement of unmatured debentures	9,164,000.00	B-6015
(a) (f)	York, Township	Widening, straightening and grading of East Drive	16,950.00	B-6268
(a) (f)	York, Township	Construction of sidewalks, Glen Cedar Road, etc., and sewers, Tweeds-muir Avenue	15,373.00	B-6366 (a-d)
(a) (f)	York, Township	Construction of sewers and watermains, Ava Road, etc., as local improvements	178,375.00	B-6791
(a) (f)	York, Township	Construction of pavement, Glenholme Avenue	19,435.00	B-6792
(a) (f)	York, Township	Construction of sewer, pavement and sidewalks, Lonsborough Avenue, etc., as local improvements	22,261.00	B-6948
(a) (f)	York, Township	Construction of watermains, sidewalks and curbs, Black Creek Boulcvard, etc., as local improvements	13,075.00	B-7022 (1-3)
(a) (f)	York, Township	Construction of sidewalks, pavements and watermain, Flanders Road, etc., as local improvements	87,302.00	B-7249
(a) (f)	York, Township	Construction of sewers and watermains, Spears Avenue, etc., as local	17,154.00	B-7357 (a-c)

VALIDATION OF DEBENTURE BY-LAWS

(Section 64 of Part IV of "The Ontario Municipal Board Act") (Capital Expenditures approved prior to 1947)

	D. 1			-
	by-law			Procedure
Municipality	So.	Purpose	Amount	File
Caledonia, Village	366	As amended by By-laws 382 and 384, construction of waterworks system and storm sewers	\$150,000.00	B-5012
Chapple, Municipality	909	Erection of a new school, P.S.S. No. 2, Richardson and Sifton	6,500.00	B-5379
Cornwall, City	110	Construction of relief sewers	62,703.00	B-6598
Etobicoke, Township	7057	Construction of sewers and watermains	31,643.60	B-6328 (a)
Etobicoke, Township	7058	Construction of sewers and watermains	10,797.14	B-6328 (b)
Etobicoke, Township	7297	And By-laws 7020, 7294, 6827, 6797, 7295, 6975, 7094, 7296, 7213, 7280 and 7281 thereby consolidated, for local improvement works	837,000.00	B-7509
Fort Erie, Town	928	And By-laws 903 and 912 thereby consolidated, purchase of fire engine and apparatus, and erection of fire hall	40,000.00	B-6220
Fort Frances, Town	1435	And By-laws 1393, 1382 and 1376 thereby consolidated—construction of certain local improvements	17,952.53	B-4087, B-4513, B-3760
Fort Frances, Town	1411	As amended by By-law 1420, construction and improvement of water course	20,000.00	B-4859
Fort William, City	4044	And By-laws 4040, 4041, 4042 and 4043 thereby consolidated for construction of certain local improvement works	177,612.00	B-6237
Galt, City	3671	Public school purposes	225,000.00	B-3800
Georgetown, Town	458	Resurfacing of Queen Street	2,200.00	B-3627
Kingston, City	525	Construction of certain local improvement works	103,500.00	B-6481
Kitchener, City	3022	And By-laws 2878, 2899, 2905, 2940, 2941, 2943, 2944, 2945, 2946, 2947, 2950, 2952, 2953, 2954, 2955, 2956, 2957, 2970, 2980, 2981, 2982, 2983, 2987, 2988, 2989, 2990, 2991, 2992, 3004 and 3006 thereby consolidated for certain local improvements	225,549.22	B-6211
Board of Trustees of Roman Catholic Separate School, Town of La Salle	47-1	For retirement of outstanding and defaulted debentures	36,100.00	B-7523

THE STATE OF THE S	Bv-Law			Procedure	
Municipality	No.	Purpose	Amount		
Leaside, Town	1060	Construction of certain local improvements	\$ 209,630.24	B-6599	
Leaside, Town	1061	Construction of certain local improvements	182,959.92	B-6600	
London, City, Board of Trustees of the Roman Catholie Separate Schools	8	School purposes	290,000.00	B-6707	
London, Township	1419	Construction of certain drains	13,287.17	B-7236	
North York, Township	5475	And By-laws 5441 and 5439 thereby consolidated for certain local improvements	810,000.00	B-7428	
North York, Township	5476	And By-laws 5044 and 5318 thereby consolidated for certain local improvements	322,000.00	B-7429	
Ottawa, City	9646	And By-laws 9670, 9671, 9685, 9686, 9687, 9688, 9758, 9757, 9798 and 9809 for the construction of certain works and local improvement works	2,746,000.00	B-7495	
Owen Sound, City	1337	And By-laws 1328, 1329 and 1331 thereby consolidated for certain local improvements	131,000.00	B-7458	
Tecumsch, Town	521	And By-laws 510, 517, 519, 518 and 520 for certain drainage, local improvements and general purposes	23,000.00	B-7391	

Procedure

ALLOCATION OF CLERGY RESERVE FUNDS

("The Municipal Act") (Section 330, as amended by O.S. 1941, Chapter 35, Section (9))

Municipality	Purpose	Procedure File
Scarborough, Township	Distribution at close of year of moneys on hand in a special Savings Account referred to as "The Clergy Reserve Principal Account" in the amount of \$8,004.00 to the various Public School Sections within the Township—By-law 131	B-7459

AMALGAMATION OF LOCAL AREAS

("The Municipal Act" (Section 23b) (as enacted by O.S. 1946, Chapter 60, Section 5))

Municipality	Purpose	File
Burlington, Town, and Nelson, Township	Creation of an Inter-Urban Area for the joint administration therein of municipal waterworks as a public utility	B-6641
	ANNEXATIONS (Section 23 of "The Municipal Act")	Danasta
Municipality	Purpose	Procedure File
Belleville, City	Annexation of parts of Lots Numbers 37 and 38 in the First Concession of the Township of Sidney	B-7053
Brampton, Town	Annexation of west half of Lot Number 7 in the First Concession west of Hurontario Street in the Township of Chinguacousy, excepting thereout and therefrom all that part of the west half of the West Half of the said Lot Number 7 lying north of the right-of-way of the Canadian National Railway	B-5938
Burlington, Town	Annexation of part of Lot 5 and Lots 6 to 16 inclusive in Block A, part of Lot 5 and Lots 6 to 10, inclusive, in Block B, Lots 1 to 5 in Block C, Plan 79, and part of Lot 88, Plan 99, Brant's Block Survey, and that part of Emerald Street closed up by Judge's Order dated July 9th, 1935, in the Township of Nelson in the County of Halton	B-7281
Chatham, City	Annexation of part of Lot 202, according to Plan registered in the Registry Office for the County of Kent as Number 413, in the Township of Dover in the County of Kent	B-5873
Chatham, City	Annexation of parts of Lots 21 and 22 in the Front Concession on the River Thames, in the Township of Raleigh	B-6101
Crystal Beach, Village	Annexation of part of Lot Number 26 in the Broken Front Concession from Lake Erie including a portion of the lands laid out under Registered Plan No. 82 in the Township of Bertie	B-6157
Delhi, Village	Annexation of the south-westerly part of Lot Number 24 in the Twelfth Concession in the Township of Windham	B-6719
Gravenhurst, Town	Annexation of all that part of Lot 6, East Muskoka Road, and original allowance for road along the south boundary of Lot 6, which together contain an area of 51.8 acres, in the Township of Muskoka	B-7116
Hamilton, City	Annexation of part of Lot 56, Concession 1, and part of the Gore of the Township of Ancaster	B-5706
Hamilton, City	Annexation of part of Lots 20 and 21 in the Third and Fourth Concessions of the Township of Barton	B-5706
Kapuskasing, Town	Annexation of part of Lot 21, Concession 13, part of Lot 22, Concession 13, Lots 21 and 22, Concession 12, part of Lot 23, Concession 12, part of Lot 24, Concession 12, original road allowance between Concessions 12 and 13, original reservation for road lying south of C.N.R. Right-of-way, Concession 13, original 66' reservation along easterly side of Kapuskasing River across Concessions 12 and 13, in the Township of O'Brien	B-6737
Kingsville, Town	Annexation of Lot Number 1, First Concession, Township of Gosfield South	B-7287

Procedure

Procedure

Municipality	Purpose	Procedure File
Leamington, Town	Annexation of part of Lot 6 in Broken Front Concession, adjoining Seacliffe Park, in the Township of Mersea	B-5735
Leamington, Town	Annexation of part of Lot 242, comprising 24.487 acres in the Township of Mersea	B-5736
Peterborough, City Peterborough, City St. Catharines, City	Annexation of part of the Township of North Monaghan Annexation of part of the Township of Smith Annexation of parts of the Township of Grantham, amend- ment of Surveyor's description in Schedule of Order dated 15th August, 1945	B-6261 (a) B-6261 (b) B-3715
St. Catharines, City Simcoe, Town Simcoe, Town Timmins, Town	Annexation of parts of the Township of Grantham Annexation of part of the Township of Windham Annexation of part of the Township of Windham Annexation of the north half of the north half of Lot No. 1, First Concession, Township of Mountjoy	B-6341 B-6390 (a) B-6390 (b) B-7037

("The Planning and Development Act")

Municipality	Purpose	File
North York, Township	Appeal for approval of subdivision of Lots 21 and 22, Plan 1590, and part of Lots 8 and 9, Concession IV, west of Yonge Street, by North Park Developments Limited	B-6260

ARBITRATIONS

("The Municipal Act" (Section 356 (a)))

Municipality	Purpose	File	
Port Hope, Town, and Willis Boughen, et al	Claim for compensation for damages arising out of the expropriation by the Town of Port Hope of land taken under By-law No. 1699, as amended by By-law No. 1700, including damage for severance of such land from adjoining land and damages for injuriously affecting adjoining land owned and occupied by the Respondents, fixed at the sum of \$3,200.00	B-5641	

ASSESSMENT APPEALS	File
County Assessor, County of Middlesex vs. Bruce S. McLeod (Parkhill Theatre)	B-7468
Kingston, City of, vs. F. W. Woolworth Company Limited	B-6062
Kingston, City of, vs. S. S. Kresge Company Limited	B-6063
Kingston, City of, vs. The Metropolitan Stores Limited	B-6064
Quance, R. P., County Assessor, vs. T. A. Ivey & Sons Limited	B-6945
Sault Ste. Marie, City of, vs. The Algoma Steel Corporation Limited	B-7573
Woolworth, F. W., Company Limited, vs. Town of Lindsay	B-6032
Zellers Limited vs. Town of Lindsay	B-6033

ACCECCATENT ADDEALC

BY-LAWS

(Approved under Section 59 (c) of "The Ontario Municipal Board Act" (R.S.O. 1937, Chapter 60, and Section 29 (3) of "The Local Improvement Act")

Municipality	By-law No.	Purpose	Procedure File
Barrie, Town	1598	Providing for pensions for employees of the municipality	B-7636
Gosfield South, Township	455	Authorizing and approving lease of lands to Samuel Wylie	B-7149
North Bay, City	1489	Granting an annual retirement allowance to certain civic employees	B-7272
Port Elgin, Village	974	Preparing plans and specifications for the construction of a system of sewers and sewage disposal plant	B-7382
Sault Ste. Marie, City		Providing for grant for an annual retirement allowance for John Wilson, Philip Dube, Bertha Miller, Oliver Wyant and John Johnson during their respective lives	•

CHANGE IN RATE OF INTEREST ON DEBENTURES

(Sec. 310 of "The Municipal Act") (as re-enacted by O.S. 1938, C. 22, s. 6)

Amount	\$40,000.00
Purpose	Consolidating the sums authorized to be borrowed by By-laws Numbers 903 and 912 and decreasing the rates of interest on debentures from 3% to 23,4% and from 31,4% to 3%.
By-law No.	928

Municipality Fort Eric, Town

Procedure

File B-6220

Procedure

COMPENSATION FOR EXPROPRIATION

(Section 356 (a) of "The Municipal Act")

Municipality	Purpose	File File
London, City	Fixing the amount of compensation for expropriation of part of Lot Number 1 on the east side of Elliott Street as claimed by Ethel M. Buchanan, et al	B-6068

DISPENSATION OF VOTE OF RATEPAYERS

(Section 69 of "The Ontario Municipal Board Act")

Municipality	Purpose	File
Chatham, City	Dispensation of vote of ratepayers in respect to the granting of an exclusive franchise to the Chatham Transit Company for the operation of a bus service for a period of ten years	
Ottawa, City	Dispensation of vote of ratepayers in respect to expenditure of \$18,000 for the purchase of land for market purposes	

EXTENSION OF MUNICIPAL UTILITIES

(Section 407 (2) of "The Municipal Act")

Municipality	By-law No.	Purpose	Amount	Procedure File
Arnprior, Town	1302	Installation of new pressure filters	\$ 55,000.00	B-7519
Elmira, Town	748	Waterworks extension	25,000.00	B-5889
Fort Frances, Town	1451	Watermain, Pithers' Point Park and Township of McIrvine	8,300.00	B-6532
Hamilton, City		Watermain, Main Street	5,030.00	B-6114
Huntsville, Town	675	Waterworks purposes	14,000.00	B-5811
Hamilton, City	6025	Storm sewer, King Street West	88,000.00	B-4744
Hespeler, Town	794	Storm sewer, Cedar Street	5,000.00	B-6009
Hamilton, City	6909	High lift pumping station	650,000.00	B-7167
Kingston, City		Relief sewer, Russell St.	9,000.00	B-6751
Kingston, City		Storm sewer, Macdonnell St.	12,000.00	B-6920
Kingston, City	561	Watermain, College Strect	38,000.00	B-7270
New Liskeard, Town	1022	Watermains and house services, Goulding Street, etc.	18,759.00	B-7181
Peterborough, City	4607	Watermains, Lansdowne St.	100,000.00	B-6296
Port McNicoll, Village	264	Extension to Hydro System	4,700.00	B-7704
Rockcliffe Park, Village		Waterworks, pump house, etc.	15,000.00	B-5723
Streetsville, Village	876	Sewers and works for interception and purification of sewage	80,000.00	B-6544
Stamford, Township	1091	Improvements to electrical distribution works	100,000.00	B-7426
Streetsville, Village	868	Installation of watermains Brookside Drive, Church and Broadway Streets	5,000.00	B-7500
Tilbury, Town		Construction of storm sewer	50,000.00	B-6645
Toronto, Township	1386	Extensions, electrical system, Arca No. 1	30,000.00	B-8869
Tiverton, Village	411	Installation of street lighting	1,300.00	B-6857
Thornbury, Town	10	Repair of water storage tank	4,000.00	B-6816
Thessalon, Town	157	Extension of distribution system of municipal electrical works	15,000.00	B-7248
Waterford, Village		Watermains, connections and hydrants, Main Street, etc.	35,000.00	B-6234
Wallaceburg, Town	1631A	Storm sewers, extensions to sewage system and private drain connections	109,000.00	(B-5648 (B-6704

EXTENSION OF TIME TO PASS BY-LAW

(Section 297 (5) of "The Municipal Act")

Municipality	By-law No.	Purpose	Procedure File
Wallaceburg, Town	1602	Granting certain privileges to the Union Gas Company of Canada Limited	B-6181

HIGHWAYS-NARROW

Municipality	Purpose	Procedure File
Fort Erie, Town	Approval of By-law 951 for the establishment and laying out of a highway known as Adelaide Street	B-7137
London, City	Approval of By-law A-2403-11 for the widening of Durham Street from Oxford Street to Brant Street at a width less than 66'	
Port Arthur, City	Approval of By-law 2714 for the establishment of a public street and highway of Lots 3 and 4 according to Registered Plan 461, and also a portion of Lot 15 in Block 2, Plan 121, to be known as Ruttan Street	
Trenton, Town	Approval of By-law 406-D, providing for opening of Hillcrest Street	B-7301 (e)
Wasaga Beach, Improvement District	Approval of By-law 55—relocation and widening of Mosely Street at a width less than sixty-six feet	B-7438
York, Township	Approval of By-law 13021, setting aside certain lands for the purpose of a public highway and for the extension of Roselawn Avenue	

IMPROVEMENT DISTRICTS—ERECTION OF

(Section 44 (a) of "The Municipal Act" (as enacted by O.S. 1943, Chapter 16, Section 1), and amended by O.S. 1944, Chapter 39, Section 5, and 1946, C. 60, Section 8)

Municipality	Purpose	Procedure File
Brackin, Leeson, Rennie and Stover Townships	Application of J. W. Scott and others, for the erection of Improvement District involving the Townships of Brackin, Leeson, Rennie and Stover	
Wasaga Beach, Improvement District	Application by Improvement District of Wasaga Beach for the adjustment of assets and liabilities as between the Townships of Flos and Sunnidale	B-3372

INCREASED BORROWING BY MUNICIPAL COUNCILS

(Section 339, Subsection (2) of "The Municipal Act") Municipality Purpose				
Wolfe Island, Township	Application for authority to borrow an amount in excess of 70% of the estimated revenues of the Corporation for the current year	B-6249		

INCREASE IN NUMBER OF COUNCILLORS

(Section 50 of "The Municipal Act")

Municipality	Purpose	Procedure File
Scarborough, Township	Approval of By-law providing for an additional Councillor for Wards 1 and 2 in the Township	В-7338

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LICENSE FEE

Municipality	Purpose	Procedure File
Englehart, Town	Annual fee of 35c. for Bicycle License (also under Section 423 (3) of "The Municipal Act")	B-6775
Ingersoll, Town	Annual fee of 25c. for Bicycle License (also under Section 423 (3) of "The Municipal Act")	B-7408
Kitchener, City	Annual fee of 50c. for Bicycle License	B-7470
Midland, Town Rainy River, Town	Annual fee of \$1.00 for Bicycle License Annual fee of \$1.00 for Bicycle License	B-6086 B-5978

LOCAL IMPROVEMENTS—APPORTIONMENT OF COST OF

(Sections 27 (3) and 29 (3) of "The Local Improvement Act")

Municipality	Purpose	Procedure File
Ottawa, City	Approval of By-law Number 9886 apportioning the cost of certain local improvement pavements	B-6787
Ottawa, City	Approval of By-law Number 9885 apportioning the cost of certain local improvement sidewalks	B-7443
Toronto, City	Approval of By-law Number 17006—pavement of lanes first north of Harrison Street and first east of Ossington Avenue	
Toronto, City	Approval of By-law Number 17058—pavement of lanes first east of Shaw Street and first north of Melville Avenue	

LOCAL IMPROVEMENTS—PART ONLY OF WORK

(Section 18 of "The Local Improvement Act")

Municipality	By-law No.	Purpose	Procedure File
York, Township	13140	Amending Construction By-law Number 13127 by abandoning part of the work authorized thereunder, to provide for construction of a sidewalk on Keele Street	,

REFUNDING PLAN

(Chapter 59 of "The Department of Municipal Affairs Act")

Municipality	Purpose	File
Board of Trustees of the Roman Catholic Separat		B-7122
Schools, Town of Riversi	ide debenture indebtedness of the Board of Trustees	

RELEASE FROM SUPERVISION

("The Department of Municipal Affairs Act")

Municipality	Purpose	File
Eastview, Town	Release from supervision under Part III of The Department of Municipal Affairs Act	B-6139
Windsor, City	Release from supervision of the Roman Catholic Separate School Board	B-6142

RESTRICTED AREAS—ESTABLISHMENT OF

(Section 406 of "The Municipal Act" as re-enacted by O.S. 1941, Chapter 35, Section 13)

Municipality	By-law No.	Area Restricted	Procedure File
Ancaster, Township	1157	Regulating the use of land and the character, location and use of buildings and structures	B-6172
Ayr, Village	473	Regulating the use of lands and to establish a standard of housing	B-6670

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Municipality	By-law No.	Area Restricted	Procedure File
Brighton, Village	A-309	Regulating the use of land and the erection and use of	B-5109
Brockville, Town	C-297	buildings Regulating the construction of buildings in area known as Lot 8, part of Lot "A," Chipman's Plan	B-6012
Calvert, Township	447	Regulating the use of land and the character, location	B-5732
Colchester, Township	582	and use of buildings and structures Regulating the use of land and the character, location and use of buildings and structures in area consisting of part of Farm Lot 62	B-6523
Grantham, Township	862	Restricting the use of lands and buildings in Sub- division known as the Kingsland Subdivision No. 2	B-6804
Grantham, Township	889	Providing certain restrictions in the area known as Martindale Road	B-6805
Grantham, Township	897	Restricting the use of lands and buildings in Sub- division known as the Maywood Plan	B-6806
Hespeler, Town	834	Regulating the use of land and the character, location and use of buildings and structures	B-7279
Leaside, Town Leaside, Town	1055 1066-A	Establishing certain building restrictions Permitting apartment houses on Eglinton Avenue	B-6339 B-6603
Leaside, Town	1068	between Laird Drive and Brentcliffe Road Permitting a gasoline station on certain lands	B-6605
Leaside, Town	1072	Respecting building restrictions on Rumsey Road	B-6718
Leaside, Town	1081	Allowing an encroachment of building on Lot 546, Plan 1925	B-7052
Leaside, Town	1081-A	Permitting a gasoline service station on Lot 364, Plan 2120	B-7123
Listowel, Town	1300	Regulating the use of land and the character, location and use of buildings and structures within a certain	B-6240
London, City C.P	. 33-254	defined area Regulating the use of lands and the use, bulk, height and location of buildings and prohibiting uses of lands	B-7041
London, Township	1360	and buildings in the City Restricting Oxford Park Area to private residential	B-5658
Maidstone, Township	1675	district, etc. Regulating the cost of residences and dwellings which may be erected in that part of Township lying north	B-6796
Merritton, Town	663	of Tecumseh Road Regulating and restricting the use of land and erection and use of buildings, establishing restricted areas	B-5622
McKim, Township	486	Restricting the area contained in proposed subdivision of part of Lot 7 in First Concession	B-6826
Newmarket, Town	924	Regulating the use of land and the character, location and use of buildings and structures	B-5930
Niagara Falls, City	4024	Establishing restricted areas and regulating the character of buildings	B-6279
Niagara Falls, City	4025	Establishing restricted areas and regulating the character of buildings to be erected	B-6280
Niagara Falls, City	4045	Establishing restricted areas and regulating the	B-6448
Niagara Falls, City	4046	character of buildings to be erected Establishing restricted areas and regulating the character of buildings to be erected	B-6449
North Dumfries, Township	980	Prohibiting the use of land or the erection or use of buildings within certain defined areas	B-6095
North York, Township	5108	Imposing certain restrictions upon part of Township Lot 16, Concession 5, west of Yonge Street	B-5908
North York, Township	5207	Prohibiting the erection of any further gasoline stations on Avenue Road between City Limits and Joicey Blvd.	B-6225
North York, Township	5283	Imposing restrictions upon part of Block "A," Plan 2090	B-6518
North York, Township	5253	Imposing restrictions upon part of Township Lot No. 4, Concession 5, west of Yonge Street	В-6519
North York, Township	5209	Imposing restrictions upon part of Township Lot 22, Concession 1, west of Yonge Street	B-6524
North York, Township	5391	Imposing restrictions on part of Lot 15, Concession 2, west of Yonge Street	В-7072
North York, Township	5393	Imposing restrictions upon part of Township Lot 15, Concession 2, east of Yonge Street	B-7074

	Der law	1	Procedure
Municipality	By-law No.	Area Restricted	File
North York, Township	5394	Imposing restrictions upon part of Lots 12, 13 and 14, Concession 1, east of Yonge Street	B-7075
North York, Township	5395	Imposing restrictions upon part of Township Lot 13, Concession 1, west of Yonge Street	B-7076
North York, Township	5455	Imposing certain restrictions on the lands covered by Plan 3470	B-7312
North York, Township	5456	Regulating the spacing of buildings to be erected on lands covered by Registered Plan 3401	B-7313
North York, Township	5457	Regulating the spacing of buildings to be erected on lands covered by Registered Plan 3405	B-7314
North York, Township	5458	Establishing lands covered by Registered Plan 3406 as a residential area	B-7315
North York, Township	5399	Imposing restrictions upon part of Township Lot 9, Concession 1, east of Yonge Street	B-7316
North York, Township	5417	Imposing restrictions upon part of Township Lot 11, Concession 2, west of Yonge Street	B-7317
North York, Township	5396	Imposing restrictions upon part of Township Lot 15, Concession 2, east of Yonge Street	B-7446
Nottawasaga, Township	869	Prohibiting the use of certain part of Lot 34 in the 2nd Concession	B-5969
Nottawasaga, Township	874	Prohibiting the use of a certain part of Lot No. 34 in the First Concession	B-6405
Nottawasaga, Township	876	Prohibiting the use of a certain part of Lot No. 33 in the First and Second Concession	B-6406
Otonabee, Township	1070	Regulating and restricting use of the land and the character, use and location of all building thereon	B-6436
Ottawa, City	9841	Restricting the use of land and the erection and use of buildings within a certain area in Dalhousie Ward	B-7031
Port Arthur, City	2659	Establishing restricted building zones	B-5112
Port Arthur, City	2660	Establishing restricted building zones	B-5113
Port Arthur, City	2661	Establishing restricted building zones	B-5114
Port Arthur, City	2662	Establishing restricted building zones	B-5115
Port Arthur, City	2663	Establishing restricted building zones	B-5116
Port Arthur, City	2664	Establishing restricted building zones	B-5117
Port Arthur, City	2665	Establishing restricted building zones	B-5118
Port Arthur, City	2666	Establishing restricted building zones	B-5119
Port Arthur, City	2667	Establishing restricted building zones	B-5120
Port Arthur, City	2668	Establishing restricted building zones	B-5121
St. Catharines, City	5198	Restricting the use of lands and buildings on parts of Herrick Avenue, Westchester Crescent, Clayburn Avenue and Terrace Hill Road	B-7099
St. Edmunds, Township	658	Regulating the use of land and the character, location and use of buildings and structures	B-7253
Scarborough, Township	3572	Regulating the use of land and the character, location and use of buildings and structures	B-5960
Scarborough, Township	3535	Establishing residential districts in certain sections of the Township	B-6275
Scarborough, Township	3671	Establishing a residential area, regulating the use of lands and buildings in such area	B-6573
Schreiber, Township	243	Regulating the use of lands and the character, location and use of buildings and structures in respect to proposed subdivision of C.P.R. lands located south of Alberta Street	B-7430
Schreiber, Township	244	Regulating the use of land and the character, location and use of buildings and structures in respect to Mining Location No. R-270 and 66E	B-7431
Stamford, Township	1053	Restricting the use of lands and buildings	B-6212
Sudbury, City	2845	Approval of Restricted Area By-law	B-6597
Sudbury, City	2836	Approval of Restricted Area By-law	B-6416
Toronto, City	16787	Restricting to use for residential purposes only lands, buildings and structures within areas bounded by North City Limits, Pape Avenue, Gerrard Street East, and C.P.R. right-of-way	B-5959
Toronto, City	16825	Restricting to use for offices and certain other purposes only lands and buildings within areas adjacent to east, west and north sides of proposed Civic Square	B-6054
Toronto, City	16895	Establishing a building line on Glen Road between South Drive and Summerhill Avenue	B-6303

Municipality	By-law No.	Area Restricted	Procedure File
Toronto, City	16916	Restricting to certain uses lands and buildings on either side of Avenue Road between Heath Street West and Lonsdale Road	
Toronto, City	16987	Restricting to use for private residences for occupation by one family only lands and buildings on the west side of Chippewa Avenue and portion of lake front west of Chippewa Avenue, Toronto Island	
Toronto, City	16966	Prohibiting the use of lands or erection or use of buildings in area bounded by College, Bathurst, Dundas Street West and Spadina Avenue for purpose of the slaughter of fowl, poultry markets or poultry storage	
Toronto, City	17027	Prohibiting the use of lands or erection or use of buildings or structures for bowling alley, billiard academy, etc., within areas comprised of lands abutting on Bayview Avenue between Hillsdale and Eglinton Avenues	
Toronto, City	17044	Restricting to use for residential purposes only lands, buildings and structures within areas comprised of lands abutting on either side of Hiltz Avenue	
Toronto, City	17113	Restricting to use for private residential purposes lands, buildings and structures within areas abutting on Gerrard Street East, Coxwell Avenue and Kingsmount Park Road, and on south side of Gerrard Street East between Coxwell Avenue and Normandy Boulevard	
Toronto, City	17124	Restricting to use for residential purposes only lands, buildings and structures within areas abutting on Ryding Avenue and Ethel Avenue west of Gourlay Crescent	
Wasaga Beach, Impro- ment District (formerly		Controlling the land by dividing it into use zones and to regulate and restrict the use of land and buildings Establishing certain residential streets and fixing	
Waterloo, Town	1103	building lines thereon	
Waterloo, Town	1206	Preventing the use of Willow Street from Erb Street to Allan Street for purposes other than that of detached private residences or public park	
Westminster, Townshi	р 1327	Regulating the use of land and the character, location and use of buildings and structures, part Lot 34 in Broken Front Concession, Township of Westminster	
Westminster, Townshi	p 1332	Regulating the use of land and the character and use of buildings on part of Lot 1 on cast side of Wortley Road	
Westminster, Townshi	p 1348	Regulating the use of land and character and use of buildings and structures	f B-7069
Westminster, Townshi	р 1352	Regulating the use of land and character and use of buildings on part of south half of Lot No. 25, Broken Front Concession "B"	B-7135
Woodhouse, Township	477	Regulating the use of land and the character and location of buildings and structures	B-6614
Woodstock, City	2617	Restricting the use of lands and buildings on both sides of Wellington Street North between Brant Street and Second Concession of Township of Blandford	
York, Township	13031	Approval of Restricted Area By-law 13031	B-6396
York, Township	13120	Prohibiting the use of land and erection or use of any building except for the purpose of a dwelling house or land abutting on Victoria Boulevard	

RESTRICTED AREAS—REPEAL OR AMENDMENT OF

(Section 406 of "The Municipal Act" as re-enacted by Section 13, Chapter 35, O.S. 1941)

Procedure File	B-6507 B-5481 B-6800	B-3979	B-4766	B-5834	B-6698	B-6165	B-2619	B-5974	B-6615	D E077	B-6587	B-6761	B-6746	B-6284	B-6889	B-7417	B-5970	B-6420		B-5666	B-6153
Pro	Prohibiting the erection or use of buildings for certain purposes Zoning By-law Exempting certain lands from the provisions of Zoning By-law No. 3138, and more particularly Zone 5	Continuance of provisions of clauses 1 and 2 of By-law 4050 concerning zoning restrictions	Approval of By-law 4455 amending By-law 1243 as amended concerning zoning restrictions, and repealing its By-law 4195	Concerning zoning restrictions	Concerning zoning restrictions	Regulating the use of land and/or the erection, alteration and use of buildings within the Township	Establishing a restricted area	Amending Schedule "D" to By-law 643/ by including in the exemptions part of Lot 16, Concession 1, Northern Division fronting towards	the take to allow one house to be erected on 48° in place of 50° of land Excepting thereout and therefrom the lands and works of the Hydro	Electric Power Commission of Ontario	Varying restrictions on Fernwood Road	Permitting the erection of a church on Bathurst Street between Briar Hill Assessing and St. Clausente Assessing	Regulating the use of land and the character of buildings	Zoning By-law	Zoning By-law-Lots 22 to 26, east side of Catherine Street	Zoning By-law	Regulating the use of land and character, location and use of buildings	Prohibiting the use of land or erection or use of buildings within certain	defined areas	Amending Zoning Ordinance By-laws	Amending Zoning Ordinance By-laws
Original By-law No.	C-319 3138 3138	1243	1243 4195	1243	1243	0	6439	043/	7073	1870	1446	1879	931	3886	3886	3886	35	852 and	854		
Amending By-law No.	C-328 3143 and 3149 3191	4050, 3077, 3547 and 3273	4455	4483 4539	4590	4	7052	2000	7161	1910	1920, 1466, 1836	1926	953	4048		4091	3163	817	1	2997 and 3003 3023	3024
Municipality	Brockville, Town Chatham, City Chatham, City	East York, Township	East York, Township	East York, Township East York, Township	East York, Township	Eramosa, Lownsnip	Etobicoke, Township	Econcoke, Lowinship	Etobicoke, Township	Forest Hill, Village	Forest Hill, Village	Forest Hill, Village	Fort Erie, Town	Fort William, City	Fort William, City	Fort William, City	Guelph. City	Humberstone, Township		Kitchener, City Kitchener, City	Kitchener, City

Procedure File	B-6154 B-6155 B-6156 B-6230	B-6041 B-6048	B-6414 B-6604 R-6717			_	B-5622 B-6158			B-6277 B-6278 B-6447		B-6799 in a B-7437	B-6435	is of B-6673	B-6988	, 25, B-6989 irch,
Areas Affected (Continued)	Amending Zoning Ordinance By-laws Amending Zoning Ordinance By-laws Amending Zoning Ordinance By-laws Amending Zoning Ordinance By-laws	Loning By-law Building restrictions on Lot 355, Plan 1925, Eglinton Ave. Respecting certain trades and businesses	Building restrictions on Lot 314, Plan 1908 Permitting a bowling alley on portion of Eglinton Avenue	refunding an enclose-mixed presenting the location, erection or use of certain buildings within certain limits	Preventing the location, erection or use of certain buildings within certain limits	Preventing the location, erection or use of certain buildings within certain limits	Respecting building lines Establishing restricted areas or zones Lots One and Two, east side of King Street	Prohibiting the erection and use of buildings Prohibiting use of land and buildings on St. George Street from Quebec Street to Rowland Street, etc., for purposes of a gasoline service station	Concerning residential streets	Respecting residential restrictions and residential streets Respecting fire limits Respecting fire limits	Establishing a minimum cost of construction of dwellings in certain areas	Zoning By-law Prohibiting the use of land or erection or use of buildings within	defined area for certain purposes Declaring a portion of the Township a residential area	Amending Paragraph 3 of By-law 2212 in respect to dimensions of residences within a certain area	Establishing a restricted district	Permitting duplexes and double duplexes on Lots Numbers 11, 12, 25, 26, and 39. Plan 1505, to face on Lawrence Avenue, and also a church,
Original By-law No.	3037	184 873 408	408 and 873 408	7191	7191	7191	C.P. 1-94 663 1174	880 261	791	1776 1771 7771	1042	1446 980	1093	2212	1099	2126
Amending By-law No.	3025 3026 3027 3038	537 1030 1039	1059	C.P. 27-114	C.P. 31-186	C.P. 32-196	C.P. 1(h)-319 665	1529 267	1566	4019 4020 4044	1055	1483 and 1456 989	1110	5308	5320, 1175 and 4975	5319 and 5423
Municipality	Kitchener, City Kitchener, City Kitchener, City Kitchener, City	Kingston, City Leaside, Town Leaside, Town	Leaside, Town Leaside, Town	Leaside, Town London, City	London, City	London, City	London, City Merritton, Town Midland, Town	Minico, Town Mitchell, Town	New Toronto, Town	Niagara Falls, City Niagara Falls, City Niagara Falls, City	Niagara, Township	North Bay, City North Dumfries, Township	North Gwillimbury, Township	North York, Township	North York, Township	North York, Township

B-6990	B-7377 B-7453	B-5017 B-7033	B-7063	B-7271	B-7319	B-7397	B-6821	B-6270	B-6413	B-7225	B-4608	B-6305	B-6788	B-6879	B-7392	B-6097 B-6772	B-6936 B-7039	B-7160 B-7161	B-6057
As above	Declaring certain streets to be residential streets Permitting medical or dental practice in private dwellings within certain lots on Riverview Drive	Establishing restricted districts Permitting use of northerly half of Lot 1704 on westerly side of Holland	Avenue, for purposes or a toward partour Permitting the see of lots on Stewart Street and Daly Avenue, Plan 6, for solved surrouse	to sensor purposes Permitting use, for purposes of an embassy or legation, Chancellery of Lot 33 and part Lot 32. Besserer Street	Permitting use of part 27, Besserer Street, for purposes of an	chibassy of regardon Chancenery Permitting use of Lot 7, Clemow Avenue, for purposes of a duplex or regardonce	arpea resource. grant transfer and and character, location and use of buildings and structures within Township houndaries.	Establishing a restricted area	Zoning By-law	Permitting the construction of apartment houses and duplexes in certain areas	Restricting the use of land and erection of buildings on lands situate within a defined area	Restricting the use of lands and erection of buildings on land situate within certain defined areas	Regulating and controlling the erection and use of buildings used as warehouses, gasoline and oil filling stations within certain defined areas in the city	Restricting the use of land and erection of buildings on lands within certain defined areas	Restricting the use of land and erection of buildings on land situate within certain defined areas	General zoning of municipality Establishing residential areas	Establishing building restrictions for Zone 1 Berablishing building restrictions for Zone 1	Establishing building restrictions for Zone 1 Establishing milding restrictions for Zone 3	Restricting for use for residential purposes only land and buildings within certain areas on Coxwell Ave. and Gainsborough Rd.
2126	1412 869	1939 6839	7610	7610	7610	5789	S	929	613	616	(2-H	2813	1928	2714	2715	1149	834	834 478	16832
4765, 2154, 2366, 2724, 2950, 4685	5467 5481	1957 9843	9847	9986	9875	0886	6	933, 954	and 95/ 617	616A	98-H and 25-K	2883	2884	2892	2753, 2927, 2795, 2840, 2868	1156 1078	1131	1142	16913
North York, Township	North York, Township North York, Township	Orangeville, Town Ottawa, City	Ottawa, City	Ottawa, City	Ottawa, City	Ottawa, City	Pittsburg, Township	Port Elgin, Village	Portsmouth. Village	Riverside, Town	Sarnia, Township	Sarnia, City	Sarnia, City	Sarnia, City	Sarnia, City	Smith, Township Stamford Township	Swansea, Village	Swansea, Village Swansea, Village	Swansca, vinage Toronto, City

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Procedure	File	B-6385	B-6444	B-6445	B-6446	B-7203	B-7205	B-7255	B-7256	B-7257	B-7258	B-7354	B-7364	B-7365	B-7366
Pro	Areas Affected (Continued)	East side of Tiverton Ave., south side of First Ave., between Tiverton Ave. and Logan Ave., and Logan Ave. between First Ave. and C.P.R.	Repealing By-law 11914 insofar as it prevents the use of lands or erection or use of buildings on lands on Curzon Street for store purposes	Repeal of By-law 12165 insofar as it prevents conversion of existing dwellings on east side Howland Avenue	Repeal of By-law 16255 insofar as it prevents use of lands or buildings on north side of Queen Street East between Parliament and River Streets for stores and other purposes	Repeal of By-law 16422 insofar as it prevents erection of stores with apartments above on Claremont Street between Dundas Street West and 193 Claremont Street	Repeal of By-law 7989 insofar as it prevents use of lands and buildings on Avenue Road between Bloor Street and 55 Avenue Road for book warehouse purposes	Repeal of By-law 8866 insofar as it prevents use of existing buildings on Bedford Road between Bloor and 10 Bedford Road for purpose of resident physicians' offices	Repeal of By-law 8868 insofar as it prevents erection and use of duplex dwellings north side of Lowther Avenue, between Avenue Road and Bedford Road	Repeal of By-law 9411 insofar as it prevents conversion of existing dwellings east side of Wells Hill Avenue between Nina Avenue and 67 Wells Hill Avenue into two-family dwellings	Repeal of By-law 9188 insofar as it prevents use of existing dwellings on west side St. George Street between Lowther Avenue and north limit of 214 St. George Street as deaconess training centres, etc.	Amending By-law restricting to use for residential purposes only land abutting on either side of Farnham Avenue	Repeal of By-law 16787 insofar as it prevents the use of existing store buildings west side of Pape Avenue between Bain Avenue and Withrow Avenue for retail store purposes	Repeal of By-law 16255 insofar as it prevents erection and use of metal work shop at Park School, 144 Sydenham Street	Repeal of By-law 7658 insofar as it prevents use of existing buildings on east side of Huron Street between Sullivan Street and 19 Huron Street for public dance hall purposes
Original By-law	Š	16915	11914	12165	16255	16422	7989	8866	8866	9411	9188	15681	16787	16255	7658
Amending By-law	No.	17026	16924	16925	16926	17028	17029	17039	17040	17041	17042	17043	17061	17062	17063
	Municipality	Foronto, City	Foronto, City	Foronto, City	Foronto, City	Toronto, City	Toronto, City	Toronto, City	Toronto, City	Toronto, City	Toronto, City	Toronto, City	Toronto, City	Toronto, City	Foronto, City

B-7367	B-7223	B-6398	B-4541	B-7070	B-5929	B-6601	B-5943	B-6075	B-6132	B-6133	B-6423	B-6830	B-7128	B-7129	B-7246
Repeal of By-law 16422 insofar as it prevents the use of existing store buildings on east side of Clinton Street between Henderson Avenue and College Street for store purposes	Lots 26, 27, 28, 29 and 30 in First Concession	Prohibiting the use of lands and buildings in Ward 6	Establishing restricted districts within the Township	Regulating use of buildings and land in certain areas	Amending certain building restrictions with respect to dwelling house at 1857 Richmond Street	Amending By-laws 1229 and 1241 of the former town of Walkerville—certain building restrictions respecting a dwelling house at 982 Devonshire Road	Prohibiting the erection and use of buildings Lot 101, on south side of Dundas Street for factory purposes	Prohibiting use of lands and erection of buildings in certain areas except for dwelling houses	Preventing the erection of a two-storey brick building for use as a glass cutting business on the southerly 30' of Lot 76, Registered Plan 1322	Providing that no buildings on land fronting on part of west side of Bathurst Street shall be closer to the highway than a distance of ten feet	Amending provision preventing the erection of building on corner of Oakwood Avenue and Gloucester Grove for a wholesale tobaccobusiness	Amending By-law 7663 insofar as it prevents the erection of buildings on Lot 1, Plan 1547, up to a point distant 7' southerly from the south street line of Eglinton Avenue	South side of Vanghan Road for purpose of a gasoline and oil filling station and public garage—amendment of By-law 11932	Amending By-law 11789 insofar as necessary to permit the location, erection and use of gasoline and oil filling stations and factories, south side of Dundas Street	Amending By-law 11766 insofar as may be necessary to permit the location, erection and use of a dwelling house on lots 31, 32 and 33, north side of Avenal Drive, Plan M.511
16422	1593	1690	1301	1349	1229 and 1241	1229 and 1241	11789	12768	11760 and 11962	11648	11932	7663	11932	11789	11766
17064	1593	1726	1343	1357	640	671	12972	12987	12993	12994	13032	13091	13138	13139	13152
Toronto, City	Vaughan, Township	Welland, City	Westminster, Township	Westininster, Township	Windsor, City	Windsor, City	York, Township	York, Township	York, Township	York, Township	York, Township	York, Township	York, Township	York, Township	York, Township

REVISED TARIFF OF FEES

(Section 177 of "The Railway Act")

Municipality
Purpose
Sudbury-Copper Cliff
Suburban Electric
Railway Company
Purpose
Approval of revision of tariff fees

Procedure File B-5876

SINKING FUND—INVESTMENT OF

(Section 326 of "The Municipal Act")

	By-Lav	V	Procedure
Municipality	No.	Purpose	File
Fort William, City	4087	Investment of portion of Sinking Fund in debentures under By-law Number 4087	B-6736

SINKING FUNDS-TRANSFER OF SURPLUS

(Section 321 (a) of "The Municipal Act")

Municipality	Purpose	File
Galt, City	Transfer of \$60,439.62 of Sinking Fund Surplus to the General Fund of the Corporation	B-7360
Paris, Town	Transfer of certain Sinking Fund Surplus to the General Fund of the Corporation	B-7585
Welland, City	Transfer of \$21,504.00 of Sinking Fund Surplus to the General Account of the Municipality for the purchase of an Armoury Site	B-5916

SPECIAL LEGISLATION

	SPECIAL LEGISLATION	Procedure
Municipality	Purpose	File
Cornwall, Township	Application for an extension of an existing franchise to The St. Lawrence Power Company Limited for a period of 20 years, under The Municipal Franchises Act, and for dispensation of a vote of the ratepayers	B-5266 (a)
Drake, Ellsworth A., Windsor, Ontario	Application, as Trustee of a Corporation named Essex Gas & Oil Limited or such other name as may be satisfactory, for a certificate of public convenience and necessity to supply gas to the Brunner-Mond Company and others in the Township of Anderdon, under The Municipal Franchises Act, and for dispensation of vote of the Ratepayers of the Township of Anderdon	
Fort William, City	Application for approval of a capital expenditure of \$300,000.00 for the construction of a skating rink, under The City of Fort William Act	B-6127
Board of Park Manage- ment, Town of Midland	Application for approval of the setting aside of certain park lands for athletic purposes, under The Public Parks Act	B-6725
Niagara Falls, City	Application for approval of its By-law Number 4033 amending By-law Number 2049, under The City of Niagara Falls Act	B-6364
Tisdale, Township	Application for approval of the raising of the sum of \$400,000.00 by the issue of debentures, under Section 43 of The High Schools Act	В-5630
Toronto and Suburban Separate School Board	Application for approval of exemption from the operation of The Toronto and Suburban Separate School Board Act, 1941, for the Village of Forest Hill	B-99
Toronto, City	Application for approval of its By-law Number 17004, authorizing the sale of certain University Avenue lands to J. L. Cornes, under The University Avenue Extension Act, 1928	

Municipality	Purpose	Procedure File
Toronto, City	Application for approval of By-law Number 17005 authorizing the sale of certain University Avenue lands to the Canadian Press, pursuant to Section 2 (5) of The University Avenue Extension Act	
Toronto, City	Application for approval of By-law Number 17079, authorizing the conveyance to the Trustees of Toronto General Hospital of certain University Avenue lands, pursuant to Section 2 (5) of The University Avenue Extension Act	
York, Township	Application for approval of By-law Number 12989 pursuant to Section 12 of The Township of York Act	B-6107

ORDERS ISSUED BY THE BOARD UNDER "THE TELEPHONE ACT"

(R.S.O. 1937, Chapter 261)

Municipality		Procedure File
Aberdeen, Plummer, Centre Line Telephone Company, Ltd.	Approval of telephone charges	B-6639
Addison Rural Independent Telephone Company, Ltd.	Approval of telephone charges	B-7642
Admaston Rural Telephone Association Ltd.	Approval of telephone charges	B-6167
Aldborough Farmers' Tele- phone Company, Ltd.	Approval of telephone charges	B-6368
Estate of the late Charles Wes- ley Archer (Browning Island Telephone Line)	Approval of agreement providing for sale of the interest of Charles Wesley Archer, deceased, to Miss Grace Archer and Wilbur Edison Archer	
Arden Telephone System Assiginack, Township of— Commissioners for Telephone System of	See Everett Scott and Leona J. Scott Approval of telephone charges	B-6892 B-7353
Aylmer and Malahide Tele- phone Company, Ltd.	Approval of telephone charges	B-7641
Ayr Rural Telephone Company, Ltd.	Approval of By-law Number 38, and approval of sale of system to Bell Telephone Company of Canada	B-7530
Beaver Creek Telephone Company, Ltd.	Approval of telephone charges	B-7521
Beeton Telephone Company Ltd.	Approval of telephone charges	B-7411
Bell Telephone Company of Canada	See Rama-Mara Telephone Company, Ltd.	B-5980
Bell Telephone Company of Canada	See Uhthoff Telephone Company, Ltd.	B-5981
Bell Telephone Company of Canada	See Fretts and Brisco Telephone Company, Ltd.	B-6886
Bell Telephone Company of Canada	See F. W. Clark	B-6941
Bell Telephone Company of Canada	See Section Telephone Association	B-6967
Bell Telephone Company of Canada	See Mount Granite Telephone Company, Ltd.	B-7131
Belmont and Methuen, Townships of	Purchase of certain plant and equipment from Bell Telephone Company of Canada	B-5914
Belmont, Township of— Commissioners for Tele- phone System of	Approval of telephone charges	B-6904
Black Lake Telephone Company, Ltd.	Approval of telephone charges	B-6479
Black Lake Telephone Company, Ltd.	Approval of By-law Number 1	B-6632
Blanshard, Township of— Commissioners for the Telephone System of	Approval of telephone charges	B-6243

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Municipality		Procedure File
Bobcaygeon Rural Telephone	Approval of telephone charges	B-7381
Company, Ltd. Bolton Telephone Company,	Approval of telephone charges	B-6566
Ltd. Bolton Telephone Company, Ltd. and Woodbridge and Vaughan Telephone Com-	Approval of charges for messages interchanged between the two systems	B-6748
pany, Ltd. Brighton, Township of—Cour- missioners for Telephone	Order prescribing date for holding annual meeting of system	B-6238
System of Brockville Road Rural Tele- phone Company, Ltd.	Approval of telephone charges	B-7502
Bruce, Township of—Com- missioners for Telephone System of	Order prescribing date for holding annual meeting of system	B-6072
Brudenell and Lyndoch, Town- ships of—Commissioners for Telephone System of	Order prescribing date for holding annual meeting of system	B-6317
Brudenell and Lyndoch, Town- ships of—Commissioners for Telephone System of	Extension of time for holding annual meeting of system	B-6317
Brudenell and Lyndoch, Town- ships of—Commissioners for Telephone System of	Approval of telephone charges	B-6891
Brussels, Village of—Commis- sioners for Telephone System of	Approval of telephone charges	B-7046
Byron Telephone Company, Ltd.	Approval of telephone charges	B-7058
Calabogie and Renfrew Telephone Assn.	See Hilliard Guest	B-7229
Capreol Telephone Company, Ltd.	Approval of By-law Number 35	B-6347
Clark, F. W. (Crediton Rural Telephone Company, Ltd.)	Approval of sale of part of system to Bell Telephone Company of Canada and the balance to the Township of Hay	B-6941
Colborne, Township of—Commissioners for Telephone System of	Approval of telephone charges	B-6502
Colchester North, Township of—Commissioners for Tele- phone System of	Approval of telephone charges	B-6038
Colchester North, Township of — Operating the Col- chester North Municipal Telephone System	Authority to expend \$5,000 for reconstruction, replacements, alterations and improvements to the system	
Conn Telephone Company, Ltd.	Approval of telephone charges	B-5911
Cramahe, Township of—Com- missioners for Telephone System of	Approval of telephone charges	B-6123
Davis Telephone System Docon Telephones Limited Docon Telephones Limited	Approval of telephone charges See Capreol Telephone Company Ltd. Approval of By-law Number 8	B-6585 B-6347 B-6348
Dungannon, Township of— Commissioners for Tele- phone System of	Order prescribing date for holding annual meeting of system	B-6135
Dunnville Consolidated Tele- phone Company, Ltd.	Authority to expend \$8,132.79 of Depreciation Funds on new construction, extensions and additions to the system	B-6546
Dunsford Telephone, Light and Power Co-operative Association, Ltd.	Approval of telephone charges	B-6205
Dunwich and Dutton Tele- phone Company, Ltd.	Approval of telephone charges	B-6020
Dysart, Township of—Com- missioners for Telephone System of	Approval of telephone charges	B-6285

Municipality		Procedure File
East Grey Telephone	Approval of By-law No. 204 of the Township of	B-6610
Company, Ltd. Edgar, A. A. (operating	Holland Approval of telephone charges	B-7380
Martintown Telephones) Emily, Township of—Operating the Emily Municipal Telephone System	Appointment of Mr. Albert Carroll as Commissioner of System	B-5976
Ernesttown Rural Telephone Company, Ltd.	Approval of By-law No. 915 of the County of Lennox and Addington	B-6907
Fenella Rural Telephone Company, Ltd.	Approval of telephone charges	B-6388
Flos Municipal Telephone System	See Noisy River Telephone Company, Ltd.	B-6361
Flos, Township of—Commis- sioners for Telephone System of	Approval of purchase of certain plant and equipment from the Minesing Telephone Company	B-6922
Fretts and Brisco Telephone Company, Ltd.	Approval of sale of system to Bell Telephone Company of Canada, and approval of By-laws 2, 3 and 4	B-6886
Goderich Rural Telephone Company, Ltd.	Approval of telephone charges	B-6408
Gore Bay, Town of—Commissioners for Telephone System of	Approval of telephone charges	B-6478
Guest, Hilliard	Approval of agreement providing for sale by A. N. Mousseau of Calabogie and Renfrew Telephone Association	B-7229
Guest, Hilliard (Guest Telephone System)	Approval of telephone charges	B-7405
Hagarty, Township of—Com- missioners for Telephone System of	Order prescribing date for holding annual meeting of system	B-6283
Hay, Township of Herrington, T. H. (Herrington Telephone System)	See F. W. Clark Approval of telephone charges	B-6941 B-7311
Holland, Township of Hopetown Telephone Company, Ltd.	See East Grey Telephone Company, Ltd. Approval of telephone charges	B-6610 B-7159
Horton-McNab Telephone Association, Ltd.	Approval of telephone charges	B-7612
Howick, Township of—Commissioners for Telephone System of	Approval of telephone charges	B-6738
Humphrey, Township of— Commissioners for Tele- phone System of	Approval of telephone charges	B-6208
Huron, Township of—Com- missioners for Huron and Kinloss Municipal Tele- phone System	Approval of telephone charges	B-6596
Ingersoll Telephone Company, Ltd.	Approval of By-law No. 11, and authority to issue additional shares of Capital Stock to an amount not exceeding \$100,000	B-6755
Innerkip Rural Telephone Company, Ltd.	See Princeton and Drumbo Telephone Company, Ltd.	B-6117
Innerkip Rural Telephone Company, Ltd.	Approval of By-law Number 10	B-6118
Iron Bridge Telephone Company, Ltd.	Approval of By-law Number 30	B-5990
Johnson, Township of—Commissioners for Telephone System of	Approval of telephone charges	B-7077
Kaladar and Northern Telephone System	Approval of telephone charges	B-6905
Lanark and Carleton Counties Telephone Company, Ltd.	Approval of By-law Number 56, and approval of sale of system to Bell Telephone Company of Canada	B-7432
Lansdowne Rural Telephone Company, Ltd.	Approval of By-law Number 1	B-6145
Leeds and Grenville Independent Telephone Company, Ltd.	Approval of telephone charges	B-7579

Municipality	1	Procedure File
Lennox Telephone Company,	Approval of telephone charges	B-6224
Ltd. Lennox and Addington,	Sce Ernesttown Rural Telephone Company, Ltd.	B-6907
County of Manitoulin Island Rural	Approval of telephone charges	B-6204
Telephone Company, Ltd. Marmora, Township of— Commissioners for Tele-	Approval of telephone charges	B-6045
phone System of McKellar, Township of— Commissioners for Tele-	Approval of telephone charges	B-6923
phone System of McKillop, Township of— Commissioners for Tele-	Approval of telephone charges	B-6387
phone System of McNab Telephone Company,	Approval of telephone charges	B-7533
Ltd. Minden, Township of—Commissioners for Telephone	Approval of telephone charges	B-6633
System of Minto Rural Telephone	Approval of By-law Number 1	B-5893
Company, Ltd. Minto Rural Telephone	Approval of telephone charges	B-5909
Company, Ltd. Monck, Township of—Council operating Telephone	Order prescribing date for holding annual meeting of system	B-7599
System of Monteagle and Herschel, Townships of—Commissioners for Telephone	Order prescribing date for holding annual meeting of system	B-6138
System of Monteagle and Herschel, Townships of—Commissioners for Telephone	Approval of telephone charges	B-7211
System of Moore, Township of—Commissioners for Telephone System of	Approval of By-law Number 4	B-5936
Moorhouse, Eric Gelling	Approval of sale of controlling interest in the Urban and Rural Telephone Company, Ltd. by Jean Robena Campbell to George Alexander McKenzie	B-6137
Mornington, Township of— Commissioners for Tele- phone System of	Approval of telephone charges	B-6422
Mount Albert Telephone Company, Ltd.	Approval of By-law authorizing an increase in capital stock	B-7352
Mount Forest, Wellington and Grey Telephone Company, Ltd.	Approval of telephone charges	B-6146
Mount Granite Telephone Company, Ltd.	Approval of By-law Number 2, and approval of sale of system to Bell Telephone Company of Canada	B-7131
New California Telephone Company, Ltd.	Approval of telephone charges	B-6477
New Glasgow Telephone	Approval of telephone charges	B-7624
Company, Ltd. Nipissing Central Railway	See Northern Telephone Company, Ltd.	B-6908
Company Nipissing Central Railway	See Northern Telephone Company, Ltd.	B-6909
Company Noisy River Telephone Company, Ltd.	Approval of By-laws Number 24 and 26	B-6247
Noisy River Telephone Company, Ltd.	Approval of By-law Number 25	B-6248
Noisy River Telephone Company, Ltd.	Agreement for interchange of messages with Flos Municipal Telephone System	B-6361
Norfolk and Tillsonburg Telephone Company, Ltd.	Approval of By-law Number 6, and approval of sale of system to the Bell Telephone Company of Canada	B-6070
Normanby Telephone Company, Ltd.	Approval of telephone charges	B-6076

Municipality	1	Procedure File
North Easthope, Township of — operating the North Easthope Municipal Tele-	Appointment of Herbert Richardson as Commissioner of System	B-7358
phone System Northern Telephone Company, Ltd.	Authority to expend \$88,514.66 of Depreciation Funds upon new construction, extensions and additions to system	B-6620
Northern Telephone Company, Ltd.	Agreement for interchange of messages with Ontario Northland Transportation Commission and Nipissing Central Railway Company	B-6908
Northern Telephone Company, Ltd.	Agreement for interchange of messages with Ontario Northland Transportation Commission and Nipissing Central Railway Company	B-6909
North Norwich, Township of— operating the North Nor- wich Municipal Telephone System	Authority to expend \$3,000 of Depreciation Funds upon the retirement of a loan	B-5982
North Norwich, Township of— Commissioners for Tele- phone System of	Approval of telephone charges	B-6500
North Renfrew Telephone Company, Ltd. North Renfrew Telephone	Approval of By-laws Number 5 and 6, and approval of purchase of the Kerr Line Telephone Company, Ltd. Approval of telephone charges	B-6397 B-6653
Company, Ltd. Ontario Northland Trans-	See Northern Telephone Company, Ltd.	B-6908
portation Commission Ontario Northland Trans-	See Northern Telephone Company, Ltd.	B-6909
portation Commission Osprey, Township of—Commissionors for Telephone	Approval of telephone charges	B-7199
System of Oxford Telephone Company, Ltd.	Approval of telephone charges	B-6102
Oxford Telephone Company, Ltd.	Approval of By-laws Number 11, 12, 13 and 14	B-6210
Oxford Telephone Company, Ltd.	Authority to expend \$6,600 of Depreciation Funds upon new construction, extensions and additions to its system	B-6714
Oxford Telephone Company, Ltd.	Approval of telephone charges, and Order rescinding Order of the Board P.F. 6199, dated September 20th 1920	B-7583
Percy, Township of—Commis- sioners for Telephone System of	Approval of telephone charges	B-6162
Pine Valley Telephone Company, Ltd.	Approval of telephone charges	B-7007
Plummer, Aberdeen and Galbraith Rural Telephone Association	Approval of telephone charges	B-7507
Port Arthur, City of—operat- ing Port Arthur Municipal Telephone System	Authority to expend \$20,995.68 of Depreciation Funds upon new construction, extensions and additions to the system	B-6515
Port Hope Telephone Company, Ltd.	Ápproval of telephone charges	B-6209
Princeton and Drumbo Telephone Company, Ltd.	Approval of By-law Number 6	B-6117
Princeton and Drumbo Telephone Company, Ltd.	See Innerkip Rural Telephone Company, Ltd.	B-6118
Radcliffe, Township of—Com- missioners for Telephone System of	Approval of By-law Number 1	B-6119
Rama-Mara Telephone Company, Ltd.	Approval of By-law Number 4, and approval of sale of system to Bell Telephone Company of Canada	B-5980
Rama-Mara Telephone Company, Ltd.	Approval of By-law Number 5	B-6498
Riverdale Rural Telephone Association	Approval of telephone charges	B-6749
Scotch Line and Stanleyville Telephone Company, Ltd.	Approval of telephone charges	B-7196

Municipality	F	Procedure File
Scott, Everett, and Scott, Leona J.	Approval of agreement providing for sale of the Arden Telephone System to James B. and Lillian Ruth	B-6892
Section Telephone Association	Taylor Approval of sale of system to Bell Telephone Company of Canada	B-6967
Sharbot Lake and Parham	Approval of telephone charges	B-6223
Telephone System Sharbot Lake and Parham Telephone Company Ltd	See Tichborne Rural Telephone Company, Ltd.	B-6613
Telephone Company, Ltd. South Bruce Rural Telephone	Approval of telephone charges	B-6392
Company, Ltd. South Diagonal Telephone	Approval of telephone charges	B-5989
Company, Ltd. Southern Ontario Telephone	See Norfolk and Tillsonburg Telephone Company,	B-6070
Company, Ltd. South Leeds and Pittsburg Rural Telephone Company, Ltd.	Approval of telephone charges	B-7040
South Monaghan, Township of—Commissioners for Tele- phone System of	Approval of telephone charges	B-7462
Southwold and Dunwich Tele- phone Association Ltd.	Approval of telephone charges	B-7503
Spence and Monteith Tele- phone Company, Ltd.	Approval of telephone charges	B-5979
Stroud Telephone Company, Ltd.	Approval of telephone charges	B-7600
Tay, Township of—Commissioners for Telephone System of (North River Municipal Telephone System)	Approval of telephone charges	B-6740
Tay, Township of—Operating the North River Municipal Telephone System	Approval of N. Durnford and M. Lovering as Commissioners for Telephone System	B-6906
Taylor, James B. (Arden Telephone System)	Approval of telephone charges	B-7638
Taylor, W. H. (Gillies Telephone System)	Approval of telephone charges	B-7595
Thesalon and Lefroy. Township of—Commissioners for Telephone System of (Ansonia and Thessalon Municipal Telephone System)	Approval of telephone charges	B-7243
Tichborne Rural Telephone Company, Ltd.	Agreement for interchange of messages with Sharbot Lake and Parham Telephone System	B-6613
Tilbury East, Township of— Commissioners for Tele- phone System of	Approval of telephone charges	B-6578
Tuckersmith, Township of— Commissioners for Tele- phone System of	Approval of telephone charges	B-6996
Urban and Rural Telephone Company, Ltd.	See E. G. Moorhouse	B-6137
Wallacetown and Lake Shore Telephone Association, Ltd.	Approval of telephone charges	B-6503
Waterloo, Township of—Com- missioners for Telephone System of	Approval of telephone charges	B-6191
Watt, Township of—Commis- sioners for Telephone System of	Approval of telephone charges	B-6244
Welland County Telephone Company, Ltd.	Authority to expend \$10,233.39 of Depreciation Funds upon new construction, extensions and additions to system	B-6763
Wellesley, Township of—Com- sioners for Telephone System of	Approval of telephone charges	B-6206
West Garafraxa Telephone Co-operative Association, Ltd.	Approval of telephone charges	B-6476

Municipality		Procedure File
West Williams Rural Tele- phone Association, Ltd.	Approval of telephone charges	B-6136
Woodbridge and Vaughan Telephone Company, Ltd.	Approval of By-law Number 12	B-6334
Woodbridge and Vaughan Telephone Company, Ltd.	Approval of charges for messages interchanged with the Bolton Telephone Company, Ltd.	B-6748
Woodbridge and Vaughan Telephone Company, Ltd.	Approval of telephone charges	B-7409
Wroxeter Telephone Company, Ltd.	Approval of By-laws Number 7, 8 and 9	B-6376
Wroxeter Telephone Company, Ltd.	Approval of telephone charges	B-6461
Uhthoff Telephone Company, Ltd.	Approval of By-law Number 1, and approval of sale of system to Bell Telephone Company of Canada	B-5981
Yarker Rural Telephone Company, Ltd.	Approval of telephone charges	B-6409
Yarmouth Rural Telephone Company, Ltd.	Approval of telephone charges	B-5971

AGREEMENTS APPROVED BY THE BOARD UNDER SECTION 96 OF "THE TELEPHONE ACT"

(R.S.O. 1937, Chapter 261) (Agreements are with The Bell Telephone Company of Canada)

SERVICE STATION AGREEMENTS	Procedure File
Browning Island Telephone Company Hay Municipal Telephone System Keward Rural Telephone Company Limited Mississippi Telephone Company Limited Southern Ontario Telephone Company Limited	B-7018 B-7086 B-5923 B-7535 B-6194
TRAFFIC AGREEMENTS	Procedure File
Arden Telephone System Arden Telephone System Guest, Hilliard (Guest Telephone System) Sharbot Lake and Parham Telephone System	B-5933 B-7308 B-7404 B-5932

THE FOLLOWING GIVES A BRIEF SUMMARY OF THE EXTENSIONS AND IMPROVEMENTS MADE TO THE RAILWAYS UNDER PROVINCIAL JURISDICTION DURING THE YEAR 1947

Cornwall Street Railway Light and Power Company, Limited

This Company reports an extension of 2000 feet of railway tracks during the year 1947, new electric line construction of 2000 feet, and additions to equipment of Sweeper, Trucks, Machinery, and Tools at a total expenditure of \$55,026.24.

Fort William Electric Railway Company

No additions to track or expenditures on improvements were reported by this Company during the year.

Hamilton Street Railway Company

This Company reports the purchase of additional land and buildings necessary to operation of railway, and additions to equipment of Motor Buses, Service Cars, Trucks, etc., during the year 1947, at a total expenditure of \$761,932.00.

The Huntsville and Lake of Bays Railway Company

No additions to track or expenditures on improvements were reported by this Company during the year.

Mattagami Railroad Company

No additions to track or expenditures on improvements were reported by this Company during the year.

Niagara Peninsular Railway

No additions to track or expenditures on improvements were reported by this Company during the year.

Port Arthur Civic Railway

This Company reports additions to land, rolling stock, buildings and equipment during the year to the amount of \$546,600.43.

Public Utilities Commission, Transportation Department

No additions to track or expenditures on improvements were reported by this Company during the year.

Sudbury, Copper Cliff Suburban Electric Railway

This Company reports additions during 1947 to equipment, rolling stock, buildings, furniture and fixtures to the amount of \$25,370.63.

Thurlow Railway Company

No additions to track or expenditures on improvements were reported by this Company during the year.

Tillson Spur Line Railway Company

No additions to track or expenditures on improvements were reported by this Company during the year.

Toronto Transportation Commission

This Company reports additions to railway, equipment, land and buildings to the amount of \$6,678,758.46.

Township of York and Town of Weston Railways

No additions to track or expenditures on improvements were reported by this Company during the year.

North Yonge Railways

No additions to track or expenditures on improvements were reported by this Company during the year.

INDEX TO RAILWAY LEGISLATION

The following index has been made with the object of continuing in chronological order all the legislation passed by the Dominion and Provincial Government since 1867, affecting railways situated wholly or partially within the Province of Ontario.

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8		1913		356
9	************************	1914		272
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20		1925		162
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25		1930		172
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27		1932		160
28	***************************************	1933		146
29		1934		152
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32	• • • • • • • • • • • • • • • • • • • •	1937		62
33	• • • • • • • • • • • • • • • • • • • •	1938		181
34	•••••	1939		151
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36	*****	1941	***************************************	Nil
37		1942		124
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4 I	***************************************	1946		117

FORM TO BE USED BY COMPANIES IN REPORTING ACCIDENTS

Accidents: Regulations under and in pursuance of Sections 281 and 282 of "The Railway Act" (R.S.O. 1937, C. 259).

Accidents—Every Company upon the happening of an accident shall give to the Ontario Municipal Board notice thereof in writing by delivering the same at the office of the Board in the City of Toronto or by mailing it, postage prepaid, in a registered letter and addressed to the Board.

Such notice shall contain a statement signed by duly authorized officer of such company setting forth the information and particulars hereinafter mentioned.

Such statement shall be divided into paragraphs, each of which shall include and refer to one (or one group) only of the numbered particulars hereinafter mentioned, and the paragraph referring to each respective numbered particular shall bear the number corresponding to the number hereinafter given for each such particular.

The numbers of paragraphs and the particulars to which each shall refer as aforesaid are as follows:

- 1. Name or names of company or companies concerned in accident.
- 2. Numbers of train, engine, car or motor.
- 3. Date and time of accident.
- 4. Nature of accident.
- 5. Exact location.
- 6. Name in full, address and status of each person injured or killed.
- 7. Age.
- 8. Married or single.
- 9. Passenger, employee or other.
- 10. If employee, length and nature of service with dates and periods of different occupations (if more than one).
- 11. If employee, character, experience, skill and fitness with respect to occupation at time of accident.
- 12. How engaged at time of accident and how long on duty.
- 13. Cause of accident, how same occurred, with full particulars and details and diagram, if required.
- 14. Persons in charge, with full names, addresses and the particulars referred to in paragraphs 10, 11 and 12.
- 15. Result to person and particulars of injury.
- 16. Result to property, including amount of damage.
- 17. Names and addresses of all persons present at, or eye witness of, the accident.
- 18. What investigation (if any) and the result of same.
- 19. Verdict (if any).

The Board reserves the right to require such further and other details, particulars, maps, plans, profiles, documents, models and information or illustration of any kind as the nature of the accident and a full understanding thereof may suggest or require.

In pursuance of Sections 281 and 282 of said Act, the Board declares that all such information so given in pursuance of this regulation shall be privileged.

Signature of Officer.

Name of City on Town

FORMS THAT MAY BE USED IN CONNECTION WITH THE EXAMINATION OF MOTORMEN

Name of City of Town
NAME OF RAILWAY
This is to certify that, acting under "The Railway Act" (R.S.O. 1937, Chap.
269), Section 265, I have examined the who is years of age and feet inches high, weighs pounds, com-
plexion; as to fitness as a motorman, that the said
is of steady habits, and is in physical ability, intelligence and general knowledge of, and experience in, this work, qualified to act as motorman on any electric car of said Company.
I have been duly appointed an examiner under the said Act, my appointment
being dated
Name
Examiner.

REGULATIONS

Regulations as to Height of Car Steps

Under and in pursuance of a certain order of the Board bearing date the 2nd day of June, A.D., 1909, the Ontario Municipal Board made the following regulations:

The steps on all cars hereafter constructed and used by the Toronto Railway Company and all other street and electric railways under the jurisdiction of this Board shall have steps conforming to the following regulations:

On closed single truck cars the height of the first step above the ground shall not be less than twelve nor more than fifteen inches.

On closed double truck cars the height of the first step above the ground shall not be less than fourteen nor more than sixteen inches.

On open single truck cars the height of the first step above the ground shall not be less than twelve nor more than fifteen inches, and the distance between the first and second steps and the second step and the floor of the car shall measure twelve inches and nine inches respectively.

On open double truck cars, the height of the first step above the ground shall not be less than fourteen nor more than sixteen inches, and the distance between the first and second steps and the second step and the floor of the car shall measure twelve inches and fourteen inches respectively.

REGULATION RE DRINKING WATER ON PASSENGER CARS

Every Electric Railway in Ontario, subject to the jurisdiction of the Board, shall provide in each passenger car which runs 20 miles or more, a suitable receptacle for water with paper cups attached upon or near such receptacle, and shall keep such receptacle, while the car is in use. constantly supplied with cool drinking water for the use of passengers and the conductor and motorman in charge of such car.

This regulation shall not apply to street railways in towns or cities.

Dated at Toronto, this 10th day of April. A.D., 1928.

TABULATION OF ASSETS AND LIABILITIES AS OF DECEMBER 31st, 1947

Name of Rashway	Authorized Capital Stock	Cost of Railway Equipment, Land and Buildings	Cash and Other Assets	Deficit	Capital Stock Outstanding	Funded Debt and Real Estate	Current	Accrued Liabilities, Sinking and Other Special Funds	Surplus
Cornwall Street Railway Light and Power Company Limited. Fort William Electric Railway	\$200,000.00	<u> </u>	1 .	and Motor Bus	\$200,000.00 Oct. 15, 1947. Street Railway	\$395,000.00 Street Railway	\$7,063.39 equipment sol	\$7,063.39 \$355,941.21 equipment sol d for scrap value	69
Hamilton Street Railway Company	50,000.00	29,482.24	12,358.20	\$1,074.42	27,800.00	3,208,500.00	1,682.93	13,431.93	32,147,00
Mattagami Kailroad Company	1,000,000,0	249,000,00	06.066,121	Operation	Discontinued		2.515.5	20017	
Niagara Peninsular Railway.	200,000.00	55,550.88	29,022.19		50,000,00	1,167,146.28	125,546.70		34,573.07
Public Utilities Commission—Street Railway Department		790,877.94	82,506.10			227,300.00	84,771.24	561,312.80	559,797.47
Sandwich, Windsor and Amherstburg Railway Company			6,367,034.35			3,000,000.00	4,668,488.96	1,694,088.56	
Southern Algoma RailwaySudbury-Copper Cliff Suburban Electric Railway	250,000.00	310,668.70	136,942.60	Did not operat e during year 60.310.47 173,100.00	during year 173,100.00	31,262.52	16,151.34	283,714.53	3,693.38
Thurlow Electric Railway	50,000.00	58,211.42		24,520.34	25,000.00	All Rolling Stock owned and operated by Clan. Nat. Rly.	57,731.76	operated by C	ın. Nat. Rly.
Toronto Transportation Commission		61,247,302.58 22,060,325.98	22,060,325.98	2,509,252.90		7,066,149,87	2,977,390.19	70,843,700.36 85,816,881.46	85,816,881.46
Toronto Transportation Commission—Township of York and Weston Railway		1,393,256.10	1,274,407.69			16,186,931,91		512,870.09	1,265,861.79
Toronto Transportation Commission—North Vonge Railway		107,549,10	5,034.60				85,929.10	85,929.10	26,654.60

TABULATION OF CHARGES OTHER THAN OPERATING COSTS FOR YEAR ENDING DECEMBER 31st, 1947

Net Surplus from Year's Operation	\$38,271,22 32,147.00 439.81	94,012.02 99,413.93 10,582.23	1,942,33	224,631.28
Net Deficit from Year's Operation	\$16,432.10	11,654.78		
Total Revenue from All Sources	\$307,965.69 177,153.37 2,521,227.00 2,274.70 64,818.40	364,500.59 648,714.12 2,969,132.62 200,736.66	41,160.00 Railway 24,803,830.51	645,782.23
Total Expenditures excluding Operating Costs	a) \$238,103,32 138,491.53 1,537,927,00 2,453,85 a) 48,776,29	8. 8. 1.9	39,217.67 idian National 1	418,324.69
Total Expenditures including Operating Costs	\$62,948.61 (a) \$273,195,04 (a) 390.62 139,272,77 734,589.00 2,375,922.00 98.00 2,375,922.00 15,525,29 (a) 52,430,24 (a) Operation Discontinued 27,505,44	3 5 2,6 du	All Rolling Stock owned and o perated by Can adian National Railway 738,471,72 4,572,135.13 5,889,148.98 (3)19,962,318.49 (3)17,426,558.75 24,803,830.51	421,147.95
All Charges other than Operating Costs	\$62,948.61 (a) 390.62 734,589.00 98.00 15,525.29 (a) Operation Dis	49,311.69 (a) 91,012.02 (a) 806,999.65 (a) Did not oper ate 11,654,34 (a)	owned and or 5,880,148.98	1,411.63
Transfer (o Special Accounts	\$45,202.75	47,591.23 65,947.93 314,969.13 9,596.95	Rolling Stock 4,572,135.13	
Taxes	\$3,312.47 390.62 203,669.00 98.00 77.01	1,456.65 324.93 24,338.26 511.42	All 738,471,72	388.58
Discount on Unfunded Debt		\$263.81 417.50 93,043.37		
Interest on Funded Debt	\$14,233.39	1,935.32	489,274.17	1,411.63
Name of Railway	Cornwall Street Railway Light and Power Company Limited	Foregara Telinoania Miliway Public Utilities Commission—Street Railway Dept. Sandwich, Windsor and Amherstburg Railway Co. 148,455.00 Southern Algona Railway 1,035,32	Tiurlow Electric Railway. Tillson Spur Line Railway. Toronto Transportation Commission.	Toronto Transportation Commission—Township of York and Weston Railway

(a) Does not include transfer to special accounts.

TABULATION OF OPERATING COSTS FOR YEAR ENDING DECEMBER 31st, 1947

Cornwall Street Railway Light and Power Company \$35,898,56 \$24 Ilamilton Street Railway Company \$38,898,56 \$24 Ilamilton Street Railway Company \$38,590,00 18 Ilamilton Street Railway Company \$38,519,00 18 Ilamilton Street Railway Company \$38,519,00 \$38,	Maintenance	Maintenance			Damage	49,444	
General Expenditures B Company \$35,898.56 19,303.35 338,519.00 420.24 420.2	Jo :	Maintenance					
Company \$35,898.56 19,303.35 38.85.19.00 anny	:	TATALLICITATION			to		
Company \$35,808,56 19,303,35 338,519,00 anny 13,303,41	Roadbed	Jo	Motive	Wages	Persons	Miscellaneous	Total
Company \$35.898.56 19,303.35 388,519.00 anny 13.36.24	and	Equipment	Power		and		
Company \$35,808.56 19,303.35 38.519,00 any 13.34.14.00	Buildings				Property		
\$35,898.56 19,303.35 338,519.00 any13.34.1							
19,303.35 338,519.00 19 Company 13.36,131	\$26,405.56	\$62,532.16	\$21,000.00	\$60,086,06\$	\$1,000,01	\$16,956.04	\$255,449.18
338,519,00 1 ty Company 420,24	14,855.09	23,881.86	14,170.09	56,873.96	1,026.58	8,771.22	138,822.15
ty Company 420.24	185,678.00	377,584.00	80,857,00	525,706.00	13,680.00	219,572.00	1,741,596.00
13 261 31	597.77	685.47		473.37		375.00	2,551.85
10:107:01	10,014.99	3,467.08		16,019,99		6.089.93	48,853.30
Mount McKay and Kakabeka Falls Railway Company			Operation	Operation Discontinued			
130.82	9,758.37	7,972.16		5,997.58		3,646.48	27,505.41
41,446.65	34,726.21	81.196,09	17,693.25	112,099.97		61,373.07	328,300.33
eet Railway Dept 75,442.76	3,616.22	173,635.05	18,892.73	171,155.80	5,823.94	87,257.50	535,824.00
108,299.02	246,711.27	796,394.01		946,634.85		75,145.69	2,173,184.84
Southern Algoina Railway Company			Did not oper	Did not opc: ate during year			
e Railway 35,630.67	25,258,23	43,576.72	19,455.72	48,082.06	78.90	6,417.77	178,500.07
122.66	17,344,74	9,097.53	1,585.28	8,889.78		2,177.68	39,217.67
Tillson Spur Line Railway.		All Rolling	Stock owned an	d operated by C	Stock owned an d operated by C anadian Nation al Railways	al Railways	
mission	1,105,999.80	2,288,423.91	1,261,420.96	6,687,396.20	578,651.91	5,100,470.89	18,654,304.64
Toronto Transportation Commission-Township of							
37,973.65	23,548.23	48,376.52	23,143.37			286,694.55	419,736.32
Toronto Transportation Commission-North Yonge						1	000
21,835.91	31,131.66	23,561.71	22,398.69			88.895.02	187,822.99

TABULATION OF COMPARISON WITH PREVIOUS YEAR AS TO CAR MILES RUN, PASSENGERS CARRIED, ETC. Year Ending Dec. 31st, 1947

								Accidents	ents			
Name of Railway	Length of Track	f Track	Car Miles Run	es Run	Passengers Carried	s Carried	Killed	led	Injured	red	Net Earnings	nings
	Increase	Decrease	Increase	Decrease	Increase	Increase Decrease Increase Decrease Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
Cornwall Street Railway Light and Power Company Limited			136,507	:	293,397						:	\$10,961.17
Fort William Electric Railway		:		415,794		2,362,540	:		×		:	51,538.15
Hamilton Street Railway Company						1,877						834,507.00 362.42
Mattagami Railroad Company			1,746	:	743		:	:		:	:	15,491.80
Mount McKay and Kakabeka Falls Railway Co.					Operation	Operation Discontinu ed	ed		,			00 60 2 63
Magara Peninsular Kallway.									7			72,001.92
Public Utilities Commission—Street Railway Dept.					8,580,037		2		×		\$93,362.46	
Sandwich, Windsor and Amherstburg Railway Co.			236,277			817,589		:	:			19,215.41
Southern Algoma RailwaySudbury-Copper Cliff Suburban Electric Railway.			39,580		Did not ope 361,274	Oid not ope rate during year 361,274	year		23	:	1,573.02	
		:					:	:	:	_		452.21
Tillson Spur Line Railway			All Rolling	All Rolling Stock owne d and opera ted by Can adian Na tional R ailway	d and opera	ted by Can	adian Na	tional R	ailway			
Toronto Transportation Commission		2,827	2.072,174	:	116,926	:	S	:	80	:	:	26,888.90.
Toronto Transportation Commission—Township of Vork and Weston Railway			81515		75 165				1-		7.028.72	
Toronto Transportation Commission-Nerth		- - - - - - - -										
Yonge Railway			6,720			38,348		3	7			33,212.10

TABULATION OF CAR MILES RUN, PASSENGERS CARRIED, ACCIDENTS, ETC., FOR YEAR ENDING DECEMBER 31st, 1947

	Length	Length			Passengers	Accidents (Claims)	ents ms)	pə	Pas	Passenger Cars				Misce	Miscellaneous	ns				
Name of Railway	of Track Owned Miles	of Switches and Sidings Miles	Passenger Car Miles Run	Passengers Carried	Carried per Mile of Main Track Operated	Killed	Leinjured	Mumber of	Cars Enclosed	Cars Open	Trailers Mail and	Baggage Box and Cattle	Platform	Dump and Coal	looT	Snow	won2 swol4	Loading	Locomo-	Buses and Trucks, etc.
Cornwall Street Railway Light and Power Company Limited	5.50	6.50	564,201	3,702,028	673,096	:	: 41	80	21 .	: :	::	: :			::	4 -	2		٥.	∞ ∽
Hamilton Street Railway Company	33.87	2.63	5,570,607	40,957,232	658,206	-	369	475	61	:	.:	:	:	<u>:</u>	:	7	:	:	:	128
Company	1.438	.312	0.74	9,620	9,620		:	7 :	: -	:	٣	2	. 2		:	:	: -	-		:
Mattagami Railroad Company Mount McKay and Kakabeka Falls	3.000	3.947	24,408	607,11	067.6	:	:	=		:	: :	: :					•	•	1	
Railway Company	3 235	2.115			Opera tion		Discon tinued	nued			- :		<u>س</u>	09	:	:	:	:	ιΩ	:
Port Arthur Civic Railway	19.53	1.04		6,954,934	1,030,371		13			:	:	:	:	:	:	:	:	:	:	24
Public Utilities Commission—Street Railway Department	•			13,137,253	1,915,301	7	16	:	:	:	:	:	:		<u>:</u>	<u>:</u>	:	:	:	49
Sandwich, Windsor and Amherstburg Railway Company			7,517,375	38,450,993		ω	10	475	197	:	:	:	:	:	:	:	9	<u>:</u>	:	17
Southern Algoma RailwaySudbury-Copper Cliff Suburban Electric						oper at	-	ring ye ar	1.0											· ·
Railway	7.9	4 666	337,875	2,092,382	340,808	-	<i>ب</i>	12	=		: :	: :	: -	31		- :	- :	: :	. ~	^ :
	1.010	.051	49,133,673	324,532,143	All Rolling	Stock 27 1	Stoc k owne d and 27 1,145 5,924		oper ated by C anad ian 859 105	ted by	oy C and	nd ian		Nati ona	Rail	way 31	17	-	<u> </u>	707
Toronto Transportation Commission— Township of York and Weston Rly	14.065	.148	1,118,294	13,325,881	:	:	37	:	Own ed	8	ope rate	e d by		ronte	Tor onto Tran s.		C om.			
Toronto Transportation Commission— North Yonge Railway	10.247	1.155	460,967	2,310,521			12	Own ed	Own e		opc rate d by	e d b		ronte	Tor onto Trans.		Com.			

ANALYSIS OF GROSS EARNINGS AND MISCELLANEOUS INCOME FOR YEAR ENDING DECEMBER 31st, 1947

			From		From Rental			
			T. POIII	_	Thom would			
			Express		of Track,		Fron	
Name of Railway	From	From	Parcels	From	Buildings	From	Other	Total
	Passengers	Mail	and	Freight	and Other	Advertising	Miscellaneous	
			Newspapers)	Property		Sources	
Cornwall Street Railway Light and Power Company								
	\$177,915.00			\$127,832.38	\$531.00	\$1,275.99	\$411.32	\$307,965.69
Fort William Electric Railway	175,422,10	\$487.08					1,244.19	177,153.37
Hamilton Street Railway Company	2,481,762.00	00.000,6		242.00		12,487.00	9,711.00	2,513,505.00
Huntsville and Lake of Bays Railway Company	1,443,00	50.00		781.70				2,274.70
Mattagami Railroad Company	1,690.37		\$1,597.46	27,412.77			34,117.80	64,818.40
Mount McKay and Kakabeka Falls Railway Company				Operation	Discontinued			
Niagara Peninsular Railway				29,377.50				29,377.50
Port Arthur Civic Railway	352,418,41				915.12		11,167.06	364,500.59
Public Utilities Commission—Street Railway Dent.	633,167.62	167.59	79.85			9,453.27	5,845.79	648,714.12
Sandwich, Windsor and Amherstburg Railway Co	2,884,517.03	3,723.91	3,448.79		103,00	9,053.63	23.53	2,900,869.89
Southern Algoma Railway				Did not operate during year	during year			
Sudbury-Copper Cliff Suburban Electric Railway	197,873.00		124.35		360.00	90.959	1,723.25	200,736.66
Thurlow Electric Railway				41,160.00				41,160.00
Fillson Spur Line Railway.			All Rolling Stoc	All Rolling Stock owned and op erated by Cana dian National R ailways	erated by Cana	dian National R	ailways	
Foronto Transportation Commission	23,591,027.18	04.50	26,457,35		222,566.76	178,154.32	163,046.78	24,181,346.95
Foronto Transportation Commission-Township of								
Vork and Weston Railway	638,169.74					5,408.37	2,204.12	645,782.23
Foronto Transportation Commission—N. Yonge R'ly.	211,841.47				1.268.90	1,185.83	266.692	214,866,17

ELECTRIC AND STEAM RAILWAYS UNDER PROVINCIAL JURISDICTION, YEAR ENDING DECEMBER 31st, 1947

	Length of Road	Length of Road	Total	Length of sidings	Total	Length	No. of Power	ct.
Name of Railway	First	Second	Main	and	computed	under	Houses	Remarks
	Main	Main	Track	Turn-	as Single	construc-		
	Track	Track		outs	Track	tion	Steam Water	ler
Cornwall Street Railway Light and Power Company								
Limited	5.50	:	5.50	6.50	12.00		:	Power purchased.
Fort William Electric Railway	12.735	5.292	20.522	0.319	31,250		:	Power purchased.
llamilton Street Railway Company	17.00	16.87	33.87	2.63	1 75		:	Power purchased.
Mantenami Dellegal Company	3,000		3.000	3.947	6.947			
Mattagain Kantoatt Company			Operation	Discontin ued				
Niagara Peninsular Railway	3.325		3.325	2.115	5,440		:	
Ontario Northland Railway (formerly Temiskaming								
and Northern Ontario Railway)	574.3	:	574.3	147.9	722.2	7.	:	Power purchased.
Port Artling Civic Railway	13.43	6,10	19.53	1.04	20.57		:	Power purchased-trackage dismantled; rolling stock
					•			disposed of.
Public Utilities Commission, Street Railway Dept	3.96	2.86	6.82	.94	7.76		:	2 Power purchased.
Sandwich, Windsor and Amherstburg Railway Co.		Street car	operation	discontinu	Street car operation discontinued 7th May, 1939	у, 1939		
Southern Algoma Railway Company			Did not o	Did not o perate dur ing year	ing year			
Sudbury-Copper Cliff Suburban Electric Railway	7.9		7.0	:	:		:	Power purchased.
Thurlow Electric Railway Company	2.671		2.671	4.666	7.337		:	
Tillson Spur Line Railway	1.010		1.010	.051	1.061		:	All equipment owned and operated by Can. Nat. Rly.
Toronto Transportation Commission	109,895	100,696	210.595	26.934	237,525		:	Power purchased from Toronto Hydro-Electric System and Hydro-Electric Power Commission.
Toronto Transportation Commission-Township of			3					Domes susplaced from Towart Transcretation
York and Weston Kailway	8.003	0.007	14.005	.148	617.41			Commission.
Toronto Transportation Commission-North Yonge			9		207			Domas surshand from North North Hudro-Floretie
Railway	10.247		10.247	661.1	11.402		<u>:</u> :	Commission.

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ANNUAL REPORT

OF THE

DEPARTMENT OF REFORM INSTITUTIONS PROVINCE OF ONTARIO

FOR THE YEAR ENDING 31st MARCH

1947

PART II TRAINING SCHOOLS

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER NO. 25, 1948



TORONTO

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1948

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Honourable G. H. Dunbar,

Minister of Reform Institutions.

SIR:

The contact of officials of this Department with the Training Schools is frequent and in fact practically continuous, and therefore we are quite familiar with their programs and activities. Nevertheless each year when annual reports are received and the statistics compiled, they are read and studied with intense interest for they tell a real story of human endeavour to overcome faults, and they record a considerable measure of success with some apparent failure.

Those statistics and reports for the year which ended March 31st, 1947 are attached herewith. The reports are those from the Superintendents of the Schools and that of the Training Schools Advisory Board.

The members of this Board serve without financial remuneration. All five members have had wide experience and intense interest in child welfare, and thus their work and advice is invaluable. They meet once each week to review the facts concerning each of the pupils and they advise the Superintendents concerning program and training as the individual case may require. They advise you regarding paroles, placements, terminations of wardship, and other matters regarding these children.

Each year there are problem children. Parents, friends, children's aid societies, social service organizations, religious groups, service clubs, officials, juvenile courts, and many others try to get these children properly re-adjusted, and with very considerable success. The so-called failures are sent to the Training Schools. In this year under review there were 451; in the previous year 539—a substantial and encouraging reduction.

These children come from a great variety of homes. Each child is an individual, and therefore an individual problem to be studied and the problem solved if success is to be attained, and by attaining it life does not offer any greater satisfaction.

The men and women who have charge of these children in the Training Schools are for the time being, their parents. It is their responsibility to ensure that they are comfortable, well clothed and have proper diet, that they are clean and healthy, to have their physical disabilities repaired if possible, to teach them to study and work, to counsel with them and advise or reprimand or praise, to help them to learn to play properly, individually, and with others in team play, to assist them to absorb religious instruction, and in fact to get them thinking aright. The children are in their care twenty-four hours each day and seven days each week. Often success does not come easily, but when kind, alert, keenly interested men and women who have the respect of these children, bring their experience and minds together in staff conferences, ways and means are found to dissolve or reduce the problems.

Annual reports cannot properly portray the ways and means and all the carefully planned activities for the children in these Schools, but nevertheless, much interest and valuable information is given in the reports of the Superintendents.

During the year consistently good progress was made in all these Schools, and there were important new developments. Late in the previous year the Galt Branch of the Ontario Training School for Boys had been established. Some months later, in this year under review, the Bowmanville Branch of this School came into use again. That was a very important milestone. All boys placed in the care of this School are first admitted to the Bowmanville Branch. After a short period in the hospital building for examination and study, the boys, generally those under fourteen years of age, are taken to the Galt Branch. The buildings and equipments of each Branch are excellent. The staffs have been carefully selected on the basis of qualifications for such work. They are young, energetic and enthusiastic to an unusual degree, and they are getting very satisfactory results.

To assist in the enlarging program of our new Department, the successful Superintendent of this School, Mr. A. R. Virgin, was promoted to the position of Director. Mr. W. J. Eastaugh, who had so well inaugurated the work of the Galt Branch, succeeded Mr. Virgin as Superintendent, and Mr. Little as Assistant Superintendent was placed in immediate charge of the Galt Branch, and similarly Mr. Rickard in charge of the Bowmanville Branch.

The completion of the new Trades and Vocational Training Building at St. Joseph's Training School was another important development, and gives the boys there an excellent opportunity to equip themselves. The officials in that School are congratulated on their achievement.

For some years Brother Jerome was Superintendent of St. Joseph's Training School with an excellent record of achievement. During the year, in accordance with the policy of his Superiors, his term of office was completed and he, therefore, went to other work. His efforts on behalf of the boys has been deeply appreciated by them and his associates in the School and by officials of this Department. Brother George succeeded to the responsible position of guiding the work of the Training School.

The record of St. John's Training School is gratifying, but it is fervently hoped that those who are in charge of it will quickly succeed in obtaining the proposed new School which they have planned, and thus further accelerate their work.

It has been a year in which unusual progress was made in these Training Schools. I desire to join with the Advisory Board and the Superintendents in their appreciation for the assistance given by other Departments of the Ontario Service, many organizations, officials, and other individuals, for that assistance was very real and valuable.

C. F. NEELANDS,

Deputy Minister

REPORT OF TRAINING SCHOOLS ADVISORY BOARD

The Training Schools Advisory Board presents herewith its sixteenth annual report for the year ending March 31st, 1947. Fifty-two meetings were held during the year. At each meeting careful consideration was given to new cases, attendance and placement reports, to parole and to termination of wardship. We feel that the placement officers have done remarkably good work in finding desirable homes for the boys and girls who go out on parole. This implies not only careful attention on their part to the executive conferences which they attend in the Schools regularly, but also to their knowledge of various communities and their ability to estimate how the attitudes of the foster parents may fit in with the desired training of the School wards.

In dealing every week with commitments from the Juvenile Courts, it is only too plain that in the majority of cases of delinquency the parents are definitely to blame. This is not theory. It can be proven by reference to court records of individual cases. As has been said in previous reports, we feel that some practical steps should be taken to train parents to a sense of their responsibility. The parents who may read or hear of this report are not likely to be those who fit into this category, and they may find these statements difficult to believe. However, we are convinced that there is an urgent need for parent education.

The Board feels that all churches should take a deeper interest and put forth a greater effort to help in the training of these boys and girls before they become delinquent.

We would like to stress the point that all commitments under the Training Schools Act, 1939 are for an indefinite period extending until the boy or girl is twenty-one years of age, unless in the meantime wardship is terminated by the Minister of this Department. Frequently parents have the idea that their child is in the Training School for a certain length of time,—six months, one year, etc., whereas by law the commitment is indeterminate.

The health of the pupils in the Schools receives particular attention. Not only do they receive a thorough physical examination by competent physicians on their admission to the School, but definite effort is made soon afterwards to correct any physical defects which may be found, such as diseased tonsils, defective vision, defective hearing, etc. Chests are x-rayed as a precautionary measure and other public health preventive procedures are carefully attended to. If operations are necessary they are done by competent surgeons. There is an excellent dental clinic established in each School and the work done is very thorough as a survey of the individual school reports will show. Attention is paid to diet and eating habits, also to regular hours of sleep and rest.

The Board is of the opinion that the Training Schools program makes a strong appeal to the great majority of the delinquent boys and girls who fall in the dull normal, or non-academic group, because it puts definite emphasis on handicrafts, etc., for at least part of the time. We have expressed in previous reports the idea that these non-academic pupils have become throughly imbued with the idea while in the elementary schools that they absolutely lack the ability to master such academic subjects as grammar, history, etc., and do not try to use even that ability which they have, but with the addition of practical work along trade lines, they soon see the need of at least a modicum of academic knowledge, and make an effort to master it. Not just everyone is competent to teach such groups of children. We are convinced that some of the present teachers are outstanding, and we must go on record as heartily commending this Department in its efforts to obtain the best teachers and assistants possible for these Schools. We hope that salaries will be such as to induce good teachers to remain.

The Board notes with satisfaction growing interest taken by the Schools and foster homes in developing any special talent the boys and girls may have, such as group singing, choir work, piano and other instrumental music, also in interesting them in young people's church groups and community activities. One of our girls recently was invited to sing over the radio.

Good work is being done by those in charge in advising,—"All who earn should save." Consequently, the number of bank savings and life insurance policies are increasing. Here are two instances recently reported—A young girl has saved \$150.00 to cover a course in hair dressing. The other, a lad who has been on a farm for two years and being anxious to increase his savings, bought a young pig this spring and expects a good profit in the fall. The employer is as much interested in the idea as the boy.

The Advisory Board feels that the Department of Reform Institutions can look on its training results of juveniles with some pride. For example, during the last year the number of juveniles placed out of the Schools was 483 and those who remained out under satisfactory adjustment at the end of the year was 316, or 65%. We have had many letters from these children expressing definite satisfaction and happiness. An extract from one of these may be of interest:—"Time certainly has a way of flying. It seems so recently that I was at the School, and it is really six years ago. Heaven only knows where I would be now, or what I'd be doing except for the School. I don't know what they expected of me when I was there. I hope, however, that I have not turned out a disappointment. Although I have not accomplished much, and have failed on several ventures, it may be of some satisfaction to know that I, and probably only I, am aware of how much I owe to the School, and what has been done for me. Certainly I am as happy now as I have ever been or will be."

The School at Bowmanville has been physically restored to better than its pre-war condition, while the Training School at Galt which was formerly used for girls has worked out admirably in the training of younger boys. The prediction which we made in our report a year ago regarding the Galt Branch of the Ontario Training School for Boys has been more than justified in both quality and quantity of training done there. Several new procedures that are full of merit have been worked out regarding the training, not the least of which is the absence of corporal punishment. We were impressed by the school spirit roused in boys by their program of physical training, competitive sports and marching. The bugle band of small boys plays with skill and enthusiasm and contributes no end to the excellence of their campus drill.

During the year wardship was terminated in 429 cases as follows:—

280 Satisfactory adjustments in community, or 65 per cent of all terminations.

- 30 Married
- 46 In Other Institutions
- 29 Moved out of Province
- 30 Whereabouts unknown
- 14 Further wardship unavailing

It will be seen in the statistical section of this report that in dealing with the mentality of pupils committed or admitted, a certain percentage are mentally defective. We have dealt with this matter before last year at some length, but we feel that the problem is still unsolved. In a conference held in the office of the Deputy Minister on January 25th, 1947 between heads of the Girls' Training Schools, the Superintendent of the Ontario Hospital School, Orillia, officials of the Department of Health and of this Department, a number of matters were ironed out. It was suggested that if possible, defective juvenile delinquents should be committed by the courts directly to Orillia. It was also thought that girls who were committed to Training Schools and were found to be mentally defective should be transferred to Orillia as soon as convenient to complete their training there. It was clear, however, that while fairly ample training is available for girls, the overcrowding on the boys' side is such as to preclude admission for sometime.

We feel that a very helpful advance has been made during the past year in that liaison has been established between the Training Schools Advisory Board and the Ontario Board of Parole by which our Mrs. Sanderson has been privileged to attend meetings of the Board of Parole at the Andrew Mercer Reformatory. Mrs. Sanderson states;—"As a result of these meetings I have become aware of the problems concerning the girls in the Reformatory, and I feel sure that the members of the Board of Parole also better understand our Training School difficulties."

During the year the Board members have visited each of the Training Schools. We wish to express to the Superintendents and staff of the Schools our appreciation for another year's excellent work.

We note with pleasure the appointment of Mr. Albert R. Virgin as Director of Reform Institutions.

The Board appreciates reports received from the Ontario Department of Education, from the Mental Health Clinics of the Department of Health, and from the Children's Aid Societies of the Department of Public Welfare.

E. P. Lewis, B.A., M.B., Chairman Ethel Sanderson Chas. D. Gordon

JOHN M. BENNETT, M.A., Ph.D.

H. J. TERRY

THE PURPOSE of a Training School . . . "to provide therein a mental, moral, physical and vocational education, training and employment."

(The Training Schools Act, 1939, Chap. 51)



Jury House, Bowmanville



Strathmore House, Cobourg



Main Building, Galt



Jury House Dormitory



Main Stairway, Strathmore



Beatty House, Galt

THE DESIRE ... "to make Training Schools attractive and comfortable, with spacious grounds, fenceless fields, bright dormitories, wholesome meals, modern equipment and a vigorous staff."

VOCATIONAL TRAINING — an important feature of the program for the older boy. . . .



Woodworking



Metalworking



Sheet Metal



Typing



Radio

VOCATIONAL TRAINING....



Cooking



Barbering



Pressing



Dairying



Farming and Poultry Raising



THE ACADEMIC PROGRAM is of major importance in all Training Schools, for many students have lost interest prior to admission. The process of leading them back to their books calls for patience and superior teaching skill.



Typical Training School Classroom



Boys' Band, Bowmanville



Individual Instruction, Cobourg



House Singsong, Bowmanville

MUSIC and a love for the "finer things" may have inestimable influence for good.

A lad must work but he should also play. Skills are taught in all outdoor sports and there is a gymnasium for basketball, floor hockey and gymnastics. At Bowmanville there's an inside swimming pool and in summertime a "swimmin hole" in the creek.



Soccer



Lacrosse



The Conference



Stop it!



A perfect combination—a summer day, a creek, warm sand, and a BOY

A problem in behaviour may find its solution in medical treatment. Dental care is important and there will always be illness and necessary "repairs"—all calling for the best medical skill and sympathetic understanding.



Modern Dentistry



Receptionist Training, Cobourg



Sick Bay, Bowmanville



Minor Repairs



Major Repairs

The Ontario Training School for Girls, Cobourg, also has a complete program . . . Academic, Stenography, Cooking, Dressmaking, Hairdressing and Supervised Physical Training and Athletics.





Modern kitchen equipment and instruction by a qualified dietitian ... features of the program at Cobourg





The environment at Cobourg is homelike





The girls are given instruction in modern hairdressing by a local hairdresser . . . they can also paint a fence and do interior decorating



The SPIRITUAL must always find a place in a well-rounded life daily Chapel Services, Sunday Services, and visits from the clergy are phases of all Training School programs



"The real test of the effectiveness of a Training School program comes when a student leaves the School to live again in society."

REPORT OF THE ONTARIO TRAINING SCHOOL FOR BOYS, BOWMANVILLE AND GALT

April 1, 1946 to March 31, 1947

The year ending March 31, 1947 witnessed a very rapid expansion in the work of the Ontario Training School for Boys. Our main buildings at Bowmanville were again available after being used as a P.O.W. camp. The organization and selection of staff for the Galt Branch was completed and once again the Schools were ready to perform their function of giving intensive training to boys admitted through the courts or by application.

Public interest shifted from external affairs to events at home. The time for close examination of the effects of six years of war on family life had arrived and the press shifted its focus from war to the less spectacular events of Main Street.

Although the general impression is abroad that juvenile delinquency has increased, it is an impression that is not borne out by the facts. Social agencies have expanded their work and many schools have welcomed the return of teachers away in the armed forces. The return of fathers to our many homes has also been a settling influence and those of us actively engaged in the field of juvenile delinquency look forward with optimism to the future.

The social agencies have continued their fine efforts and almost without exception, any youngster who has appeared in Juvenile Court or has been drawn to the attention of the police, has received some form of pre-committal supervision. This has been a sincere effort on the part of our agencies to keep youngsters from committal to Training Schools.

The Children's Aid Societies and Big Brothers have assisted materially in our placement and supervision problem and we are most grateful for their prompt attention in making home inspections and forwarding reports.

Much should be said here regarding the sympathetic attitude of the officials of the Department of Reform Institutions. With the refreshing knowledge that we are backed by superiors who advocate training above punishment, it has been relatively simple to institute a program in which fear and punishment as motivating factors are non-existent. While we hesitate to say we have abolished corporal punishment, it is a true statement of fact that no boy has been strapped in either of our institutions during the past year. We freely admit that occasions have arisen that would seem to warrant corporal punishment; but we have avoided its use and as a result we are developing a thinking staff who already show signs of the clinical approach when antisocial behaviour patterns appear. We firmly believe that growth in this direction would not result if the staff could resort to corporal punishment.

It is with considerable interest that we compare our Training School program with the current trend in penal reform. This reform advocates stressing training rather than punishment; the establishment of indefinite sentences; after-care; physical training; vocational training; classification of prisoners with regard to age, frequency of misdemeanor, intelligence, interests, etc. Such practices have been and will continue to be an integral part of our policy and program.

We have been visited at Bowmanville and Galt by members of the Advisory Board and their patient and experienced counsel has been appreciated. Their kind words of encouragement have aided materially and the staff at both schools have received inspiration to redouble their efforts to make our Schools training centres rather than punishment institutions.

BOWMANVILLE

With expectations of an early return to the former school site the program of rapid placement among the older boys was continued. Not until October were the boys moved from town although part of the farm provided excellent training during the Spring and Summer. We felt both sorry and complimented when our Superintendent, Mr. A. R. Virgin, was appointed as Director of Reform Institutions in August. Sorry to lose a man whose heart and soul have always been attuned to boys' work; complimented by the knowledge that his experience and influence were required in the larger field.

This report would be incomplete if it did not express appreciation for the sterling work of Mr. J. J. Brown whose untiring efforts as Acting Superintendent during the war made possible the functioning of this School. As Chief Placement Officer he continues to give outstanding service and counsel to this important phase of our program.

The break-up of the School during the war years meant almost the complete dissolution of the former staff. The return left many blanks and we are still in the process of hiring and training young ex-service men as supervisors and instructors. We are grateful for the patient assistance from the few remaining personnel with experience. Their efforts and example are invaluable in producing a staff with proper attitudes and philosophy. During November eighteen young men were selected from a large group of applicants and they were given an introductory course of procedure at the Galt School before commencing their duties at Bowmanville. Advantage has also been taken of the training courses established at the Ontario Reformatory at Guelph in Recreation and Physical Training.

Early in January, Mr. S. J. W. Rickard was appointed as Assistant Superintendent, to be in charge of the Bowmanville School. He brings to the work a wealth of experience gained as an academic teacher here prior to the war, teaching at Lakefield Preparatory School and as Principal of Millbrook Continuation School. During the war he saw service with the Meteorological Bureau. His patient understanding of boys' problems augurs well for his eventual success in this field.

In keeping with the Minister's desire to segregate youthful offenders from older more experienced prisoners, a group of sixteen and seventeen year old boys were selected from the Ontario Reformatory at Guelph. This move occurred late in the year and they came to Bowmanville because accommodation was available. The resultant changes in attitude endorse any move that might be contemplated in setting up smaller reformatories for younger prisoners. It has never been considered advisable to mix adult prisoners and Training School boys and when our numbers increase and facilities become available for this reformatory group it is expected that this experiment will be dropped.

Among the teen agers who make up the student body at Bowmanville, there will always be many who fail to respond to academic instruction. For

this large group we have Trade Training in Shoe Repair, Sheet metal, Commercial Arts and Crafts, Woodworking, Horticulture, Cooking and Farming. Much useful employment is found in the general maintenance of our large plant and all members of staff have boys assigned to them who learn useful skills while performing any necessary tasks.

Every effort is made to encourage youngsters to continue their academic education. If a boy's intelligence is normal or above, he should respond to our teaching and it is possible for him to advance his grades without waiting for the usual one step jump in June.

While we believe wholeheartedly in the wisdom of committing boys for an indefinite period we would be lax in our duties as educators if we did not set up reachable intermediate goals. To the newly-admitted boy we say that he should be finished with his training at the School after he has been with us one year. We also claim that some boys require a shorter and some a longer period than this. In order to keep him acquainted with his progress he moves from house to house in steps resulting in graduation. In addition to this he is given definite interview dates set at four month intervals and here his behaviour is reviewed and every effort is directed to acquaint him with his progress and shortcomings. For the boy who shows normal progress, at the end of the second interview, that is at the end of eight months, a possible parole date is indicated. If, on the other hand, a boy's progress has been unsatisfactory during the first eight months a third interview is assigned. We find the system is working well. The boys like it and we like the informal character of the talks, and the frank discussion with boys who have admitted and recognized their faults, and are working to overcome them.

GALT

When a school increases its population from 25 to 140 within one year, it means that there must be a rapid growth in staff, commissariat and program. Such was the experience of the Galt Branch during 1946. The School remained the baby of Bowmanville for only a very short time. By midsummer, 95 boys were engaging in a full program of sports and garden work.

The School was started with 22 boys who had failed to respond in foster placement from war-time Bowmanville. This group soon developed a spirit of responsibility and loyalty, and we purposely directed considerable prestige their way to make them aware of their importance as "originals". It was upon this first group of so-called "incorrigibles" that the staff cut their teeth and it should be stated here that they educated our staff as only a healthy mischiefloving group could. We won through, however, and as the population grew, the problems fell into an orderly pattern.

The response of staff and boys alike to the generous offer of the Galt Scouts and Kiwanis Club to use Peacehaven Camp during the first two weeks of August was most encouraging. To ready themselves for the outing the boys accepted the challenge of entering upon a period of exceptionally good behaviour.

With enthusiasm running high, 95 boys and 17 staff left the institution to live under canvas near Drumbo on the River Nith. We enjoyed exceptional weather and although over eighty per cent of the boys experienced camping

for the first time, there were no accidents and an abundance of healthy activity. Words cannot adequately express the heights to which the staff soared in their co-operation, enthusiasm and service during this period. The eight-hour day was discarded and everyone pitched in to make the event a memorable one. Camp fires, athletics, swimming, hiking, fishing, wood-craft, handicrafts, exploring and story-telling were enjoyed to the full. Events such as the daily assembly in the Scout Memorial Chapel, the visit and prize-giving of the Galt Kiwanis Club, the special ball-game against the Galt Christian Business Men and the nocturnal visits of the white-striped pussies are still topics of conversation at the School.

An activity that has done much to endear the boys to the people of Galt is the Bugle Band. Full use is made of the parade square developed by the W.R.N.S. during the war, and it is an inspiring sight when our 38 piece bugle band leads the whole school in march formation to church and special events in town. Without being overly militaristic, youngsters from 8 to 13 years of age march in a manner that would do credit to a much older Cadet Corps.

We stress the point with the boys of cultivating the goodwill of the neighbouring towns. The boys know that absconding brings us in bad repute and we will always strive to abolish the kind of behaviour that will give us a reputation whereby the townspeople automatically blame the school if something is missing. At the present time there is a wholesome attitude which results in 30 to 35 boys being invited out on Sundays. During the week we receive invitations to parades, circuses, skating, festivals, shows, etc. The Kiwanis Club of Galt, the Galt Christian Business Men, the Boy Scouts, Air Cadets, Y.M.C.A. and the churches have shown an overwhelming desire to assist us in every way and we are deeply appreciative of their efforts at enhancing our program.

Late last Fall, the Wellington Music Teachers Association, which is affiliated with the Ontario and Canadian Music Teachers Federation, undertook to provide weekly Friday night musicales at the School. This music has been consistently classical and through the efforts of the artists and the school staff, these concerts have been most entertaining and highly educational.

We were very proud to have the Premier and the Minister officially open the School in September. The weatherman was kind and the boys put on an outdoor display of games and marching that did credit to the patient work of the Staff. Our official visitors were most kind in their expressions of delight at the happy atmosphere and it caused everyone to feel that we were off to a good start.

In October, Mr. W. T. Little was appointed as Assistant Superintendent to head up the Galt Branch. He has used talents garnered from seven years experience as a High School teacher at Mimico; service as a Pilot in the R.C.A.F.; musical talent which gained him an A.T.C.M. and boys' work techniques learned at the Taylor Statten Camps over a period of many years. Mr. Little has already given evidence of tact and skill in developing a staff morale and school program that will keep the Galt institution efficient for many years to come.

A word of appreciation is in order for the excellent co-operation tendered by the Superintendent and Staff of the Ontario Reformatory at Guelph. Being a school for very young boys we have had to call on Mr. Basher and his staff for active assistance in painting, landscaping, maintenance and repairs. At every turn we have enjoyed cheerful and willing co-operation and for this we are most grateful.

Since the boys at Galt are all under fourteen years it follows that stress is placed on academic work. The population has grown rapidly and already our three academic and one hobbycraft teacher are taxed to the limit. Our plans for the Fall call for five academic teachers.

Because we believe a youngster being paroled from Galt should continue his academic work, we are trying to limit parole to Christmas and August. If we were to send youngsters out during the Fall and Spring, they would be at a disadvantage at whatever school they were enrolled. If we paroled them in June they would have the whole summer in which to get into mischief. Thus it is that the Advisory Board is in agreement with our plan to establish graduation periods at August and Christmas.

Twenty-four acres of fertile ground at the south of the school property was purchased last summer and some eight acres has been graded and work commenced on an athletic field and einder track. The remaining 16 acres will be worked as a garden and already ambitious plans are formulated to allow for a maximum participation by the boys.

Academic Report—Bowmanville

From April 1, 1946 to June 17, 1946, academic classes were conducted in the Alexander House with an average daily attendance of 29. On June 17, 1946, the Alexander House was vacated and actual academic work was not resumed until September 3rd, when a classroom was opened in the original Training School property with an enrolment of 30 boys taking part-time academic work.

During the summer, outdoor classes were held in agriculture, horticulture and nature lore. The remainder of the time was spent in harvesting on the school farm and in sports which were conducted on the lawns of the Senkler House in Bowmanville.

Owing to the help required on the farm in the harvesting of apples, vegetables and roots, and the necessary clean-up work in the dormitories, a second class-room was not opened until Nov. 4th. On Nov. 4th. the enrolment was as follows: Senior Room (Grades 7, 8, 9, and 10)—27; Junior Room (Grades 5, 6, and Specials)—22. At this time all boys were attending academic classes half a day for five and a half days a week.

Along with the academic training, vocational classes were opened with capable instructors and the following projects completed:

Woodshop

Repairing school desks, chairs and tables;

Repairing maintenance shop equipment;

Making of notice boards for all cottages, kitchen, school building, etc;

Making of benches for cottages and gym;

Making of flats for greenhouse;

Making of hall trees, ash-trays, smoking stands, bird houses, small finished boxes, carved figures.

Shoe Shop

Repairing of approximately 200 pairs of boots; Making of moccasins; Small articles in leathercraft.

Sheet Metal

Making of garbage-cans; Making of pails, measuring cans, dust pans; Trays for dishes: Name plates.

Manual Arts

On March 12th, a third classroom was opened for a special class of Arts and Crafts where such projects as clay modelling, plastics, paper mache' designing, etc., are taught.

The roll increased rapidly during the new year and on March 31, the two academic classrooms had an enrolment as follows:

Senior Room	Grade 10 1	
	Grade 9 7	
	Grade 827	
	Grade 718	53
	_	
Junior Room	Grade 618	
	Grade 511	
	Specials 12	41
	-	
Arts and Crafts		29
		123

During the year 185 boys were given Intelligence and Binet Tests upon admittance. A number of these boys being under 14 years of age were transferred to Galt.

Regular fire drills were held throughout the year.

Each classroom is equipped with a radio which keeps the boys in touch with the outside world through current events, addresses by prominent speakers and educational broadcasts.

A new Victor Sound Projector was purchased during the year and is being used twice weekly. On Wednesday evenings an average of four educational reels on Vocational Guidance, Social Studies, and Natural Science are shown. On Saturday evenings entertainment reels are provided.

Our previous library was chiefly absorbed by the Galt Branch and a new library is in the process of being built up at the present time.

Religious instruction is imparted to the boys at daily chapel service in the morning and regular attendance at church. Prayers are supervised nightly.

Missellaneau (Cell)		1,216
Miscellaneous Calls Car Mileage Train Mileage		
Boys attending Public School.		118
		20
Boys in Residence at Bowmanville, April 1, 1946. Boys admitted during year. Boys readmitted during year.		38 173 140
Boys discharged during year:		
Returned home to attend School	6	
Returned home for employment	$\frac{10}{28}$	
Farm Employment	55	
In Other Institutions	$\frac{8}{5}$	
In Hospital end of year	1	
Boys discharged to Hospital	1 5	
Boys transferred to O.T.S., Galt	104	
Boys in residence at Bowmanville at end of year	128	
	351	351
Medical Report		
Number of Visits to School Number of Boys examined		
Number of Eyetests		. 22
Number of Staff examined Number of T. & A. Operations		
Number of Appendectomy.		
Number of other Operations		5
Number of Boys on Sick Parade		
Number of Visits to Cottage		3
Number of Night Visits		2
Dental Report		
Number of Boys reporting at Office		195
Number of Boys received Treatment. Fillings inserted.	41	172 5
Extractions	2	9
Block Anaesthesia used Gum Treatments		9 7
Occlusion corrected.		3
Teeth desensitized		4 1
Partial upper denture		2
Porcelain crown		1
		•
	49	_
	49	1
ONTARIO TRAINING SCHOOL FOR BOYS	49	1
Boys at Galt at beginning of year	49 GA	
Boys at Galt at beginning of year	49 GA	
Boys at Galt at beginning of year Number admitted during year Boys discharged to O.T.S., Bowmanville Boys discharged to own home	49 G A	
Boys at Galt at beginning of year Number admitted during year Boys discharged to O.T.S., Bowmanville Boys discharged to own home Boys discharged to Mental Hospital	49 , G A	1 1
Boys at Galt at beginning of year Number admitted during year Boys discharged to O.T.S., Bowmanville Boys discharged to own home Boys discharged to Mental Hospital. Boys in Hospital at end of year	49 , G A	1
Boys at Galt at beginning of year Number admitted during year Boys discharged to O.T.S., Bowmanville Boys discharged to own home Boys discharged to Mental Hospital	49 , G A	1 - ALT 47 104 5 4 1 1 1

24

Placement Report

Boys receiving supervision at beginning of period		453
Boys discharged during period	.,	219
Number of Boys readmitted	140	-10
Number of Boys readmitted	119	
Number of Boys released		
Attending School	129	
Employed on farms	63	
Employed in factories	67	
Miscellaneous work	8	
Employed in tailor shop	1	
Employed as truck helpers	4	
Employed as orderlies	i	
Employed in lumber camps	î	
Employed in office	1	
Employed in office	17	
Doys in mental hospitals	10	
Boys in other institutions		
Boys A.W.L.	27	
Boys in O.T.S., Galt	104	
	693	693
Boys under supervision at end of year		330
Total number of visits to boys.		
Homes investigated		303
Attendance at clinica and regist agencies		236
Attendance at clinics and social agencies		230
Attendance at court		
Other contacts		95
Total number of boys in paid homes at end of year		107

W. J. Eastaugh, Superintendent

REPORT OF THE ONTARIO TRAINING SCHOOL FOR GIRLS, COBOURG

April 1, 1946 to March 31, 1947

During the past year, Strathmore and McCook Houses have continued as the Training School for Girls at Cobourg. In this time eighty-eight girls were enrolled, all of whom had been committed to the School by the Juvenile Courts of the Province. On entering, these girls spent their first days in isolation where they became acquainted with house rules, received thorough medical and dental examination, and were given aptitude and interest tests.

When these necessary preliminaries had been completed, the girls were incorporated into the life of the School where, in accordance with their ages and the results of their tests, they were sent either to grade or to high school classes, or to learn to sew, to do general kitchen work, or to work in the laundry.

In all these fields every effort was directed toward providing each girl with the skill and knowledge which would help her to assume her position as a valued member of society on leaving the School. To this end special commercial courses, advanced high school classes, music, hobby shop, and even hair-dressing classes were made available by qualified instructresses to girls with the interest and ability to see them through.

The results of these classes have been gratifying. Many of our girls were serious truant problems at home, but at the School where regular classes have given them a chance to develop, many found a real joy in learning, and were justifiably proud of the scholastic records they achieved.

We felt that perhaps the most important thing for these girls to have acquired at the School was some appreciation of the ideals of our democratic society, and of the responsibilities that each individual must assume to protect and to promote these ideals. This was no easy task, especially when the School was overcrowded and classroom facilities, in particular, too often proved inadequate.

Some girls just did not respond to our uttermost efforts on their behalf, but by actual count their number was small, and the large percentage who did seem able to adapt themselves was encouraging.

To cultivate a sense of honour and responsibility, the two houses continued to be arranged in such a way that a promotion for a girl from McCook to Strathmore represented a very real expression of our confidence in her. She moved from a life of very close discipline and cramped quarters at McCook House to Strathmore, where doors were open at certain periods and where living conditions were much more spacious and enjoyable.

A students' council was elected. It took full responsibility for planning several successful parties, and made a valuable contribution in harmonizing the routine and activities of the School.

The use of special privileges, such as Saturday movies or staff treats, proved valuable in encouraging the girls to try to co-operate cheerfully with the house rules, and with each other.

. We have been encouraged in our work by several letters of appreciation from previous wards and by the kind co-operation of the interested public.

We wish to express our very great appreciation for the individual presents received by the girls from the Boys' Work Committee of the Toronto Rotary Club, and to all others who have assisted in our work.

Medical Report

When a girl is first admitted to the School, she is given a medical examination. There is a registered nurse in charge of the doctor's office. One of the girls is trained to assist and very often, when she leaves the School, she is able to take a position as a nurse's aide.

The following is a report in detail of the work carried out:

No. of patients examined by doctor.	320
No. of Wasserman tests	216
No. of G. C. smears.	460
No. of G. C. cultures	12
No. of patients in hospital	21
No. of minor infections and abscesses.	16
No. of X-rays	8
No. of minor operations	$\frac{8}{2}$
No. of appendix cases	ī
No, of tonsillectomies	15
No, of pregnant cases	4
No. of blood sugar	î
No, of poison ivy.	î
No. of 'flu cases	25
No. of V. D. G. treatments.	11
No. of V. D. S. treatments.	11
No. of T. B. tests	70
No. of chest X-rays.	86
No. of vaccinations	7
No. of diphtheria toxoids	66
No. of dipheneria toxolds	
No. of scarlet fever toxoids	70
No. of typhoid vaccinations.	67
No. of girls fitted with glasses	21
D D	
Dental Report	
No. of patients at clinic	422
No. of patients examined only	147
No. of fillings	454
No. of extractions.	85
No. of partial dentures.	5
No. of special treatments.	4
No. of X-rays.	4
.vo. or x-rays	-1

Academic Report

The academic program as given by the Department of Education has been followed from Grade 1 to 11. We would like to once again thank the Public School Inspector, and the Cobourg Collegiate Institute for their assistance.

GRADES	TOTAL ENROLLED	Ркомотер
11	1	1
10	3	3
9	16	13
8	33	12 recommended
8	33	20 passed
7	4	4 1
6	9	9
5	$\overline{2}$	2
4	4	4
3	1	ī
2		
1	1	1

Vocational Report

Commercial

Ninety-two girls attended this class during the year where they studied Typing, Shorthand, Bookkeeping, Secretarial studies, Rapid Calculation, English and Spelling, Penmanship and Business Correspondence.

Some of the girls applied themselves so well to this work that they were able to take positions as junior office workers. Others had a good foundation laid for them to continue with a Commercial program after leaving the Training School.

Music

(Vocal) Regular classes in singing were held during the week. As a result of this training the girls were able to sing at the Band Concert and at the Salvation Army Service. The Senior School choir also assisted at the Annual St. Patrick's concert by singing from the gallery during the intermission.

(Piano) Thirty-two pupils have been given piano lessons. In June 1946 three girls obtained honours (Toronto Conservatory Music Examination) and, one girl—First Class honours.

In March 1947, five girls were successful in the examinations and all obtained Honours.

Quite a number of the girls took part in the Music Festival for the Northumberland County at Brighton, where seven of their number were awarded prizes.

Dramatics

Our three-act play was produced in the Cobourg town hall under the sponsorship of the Business and Professional Women's Club of the town. The play required a great deal of careful planning on the part of those girls who arranged the setting and costumes, as well as much study and constant rehearsals for those who took part. However, the warm reception quickly compensated for the labour it had cost.

Sewing

While all the girls in the School were responsible for mending their personal things, several girls were given regular sewing instruction. Here they learned to make alterations and pattern fittings, and eventually to make dresses for themselves. In April these girls were able to sew all the dresses required for the confirmation class.

Household Science courses were added for the girls in grades 8, 9 and 10, and the junior classes also were given instruction in sewing so that they were able to complete dresser sets to be sent to their relatives at Christmas time. From this they became interested in hand weaving, and made coloured blocks for cushions and afghans.

Laundry

There were fifty regular laundry girls appointed during the year who did the work for the girls and staff. However, most of the girls in the School took part in this course as it was a necessary part of their vocational training. The following figures show something of the work accomplished by the girls under a qualified supervisor:

Girls' clothing—	number	rof	article	S	22,088
Staff clothing—	6.6	6.6	6.6		486
Household linen-	- "	6.6	6.6		9,284

Cooking

Strathmore and McCook kitchens were each supervised by qualified dietitians. During the year fifty-four girls served at regular periods in these kitchens, preparing staff and students' meals, and obtaining thereby a knowledge of food values and conservation, and of meal planning.

Gardening

This included work in the greenhouse as well as in the garden and on the lawns. During the summer we obtained the services of teachers and university students who supervised the work of the girls. A large portion of the ground was used as a vegetable garden. One additional project, of the girls in the group, consisted this year in clearing a great deal of the brushwood from the back of the house, and of cutting the wood into lengths for the fireplace.

Household Care

Each girl in the School was responsible for a certain part of the House. This work was supervised by the housemothers.

Physical Training

All the girls attended these classes which consisted of exercise-bar and mat work, badminton, volley ball, basket ball, ping-pong and soft ball. The School soft ball team acquitted themselves creditably in the town league, winning, for the first time, the Sentinel Star trophy presented to the winners of the league.

Hobby Shop

The Hobby Shop group meet in their own shop in the basement of McCook House each Friday evening and Saturday morning. Their aim is to keep everyone interested, and to develop individual talents or ideas. No expensive tastes are fostered, but as far as possible salvage material from the School is used to make toys, knick-knack shelves, bird houses, magazine racks, curtains and drapes. Hobbies such as weaving, decorative painting, upholstering, embroidery work, and leather work are the most common.

Last year (April 1946) a bird house contest for Northumberland County was held by the Fish and Game Club of the district. Among the three hundred entries, a 4th and 7th prize were awarded two of our entries.

In the Fall the girls from the Hobby Shop were invited by the ladies of the Business and Professional Women's Club to assist at their Bridge. In addition to actually taking active part at the Bridge, the girls designed and made the decorations for it in the shop.

In February, a Shower was held in the Hobby shop in honour of one of the staff members, 'A bride to be', where the girls had made their own decorations and where they served lunch.

Library

The Library period provided great interest every Friday afternoon, when the girls were able to choose any one of the 700 books available.

Religious Instruction

All the girls attended Chapel service every morning. On Wednesday morning, the service was conducted by a member of the Ministerial Association. Girls were given special instruction before they became members of the Churches. Sixteen girls joined the United, and thirteen the Anglican Church in this past year. They attended Church every Sunday morning and sometimes in the evening.

Recreation

Evening activities in the common room (or when the weather is good, on the grounds) still continued. The girls did their sewing, knitting, painting, sketching, dancing, games, letter-writing, and the evenings passed quickly when they were thus busily engaged.

During the winter some of the girls were taken to a bowling tournament in town. There was a Hallowe'en party in the Gymnasium at which representatives of the Kinsmen Club were present.

The little girls of the School were taken to see the Santa Claus parade in Toronto, and the Student Council organized a party for St. Valentine's day.

Mental Health Clinics

We appreciated the co-operation given by the mental clinics, especially by the Out-patients' Department of the Toronto Psychiatric Hospital. Their recommendations as to future programs which may be followed with benefit for the girls were very helpful.

Placement Report

Placement Officers in Galt, Hamilton, London, Peterborough and Toronto gave supervision to the girls who were returned to the community. The following is a summary of some of their activities:

		sits to girls 6,3	
Home	s and jo		750 -
Visits	to clinic	cs and other social agencies	330
		t court	27
Psych	ological	interviews	30
			72
Girls	ınder sı	upervision March 31, 1947	261
Girle	attandir	ng school	84
		ed as domestics	39
Onis	empioye		
"	""	" factory workers	72
6.6	4.4	" office employees	16
4.6	44	" waitresses	12
6.6	46	" store clerks	6
4.6	4.6	" beauty parlour operators	-4
4.6	4.6	" laundry workers.	3
44	44	" farm workers	5
66	44	" ward aides	12
44	4.4	" other	6

No, of girls in boarding homes """ free homes """ with parents Whereabouts unknown	51 12 26 12
Institutions: Committed to Andrew Mercer Reformatory Transferred to Ontario Hospital, Orillia Placed in Salvation Army Home Mileage	3

(Mrs.) M. E. Pender, Superintendent

REPORT OF THE ONTARIO TRAINING SCHOOL FOR BOYS, GUELPH

April 1, 1946 to March 31, 1947

This School was opened in 1941 to take care of boys which the other Training Schools were not equipped to properly control and manage. Since that time the number in our School has risen as high as 44, with the greatest number of admissions being reached in 1946 when 48 were admitted. As will be seen from the statistical form submitted with this report only 14 were newly admitted to the School for the year ending 31st March, 1947, and 4 were returned as having been unsuccessful.

During the last three months of the year emphasis has been placed on physical and recreational training as well as academic studies. We now have a complement of physical training instructors who are qualified to give instructions and to demonstrate and coach for a very wide variety of indoor and outdoor games. As these were three of the winter months, our gymnasium was taxed beyond capacity and despite the flooding of two yards where hockey was indulged in, it was impossible to provide the boys with as many recreational periods as it was desired they should have. The fact that the boys must be kept entirely apart from inmates of the Ontario Reformatory is partly responsible for this situation, but an extension to our present gymnasium is essential. Some of the boys received their skates from home while others were provided by the School. This was an entirely new departure and while the weather was not ideal by any means many games of hockey were thoroughly enjoyed during this period. Basketball, floor hockey and volleyball were the indoor games finding the greatest favour and it was not surprising to see good sportsmanship, self control and leadership demonstrated on the floor as these various games were in progress. It gave the boys an opportunity to learn the finer points of games and beyond this they were taught, where necessary, how to "play the game" with others. It helps to give confidence where self confidence is lacking and it provides an outlet for pent up emotion which cannot otherwise be satisfactorily expressed. It may be somewhat early to prophesy the ultimate outcome of this recreational program but it is safe to say that so far as these boys are concerned there is every indication that it has been good for them and that it has not interfered with their attitude towards their work. Almost without exception these boys are thoroughly industrious and carry out their work exceptionally well. Recently their employment has been of greater variety and interest than before and this has been definitely reflected in their manner and attitude generally.

Organization of the Educational Branch

The educational branch is divided into, (1) The Academic Day School; (2) Commercial Night School; (3) Vocational Day School; (4) Correspondence Courses and (5) Library.

The attendance of all boys at the Academic Day School is compulsory for one-half day on each of the five days weekly. All subjects from Grades I to VIII inclusive have been taught with emphasis on the fundamental subjects of reading, writing, spelling and arithmetic. Special courses are provided for illiterates, near illiterates and slow learners. High School entrance certificates are provided for those who are successful in passing the examinations as set by the Ontario Department of Education. During the last school year, 6 sat for their entrance examinations and all 6 passed with honours.

The Commercial Night School operates from October 1, until the end of May, when those boys of high school entrance standing are provided with courses in shorthand, typing and bookkeeping and business practice. Each course involves two lecture periods weekly as well as practice, demonstrations and individual attention.

The Vocational Day School is in its infancy again, largely because of the necessity of keeping the boys removed from contact with Ontario Reformatory inmates. However, much interest has been developed and much knowledge has been acquired in motor mechanics, motor vehicle repair and the mixing, blending and application of paint. If the school continues here, more time will be devoted to these subjects and greater opportunity will be afforded to increase the variety of trade training.

Correspondence Courses for Grades IX and X have been carried out during the past year under the supervision and guidance of our teaching staff. These courses are set out by the Ontario Department of Education and each student is given credit on the basis of the number of lessons of each grade successfully completed.

The library facilities consist of eight hundred books chosen from the list of supplementary reading material set forth by the Ontario Department of Education and augmented by those carefully selected to make good wholesome reading for boys ranging in age from fourteen to nineteen.

From the foregoing it will be seen that there is little or no time which is not fully used. The program is full but interesting and there is little opportunity or desire for misconduct. During the past year the members of this school have behaved well and much credit is due to them and to the officer (Mr. Martens), who is in direct charge of them, for the manner in which they have conducted themselves and applied themselves to their studies and other employment. There were no escapes nor were there any attempts.

In January Mr. F. Potts was appointed as Chief Psychologist to the Department and since then he has devoted his full time to this Institution as a whole. Much of his time has been given over to the boys, in fact his initial undertaking was to examine them and make a written report concerning each one for the benefit of myself and the Training Schools Advisory Board.

It is felt that much progress has been made during the past year and that we are now organized to accomplish a great deal more than ever before.

The health of the school was good with no serious illnesses to report. The following table is taken from the records.

Consultations with Medical Officer Number of days in our hospital ward """ Guelph Hospital	
Medical examinations on admittance	- 5 - 18
" for Advisory Board	42
" " other reasons	12
Mental examinations	3 2

X-ray examinations		3
		į į
Operations: Tonsillectomy		1
Dental: Examinations on adm	nission.	18
	visory Board	52
Extractions		$\frac{14}{62}$

During the year the boys have enjoyed and appreciated a number of concerts and a series of educational and entertaining films.

Plans for the forthcoming year include a greater diversity of employment, the installation of equipment for the handicraft shop, extended studies in natural history and the publication of a school newspaper.

G. Hedley Basher,
Superintendent

REPORT OF ST. MARY'S TRAINING SCHOOL FOR GIRLS, DOWNSVIEW

April 1, 1946 to March 31, 1947

In our task of training youthful hearts to a truer mode of life we are happy to meet our contemporaries along the way in the stimulating reunion of the Annual Report. Their yearly accounts of effort and achievement in caring for the much bewildered children of our day are read with interest and admiration, and we appreciate this opportuity of exchanging notes and views with them.

As we look back upon the past year at St. Mary's, we feel that its successes owe much to the interest and support of the Department and the Advisory Board, and we welcome the occasion offered by the Report to record our sincere thanks. Gratitude prompts us also to refer herein to the unfailing courtesies extended to the School in many ways by the various welfare groups of the Province.

Enrolment figures for the year have fluctuated between 113 and 126, and a gratifying decrease in the number of returns is noted. There are in residence at present 118 girls, spritely spirits for the most part, whose occasional antics serve to beguite the spell profound of academic decorum.

Thanks to the faithful attendance of Doctors, Dentist and Nurse, good health has prevailed throughout the year. Six tonsillectomies were performed.

Study courses have continued in favourable progress. The teaching staff has been enlarged to provide for a more complete grading of the Classes and for a greater proportion of individual instruction. Commercial students number 18 at present. The girls enjoy the course and apply themselves with much enthusiasm to the mastery of its several subjects. In the hush of the afternoon sessions the rythmic tapping of the Underwoods makes music with the distant humming of industrious sewing machines, or borrowing, perchance, the measures of an occasional melody issuing from a neighbouring schoolroom, joins harmonies in a tuneful rendering of "John Peel" or "Brahms' Lullaby".

Choral singing and dramatics continue to hold the interest of the girls, and several plays and operettas were presented in the course of the year. An increasing number of pupils are enjoying the privilege of piano and violin lessons. Through the kindness of a number of good friends several musical recitals by accomplished artists were given in the School auditorium. A variety of other entertainments were also provided, chief among these being the monthly birthday parties sponsored by the young ladies of the Catholic Youth Organization in honour of the ten or twelve girls whose birthdays occurred during the month. The C.Y.O. has continued to give generous and enthusiastic aid in organizing and directing sports and in providing expert instructors for tennis and basket-ball. The self-sacrificing zeal of these young ladies and their beneficial influence upon our girls cannot be exaggerated.

A welcome addition to the playground is a broad cement area used for roller-skating. The gymnasium floor is also ideal for this pastime, which is becoming a favourite one at Downsview. The radio lends its aid, and recreation hours speed pleasantly away upon the swift ball-bearings. In addition to the regular class parties and picnics, several delightful tea-parties were arranged for small groups in the model homemaking apartment. Talkie productions have formed a notable part of the educational and recreational programs.

Many hands made light work as the girls performed the various household tasks involved in "keeping things nice", and cleanliness and order were promoted with all diligence. The special homemaking class maintained its prestige throughout the year, the girls according it a true feminine preference.

Excellent results were accomplished in the class devoted to fancy sewing, where natural skill is brought by careful training to the perfection of an accomplished art. The girls take justifiable pride in displaying samples of their dainty needlework.

The care of the grounds provided a wholesome and pleasant summer occupation. A cedar hedge planted in the spring adds a note of distinction to the lawn, and plans are developing to bring the landscaping of our spacious acres into harmony with a more decorative scheme.

All available farm land has been brought under cultivation, and garden activities made many tasks for many willing hands. The harvest was unusually plentiful, and a number of girls proficient in culinary art proved skilful in canning the surplus for winter use. The many hundreds of jars that filled the storeroom shelves included several varieties of pickles, chili sauce, tomatoes, apples and pears, all from our Downsview gardens, together with a goodly array of peaches, plums and currants. Corn, beans, peas and summer greens were plentiful in season. The potato yield was poor, but the vegetable cellar was well stocked with other staples. Poultry raising prospered, and the hens entered the blue-ribbon production ranks, supplying us with fresh eggs for the greater part of the year.

Humorous and exciting episodes of our summer idyll concerned the fortunes of Billy and Frisky and Nanny and Woogh, our goats of strange renown, and much amusement was afforded by their comic capers. It may be whispered too, that the goats had many a laugh at our expense. With countless little homespuns of such simple fun and gaiety we banished old dull care.

But St. Mary's has its solemn moments too, and the Retreat exercises conducted by a Redemptorist Father at the close of the summer vacation were fulfilled with serious gravity by the young retreatants. The spiritual needs of the girls throughout the year are cared for by a resident Chaplain. True education must ever be alert to the importance of spiritual values and in the light of this ideal is the training of our girls directed towards the goal of Christian womanhood.

As we draw forth little threadlets from the fabric of daily life at St. Mary's and reweave them into the story of our year, we turn in thought to God, the Master Craftsman. Unto His gentle skill do we confide the children of our troubled times that He may form the slender threads of their young lives into the beauty of a perfect pattern.

We have the honour to remain, your obedient servants,

REPORT OF

ST. JOHN'S TRAINING SCHOOL FOR BOYS, TORONTO

April 1, 1946 to March 31, 1947

We present herewith for your approval our annual report for the year ending March 31, 1947.

The general health of the boys has been excellent. Contributing factors in the maintenance of this high standard of health were the skilled services and courteous attention of Dr. J. J. Hurley, house doctor, and Dr. W. H. Godsoe, school dentist. Both were in attendance regularly.

Hospitalization record for the year shows:

Tonsillectomy	29	Chest X-rays	148
Appendectomy		Other X-rays.	1
Pneumonia	2	Fractures	
Rheumatic heart	2	Correction of eye squint	5
Minor operations	15	Fitted with glasses	2

Added to this record are the regular examinations and daily care bestowed by Dr. Hurley, Miss Anna McMahon, school nurse, and the Brother Infirmarian. School clinics are further supplemented, when necessary, by visits to St. Michael's Hospital.

Through the excellent co-operation of Dr. F. Hawthorne Steele, eye, ear, nose and throat specialist attached to St. Michael's Hospital, Dr. Hurley, and Miss McMahon, five tonsil clinics were conducted at the school. Since it has become increasingly difficult to obtain hospital space, we found this plan quite satisfactory.

Twenty-seven dental clinics were held. Although Dr. Godsoe's office practice is extremely heavy, he has been giving us, unstintedly, the benefits of his time and talent for some years. Visits to his office were a follow-up on work done in the school. The records show:

Extractions	176	X-rays	61
Fillings	96	Partial dentures	3
Treatments	34	Surveys	160

Religious and moral training have continued to hold a role of paramount importance in our daily program. Attendance at daily Mass, recourse to prayer and the sacraments, visits to the Chapel and Chaplain, and daily instructions in the classroom, form part of this program. Rev. J. J. Hennessey, S.J., continued, as in the past, to place his services at the disposal of the boys at least twice a month. In October, a three-day retreat was conducted by a special missionary. A month of special instruction terminated in the administering of the sacrament of Confirmation to a class of forty-three, on Nov. 8, by His Eminence, James Cardinal McGuigan. Archbishop of Toronto.

There has been little change in the academic and vocational program. Seven boys received High School Entrance Standing in June. We have had a number of our boys continuing their High School work at De La Salle High School in downtown Toronto. Up to the present, all are responding well. We anticipate that, by the end of the term, one will lead his class, numbering

forty pupils. In this matter of academic training, we have been pleased to co-operate as fully as possible with the recommendations of our Inspector, Dr. John M. Bennett.

Our shops are a centre of activity, provide part time occupation, training and interest for the greater number of the school population, and continue to give satisfaction. The following percentages, while based on the daily enrolment for March, are fairly representative of the twelve-month period:

Part-time academic and vocational	61%
Full-time academic	27%
Full-time vocational.	12%

Those receiving a full time vocational program comprise, for the most part, boys past the school age or unable to advance academically. In the matter of vocational training, we take cognizance of a boy's personal likes and dislikes. The greater majority adjust favourably to the shop of their original choosing. Our shoe shop instructor has drawn our attention to one boy in his shop who has made exceptional progress. Handicapped academically, his workmanship and skill are noteworthy, whether it be in making or repairing shoes, or in repairing softballs, hockey pads, etc. Turning out a pair of new shoes a day we consider quite an accomplishment, and rather an enviable record, for a boy. We could single out others who are equally advanced in other departments. Those receiving a full time academic program take an active part in caring for the house and grounds, and manifest great pride in their accomplishments.

Two years ago we purchased canning equipment, which was put to very good use last summer. Approximately 5000 28-oz. tins of tomatoes, homegrown, and fruit—cherries, raspberries, peaches and plums—were canned. Many lent a hand, if not in the actual process of canning, then in picking the fruit. Our services were in demand by fruit farmers in the neighbourhood who, being unable to secure the necessary help, would otherwise have suffered the loss of their entire crop. The boys did not consider this occupation work, but rather a pleasant deviation from their usual daily program. Under the supervision of one or more members of the staff these groups, ranging in number from six to thirty-six, responded very well, their employers providing lunches twice daily.

Athletic contests, games and sports, are not classed among the fine arts, but they are the correct things for a boy, and should be enjoyed by everyone. They help in forming an honest and manly character, as well as a healthy and well-developed boy. They are given prominence in our program of character training. Over the years it has been proven that contact games not only appeal to the boys but instil a spirit of teamplay, and provide a discipline and training that cannot be lightly discounted. Leagues within the school provide the basis of the athletic program. Yet it is considered profitable to give the boys who are more advanced in their group outside competition such as is provided by the Toronto Rugby Union, Catholic Youth Organization, Toronto Baseball Association, and Ontario Lacrosse Association schedules. During the year, one team was entered in the T.R.U., two in C.Y.O. hockey, and two in the O.L.A. Not only did our midget lacrosse team win the Toronto and District championship, but went through the season undefeated and swept right on through all opposition, eliminating in succession Etobicoke, Norval,

Brampton, and St. Catharines, to capture, for the first time in the history of the school, a provincial title.

In February, a group chosen rather haphazardly, participated in skating races open to all public, separate, and high school pupils—boys and girls—of Toronto and District. These races were sponsored by the Toronto Lions Club and held in Pears Park, North Toronto. Our entry of twelve outclassed all other competitors of the day, captured seventeen points, and returned with eleven medals—gold, silver, and bronze—and the proud possessors of a hand-some trophy, emblematic of their prowess.

We are very proud of our "Mosquito Bowl". This is a lacrosse box that gets its name from the fact that it was built from discarded and unused gastank covers from mosquito bombers and fighters. Material was obtained from the Mosquito Bomber Plant at Weston, operated during the war years, for the Dominion Government, by Massey Harris. Transportation of material, preparation of ground, and erection of box, occupied the greater part of three months.

We are indebted to the managers of the Fox and Scarboro Theatres who provided us with a weekly movie. Outings were twice provided to groups of boys to Maple Leaf Gardens. On December 14, the Knights of Columbus again visited the school, entertained the boys and staff for three hours, and distributed gifts to one and all. Constable Holman, R.C.M.P., visited us weekly during November and December. He delivered an interesting series of talks on "Citizenship" accompanied by movies, terminating all by giving the boys a party. We anticipate further visits from Constable Holman in the near future.

Letters home, visits from parents and friends, were other forms of contact. Last July we were proud to have students from the School of Social Service of the University of Toronto pay us visits on two occasions.

Our summer program again afforded a pleasant change and many profitable moments. Especially worthy of mention was the woodworking shop. Some very fine workmanship was evidenced. Under the direction of three capable instructors a sports' building was enlarged and remodelled, and a fence was replaced. A daily visit to the lake was another feature provided during July and August. From August 25, to September 10, the entire school population enjoyed the privileges and healthful surroundings of De La Salle Camp at Jackson's Point, Ontario.

Our merit system continued to provide rewards for good conduct and satisfactory work, and punishment for misbehaviour. Boys are given good or bad notes by their teacher, shopman, or prefect, and are then assembled every week and praised or censured as they deserve. The weekly results are combined in a monthly report. Boys in good standing are given spending allowances ranging from twenty-five to forty cents a month. They are also allowed out on Saturday mornings to do odd jobs, proceeds of which they share with the athletic fund. Other very special privileges are attached to this honour system. The most cherished is the visit home at Christmas. Fifty per cent of the school population earned this privilege, the length of their stay ranging from one to ten days.

During the year our Placement Officer made approximately 750 visits to boys who have been returned to their own homes or who have been placed in farm homes or boarding homes. By means of these periodic visits, supplemented by correspondence, we advise, caution, and encourage the boys in continued well-doing. On April 1, 1946, there were twenty-four boys in boarding homes; on March 31, 1947, twenty-three. Of this latter number, ten remained out the whole year and continued to give satisfaction. Our records show eighteen boys in farm working positions. Demands far exceed our ability to supply them.

In concluding this report I would like to pay tribute to the staff. Every member has been sympathetic and conscientious in the discharge of his duties. Their loyalty and faithfulness is greatly appreciated.

To the Training Schools Advisory Board, to Mr. Neelands and Staff, to Juvenile Court Officials, to Children's Aid Societies throughout the Province with whom we deal, and to all who have contributed in any way to make this year successful, we say, "your interest and helpful suggestions have been much appreciated. Thank you."

BROTHER FRANCIS,

Superintendent

REPORT OF ST. JOSEPH'S TRAINING SCHOOL FOR BOYS, ALFRED, ONTARIO

April 1, 1946 to March 31, 1947

Many changes have taken place in staff, buildings and equipment since our last annual report. In August a new superintendent, Brother George, replaced Brother Jerome, who for nine consecutive years faithfully and conscientiously conducted the affairs of the School. Certainly Brother Jerome deserves special mention for his wonderful work at Alfred. His action was both intimate and successful, he was well liked by the boys, highly considered by the personnel and the people in general.

The new shops were used for the first time either in August or September, but they had to be furnished with shelves and machines to suit the purpose for which they were built, and both instructors and boys spent much time doing the job.

We received a new teacher for the woodshop, but owing to sickness he was unable to continue his work till the end of the year.

We have enjoyed good health in the institution and boys have been shown the benefit of outdoor work on the School lawns and gardens. Outdoor games, both in winter and summer, gave them the necessary hygienic recreation.

As in the past, we have been favoured with excellent co-operation from the Social Agencies and whole-hearted support of our Staff.

During the past years, two teachers gave in their resignations and two others came to replace them. The average enrolment for the academic year increased considerably. In each of the four classrooms, the pupils were helped and drilled individually in all grades.

Considerable attention was paid to personal hygiene and beneficial results were soon apparent. Efforts were made to make the boys industrious and happy and thus supplement, in some degree at least, the lack of family ties which most of them have missed. As usual, English, French, Mathematics, Drawing, Music, and Social Studies formed the essential parts of our curriculum.

The number of boys attending the various grades was as follows:

Grade	10	2	Grade 5	28
Grade	9	5	Grade 4	15
Grade	8	22	Grade 3	9
Grade	7	14	Grade 2	15
Grade	6	38	Grade 1	8

TOTAL: 156

At the Entrance Examinations, eight candidates were admitted by the Board of Examiners, two by recommendation. At the end of the month of July a special celebration with banquet was held on the picnic grounds of the

school in honour of our successful candidates. We profited by the occasion to give out certificates to those boys who had completed their work on the Morse Code.

The library activities were used to assist social studies and natural sciences. Many supplementary reading books were lent with an endeavour to create a greater stimulus for more and better reading.

More than 4,500 books were read during the year and twenty-four boys read an average of one book a week. One hundred boys were regular customers at the library.

The following periodicals come regularly to the School: Catholic Register, Topics, Heroes All, Junior Messengers, Treasure Chests and Catholic Messengers. Also two French reviews: Sais-Tu? and Hérauts.

We bought a 16mm. Talking-Machine and gave our school population one program every week, generally on Saturdays. The boys worked during the summer on the farms around, helping to garner the hop or potato crops. As the work was considered a favour and as gratuities were given for it, nobody was forced or coaxed to do it, and we had always plenty of volunteers. The surplus of the money received was used to buy the machine. Here are some of the programs shown: Robinson Crusoe, The Song of Bernadette, Going My Way, Pack up Your Troubles, Children of the Wild, Alexander the Great, The Passion Play, Michael Strogoff, Loyalty of a Dog, Count of Monte Cristo.

Besides their regular showings Mr. Pat. Durocher, National Film Board Representative, comes monthly to the school to give the pupils an educational program to which the people of the Village of Alfred are invited. This contributes towards a good spirit of co-operation between the institution and the people in the community.

As usual many friends and strangers came to the school, and their visits were the occasion of gymnastic displays, of special ceremonies when some of the talents of the boys were put in relief either with regard to community singing, elocution or of interesting entertainments either in English or French, generally in both languages. Among our many visitors we might mention: Mr. H. S. C. Rees, Britain's leading expert on delinquency. He was so pleased with what he saw that he told reporters, after a visit to St. Joseph's, that he had seen most reformatories in the United Kingdom and many on this continent, "but never one so finely equipped!"

His Excellency Archbishop of Ottawa came to the institution to bless the new shops, May 28. Later in the year we received: The Ottawa City Council, the Ottawa School of Nurses, the Training Schools Advisory Board, the Cornwall Lions Club, le Club Richelieu Ottawa-Hull, l'Association Athlétique Notre-Dame, Ottawa. The Knights of Columbus, Hawkesbury council, treated the boys with sweets around Christmas, and Mr. J. B. Woods, barrister, one of them, delivered an address in both languages, speaking to the boys as a tender father, a devoted social worker and an experienced lawyer. Moreover, at various times, very interesting entertainments were given by the following groups of artists and social workers: Hull Radio Artists, Cercle Gascon from Hawkesbury, Brebeuf School pupils and the Catholic Youth Organization from St. Brigid's, both from Ottawa.

It is with gratitude what we add the following names to our list of benefactors: the Lions Club, Cornwall; Mr. Harry Greenspon, merchant, Hawkesbury; Mr. Eugène Carisse, his friends and employees, Ottawa; le Club Richelieu Ottawa-Hull; l'Association Athlétique N.-D., Ottawa; the Knights of Columbus, through Mr. Philip Phelan, their Ontario Supreme Director, gave the institution highly appreciated sporting goods to the value of \$400.

Physical Training

At the invitation of Honourable G. H. Dunbar, Minister of Reform Institutions, one of our prefects spent six weeks at Guelph, to follow a specially-organized Physical and Recreational Training Course which he found very interesting and very practical.

He made good use of this experience in several ways, particularly with regard to sports, games and exercises.

Basket-Ball was most popular. There were three leagues, grouping seventy-five contestants with five teams a league. When one team played basket-ball, the other boys were kept busy playing other indoor games. Besides regular gymnastic exercises, the skaters enjoyed the use of two good rinks during the winter, and Brother Philip deserves great praise for keeping the ice in the peak of condition all winter. In the First Division group, every one played hockey, each participating in forty-five scheduled games. As in the past, this sport was very popular and our seniors, together with a few players from the village under the title of "Speed-Kings", formed the main attraction in the place. They showed up well and attracted great crowds which came to the college to witness clever hockey performances.

Members of the Prescott Hockey League, the "Speed Kings" played against teams organized in the villages around Alfred and won the Challenge Cup. At the end of the season, the promoters gave each of our champions, as a token of satisfaction, a brand new twelve-dollar windbreaker.

When requested, and when the thing could be done without any disturbance to the school, the gymnasts gave displays here and there. This year they went to Montreal where they had the favour of visiting St. Joseph's Shrine on Mount Royal, the Wax Museum and the Sun Life Building. The former superintendent, Brother Jerome, now a principal of a school in Montreal, gave a reception to his former pupils after which they went to Longueuil College and Mount Saint Louis Institute.

Later they were also asked to give demonstrations in: Cornwall, Finch, Curran, St. Albert, Hawkesbury, St. Jerome and Hull. Over fifty of our cadets were permitted to visit the Boys' Farm at Shawbridge, Quebec, in the Laurentides, about forty miles from Montreal.

The best gymnastic group is made up of only sixteen competitors, but the whole division practises together to be able to reach the top standard and thus be accepted in the first group. This was found to be an excellent means of emulation and the favours granted to those who do their very best to succeed and get to the mark, exert an excellent influence on the wards. A regular gymnastic course is given to the lads every week, besides scheduled games and leisures for hobbies and handicrafts. We rightly attribute the slight number of

desertions, only two this year, to the fact that all are kept busy at something useful and interesting.

As a new experience we bought twenty-four lacrosse sticks, two nets, and two goaler sticks, and so far, the attempt has been conclusive, because the game seems to be very popular with the bigger scholars.

We prepared a very successful field-day under the sponsorship of a few friends of the institution and of certain Social Workers.

Our cadet corps was disbanded by order of the National Defence Department, as all those established outside High Schools, but we continued to give regular drill exercises.

Vocational Report

Shoeshop

This shop was moved to the new building August 28, where it occupies the main floor on the north side. It is fifty feet long by fifty-five wide, and is made up of the shop itself with an office and two stock rooms. This new department is quite satisfactory, being well lighted, well ventilated and well provided with machines.

One shelf was built in the office by the carpenter with the help of two boys. Besides, there are four other tables and ten shelves made by the instructor and the apprentices. A telephone to communicate with the main building was installed by one of the supervisors. Each department, in the new shops, is provided with fire hose and fire-alarm, although the house is fireproof.

The boys work here from 9:30 to 11:30, and in the afternoon, from 1:30 to 4:00, with two half holidays. During the vacation, the shop opens only in the morning.

Thirty-four boys worked in the shoeshop during the year. Most of their time was spent doing repairs for the use of the house.

We bought for this department:

75 1	Gearless sole cutting machine for Sole and insole dies for Sole sewing machine for New sewing machines for Sole sewing machines for Sole sewing machines for Sole Sole Sole Sole Sole Sole Sole Sole	\$300 1 Steam patching machine for \$15 \$800 1 Eyelet fixing machine for \$2	50

Woodshop

This shop was also opened in September. It is made up of two rooms, the shop proper and the woodclass. Both rooms are spacious and well provided with everything necessary. The wood was brought in by Second Division boys, the work being done in spare moments.

The main work of this department for many weeks was the reconditioning of a swimming-pool that had been all dislocated the year before by the spring freshets. The inmates built a cement wall a hundred and twenty-five feet long by one foot thick, on an average. The job was done in September and October, fifteen working at it quite regularly. The bottom of the pool was also cemented to a distance of ten feet from the wall. Occasionally, to speed up the work, we

put twenty boys with shovels, and after ten minutes work, the supervisor would blow the whistle and another group would take their turns at the shovels. The juniors who could not do any hard work, jumped in the sand to press it and thus did something useful.

The Instructor made for the shop, one shelf ten feet long, eleven feet high and eighteen inches wide together with four guards and tables for the circular saws. With two helpers, he built sixteen window frames for a hen-coop and two children's play-houses in cedar and two doll-houses in masonite with electric fixtures valued at \$150 each.

We bought for this department:

1	Circular saw	\$410	1 Electric drill	\$50
1	Butting machine	\$540	1 Small circular saw	\$75
1	Tenon machine	\$555	1 Lathe	\$150
	Buzz-planer		2 Shapers	\$125
1	Shaper for moulding	\$100	Wood	\$200
2	Emery stones	\$120		

Tailor Shop

It is now located on the first floor on the north side of the new building. It is made up of the main room, stock rooms and two other rooms for patterns and odd materials. Sixteen boys worked here during the year under the supervision of an expert tailor.

The shop is spacious, well lighted by nineteen electric lights and thirteen windows spread on three sides of the building. Most of the time is spent mending, pressing and making different articles of clothing for the boys themselves.

We bought the following machines to replace those that had been completely destroyed in 1944:

8 Sewing machines	.\$1,118.60	1 Electric cutter	\$225.00
1 Button-hole making machine	\$487.00	1 Overedging machine	\$307.75
1 Basting machine	. \$264.00	1 Steam press	\$565.00
1 Darning machine	\$165.40	1 Steam iron	\$135.00
The boys made: New suits	148	Aprons	62
Pants	420	Overalls	
Sheets	298	Kneepants	172
Handkerchiefs	990	Half-sleeves	124

Laundry

This department occupied a small room in the main building, but it has been moved into new quarters, next to the shoe shop. This place is considered more suitable as it is much larger and much more convenient than the other.

The laundry is made up of three apartments: the laundry proper, and two drying rooms. The work is carried on five days a week, from eight-thirty in the morning to four o'clock in the afternoon. It is under the supervision of three laundrywomen, with two boys to do the heavy work.

Four tables were made by the carpenter of the school to provide the laundry with the necessary furniture. One of these tables is twenty feet long with a series of shelves to sort out the linen.

As the old washing-machine could not be used any more, we had a small Connor machine temporarily installed, while waiting for the new one to be

delivered. The work done here comprises the washing, mending and ironing of all the articles of clothing sent to the laundry.

We bought a new Steel-Electric iron, costing \$19.00, and we had a new sewing-machine taken from the tailorshop and brought to the laundry.

Kitchen and Dining-Hall

Here, six boys work regularly with sixteen others who give an occasional hand to do the general kitchen work and the peeling of vegetables. We bought a dough-mixer. We used it much for bread, but as grease and shortenings were difficult to obtain, cakes and cookies were a little scarcer than last year.

We generally kill two hogs every three weeks and one cow a month. Much of the work is done by the boys themselves: helping to chop the meat and put it into the refrigerator. The ham cured and smoked amounted to eight hundred pounds. As usual, we canned the required quantity of vegetables and preserves.

The kitchen and dependences are cleaned and swept every morning after breakfast.

Farm Products

Hay	80 tons	Carrots150 bags
Ensilage	75 "	Preserves 800 gallons
Onions	1 ton	Hogs, killed 35
Grain	1,680 bushels	Hogs, sold 4,000 lbs.
Cabbages	2,000 lbs.	Milk
Potatoes	1,800 bags	Maple-syrup 102 "

Placement Officer's Report

Number of visits to the boys	404	Boys released from guardianship	62
Number of letters written	155	Boys receiving supervision at end of	
Boys on farms		period	
Miscellaneous positions		Boys in foster-home	
Boys receiving supervision at home	37	Boys returned home to attend school	12

Conclusion

I wish to take the occasion of this report to express my most sincere gratitude to all who have, in any way, assisted in making the year 1946-47 so successful in every respect. However, I can't refrain from mentioning specially three men who are closely connected with our organization.

Dr. H. Kirby, Dentist, from Hawkesbury, comes to our School every Tuesday to look after the teeth of his "Friends". He knows them all, chats with them in a friendly way.

Dr. Joseph Larocque, Physician, is always ready, night or day, to care for our sick children. He is also enthusiastic with sports and is a very strong supporter of our Teams.

Reverend Father Salvador Grenon, our Chaplain for nine years now, looks after the spiritual welfare of our school population. Kind, devoted, he understands everybody's needs and has God's words to console the afflicted, the discouraged. He is a very precious help to the staff members who often have recourse to his wisdom and experience.

Respectfully submitted,

Brother George,

Superintendent

STATISTICAL REPORT TRAINING SCHOOLS ADVISORY BOARD

April 1, 1946 to March 31, 1947

NUMBER OF CASES REVIEWED

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
Designations	57	75	49	87	174	14	456
Applications for Admission							
Recommended	8	10	4	1	5		28
Applications for Admission							
not Recommended		2			1		3
Returns from Parole	14	40	34	38	104	4	234
Paroles recommended to							
Minister and made							
effective		121	75	281	242	25	834
Paroles Refused		8	14	7	21	13	94
Placement Reports		261	173	292	787	14	1,604
Attendance Reports		359	289	92	292	43	1,357
Termination of Wardship		89	67	67	123	23	429
Terminations Refused			1	1	-		2
Deaths			2	2			4
Totals	619	965	708	868	1,749	136	5,045

52

TRAINING COMMITTALS For Year Ending

																				-6
	Court	Application	r of Minister												Ag	ES				_
Counties and Districts	Committed by C	Admitted by Ap	Transf'd on Order	Total	Male	Female	City	Town	Township	6	7	8	9	10	11	12	13	14	15	16 and over
Algoma District	9	-	1	10	6	4	8	1	1		1					2		5	1	1
Brant	6			6	4	2	5		1				2			1	1	1	1	
Carleton	34	2	3	39	27	12	33	1	5					2	2	2	8	7	15	3
Cochrane District	6			6	5	1		2	4							1	1	1	3	
Dufferin							1													
Elgin Essex	15			5 15	13	$\frac{1}{2}$	$\frac{1}{12}$	$\begin{vmatrix} 1\\2 \end{vmatrix}$	3							1	1	$\frac{2}{2}$	10	1
Frontenac	4			4	2	$\frac{2}{2}$	3		1						2			1	1	
Grey	3			3	3		3							1				1	1	
Haldimand Halton	$\begin{vmatrix} 3\\2 \end{vmatrix}$		1	3	3	3		2	$\begin{vmatrix} 3 \\ 1 \end{vmatrix}$						$\frac{2}{1}$		1		1	
Haliburton	3			3	1	2	1		2								2		1	
Hastings	5			5	3	2	4		1							1	2		2	
Huron Kenora District	2			2	1	1		2									1	1		
Kent	7			7	3	4	1	3	3						1	2	2		2	
Lambton Lanark	5			5	4	1	3	1	1								• • • •	1	4	
Leeds-Grenville	7		1	8	8			6	2				1	1	1	2		1	2	
Lennox-Addington	1			1	1				1									1		
Lincoln	5 2			5	4	1	3	2								1		1	3 2	
Manitoulin Island Middlesex	8		• • • •	9	1 8	$\frac{1}{1}$	8		1 1				1		2		2	4		
Muskoka District	3			3 7	3			1	2					1	1		1			
Nipissing District	4		1	7	7		5		5				1	1	2	1	$\frac{1}{2}$		1	1
Norfolk	12			12	$\frac{8}{2}$	4		7	1			••••		1		1	2	4	1	
Ontario	3			$\begin{vmatrix} 2\\3 \end{vmatrix}$	$\tilde{2}$	1	1	î	1								1		2	
Oxford	2			$\frac{2}{7}$		2	2										1	1		
Parry Sound District	7 2	.:		2	$\frac{5}{2}$	2	2	4	3					2	1		1	2 1	2	
Perth	2			2	1	1	1										1	1		
Peterboro Prescott-Russell	1			1	1 3	3		3	3									$\begin{array}{c c} 1 \\ 1 \end{array}$	3	
Prince Edward	$\begin{vmatrix} 6\\1 \end{vmatrix}$			6	1	0		3	1			1					1	1	3	
Rainy River District	5			5	3	2		5					1					2	1	
Renfrew	6			6	5	1		·5					2	2		1		$\frac{1}{2}$	$\frac{1}{2}$	
Stormont, Dundas & Glengarry	5		1	5 13	10	3	8		4						1	1 1		$\frac{2}{5}$	5	1
Sudbury District	32			32	21	11	17	12	3			1		1	2	6		7		
Temiskaming District Thunder Bay District				9 9	$\begin{array}{ c c } & 6 \\ & 5 \end{array}$	$\frac{3}{4}$		6						1	2	1 1	1	1 6		
Victoria				3		2	0	$\frac{1}{2}$					1				1		1	
Waterloo	14			14	10	4	12	2		1			2	1	1	2	3	2		
Welland Wellington	3			5 3	5 3		3		2				1				1	$\frac{1}{2}$	2	
Wentworth	52			52	33				5				1	1	5	4	12	13		
York		18	4	106					15			2		9			18			3
Тотаь	412	27	12	451	311	140	276	87	88	1	1	4	13	24	31	42	73	108	144	10
T O TITLD	, 2		12	-101	.011	. 1 10	-210	.01	-00	. 1		. 1	, 10	1 - 1	101	1	110	, 200		120

SCHOOLS AND ADMISSIONS

March 31, 1946

	Ward of C.A.S. Others Cause of Committal or Admission															
	Parents Married	Parents Unmarried	Parents Married	Parents Unmarried	Armed Robbery	Arson	Assault	Break and Enter	Immorality	Incorrigibility	Theft	Truancy	Vagrancy	Trespassing	Forgery	Joy Riding
Algoma District	1 1		9 5					2		4 1	3 4	1				
Bruce	1									1	4	1				
Carleton	3		35					3		18	14	4				
Cochrane District			6					2		1	3					
Dufferin Elgin	1	1	3		• • • • • •			.		3	9					
Essex			12		1		1	2		5	5				1	
Frontenac			4				1			2	1					
Grey			3							3						
HaldimandHalton			2	1						3 2	1					
Haliburton	1		2							3	1					
Hastings			3							5						
Huron.																
Kenora District		1	1 6	1				9		2 5						
Lambton		1	3	1						5						
Lanark																
Leeds-Grenville			7	1			1	2			4	1				
Lennox-AddingtonLincoln.		1	1 3					ີ		$\frac{1}{2}$		1		• • • •		
Manitoulin Island			2							2		1				
Middlesex		1	$\frac{2}{7}$	1						5	3	1				
Muskoka District			3							1	2					
Nipissing District Norfolk.		1	5 3	2						6	1 1	ງ				
Northumberland & Durham	1		1							1	1					
Ontario.		1	2							1	1					1
Oxford			2							2						
Parry Sound District	1		6 2					2		3 2	2					
Perth			2							1	1					
Peterboro			1							1						
Prescott-Russell Prince Edward	1	1	2					1		3	2					
Rainy River District		1	4							3	2					
Renfrew	1		5							2	4					
Simcoe.	2		3							3	1				1	
Stormont, Dundas & Glengarry	2	1 1	10 30						1	5	7					
Sudbury District Temiskaming District	4		5	1	****	1		8		14 6	$\frac{5}{3}$	2	2			
Thunder Bay District	1		7	1				2		6	1					
Victoria	1		2							3						
Waterloo Welland	2		10	2				3 2		8	2 2	1				
Wellington		1	2	1				1		1	1					
Wentworth	4	1	2 43	4				4	1	29	10	7		1		
York	16	7	76	7		1	3	9	1	59	28	3	1		1	
TOTALS	58	23	345	25	1	2	6	47	3	242	118	24	3	1	3	1

SUMMARY OF ATTENDANCE IN TRAINING SCHOOLS

April 1, 1946 to March 31, 1947

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
Number in Residence, April 1, 1946 New Commitments or	118	138	126	97	85	35	599
Admissions	54	73	49	88	173	14	451
Returned from Parole: Violation of Parole Not Satisfactory		2 26	22 6	19 12	89	4	140 56
Services no longer required Pupils Dissatisfied		1	9	1			11 3
For Replacement	1	6		1	20		28 4
Court orderReturned from A.W.L		2 16	1	12	7		9 34
Totals	185	266	216	231	384	53	1,335
Number of Placements: Returned home for school Returned home to assist	2	23	12	10	10		57
parentsReturned home for		4	5	2	11	*****	22
employment To boarding home To positions (farm, factory,	8	20 17	8 11	11 32	28	17 4	70 100
domestic, etc To other institutions	30	34	33	45 10	55 17	$\frac{4}{2}$	201 54
Number A.W.L. Number died		26	2	18	8		54 2
Totals	72	127	76	129	129	27	560
Number remaining in residence, March 31, 1947	113	139	140	102	255	26	775

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St. Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
Number remaining out for whole year Number placed and returned		87	34	98	42	23	326
during yearPlaced out in previous years	12	14	39	12	79	4	160
and returned during present year		25	1	22	47		96

RETURNED FROM PLACEMENT DURING YEAR

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Tota
After one placement		33	34	16 10	25 33	+	121 55
After two placements After three placements		2	1	3	27		33
After four placements After more than four			I	3	20		24
placements				2	21		23
Totals	13	39	40	34	126	4	256

NUMBER OF COURT APPEARANCES PRIOR TO COMMITMENT OR ADMISSION

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
None	39	30	17	59	60	2	227
One	11	21	11	17	39	5	104
Two	1	9	5	4	26	1	46
Three	3	4	8	1	16	2	34
Four		5	3		2	2	12
Five or more		4	5	7	10	2	28
TOTALS	54	73	49	88	173	14	451

NATIONALITIES OF PUPILS COMMITTED OR ADMITTED

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
Indian	6	6		3	1		16
Negro			1	2	4		7
Canadian	48	67	34	$7\overline{6}$	165	13	403
Irish			7	3	- /		7 7
Scotch			-		1		
Other			3	4	2	i	10
TOTALS.	54	73	49	88	173	14	451

SCHOOL ROLL AND COMPARISON

	Bed Capacity	In Atten- dance March 31, 1943	In Atten- dance March 31, 1944	In Atten- dance March 31, 1945	In Atten- dance March 31, 1946	In Atten- dance March 31, 1947
Ontario Training School for Girls, Cobourg	91	54	84	99	97	102
Downsview	126	96	93	102	118	113
St. John's Training School for Boys, Toronto	150	142	145	138	138	139
St. Joseph's Training School for Boys, Alfred	150	103	115	139	126	140
Ontario Training School for Boys, Bowmanville and Galt Ontario Training School for Boys,	389	24	28	34	85	255
Guelph	40	6	15	40	35	26
TOTALS	946	425	480	552	599	775
GIRLS		150 275	177 303	201 351	215 384	215 560

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph
Average length of stay in school per pupil	1 year 8 mths.	1 year 1 mth.	1 year 6 mths.	11 mths.	*B. 4 mths. G. 1 year 2 mths.	$9\frac{1}{2}$ mths.
NET PER DIEM COST PER CAPITA	\$1.03	\$1.27	\$1.17	\$2.57	\$2.41	

^{*}Seven months in temporary quarters during which time placements on parole were rapid due to lack of accommodation.

MENTALITY OF PUPILS COMMITTED OR ADMITTED

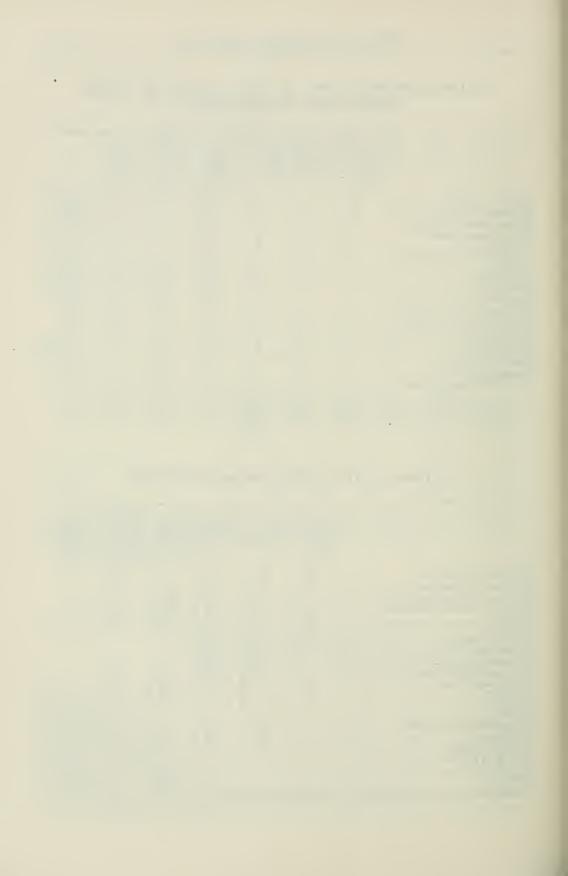
	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
Morons—I.Q. 40-60	5	2	7	1	4		19
High Grade Morons—							
Ī.Q. 60–70	5	7	3	4	17	2	38
Borderline—I.Q. 70-80	15	13	9	24	28	4	93
Dull Normal—I.Q. 80-90	14	22	13	17	47	4	117
Normal—I.Q. 90-100		18	9	19	35	3	90
Normal—I.Q. 100-110		6	5	8	25	1	51
Superior—I.Q. 110 and over		5	3	7	17		34
Not examined	_			8			9
Totals	54	73	49	88	173	14	451

FACTORS CONTRIBUTING TO DELINQUENCY OF THOSE COMMITTED OR ADMITTED

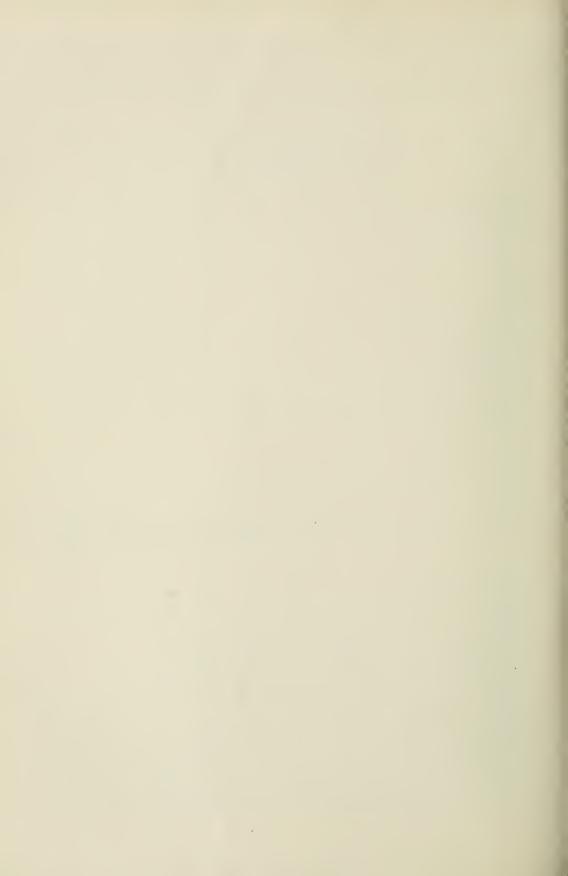
	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph	Total
Alcoholic parents	2	3	5	12	4		26
Desertion in home	$\frac{2}{3}$	9	3		7		$\tilde{2}^{0}_{2}$
Either parent immoral		10	4	5	5		$\frac{22}{27}$
Either parent mentally		10	1	U			21
defective	3	3	3	2			11
Either parent with court				2			3.1
record	1	2	4	1	1		9
Father dead		$\frac{7}{4}$	$\frac{1}{2}$	5	7	1	19
Mother dead	1	$\frac{1}{4}$	4	4	6	1	19
Parents dead		Î	_	$\frac{1}{2}$	$\frac{1}{2}$	1	7
Fair home but no control		7	4	12	48	6	84
Poor home and no control		10	5	14	57	3	100
Stepfather		4		3			100
Stepmother		_	2	3	1		7
Parents separated	16	9	5	$\frac{3}{22}$	21	3	76
Associations	_	5	5	3	8	_	21
Mentality of child		2	3		5		13
Father in Armed Services		_	_		1		10
radier in mineu bervices					1		1
Тотаья	54	73	49	88	173	14	451

ACTIVITIES OF RESIDENTS DURING YEAR

	St. Mary's Training School for Girls Downs- view	St. John's Training School for Boys Toronto	St.Joseph's Training School for Boys Alfred	Ontario Training School for Girls Cobourg	Ontario Training School for Boys Bowman- ville and Galt	Ontario Training School for Boys Guelph
Full time in classroom	100	38	173		213	
Part time in classroom	38	85	5	151	102	14
Full time in vocational shops		16	53	58		
Part time in vocational shops		85	3	151	173	
Culinary		18	12	74	39	
Sewing	95		13	209		
General domestic	160					
Barber shop	.,,	1	3			
Carpentry		1	6			*****
Farming and horticulture		6	10	96	137	*****
House maintenance		10	171	209	163	
Laundry	50		3	209		
Office	40			5	1	
Printing		7	5			
Shoe making and repairs		12	34			
Tailoring		30	13			*****
Wood working			2	35	27	
Part time at work						14
Nurse's aid				6		
Piano				32		
Commercial				92	<u> </u>	













AWAITING DEVELOPMENT

Tunnel power site on the Mississagi river in a state of nature. Long known as a potential water power site and now being developed

FORTIETH ANNUAL REPORT

OF

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

FOR THE YEAR ENDED OCTOBER 31st

1947



PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

1947

T. H. Hogg, D.Eng	(Retired—February, 1947)
Hon. George H. Challies, Phm.B.,	M.L.A
W. Ross Strike, K.C	2nd Vice-Chairman
OSBORNE MITCHELL	Resigned—December 31, 1947)

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

1948

ROBERT H. SAUNDERS, C.B.E., K.C. (Appointment Effecti	
HON. GEORGE H. CHALLIES, PHM.B., M.L.A	Vice-Chairman
W. Ross Strike, K.C	Vice-Chairman

R. L. HEARN

General Manager

and Chief Engineer

E. B. EASSON
Secretary



HEAD OFFICE

620 UNIVERSITY AVENUE - TORONTO 2, ONTARIO

LETTER OF TRANSMITTAL

TORONTO, ONTARIO, MARCH 31, 1948

THE HONOURABLE RAY LAWSON, O.B.E., LL.D.,

Lieutenant-Governor of Ontario.

Sir:

The Fortieth Annual Report of The Hydro-Electric Power Commission of Ontario is transmitted herewith.

It presents for the fiscal year ended October 31, 1947, a record of the Commission's activities on behalf of the Co-operative Systems—The Southern Ontario system and The Thunder Bay system -and in connection with its trusteeship of The Northern Ontario Properties on behalf of the Province.

Respectfully submitted,

Robert H. Saunders, Chairman

GEORGE H. CHALLIES,

1st Vice-Chairman

W. Ross Strike, 2nd Vice-Chairman



TORONTO, ONTARIO, MARCH 29, 1948

ROBERT H. SAUNDERS, ESQ., C.B.E., K.C., Chairman And Commissioners

SIRS:

The undersigned respectfully submits the Fortieth Annual Report of The Hydro-Electric Power Commission of Ontario for the fiscal year which ended October 31, 1947.

The record of the Commission's work presented in this Annual Report relates to three principal fields—the co-operative municipal field, the field of rural supply, and the northern Ontario field. The first two cover the Commission's activities on behalf of the co-operative systems, and the last relates to its trusteeship of the Northern Ontario Properties on behalf of the Province. Throughout the various sections of the Report dealing broadly with physical operation of the plants, constructional activities and financial statements, these fields of activity are clearly differentiated.

The Report also presents for the calendar year 1947, financial statements and statistical data relating to the municipal electric utilities operating in conjunction with the co-operative systems for the supply of electrical service throughout the Province.

Hydro in 1947

In 1947, the Commission supplied the greatest load in its four decades of service and substantial progress was made upon the greatest power development program in Hydro history.

Reorganization

When it became evident that Hydro was faced with this great expansion program the Commission late in 1946 reviewed broadly the adequacy of

the existing organization to serve effectively the co-operating municipalities and its direct customers, while concurrently dealing with the multitude of technical problems involved in an expansion program.

In February 1947 the matter was further explored upon a three-fold basis, comprising: (a) The general administrative organization, (b) Certain engineering problems, (c) Certain financial problems, and it was decided to secure the services of independent authorities to review, in co-operation with officials of the Commission, the associated problems relating respectively to administration, engineering and finance.

Administration

It was decided to retain J. D. Woods & Gordon, Limited, industrial consultants, to report upon the general administrative organization and to make recommendations regarding an appropriate plan, indicating the principal positions to be filled, the relationship and sub-division of duties, the functions and personnel of the various departments, lines of authority, definition of duties, a review of the methods to be followed in statistical recording, and the adequacy for control purposes of reports and other data.

Engineering

The Stone & Webster Engineering Corporation was retained to report upon three main problems:

- (1) The present and future sources of power, probable demands, types of power, the desirability of augmenting for certain areas hydro-electric development by steam or other auxiliary units.
- (2) The proposed frequency change, with an assessment of advantages, review of estimated costs and particularly the timing of any changes and program that might be suggested.
- (3) New sources of power for short-term requirements and related development of new power sites.

Finance

The Commission retained Mr. G. T. Clarkson of Clarkson, Gordon & Co., to advise upon finance problems, reviewing particularly:

- (1) The problems involved in the financing of any program for the standardization of frequency, and
- (2) Possible modifications of present practices regarding basis of determining costs of power, the financing of rural expansions and the position of Hydro reserves.

The final reports on engineering and finance were not available at the end of 1947, but interim recommendations respecting administration were made during the year and a large measure of re-organization was effected.

The plan of organization recommended by the consultants and accepted by the Commission covers three main functions, policy making, policy interpretation and action. It provides all supervisors with authority to take prompt and decisive measures on any matters within their range of administrative duties.

Regional Offices

A feature of the re-organization of particular interest to the municipalities is the division of the Province into nine regions and the setting up of regional offices in London, Hamilton, Niagara Falls, Toronto, Barrie, Belleville, North Bay, Ottawa and Port Arthur. These offices are in effect nine miniature head offices and will be under the direction of regional managers charged with the responsibility of administering the day-to-day activities and policies of the Commission within their respective regions, excluding engineering and construction projects.

Each regional manager has reporting to him a number of area managers, whose activities heretofore have been confined to the operation and maintenance of rural distribution systems, but whose responsibility now is to deal expeditiously with any problems arising in their respective areas.

The regional managers are responsible for the operation and maintenance of all Commission properties and for all matters pertaining to consumer relations within their respective regions and it is believed that the adoption of a decentralized type of administration will afford many advantages to the municipal and other customers.

Power Development

Since 1945 the Commission has been engaged in implementing the power development program for which plans were started before the termination of the war. During the past year, however, the Commission again found it necessary to revise its plans to cope with the ever-increasing magnitude of prospective demands.

The total power resources available to the Commission in 1947 including its own generating plants and the purchased power contracts, aggregated 2,050,000 kilowatts (2,748,000 hp). The power plants authorized for construction (with an additional power purchase contract) will add during the next few years a capacity of 704,000 kilowatts (943,000 hp) making a total of 2,754,000 kilowatts (3,691,000 hp) as shown on the accompanying table.

Commission's Available Power Resources—All Systems

	Kilowatts	Horsepower
Maximum normal plant capacity (including DeCew Falls second unit placed in service in September 1947)	1,338,000 712,000	1,793,000 955,000
New projects as tabulated below	2,050,000 704,000	2,748,000 943,000
Total	2,754,000	3,691,000

Authorized Construction

System and development	Kilowatts	Horsepower
SOUTHERN ONTARIO SYSTEM Stewartville—Madawaska river Des Joachims—Ottawa river Chenaux—Ottawa river	60,000 358,000 119,000	80,000 480,000 160,000
Thunder Bay System	537,000	720,000
Aguasabon—Aguasabon river Pine Portage—Nipigon river	40,000 60,000	53,000 *80,000
Northern Ontario Properties	100,000	133,000
Ear Falls—English river	5,500 42,000	7,500 56,500
Additional Power Purchase Contract	47,500	64,000
Polymer Corporation—Sarnia	19,500	26,000
Total	704,000	943,000

^{*}Hydraulic structures and powerhouse for 4 units. Initial installation 2 units, ultimate capacity 4 units = 160,000 hp.

In addition to the developments included in this table there are other hydro-electric and steam plant projects receiving close study for integration into the general expansion program; these, would provide over 250,000 kilowatts (330,000 hp) of additional capacity.

The total estimated cost of engineering projects approved by the Commission now stands at nearly \$320,000,000. They may be grouped as follows:

Summary of Projects Under Construction or Authorized

Including DeCew Falls now completed.

For power generation: Hydraulic	\$138,247,000 \$46,019,000 46,861,000
Total for main projects	\$231,127,000
In addition there are a large number of approved projects, many of substantial magnitude relating to certain rehabilitation of plants, modernizing of equipment, improvements to transmission and distributing equipment and further new installations, etc. These approved projects aggregate in value about	88,471,000
A total of	\$319,598,000

It will, of course, be understood that this program of capital expenditure extends over a period exceeding five years. Of this total about \$75,000,000 had been expended to December 31, 1947.

The 1947 capital construction budget of the Commission contemplated expenditures of over \$57,000,000. However, due to deficiencies in the available supply of both labor and materials and other problems attendant on

a prcgram of this magnitude, actual expenditures for the fiscal period were only \$46,000,000 cr 80 per cent of the budget objective. This expenditure greatly exceeds the amount spent on capital construction in any year since the building of the Queenston-Chippawa development.

Progress on Developments

Activities in connection with new projects and improvements to and rehabilitation of existing generating stations and transmission and distribution facilities have been so numerous that only a brief reference may be made here. Fuller information regarding the work done in 1947 is given in the body of the Annual Report.

With respect to the new hydro-electric developments actual construction has proceeded on four major developments and two extensions, and on access roads and camps at two others. Field investigations including surveys and office studies were active on two other developments. At several power plants and storage developments now in use improvements and repairs were being made.

During 1947 the increased construction program created a substantial volume of work in the acquisition of land and rights of various kinds for hydraulic developments, transformer stations, transmission lines, etc., for which surveys and other field work, the preparation of plans, the study of assessment and taxation problems and official recording have been required. The policy of contacting owners of private property before commencing survey work has been carried out as far as possible to the benefit of both property owners and the Commission.

Scarborough Frequency-Changer No. 1

Because of the extraordinary increase in the load of the Georgian Bay division it was decided in August 1945 to provide additional power by the installation of a 25,000-kva 25-60-cycle frequency-changer adjacent to Toronto with the necessary voltage transformation and 110-kv transmission line connections joining the Niagara, Eastern Ontario and Georgian Bay divisions of the Southern Ontario system by July, 1 1947.

During the period this work was being done, staff was in short supply and equipment was difficult to obtain. Diversion of men and equipment was made from certain less urgent work and manufacturers' schedules were changed. With close attention and the co-operation of all parties concerned this project was constructed according to schedule and despite many attendant difficulties the frequency-changer was tested out on July 2, 1947, and placed in operation a few days later in time to meet the peak load requirements of the Georgian Bay division. Credit is due to the engineering and construction staff of the Commission for this excellent performance.

Operating Conditions

Increased Generating Capacity

On September 26, 1947, the first of the Commission's major post-war projects, the second 25-cycle unit at the DeCew Falls generating station, was

officially brought into service adding 57,000 kilowatts (77,000 horsepower) to the power resources of the Southern Ontario system. The total normal operating capacity of the 53 generating plants of the Commission at the end of 1947, including the new DeCew Falls unit, was 1,338,000 kilowatts (1,793,000 hp).

Helpful Co-operation from Quebec

Almost continuously throughout the year the Commission took delivery of surplus power whenever and wherever available. Under special arrangements approximately 617,000,000 kilowatt-hours were purchased during the year in excess of the amounts provided for in the main contracts with the Quebec power companies. In this connection the Commission records appreciation for the helpful co-operation given by the Department of Transport, Ottawa, the Government of the Province of Quebec, Quebec Hydro-Electric Commission, Gatineau Power Company, MacLaren-Quebec Power Company, Beauharnois Light, Heat & Power Company and the Ottawa Valley Power Company.

In 1947 there was no change in the centract amounts for purchased power.

Failures of Equipment

In December, 1946, a sleet storm of unusual severity caused heavy icing of the transmission circuits in the Niagara peninsula where 137 towers on two of the 44,000-volt lines between DeCew Falls and the city of Hamilton collapsed under the icy weight of the conductors. The damaged circuits were restored to normal service on March 1, 1947.

On June 17, 1947, service to a major portion of the Niagara division was disrupted when the total power supply from Quebec sources failed, following a disturbance on the 220,000-volt network. It was necessary to interrupt service to Toronto area customers, and to some western-area customers for periods up to 15 minutes, in order to restore normal operating conditions. On June 25, a similar break-down occurred. In each case the trouble was caused by an explosion in a municipal dump.

The restoration of a complex network, such as that involved in this trouble, is a most difficult situation to handle. It is only by the complete co-ordinated effort of the operating staff, each man doing his integral part with sound judgment and with all possible speed, that a collapsed power system can be restored to normal. Too much praise cannot be given to the operating staff for the manner in which restoration of service was made.

Precipitation and Storage

The principal storage reservoirs throughout the Province were below normal levels on entering the 1946-47 winter season. However, improved early winter inflows particularly in the northern areas and a generally heavy snow cover combined to brighten the picture as spring 1947 approached. Throughout the spring and early summer above-normal precipitation and stream flows persisted until the end of July.

During the late summer and early autumn of 1947 precipitation in most sections of the Province was much below normal and by the end of October the water situation was generally unfavourable and in some northern areas was serious. Thus, notwithstanding the favourable outlook in the spring, overall water conditions throughout the Province on entering the 1947-48 winter season were poor, even worse than those at the same time in the previous year, and in the north-eastern section winter water levels reached their lowest recorded elevation in over 13 years.

Load Conditions

Power Demands Exceed Resources

Combined demands for power on the Commission's systems reached levels never before attained. They exceeded the Commission's available resources especially on the Southern Ontario system where it was necessary to curtail deliveries of power to industrial consumers.

The total peak output on the combined systems was 2,056,000 kilowatts (2,755,000 hp), exceeding the record output of the previous year by 97,500 kilowatts (130,000 hp), or 5 per cent. The total energy output from all generated and purchased sources amounted to 13,654,857,750 kilowatt-hours. This was 983,000,000 kilowatt-hours or 7.8 per cent greater than the production during the previous fiscal year.

Primary Demand

The maximum primary peak demand (actual load plus cuts) for the fiscal year occurred in October and was estimated to be 2,169,700 kilowatts (2,908,000 hp), as compared with 1,962,000 kilowatts (2,630,000 hp) in the previous October. This was an increase of 207,700 kilowatts (278,500 hp) or 10.6 per cent. The total energy demand for primary power, which includes load cuts made during the year, amounted to 12,852,000,000 kilowatthours, as compared with 10,958,000,000 kilowatthours for the fiscal year ended October 31, 1946, an increase of 17.3 per cent.

Cuts in Power Deliveries 1946-1947

In the winter of 1946-47 the curtailments of deliveries were of the order of 225,000 kilowatts (300,000 hp) at the time of peaks and only for a short time during the summer vacation period in the months of July and August was it possible to meet all primary demands over the daily peak load periods. However, at the time of the monthly peak demands in July and August the cuts were 62,000 kilowatts (83,000 hp) and 110,000 kilowatts (147,000 hp) respectively.

Increase in Demand Exceeds Capacity Added

The second unit at DeCew Falls came into operation in time to be of service when the customary winter increase in load took place but the growth in demand had already exceeded the capacity added with the result that the load cuts in October, November and December of 1947 exceeded the cuts for the same months in 1946.

Conservation Essential

At the approach of the fall and winter months of 1947, with the continued rise in power demands an appeal was made to domestic consumers not to waste electricity, in order to make power available for the production of food and basic commodities and to help maintain employment at its present desirable level throughout the Province. Notwithstanding this appeal the unavoidable curtailment in the delivery of power and energy to large industrial users became more serious and on November 10, 1947, in order to relieve the situation a modified system of power rationing was introduced. This together with the continuation of a vigorous campaign for domestic conservation of power enabled the Commission to deliver to industries an estimated 60,000 to 90,000 kilowatts (80,000 to 120,000 hp) more than otherwise would have been possible.

Supply and Demand of Power by Systems

TOTAL POWER ACTUALLY SUPPLIED

(Primary and Secondary Power)

20-Minute Peak Horsepower—System Coincident Peaks

System	1946	1947
	October	
Southern Ontario System Thunder Bay System Northern Ontario Properties	2,156,599 151,072 287,464	2,257,733 150,918 276,521
Total	2,595,135	2,685,172
	December	
Southern Ontario System. Thunder Bay System Northern Ontario Properties	2,211,579 152,413 294,272	2,312,638 154,055 260,224
Total	2,658,264	2,726,917

TOTAL POWER DEMAND

(ACTUAL PRIMARY LOAD PLUS ESTIMATED INDUSTRIAL LOAD CUTS—HORSEPOWER)

System -	1946	1947
	October	
Southern Ontario System Thunder Bay System Northern Ontario Properties	2,262,000 141,400 226,600	2,505,100 150,900 252,500
Total	2,630,000	2,908,500
	December	
Southern Ontario System Thunder Bay System Northern Ontario Properties	2,458,400 139,000 242,600	2,581,900 153,700 259,300
Total	2,840,000	2,994,900

Note: These comparisons do not fully reflect growth in demand as no allowance has been included for load reduction due to restrictions and voluntary conservation in 1947.

Maintenance and Rehabilitation

The post-war program of maintenance and rehabilitation of plants has been handicapped by the continued high demand for power which has made it difficult to release any part of the overburdened plants for repairs. It has also been slowed to some extent by a continued short supply of materials. Only the most urgent part of the program was undertaken in 1947.

Modifications and rehabilitation of many transmission facilities and transformer stations were made during 1947. These extensive changes together with increased transformer capacities provided more stable operating conditions for many system and municipal stations.

Rural Electrical Service

The record for the fiscal year ended October 31, 1947, is recorded briefly in the following paragraphs:

At the end of the year there were nearly 196,500 rural consumers of all classes supplied through rural operating areas served by 24,400 miles of rural line.

Despite the shortages of materials and men which pervaded all phases of the Commission's construction activities, 21,000 new consumers were served and 1,000 miles of primary line were built. Of the new consumers, 17,300 received service from existing lines.

The aggregate of the monthly peak loads recorded for all rural operating areas reached a new maximum in October, 1947, of 146,625 kilowatts (195,500 hp), an increase of 20 per cent.

In previous years the maximum aggregate power sold in rural areas occurred during the summer months of July or August. In the latter part of the summer of 1947, however, so rapidly were customers being added to the rural lines that the usual drop in load, following the exodus from summer resorts, was more than counter-balanced by the increased demand of permanent residents in rural areas. The peak of 146,625 kilowatts established in October compares with 142,120 kilowatts in August which itself was 19 per cent higher than the previous summer's peak.

At the end of October, 1947, there were on hand and in immediate prespect some 35,900 rural applicants requiring service in 1948. To serve part of this group, it would be necessary to construct 5,300 miles of new primary line. The remainder would be connected to existing lines. The objective of the Commission is to serve some 30,000 new consumers during 1948 and to construct 3,400 miles of new rural lines. The rural program also includes a large number of improvements to increase the capacity of existing lines, an essential prerequisite to further extensions and the taking on of additional customer loads.

The greatly increased number of consumers on existing lines, while it presents some difficult problems of line capacity, will greatly assist to main-

tain, during the present period of higher costs, the low uniform rates established.

The Commission considers it very important to the economy of the Province to extend electrical service to as many farms as is possible. One of the principal reasons for this extensive rural construction program is to encourage the farmer to improve his production in the face of extremely adverse labour conditions. A further reason which has been basic with the whole rural program is to raise the farmer's standard of living and lighten his labour.

1947 Financial Operating Results

The Commission experienced another successful financial year in 1947 which was the result of a ready market at all times for its available power output. Consequently, despite the general trend of economic conditions which necessitated price increases for goods and services of so many kinds, there was no need in 1947 to consider an increase in electric rates.

However, the circumstances which have enabled the Commission to report successful financial operating results during recent years under prevailing rates are not expected to continue indefinitely. Operating records show that the Commission is at present securing its maximum revenue to date per unit of plant; thus a temporary situation has developed within the last few years whereby increasing revenues have not been accompanied by corresponding increases in operating expense. This condition will change as new units of plant are brought into service and essential reserve capacities have once more become established.

Personnel Activities

In the reorganization, a greatly expanded personnel department has been developed with the direct intention of placing an increasing emphasis on personnel relations. One of the major responsibilities of the Personnel department throughout 1947 was securing of men for the large construction projects. During most of the year, labour both skilled and unskilled was in high demand which made it difficult both to obtain and to hold a sufficient number of workers at the major projects. A number of camp personnel superintendents were recently appointed to aid in the handling of these conditions.

The number of employees of the Commission increased from 8,980 to 13,090 in the past year. In the same period the staff of the Construction department, which is included in the above total, increased from 2,916 to 6,314, this accounted for 83 per cent of the total increase in staff.

The staff of the Commission is now represented in management-employee relations by two separate groups and relations have been maintained on a cordial and satisfactory basis. The Federation of Employee Professional Engineers and Assistants (Unit No. 1) embraces all employees engaged in non-supervisory professional engineering work, and the Employees Association of The Hydro-Electric Power Commission of Ontario represents all other non-supervisory employees including technicians, clerks, trades workers, cperators, regular employees of the Construction department. etc.

Expanding activities and staff increases have made necessary an enlargement of personnel in the Medical section. The staff now includes a medical director, a part-time doctor at head office, and a full-time doctor at the Des Joachims development. A modern hospital was erected at Des Joachims and a second one is under construction at Pine Portage.

The Linemen's School operated at full capacity last year and the Training section generally reports substantial achievement. Sixty rural foremen were given a two weeks' course at the training centre in Toronto which stressed supervisory duties, job relations, planning and laying out work and instructions and training in job skills. The three-year program for operators in training was maintained through the year. Safety training was carried on by visits to actual jobs in connection with accident prevention work.

Research and Testing

The research and Testing laboratories of the Commission are continuously preoccupied with many of the problems inherent in the development and administration of a large power supply system. In the construction field these problems relate chiefly to the maintenance of quality in the various structures and equipment used. In the operating field they are concerned with undesirable conditions, hazards, limitations and obstructions. Laboratory investigations by their control of quality and the elimination of undesirable conditions aid greatly in the improvement and expansion of Hydro service.

In concrete research the Commission has been a leading investigator in Canada. A well-established procedure is now followed for each major hydro-electric development. Before construction starts field surveys locate adequate supplies of sand and stone whose satisfactory quality must be established by extensive acceptance tests. Next, proportioning tests are made to ensure accurate design of field mixes. During construction, supervision and testing ensure adequate field control of quality. Finally throughout the service life of a structure its condition is carefully studied and the information applied to ensure even more satisfactory results in future structures. Other research on concrete is directed to durability, expansion, volume changes, and the comparative value of several classes of plain and deformed reinforcing bars.

Other important research has related to the use of plywood form panels in connection with Bailey bridge structures for concrete forms in dam construction, methods of grouting the rock foundations beneath large dams, the engineering properties of soils, the chemical grouting of sands, and the study of seepage problems.

In connection with both maintenance and operating problems electrical devices of great ingenuity have been developed by the Commission's scientists and engineers. These result in better protection of equipment and in improved continuity of service.

To the engineering activities of the Commission, to which it is closely linked, research has made an important contribution in progress toward the goal of greatly expanded supplies of power and distribution facilities.

Capital Investment and Reserves

Capital Investment

The total capital investment of The Hydro-Electric Power Commission of Ontario in power undertakings is \$442,923,109.05 exclusive of government grants in respect of construction of rural power districts' lines (\$27,192,870.14 and the investment of the municipalities in distributing systems and other assets is \$160,303,443.24, making in power undertakings a total investment of \$603,226,552.29.

The following statement shows the capital invested in the respective systems, properties and municipal undertakings, etc:

Southern Ontario system. Thunder Bay system. Office and service buildings. Construction plant and inventories.	28,976,120.54 5,244,155.90
Total capital investments in co-operative systems	\$383.114,937.98
Northern Ontario Properties—Operated by H-E.P.C. on behalf of the Province of Ontario Northern Ontario Properties—Construction plant and inventories	59,162,285.45 645,885.62
Total Commission capital investments	\$442,923,109.05
Municipalities' distribution systems. Other assets of municipal Hydro utilities.	117,369,150.63 42,934,292.61
Total	\$603,226,552.29

Reserves of Commission and Municipal Electrical Utilities

The total reserves of the Commission and the municipal electrical utilities for depreciation, contingencies, stabilization of rates, sinking fund and insurance purposes, amount to \$414,830,047.20, made up as follows:

Southern Ontario system. Thunder Bay system. Office and service buildings and equipment.	16,739,567.03
Total reserves in respect of co-operative systems' properties	
Northern Ontario Properties Fire insurance reserve. Miscellaneous reserves. Employers' liability insurance, and staff pension reserves.	212,740.57 672,755.12
Total reserves of the Commission Total reserves and surplus of municipal electric utilities	\$306,938,717.30
Total Commission and municipal reserves	\$453,010,127.32

Revenue of Commission

The revenue of the Commission at interim rates from the municipal utilities operating under cost contracts, from customers in rural power districts and from other customers with whom—on behalf of the municipalities—the Commission has special contracts, all within the Southern Ontario and Thunder Bay systems, aggregated \$57,154,072.20. The revenue of the Commission from customers served by the Northern Ontario Properties, which are held and operated in trust for the Province, was \$6,786,115.01, making a total (excluding \$203,006.47 of Northern Ontario Properties revenue transferred to Thunder Bay system in respect of power supplied) of \$63,737,180.74.

Summarized operating results of these co-operative systems and rural power districts and of the Northern Ontario Properties, follow:

Summarized Operating Results

SOUTHERN ONTARIO SYSTEM—THUNDER BAY SYSTEM

INCLUDING RURAL POWER DISTRICTS

Revenue: amount received from or billed against municipalities

and other customers		
Total revenue, systems and rural		\$57,154,072.20
Operation, maintenance, administration, interest and other current expenses.	\$37,093,410.49	
Provision for reserves— Renewals \$2,987,938.50 Contingencies and obsolescence. 10,354,052.43 Stabilization of rates 54,233.97 Sinking fund. 3,340,404.10	16,736,629.00	
	10,730,029.00	\$53,830,039.49
Balance	- - · · · · · · · · · · · · · · · · · ·	\$3,324,032.71
NORTHERN ONTARIO PROPERT: Held and operated by The Hydro-Electric Power Com In trust for the Province of Ontario	nmission of Onta	ario
Revenue: amount received from or billed against municipalities and other customers	• • • • • • • • • • • • • • • • • • • •	\$6,786,115.01
Operation, maintenance, administration, interest and other current expenses.	\$4,781,757.11	
Provision for reserves— Renewals		
	2,211,093.78	6,992,850.89
Logo		600C 70E 00

Loss....

Comparative Financial Statements 1946-1947

Co-operative Systems of the Commission

SOUTHERN ONTARIO SYSTEM

Embracing Niagara, Georgian Bay and Eastern Ontario divisions

	1946	1947
OPERATING EXPENSES AND FIXED CHARGES	S c.	\$ c.
Power purchased. Operation, maintenance and administration. Interest. Provision for renewals. Provision for contingencies and obsolescence. Sinking fund.	11,859,115.38 2,670,559.08 8,575,543.00	12,842,841.99 10,378,090.90 12,376,441.09 2,810,247.09 9,697,982.20 3,127,754.11
TOTAL COST OF POWER.	46,928,970.85	51,233,357.38
REVENUE from municipalities at interim rates, from rural consumers and from private customers under contract rates	49,808,740.93	54,486,567.16
Net balance credited to municipalities under cost contracts	2,879,770.08	3,253,209.78

THUNDER BAY SYSTEM

	1946		1946		1947	
OPERATING EXPENSES AND FIXED CHARGES	\$	c.	\$	c.		
Power purchased Operation, maintenance and administration. Interest Provision for renewals. Provision for contingencies and obsolescence. Provision for stabilization of rates Sinking fund.	672,703. 907,973. 176,754. 557,433. (90,335. 212,529.	29 39 79 81)	18,895 600,855 876,285 177,693 656,070 54,233 212,649	5.16 5.45 1.41 0.23 3.97		
TOTAL COST OF POWER	2,437,058.	68	2,596,682	2.11		
REVENUE from municipalities at interim rates, from rural consumers and from private customers under contract rates	2,492,136.	04	2,667,508	5.04		
Net balance credited to municipalities under cost of contracts	55,077.	36	70,823	2.93		

Municipal Electric Utilities

The following is a summary of the year's operation of the local electric utilities conducted by municipalities receiving power under cost contracts with the Commission:

Total revenue collected by the municipal electric utilities		\$50,462,229.67
Cost of power.	\$31,149,181.44	
Operation, maintenance and administration	9,391,708.15	
Interest	419,498.78	
Sinking fund and principal payments on debentures	971,393.14	
Depreciation and other reserves	4,423,152.96	
Total		46,354,934.47
	-	
Surplus		84,107,295.20

With regard to the local Hydro utilities operating under cost contracts, the following statements summarize for each of the co-operative systems administered by the Commission, the financial status and the year's operations as detailed in Section X of the Report.

SOUTHERN ONTARIO SYSTEM

The total plant assets of the Southern Ontario system utilities amount to \$112,331,442.86. The total assets, including an equity in the H-E.P.C. of \$81,857,204.76 aggregate \$235,318,133.36. The reserves and surplus accumulated in connection with the local utilities, exclusive of the equity in the H-E.P.C. amount to \$139,850,073.97, an increase of \$7,883,298.93 during the year 1947. The percentage of net debt to total assets is 5.3, a reduction of 0.2 per cent.

The total revenue of the municipal electric utilities served by this system was \$49,202,987.70, an increase of \$4,148,276.24 as compared with the previous year. After meeting all expenses in respect of operation, including interest, setting up depreciation and other reserves amounting to \$4,358,584.01 and providing \$966,138.30 for the retirement of instalment and sinking fund debentures, the total net surplus for the year for the municipal electric, utilities served by the Southern Ontario system amounted to \$3,979,539.92 as compared with \$3,291,690.65 the previous year.

THUNDER BAY SYSTEM

The total plant assets of the Thunder Bay system utilities amount to \$3,084,543.31. The total assets, including an equity in the H-E.P.C. of \$4,716,892.05, aggregate \$9,318,381.46. The reserves and surplus accumulated in connection with the local utilities, exclusive of the equity in H-E.P.C. amount to \$4,211,774.34 an increase of \$208,517.83 during the year 1947. The percentage of net debt to total assets is 5.4, a reduction of 0.4 per cent.

The total revenue of the municipal electric utilities served by this system was \$1,259,241.97, an increase of \$80,553.09 as compared with the previous year. After meeting all expenses in respect of operation, including interest, setting up depreciation and other reserves amounting to \$64,568.95 and providing \$5,254.84 for the retirement of instalment and sinking fund debentures, the total net surplus for the year for the municipal electric utilities served by the Thunder Bay system amounted to \$127,755.28 as compared with a net surplus of \$134,189.85 for the previous year.

* *

In carrying out the large expansion program outlined above, the effective operation of the Hydro undertaking during the past year under adverse conditions was made possible only by the loyal and efficient service rendered by every member of the Hydro staff.

Respectfully submitted,

R. L. HEARN,

General Manager and Chief Engineer



DES JOACHIMS

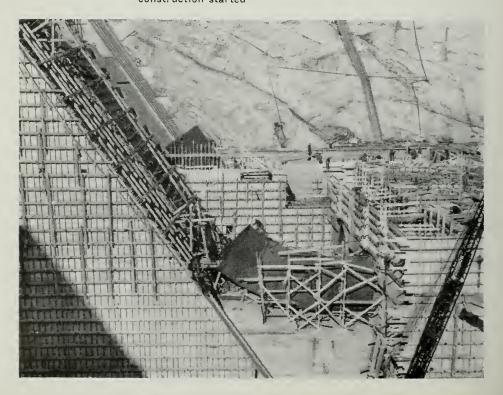
Construction activity in 1947, at 480,000-horsepower project on Ottawa river. Above: General layout of camp No. 1, Ontario side. Below: Conveyor for transmitting concrete aggregate





STEWARTVILLE

Progress in 1947, at 80,000-horsepower development on Madawaska river. Above: Dam construction as photographed in November 1947. Below: Powerhouse substructure with penstock construction started





TUNNEL Construction camp late in 1947 at this 56,500-horsepower project on the Mississagi river. Also see frontispiece



CHENAUX The Old Mill at Portage du Fort on the Ottawa river near the Quebec end of the dam where 160,000 horsepower will be



AGUASABON A 53,000-horsepower development on Aguasabon river on north shore of lake Superior. Above: Drill used in sinking shaft at water intake. Below: Concrete plant and conveyor at dam site





PINE PORTAGE Above: The rapids at Pine Portage on the Nipigon river where an 80,000-horsepower development was started in 1947. Below: Preliminary work near the dam site





MEASURING THE RIVER FLOW Boat and crew equipped for stream flow measurements



CLEARING THE GROUND

Before the dam holds back the river, the areas to be flooded are cleared. The power saw illustrated is a great help in clearing operations





CONSTRUCTION CAMP FACILITIES
The general welfare of the men employed at construction projects is
promoted by outdoor and indoor recreational facilities and by opportunities to study







MORE FARMERS RECEIVE HYDRO SERVICE

Left: Installing the three-wire distribution circuit. Right: Explaining the service switch and meter to the farmer



EAR FALLS

A fourth unit of 7,500 horsepower was under construction at Ear Falls generating station on the English river in 1947. View shows the powerhouse and extension

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FORTIETH ANNUAL REPORT

OF

The Hydro-Electric Power Commission of Ontario

FOREWORD

and

Guide to the Report

THE Hydro-Electric Power Commission of Ontario administers a cooperative municipal-ownership enterprise, supplying power throughout the Province of Ontario. The Commission was created in 1906 by special act of the Legislature and followed investigations by advisory commissions appointed as a result of public agitation to conserve the water powers of Ontario as a valuable asset of the people and to provide a more satisfactory supply of low-cost power in southern Ontario. In 1907 the Power Commission Act (7-Edward VII Ch. 19) was passed amplifying and extending the Act of 1906, and this Act—modified by numerous amending acts which now form part of the Revised Statutes of Ontario, 1937, Chap. 62, and subsequent amending Acts—constitutes the authority under which the Commission operates.

The Hydro-Electric Power Commission of Ontario consists of a Chairman and two Commissioners, all of whom are appointed by the Lieutenant-Governor-in-Council to hold office during pleasure. One of the Commissioners must be a member of the Executive Council and two may be members.

In 1909, work was commenced on a comprehensive transmission system and by the end of 1910 power was being supplied to several municipalities.

The Commission has now been supplying electrical energy for more than thirty-seven years and the Report contains diagrams depicting the growth of the enterprise. During this period the costs of electricity to the consumer have been substantially reduced and the finances of the enterprise have been established on a secure foundation.

At the end of 1947 the Commission was serving 944 municipalities in Ontario. This number included 26 cities, 124 towns and mining townsites, 316 villages and police villages and 478 townships and improvement districts. With the exception of 13 suburban sections of townships known as "voted areas," the townships and 132 of the smaller villages are now served as an amalgamated rural division of Hydro service with a uniform rate structure. Thus, no matter where rural service is given in Ontario by the Hydro, the rural consumer for the same class of service with the same consumption of electricity pays the same amount on his quarterly bill.

Financial Features of Co-operative Systems

The basic principle governing the financial operations of the undertaking is, that electrical service be given by the Commission to the municipalities

and by the municipalities to the ultimate consumers at cost. Cost includes not only all operating and maintenance charges, interest on capital investment and reserves for renewals or depreciation, for obsolescence and contingencies, and for stabilization of rates, but also a reserve for sinking fund or capital payments on debentures.

The undertaking from its inception has been entirely self-supporting and no contributions have been made from general taxes except in connection with service in rural power districts. In this case the Province, in pursuance of its long established policy of assisting agriculture and with the approval of the urban citizens, assists extension of rural electrical service by a grant-in-aid of the capital cost and in other ways as specified and detailed in the Report.

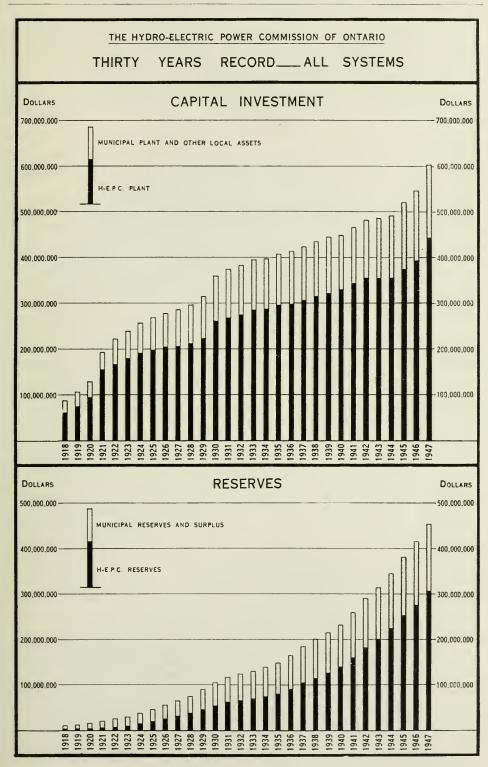
As the principle of "service at cost" is radically different from that obtaining in private organizations, where profit is the governing feature, it naturally results in different and in some ways unique administrative features.

The undertaking as a whole involves two distinct phases of operations as follows:

The First phase of operations is the provision of the electrical power either by generation or purchase—and its transformation, transmission and delivery in wholesale quantities to individual municipal utilities, to large industrial consumers, and to rural power districts. This phase of the operations is performed by The Hydro-Electric Power Commission of Ontario as trustee for the municipalities acting collectively in groups or "systems", and the financial statements relating to these collective activities of the municipalities are presented in Section IX of the Report. Each system of municipalities, as provided in The Power Commission Act, forms an independent financial unit and the accounts are therefore segregated and separately presented for each system. In order, however, that there may be a comprehensive presentation of the co-operative activities of the undertaking as a whole, there are presented, in addition, for the two main systems and miscellaneous co-operative activities, a balance sheet of assets and liabilities, a statement of operations, a tabulation of fixed assets, and summary combined statements respecting the various reserves.

The Second phase of operations is the retail distribution of electrical energy to consumers within the limits of the areas served by the various municipal utilities and throughout the rural areas of the Province. In the case of the consolidated rural power districts The Hydro-Electric Power Commission not only provides the power at wholesale, but also—on behalf of the respective individual townships—attends to all physical and financial operations connected with the distribution of energy at retail to the consumers within the rural operating areas. Summary financial statements relating to rural electrical service are presented in Section IX of the Report, and a general report on this service is given in Section IV.

In the case of cities, towns, many villages and certain thickly populated areas of townships, retail distribution of electrical energy provided by the Commission is in general conducted by individual local municipal utilty commissions under the general supervision of The Hydro-Eiectric Power Commission of Ontario. The balance sheets, operating reports and statistical data relating to the individual urban electrical utilities are presented in Section X of the Report.



For the Northern Ontario Properties held and operated by the Commission in trust for the Province there are also presented in Section IX financial statements including a balance sheet, an operating account, and statements respecting reserves and capital expenditures.

Further details respecting administration and explanations of the financial tables presented in the Report are given in the introductions to sections IX and X on pages 125 and 203.

Co-operative Systems Operating

From time to time in accordance with provisions of *The Power Commission* Act various groups of municipalities have been co-ordinated to form systems for the purpose of obtaining power supplies from convenient sources. In some cases these small systems grew until their transmission lines interlocked with those of adjacent systems and it proved beneficial to consolidate the transmission networks and the financial and administrative features. Early in 1944 the three systems serving southern Ontario, the Niagara, Georgian Bay and Eastern Ontario systems, were amalgamated to form the Southern Ontario System and financially the amalgamation was made retroactive to apply to the fiscal year 1942-43. The three former systems are now known as divisions of the Southern Ontario system.

The Niagara division embraces municipalities in all the territory between Niagara Falls, Hamilton and Toronto on the east and Windsor, Sarnia and Goderich on the west. It is served with 25-cycle power supplied from plants on the Niagara river, supplemented with power transmitted from generating plants on the Ottawa river and with power purchased from Quebec companies.

The Georgian Bay division comprises municipalities in that part of the Province which surrounds the southern end of Georgian Bay and lies to the north of the territory served by the Niagara division. It includes the districts surrounding lake Simcoe and extends as far north as Huntsville in the Lake of Bays district and south to Port Perry. Its power supplies, 60-cycle, are derived from local water power developments and by interconnection with the Niagara and Eastern Ontario divisions.

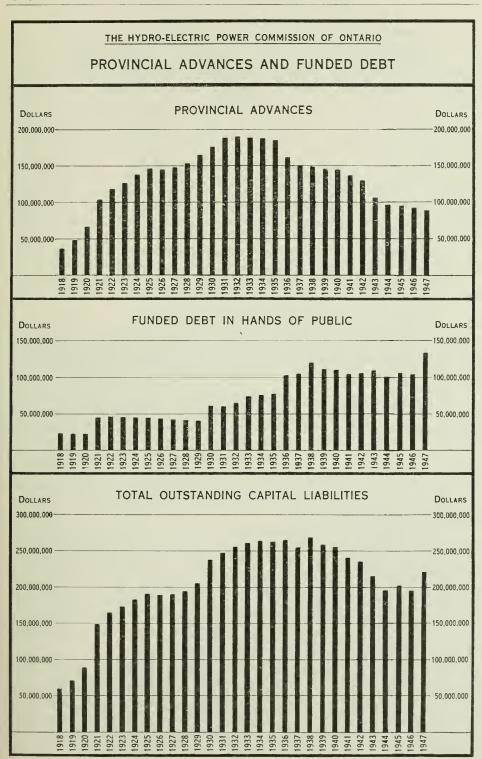
The Eastern Ontario division serves all of Ontario east of the areas comprising the Georgian Bay and the Niagara divisions. It includes the districts of Central Ontario, St. Lawrence, Rideau, Ottawa and Madawaska; formerly separate systems. Its power supplies, 60-cycle, are from local developments

supplemented by purchases from other sources.

The Thunder Bay System comprises the cities of Port Arthur and Fort William, adjacent rural sections, the village of Nipigon and the mining district of Longlac. Developments on the Nipigon river supply 60-cycle power.

Northern Ontario Properties

In addition to its operations on behalf of the partner municipalities, the Commission, under an agreement with the Province, holds and operates the Northern Ontario Properties in trust for the Province. For the purposes of financial administration these properties are treated as one unit. The principal areas in the vast territory of northern Ontario at present receiving service are the Abitibi District comprising the territory served by 25-cycle power from the Abitibi Canyon development, together with a small area in the southern portion of the district of Sudbury in which mining properties are served with 60-cycle power; the Timiskaming District comprising the



drainage basins of the Matabitchuan river, the Montreal river and a portion of the Mattagami river with eight generating plants, four 25-cycle and four 60-cycle; the Sudbury District comprising the city of Sudbury and the adjoining mining area known as Sudbury Basin; the Nipissing District centering around the city of North Bay on the shore of lake Nipissing; the Patricia District comprising the territory within transmission distance from the Ear Falls development at the outlet of lac Seul on the English river including the Red Lake mining area, and the territory immediately north of lake St. Joseph in the territorial district of Patricia served with power from a development at Rat Rapids on the Albany river; and the Rainy River district which derives its power from the Thunder Bay system. Included in the Northern Ontario Properties are rural districts on Manitoulin island, and others adjacent to the communities served in the various districts of northern Ontario. Power supplies are 60-cycle except from Abitibi Canyon development and four plants in Timiskaming district.

The geographic boundaries of the various systems and districts are shown on the maps of transmission lines and stations at the back of the Report.

The power supplies for the systems and Northern Ontario districts are listed in the first table of Section II of the Report on pages 16 and 17.

The Annual Report

The table of contents, pages xxxi and xxxii, lists the matters dealt with in the Report. At the end of the Report there is a comprehensive index. To those not conversant with the Commission's Reports, the following notes will be useful.

In Section II, pages 15 to 38, dealing with the operations of the systems, are a number of diagrams showing graphically the monthly loads on the several systems and districts. Tables are also presented showing the amounts of power taken by the various municipalities during the past two years.

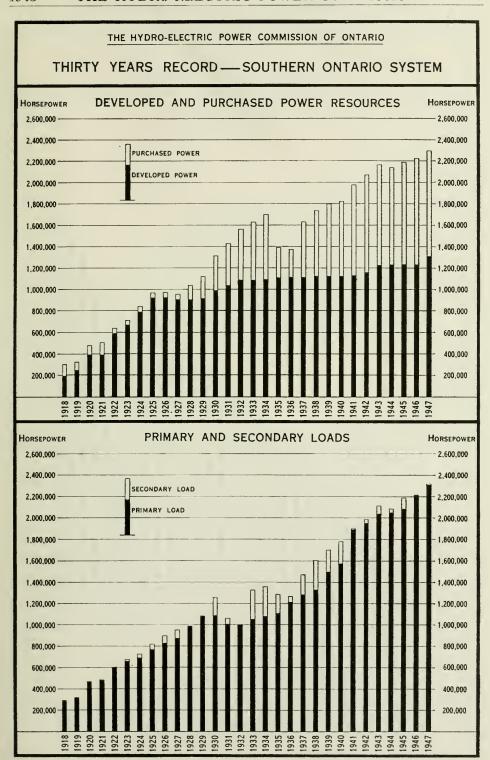
The rural distribution work of the Commission has proved of widespread interest and special reference to this is made in Section IV on pages 57 to 78.

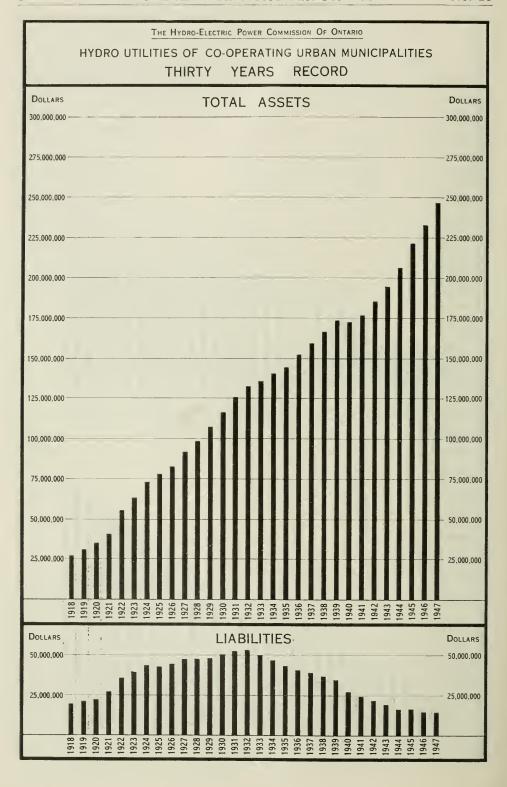
In Section VI will be found information respecting progress of work on new power developments and on transmission system extensions, together with photographic illustrations.

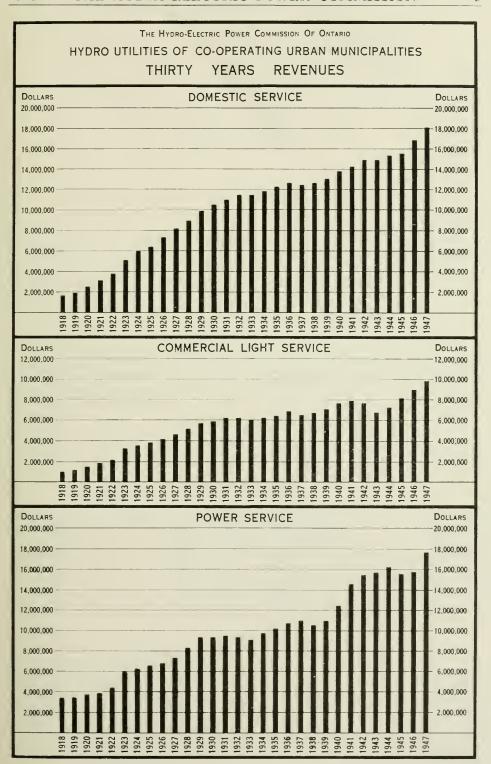
About one-half of the Report is devoted to financial and other statistical data which are presented in two sections IX and X already referred to above.

Frequent enquiries for the rates for service to consumers are received by the Commission. For the urban municipalities served by the Commission these are given in Statement "E" starting on page 338; for the rural power districts they are given in Section IV on page 63. Certain statistical data resulting from the application of the rates in urban utilities are given in Statement "D". This statement is prefaced by a special introduction starting on page 320.

In its Annual Reports the Commission aims to present a comprehensive statement respecting the activities of the whole undertaking under its administration. Explanatory statements are suitably placed throughout the Report. The Commission receives many letters asking for general information respecting its activities, as well as requests for specific information concerning certain phases of its operations. In most cases the enquiries can satisfactorily be answered by simply directing attention to information presented in the Annual Report.







SECTION I

LEGAL

AT THE 1947 Session of the Legislative Assembly of the Province of Ontario two Acts respecting The Hydro-Electric Power Commission of Ontario were passed. These Acts are reproduced in full in Appendix I of this Report. The short titles of the Acts are as follows:

The Power Commission Amendment Act, 1947, Chapter 78.

The Power Commission Amendment Act, 1947 (No. 2), Chapter 79.

The agreements between The Hydro-Electric Power Commission of Ontario and municipalities, persons and corporations mentioned in the list hereunder given were approved by Orders-in-Council.

Century Coal Company Limited Sept. 9, 1947
Consolidated Sand and Gravel, Limited June 16, 1947
Exolon Company Incorporated Mar. 31, 1947

Grand River Railway Company Hard Rock Gold Mines, Limited His Majesty the King, represented by the Minist Honourary Advisory Council for Scientific and It Howard Smith Paper Mills, Limited International Nickel Company of Canada Limite Kennedy, William & Sons, Limited. Lake Erie and Northern Railway Company. Longlac Pulp & Paper Company Limited (15,00 Longlac Pulp & Paper Company Limited (2,500 Maple Leaf Milling Company, Limited. Millwood Fluorspar Mines Limited. Norton Company. Orillia Water, Light and Power Commission Peebles Products Limited. Roe, A.V., Canada Limited. St. Mary's Cement Company, Limited. Steel Company of Canada, Limited. Talmora Longlac Gold Mines, Limited Trailmobile Canada Limited War Assets Corporation.	Jan. 20, 1947 ter of National Defence Jan. 21, 1947 ndustrial Research June 16, 1947 July 2, 1947 ed. Dec. 22, 1947 Nov. 19, 1947 Aug. 1, 1946 O H.P.) May 21, 1946 H.P.) May 21, 1946 Nov. 26, 1947 Dec. 10, 1947 Oct. 22, 1947 Feb. 6, 1947 Dec. 31, 1946 Dec. 1, 1946 Nov. 19, 1947 June 1, 1946 April 1, 1947 July 22, 1947 April 1, 1947
	WN
Bonfield	Feb. 3, 1947
Town	NSHIPS
Armstrong Sept. 22, 1947 Brethour Dec. 16, 1947 Bucke Aug. 15, 1947 Burpee Sept. 18, 1947 Caldwell Dec. 4, 1947 Carnarvon (Street Lighting, Providence Bay) Mar. 17, 1947 Carnarvon (Street Lighting, Mindemoya) Mar. 17, 1947 Casey Nov. 3, 1947 Dack Dec. 15, 1947 Dowling Sept. 24, 1947	Drury, Denison & Graham Aug. 29, 1947 Dymond Aug. 14, 1947 Evanturel Nov. 1, 1947 Field Nov. 20, 1947 Harley Nov. 1, 1947 Harris Aug. 11, 1947 Hilliard Dec. 9, 1947 Hudson Dec. 15, 1947 Kerns Nov. 10, 1947 Playfair Jan. 11, 1947 Waters Sept. 9, 1947
	RATIONS
Coopérative d'Electricite du Temiscamingue and Crowshore Patricia Gold Mines Limited. Dryden Paper Company Limited. Falconbridge Nickel Mines Limited. Harrison-Hibbert Mines Limited. Hollinger Consolidated Gold Mines Limited. Kelwren Gold Mines Limited. Kerr-Addison Gold Mines Limited. Omega Gold Mines Limited.	May 14, 1947 d Rural Electrification Bureau Dec. 16, 1947 Dec. 23, 1947 July 2, 1947 July 22, 1947 Nov. 26, 1947 May 26, 1947 Mar. 20, 1947 June 16, 1947 Dec. 1, 1946 Nov. 26, 1947 y Company. Nov. 26, 1947

RIGHT-OF-WAY AND PROPERTY

THE large post-war program of new hydro-electric power developments with their associated transmission lines and transformer stations has created a record demand for the purchase of property for stations and dam sites, for flooding purposes and for transmission line rights-of-way, etc. As in previous years where ownership of the property was not considered necessary easements have been taken.

Before surveys are conducted on privately-owned land representatives of the Commission now discuss with each property owner the purpose of the survey and obtain permission to do the necessary work. This practice results in better co-operation between the property owners and the Commission and provides a good background for the work involved in purchasing the required land or rights.

SOUTHERN ONTARIO SYSTEM

The volume of new construction made it necessary to postpone the work of securing easements to replace the term easement-rights now expired. This renewal work will be resumed when conditions permit. Good progress was made in obtaining lands required for the new power developments, particularly on the Ottawa and Madawaska rivers.

Most of the land required for the Des Joachims development from the dam site to the village of Mattawa has been obtained. Properties on the Quebec side of the Ottawa river were purchased by agents acting for the Quebec provincial government, accompanied by a representative of the Commission. More than 90 per cent of the land required on the Quebec side for the Des Joachims development has been secured.

At the Chenaux power site 700 acres of land in the vicinity of the dam site were obtained for construction camps, storage of material, etc. At the Stewartville development, with the exception of a relatively few parcels, the lands required for flooding purposes have now been obtained.

Various properties suitable for regional offices and for rural operating area offices, etc., were given consideration. Existing buildings were maintained and where necessary improved.

Niagara Division

Properties were purchased and easement rights acquired for station sites and for transmission lines in the Niagara division, the following are the more important.

In the western portion of the Niagara division a site was purchased for the new Westminster transformer and frequency-changer station at London.

In connection with the 110,000-volt twin-pole transmission line from Sarnia transformer station to Westminster transformer station certain preliminary work was completed and further studies were made.

Easement rights were secured for a 110,000-volt transmission line from the new Westminster transformer station near London to Allanburg transformer station near Niagara Falls.

Niagara Falls

Easements were secured for a 110,000-volt twin-pole transmission line from Kingsville distribution station to Belle river distribution station in Essex county.

In the eastern portion of the Province some easement rights were secured and properties purchased for portions of the 220,000-volt steel tower trans-

mission line from Des Joachims generating station on the Ottawa river to Richview junction near Kipling transformer station at Toronto.

Preliminary work was done in connection with the proposed transmission line from Masson at the mouth of the Lievre river in Quebec to Burlington.

For the DeCew Falls development and for the Islington transformer station and service centre additional properties were purchased.

Georgian Bay Division

A site was purchased for a new transformer station at Owen Sound and easement rights were obtained for the 110,000-volt twin-pole transmission line from Owen Sound to Barrie transformer station to connect with the line already in operation from Barrie to the frequency-changer station in Scarborough.

Easement rights were secured for many miles of newly constructed rural and distribution feeder lines throughout the Georgian Bay division.

Eastern Ontario Division

Some progress was made in securing easement rights for the 110,000-volt transmission line from Barrett Chute generating station to Oshawa transformer station. Easement rights were also secured for the wood-pole transmission line from Heely Falls generating station to American Nepheline Company station.

In this division easement rights were secured for newly constructed rural service lines.

THUNDER BAY SYSTEM

Rights were obtained where required for lines in this system.

NORTHERN ONTARIO PROPERTIES

Properties were purchased and rights acquired for the Tunnel development on the Mississagi river. Arrangements were made to clear a right-of-way and purchase easements for the 110,000-volt transmission line from Upper Notch generating station on the Montreal river to Crystal Falls generating station.

Easement rights were secured for the wood-pole transmission line from Azilda transformer station to Nickel Offsets Limited. Sites were purchased for transformer stations at Sudbury and Azilda.

A study was made of flood conditions on the Mattagami river at Sandy Falls generating station and additional flooding rights were negotiated for storage areas at Frederick House and Night Hawk lakes.

GENERAL

The volume of survey work now being carried on has required a substantial increase in the staff. A total of 5,246 acres of land was purchased and 163 acres of surplus land was sold.

SECTION II

OPERATION OF THE SYSTEMS

Municipal Loads Increase—Improved Power Transfer Facilities— Output Again Exceeds All Previous Records—Deficient Precipitation in Fall of 1947 Foreshadowed Winter Shortage of Power

DURING the year a second 25-cycle unit at the DeCew Falls generating station was brought into service. In addition, some increase in capacity has been realized at a few plants due to improved operating conditions. Offsetting this new capacity, one small generating station in the Georgian Bay division of the Southern Ontario system was removed from service as being no longer economical to operate, and in the Timiskaming district of the Northern Ontario Properties the Upper Notch generating station was taken out of service on February 28, 1947, to be eventually converted from 25- to 60-cycle operation. Thus a net total of approximately 52,000 kilowatts (70,000 horsepower) was added to the Commission's generating capacity during the year.

Power available under long term purchase agreements was fully utilized and, in addition, the Commission was able to secure substantial quantities of power purchased on an "at-will" basis, principally from the Quebec power companies. These additional purchases were of great assistance in meeting the power demands of the Southern Ontario system.

Except on one occasion, there was no major failure of equipment. In December 1946, a sleet storm of unusual severity caused heavy icing of transmission circuits, particularly in the Niagara peninsula where 137 towers on two of the 44,000-volt lines, between DeCew Falls generating station and the city of Hamilton, collapsed under the weight of the ice-laden conductors. Permanent repairs were completed and the damaged circuits were restored to normal service on March 1, 1947.

During the summer of 1946, precipitation was extremely light with the result that the principal storage reservoirs throughout the Province were below normal levels on entering the 1946-47 winter season. However, improved early winter inflows, particularly in the northern areas, and a generally heavy snow cover combined to brighten the picture as spring approached. The spring run-off, augmented by heavy rains in March, April and May, was of near-record proportions and many rivers supplying generating stations

TOTAL POWER GENERATED

HYDRO-ELECTRIC GENERATING PLANTS

	Maximum normal plant	Peak during fi	load scal year	Total of during f	output iscal year
Generating plants	capacity Oct. 31, 1947 horsepower	1945-46 norse- power	1946-47 horse- power	1945–46 kilowatt- hours	1946–47 kilowatt- hours
SOUTHERN ONTARIO SYSTEM Niagara Division Queenston-Chippawa—Niagara river "Ontario Power"—Niagara river "Toronto Power"—Niagara river. Chats Falls (Ontario half)—Ottawa river. DeCew Falls (25 cycle)—Welland canal DeCew Falls (63 ½ cycle)—Welland canal.	500,000 180,000 145,000 108,000 155,000 50,000	516,086 183,646 144,772 115,952 74,799 51,609	517,426 182,976 144,772 117,292 160,858 50,670	2,749,065,000 1,115,761,700 841,152,400 378,919,150 378,532,000 193,767,400	2,794,090,000 1,115,771,000 871,038,000 406,745,300 414,024,400 198,351,500
Georgian Bay Division Big Eddy—Muskoka river Ragged Rapids—Muskoka river Bala No. 1 and No. 2—Muskoka river South Falls—South Muskoka river Hanna Chute—South Muskoka river Trethewey Falls—South Muskoka river Big Chute—Severn river Wasdells Falls—Severn river Eugenia Falls—Beaver river Hanover—Saugeen river Walkerton—Saugeen river Caledon Electric—Credit river (Hydraulic	1,600 2,300 5,800 1,200 7,500 400 500	10,590 11,361 496 5,764 1,743 2,279 5,952 1,206 7,614 402 496	10,757 11,160 469 6,032 1,743 2,279 5,992 1,220 7,828 402 489	34,691,520 39,104,910 2,031,760 29,421,390 9,062,100 11,284,800 25,988,360 3,793,909 22,955,200 1,142,688 2,110,000	35,318,300 42,122,260 1,218,160 30,650,205 9,388,500 12,009,600 29,976,560 3,172,834 19,257,200 1,397,136 2,179,600
and Diesel units)	0		550	1,347,120	410,160
Assets Corporation	0	4,993	4,926	2,423,040	1,096,320
Sidney—Dam No. 2—Trent river. Frankford—Dam No. 5—Trent river Sills Island—Dam No. 6—Trent river Meyersburg—Dam No. 8—Trent river Hague's Reach—Dam No. 9—Trent river. Ranney Falls—Dam No. 10—Trent river. Seymour—Dam No. 11—Trent river. Heely Falls—Dam No. 14—Trent river. Auburn—Dam No. 18—Trent river. Lakefield—Otonabee river Lakefield—Otonabee river Galetta—Mississippi river High Falls—Mississippi river Calabogie—Madawaska river. Barrett Chute—Madawaska river. THUNDER BAY SYSTEM	15,300 2,400 2,300	5,362 3,954 2,232 7,842 5,027 11,810 4,457 16,086 2,668 2,473 938 1,200 3,519 6,676 54,960	5,228 4,223 2,272 7,842 4,926 11,890 4,424 16,086 2,614 2,373 932 1,247 3,586 6,515 56,635	21,558,000 16,264,050 10,504,720 35,470,720 21,432,470 18,749,760 63,984,330 10,900,010 8,601,690 3,832,265 2,998,800 10,563,840 25,276,240 162,809,200	25,128,000 19,492,800 10,609,840 40,298,720 25,240,560 61,991,840 20,238,720 78,856,920 12,221,050 9,420,530 4,704,465 4,156,800 14,894,400 29,703,530 237,173,400
Cameron Falls—Nipigon river Alexander—Nipigon river NORTHERN ONTARIO PROPERTIES	74,000 71,000	77,748 73,727	77,748 71,046	423,873,400 390,710,800	443,641,500 393,257,400
Abitibi district Abitibi Canyon—Abitibi river	240,000	203,083	225,201	919,932,100	992,948,800
Matabitchuan—Matabitchuan river Upper Notch—Montreal river Fountain Falls—Montreal river Hound Chute—Montreal river Indian Chute—Montreal river Lower Sturgeon—Mattagami river Sandy Falls—Mattagami river Wawaitin—Mattagami river	12,000 0 2,700 4,800 3,800 8,000 4,300 12,200	12,064 11,662 2,681 4,866 3,887 8,177 4,290 12,466	11,796 11,528 2,681 4,571 3,820 8,177 4,155 12,466	31,667,300 54,525,000 13,767,030 23,626,375 18,206,006 41,168,203 18,631,544 46,830,935	47,334,328 18,406,000 12,151,100 21,318,554 17,257,000 43,938,557 13,102,317 61,375,175
Sudbury district Coniston—Wanapitei river McVittie—Wanapitei river Stinson—Wanapitei river Crystal Falls—Sturgeon river	5,900 3,100 7,500 10,700	5,898 3,445 7,882 10,791	5,845 3,123 7,708 11,059	28,177,050 18,286,040 27,611,600 31,169,500	26,739,800 16,814,400 25,021,100 38,112,000
Nipissing district Nipissing—South river Bingham Chute—South river Elliott Chute—South river	2,100 1,200 1,700	2,232 1,267 1,903	2,192 1,287 1,890	6,852,840 4,308,640 4,466,400	7,991,480 5,068,300 5,438,400
Patricia district Rat Rapids—Albany river Ear Falls—English river	3,200 18,200	2,038 15,013	3,177 17,560	11,145,340 68,024,080	16,142,370 79,622,100
Manitoulin district Kagawong—Kagawong river	1,200	0	1,099		3,304,000
	1,793,400	*	*	8,491,910,465	8,871,333,291

^{*}Because the peak loads on the various generating plants and purchased power sources usually occur at different times, the sum of the individual peak loads would not represent the sum of the peak loads on the systems. These, in the case of each system, must relate to the maximum load occurring at any one time. Consequently, the column headed "Peak load" is not totalled.

AND PURCHASED—ALL SYSTEMS

POWER PURCHASED

1 OWEN TONOMISEE								
	Contract	Total pu	ırchased					
Power sources	amount horsepower Oct. 31, 1947	1945–46 kilowatt-hours	1946-47 kilowatt-hours					
SOUTHERN ONTARIO SYSTEM Canadian Niagara Power Co. Department of Transport (Welland Ship Canal) Gatineau Power Co. Ottawa Valley Power Co. Beauharnois Light, Heat and Power Co. MacLaren-Quebec Power Co. M. F. Beach Estate. Rideau Power Co. Campbellford Water and Light Commission. Miscellaneous.	340,000 108,000 300,000 185,000 500 400 800	91,597,300 989,900 1,507,401,600 382,040,850 1,341,560,000 823,169,825 3,034,000 1,874,400 2,345,700 3,493,400	91,561,400 9,572,200 1,666,273,400 410,080,900 1,533,920,000 1,013,727,800 2,758,000 1,887,500 9,964,500 7,615,083					
THUNDER BAY SYSTEM Kaministiquia Power Co		14,963,520 0	24,118,400 99,740					
Manitoulin Pulp Co. Abitibi Power and Paper Co.		2,547,200 5,089,152	11,945,536					
Total purchased	954,700	4,180,106,847	4,783,524,459					
Power purchased, contract amount, 194' Maximum normal plant capacity, 1947.		1,793,400	~					
Total available capacity generated and p Total available capacity generated and p			J					
Difference (increase)		. 4,783,524,459	kilowatt-hours					
Total energy generated and purchased, Total energy generated and purchased,								
Difference (increase)		. 982,840,438	8 "					

CAUTION: The figures for "Maximum normal plant capacity" reflect the capacity of the various plants under the most favourable operating conditions that can reasonably be considered as normal, taking into consideration turbine capacity as well as generator capacity, and also the net operating head and available water supply.

Owing, among other things, to changes in generating equipment due to wear and tear or the replacement of parts, also to changes in limitations governing water levels and effective net heads, the maximum normal plant capacity is not a fixed quantity but is one which must be revised from time to time.

It is particularly important to bear in mind that the column headed "Maximum normal plant capacity" cannot be taken as an indication of the dependable capacity of the various plants; in some cases it is, but in many cases it is not. Principal among the factors which govern the maximum dependable capacity of an hydraulic power plant and which are not reflected in column headed "Maximum normal plant capacity", are abnormal variations in water supply and operating limitations encountered when plants are so situated on a given stream as to be affected by one another.

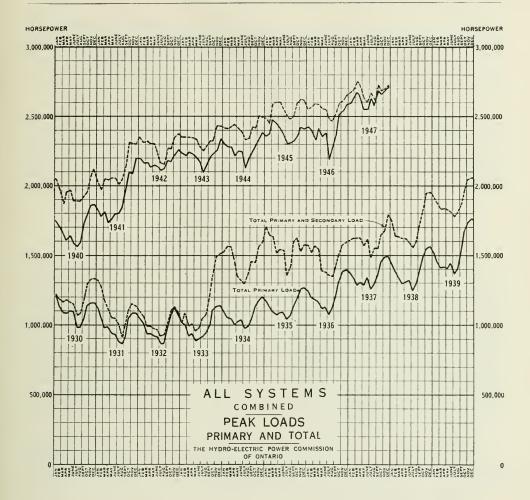
in both the northern and southern sections of the Province were at, or near flood stage. Above-normal precipitation and stream flows persisted until the end of July, it being worthy of note that the level of lake Ontario reached a stage of 248.97 in that month, setting a new high record. During the late summer and early autumn, however, precipitation in most sections was much below normal and, by the end of October, 1947, the water situation was generally unfavourable and, in some northern areas, serious. Overall water conditions throughout the Province on entering the 1947-48 winter season may be described as poor—even worse than those prevailing at the same time the previous year.

Load Conditions November 1, 1946 to October 31, 1947

Preliminary to any comments on load conditions, it will be helpful to define the meaning of the terms used in this section of the report. In the comments which follow, reference is made to "primary" and "secondary" power. As in previous reports of the Commission, "primary" power relates to that power for which definite commitments have been made for its delivery. On the other hand, "secondary" power implies no obligation and is only supplied as and when available, and when not required for the Commission's "primary" power customers. There is no obligation expressed or implied to provide power resources for the purpose of supplying "secondary" power customers. With demands for primary power exceeding the Commission's available power resources, certain restrictions in delivery of "primary" power have been necessary. The amount of these restrictions added to the actual primary power carried represents what is referred to later in this report as the Primary Demand (actual load plus cuts) and such values are an indication of load growth.

Demands for primary power on the Commission's combined systems during the year under review reached levels never before attained. They exceeded the Commission's available resources, especially on the Southern Ontario system where it was necessary to curtail industrial power demands. At the approach of the fall and winter months, with the continued rise in power demand, an appeal was made to domestic consumers not to waste power. Notwithstanding this appeal, the curtailment in the delivery of power and energy to large industrial users became more serious and on November 10, 1947, in order to relieve the situation, a modified system of power rationing was introduced. This, together with the continuation of a vigorous campaign for domestic conservation of power, enabled the Commission to deliver to industry an estimated 60,000 to 90,000 kilowatts (80,000 to 120,000 hp) more than otherwise would have been possible.

Except for a short time during the summer vacation period in July and August, 1947, delivery of primary power to industrial customers, principally the large users of power in the Niagara peninsula, was curtailed over the high daily peak periods throughout the year. In the winter of 1946-47, these curtailments were in the order of 225,000 kilowatts (300,000 hp) at the time of peak. During the year, cuts to industrial customers were estimated to be 136,470,000 kilowatt-hours. At off-peak periods, principally week-ends, holidays and night hours of working days, surplus power was available. During the year, this surplus amounted to 938,800,000 kilowatt-hours, of which 447,200,000 kilowatt-hours were disposed of in Canada and the balance of 491,600,000 kilowatt-hours was exported to the United States.



Sharp Rise in Primary Power Demands

Following the settlement of the labour disputes in the fall of 1946, primary power demands on the combined systems rose sharply to a level about 14 per cent above the demand for the same period of the previous year. This level above the previous year was well maintained throughout 1947 until November, when the seasonal rise was retarded by the introduction of a modified system of power rationing and a vigorous campaign for domestic conservation of electricity.

The maximum primary peak demand (actual load plus cuts) for the current year occurred in October 1947, and was estimated to be 2,169,700 kilowatts (2,908,500 hp) as compared with 1,962,000 kilowatts (2,630,000 hp) in the previous October. This was an increase of 207,700 kilowatts (278,500 hp) or 10.6 per cent. The total energy demand for primary power, which includes load cuts made during the year, amounted to 12,852,000,000 kilowatt-hours as compared with 10,958,000,000 kilowatt-hours for the fiscal year ending October 31, 1946, an increase of 17.3 per cent.

The total peak output on the combined systems for both primary and secondary power was 2,056,000 kilowatts (2,756,000 hp), exceeding the record output of the previous year by 97,500 kilowatts (131,000 hp) or 5 per cent. The total energy output from all generated and purchased sources amounted to 13,654,857,750 kilowatt-hours. This was 983,000,000 kilowatt-hours or 7.8 per cent greater than the production during the previous year.

Details regarding the peak loads of the Southern Ontario and the Thunder Bay systems and of the several districts of the Northern Ontario Properties are given in the load curves in this section of the report. It should be noted that as the curves are intended to be a record of historical facts, they show only the actual loads carried. Because of load restrictions imposed from time to time, they cannot be used as an indication of the growth in power demand.

SOUTHERN ONTARIO SYSTEM

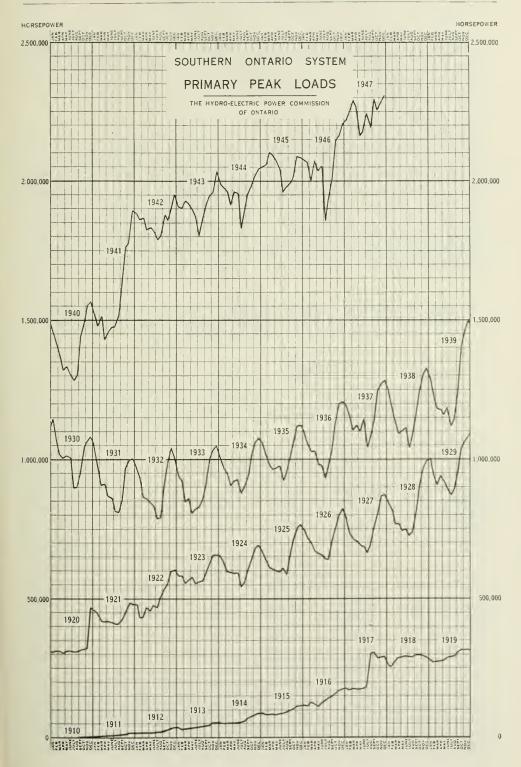
With demands for primary power exceeding available resources in the Southern Ontario system, every endeavour was made to make a maximum use of the Commission's own generating sources and, in addition to the power provided for under main purchase agreements, to obtain by special arrangements any power that could be made available to the system. Under these special arrangements approximately 617,000,000 kilowatt-hours were purchased during the year in excess of that provided for in the main contracts with the Quebec power companies. Also, a relatively small amount of power was purchased from the Department of Transport during the non-navigation period of the Welland Ship Canal, and on December 3, 1946, arrangements were completed with the Corporation of Almonte for the purchase of such excess power as the Corporation had available.

Primary power demands exceeded available resources throughout the greater portion of the year. Only for a short time during the summer vacation period in July and August, when seasonal demands are the lowest, was it possible to meet all primary power demands.

The maximum peak demand (actual load plus cuts) for primary power purposes was 1,868,800 kilowatts (2,505,100 hp) as compared with 1,687,400 kilowatts (2,262,000 hp) in the previous year, an increase of 181,400 kilowatts (243,100 hp) or 10.8 per cent. Demands (actual load plus cuts) for primary energy rose from 9,220,700,000 kilowatt-hours in the previous year, to 10,863,000,000 kilowatt-hours, an increase of 17.8 per cent.

The maximum peak load for both primary and secondary power on the Southern Ontario system was 1,709,391 kilowatts (2,291,400 hp), exceeding the corresponding peak of the previous year by 73,500 kilowatts (98,500 hp) or 4.5 per cent. The total energy output for the year rose 8.2 per cent.

Reasonably high natural run-off and stream flows prevailed on the rivers supplying generating stations in the Georgian Bay and the Eastern Ontario divisions during the winter 1946-47. Abnormal high flows experienced during the freshet period were reflected in continued high run-off until August. However, the extremely light precipitation of the early fall months was responsible for below normal elevations of the principal storage reservoirs and a major recession in the ground water storage by the end of October.



Average stream flow and storage conditions on the Ottawa river during the year were somewhat better than normal. In June 1947, the flow was higher than in any month since 1928. However, it is believed that the low water content of the ground, which was experienced at the end of the year, may adversely affect the general water situation on this river during the winter season.

Improved Power Transfer Facilities

To improve and strengthen the power transfer facilities between the 25- and 60-cycle divisions of the Southern Ontario system, a station was placed in service at Scarborough on July 8, 1947, consisting of a 25,000 kilowatt frequency-changer and a 25,000 kilovolt-amperes, three-phase transformer, together with the necessary auxiliary equipment. Connection with 25-cycle power is made over the new 110,000-volt line from Leaside, and the 60-cycle side is connected with the Oshawa-Barrie tie line, which was placed in service last year, providing at that time transfer facilities between the Eastern Ontario and the Georgian Bay divisions.

SUMMATION OF PEAK LOADS IN HORSEPOWER AS SUPPLIED TO URBAN MUNICIPAL UTILITIES AND FOR RURAL HYDRO SERVICE, SHOWING TREND OF POWER DEMANDS 1946-1947

			Net	Numbe	r of utilitie	es with	
System	July to Dec. 1946	July to Dec. 1947	increase in horsepower	De- creases	Increases	No change	Total

URBAN MUNICIPAL UTILITIES

Southern Ontario Thunder Bay Northern Ontario		1,593,803 50,971	79,316 2,025	43 0	264 6	1 0	308 6
Properties	24,269	25,659	1,390	1	15	1	17

RURAL HYDRO SERVICE

Southern Ontario Thunder Bay Northern Ontario	176,758 1,355	206,073 1,411	29,315 56	3 0	84 1	0	87 1
Properties	3,756	4,524	768	1	3	0	4
Total, Rural Service.	181,869	212,008	30,139	. 4	88	0	92

Note: The yearly peak demands of the individual municipal Hydro utilities do not all occur during the same month of the year nor, for any given municipality, do they always occur in the same month in successive years; in nearly all cases, however, the yearly peak occurs during the second half of the calendar year. For this reason a comparison of the peaks occurring during the second half of the year as shown in the tables of this Section shows most satisfactorily the general trend of the local loads. The loads given above for Rural Hydro Service are a summation of the loads in the various operational districts and are similarly obtained.

During the year, condensers were placed in service at Owen Sound, Peterborough and Auburn, and auto-transformers at St. Thomas, Oshawa and Cornwall, all to regulate and improve voltage conditions in these areas.

New transmission lines were placed in service during the year to relieve overburdened lines and to provide outlets for new power demands. New transformer stations were placed in service at Ottawa, Cornwall and Caledonia, and the transformer capacities at the York, St. Marys, St. Catharines and the American Cyanamid transformer stations were increased, involving, in all, an addition of approximately 110,000 kilovolt-amperes of new transformer capacity. A new transformer station of 3,750 kilovolt-amperes was also placed in service to provide construction power at the site of the Des Joachims development.

Several new distributing stations were added to the system and the capacities of many were increased to provide for increasing power demands. Total capacity added during the year was approximately 37,000 kilovoltamperes.

SOUTHERN ONTARIO SYSTEM-LOADS OF MUNICIPALITIES 1946-1947

Municipality			load in power	Change in load	
	ency cycles	July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Acton. Agincourt. Ailsa Craig. Alexandria. Alliston.	25 25 25 60 60	2,252.2 345.3 213.8 467.5 728.9	2,524.6 363.8 225.5 550.7 782.6		272.4 18.5 11.7 83.2 53.7
Almonte. Alvinston. Amherstburg. Ancaster Twp.—Voted Area. Apple Hill.	60 25 25 25 25 60	859.2 198.0 1,631.9 671.4 67.8	913.5 204.5 1,713.9 681.2 67.7	0.1	54.3 6.5 82.0 9.8
Arkona. Arnprior. Arthur. Athens. Aurora.	25 60 60 60 25	101.9 1,867.6 280.4 196.1 1,938.6	124.4 1,985.3 315.6 212.5 2 033.5		22.5 117.7 35.2 16.4 94.9
Aylmer. Ayr. Baden. Bala. Barrie	25 25 25 60 60	1,389.7 373.6 655.6 536.2 6,092.5	1,943.2 436.2 714.5 646.1 7,026.8		553.5 62.6 58.9 109.9 934.3
Bath	60 25 25 60 60	82.6 850.9 740.6 441.0 165.7	83.0 940.7 834.4 546.6 189.4		0.4 89.8 93.8 105.6 23.7

SOUTHERN ONTARIO SYSTEM—LOADS OF MUNICIPALITIES 1946-1947—Continued

Municipality	Frequ-		load in power	Change	in load
	cycles	July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Belle River Belleville Blenheim Bloomfield Blyth	25 60 25 60 25	341.9 9,671.6 1,139.4 202.6 196.1	374.7 10,538.5 1,099.7 259.5 195.6	39.7	32.8 866.9 56.9
Bobcaygeon Bolton Bothwell Bowmanville Bradford	60 25 25 60 60	90.4 362.9 237.3 3,948.5 514.2	268.1 368.5 239.9 4,460.9 480.0	34.2	177.7 5.6 2.6 512.4
Braeside. Brampton. Brantford. Brantford Twp.—Voted Area. Brechin.	60 25 25 25 25 60	274.8 4,172.2 26,510.0 2,590.9 88.5	325.7 4,360.8 29,405.6 3,214.1 82.1	6.4	50.9 188.6 2,895.6 623.2
Bridgeport Brigden Brighton Brockville Bronte	25 25 60 60 66 ² / ₃	344.9 177.5 802.1 9,389.5 312.3	336.8 170.2 829.1 9,492.2 300.3	8.1 7.3 12.0	27.0 102.7
Brussels. Burford. Burgessville Burlington Burlington Beach	25 25 25 66 ² / ₃ 25 & 66 ² / ₃	336.7 392.8 125.6 2,393.0 759.6	351.2 470.1 132.4 2,575.2 713.2	46.4	14.5 77.3 6.8 182.2
Caledonia Campbellville Cannington Cardinal Carleton Place	25 25 60 60 60	613.3 81.0 378.1 537.6 2,422.9	571.6 89.5 370.7 556.5 2,399.2	41.7 7.4 23.7	8.5 18.9
Cayuga Chatham Chatsworth Chesley Chesterville	25 25 60 60 60	283.9 10,058.7 181.3 846.2 463.1	321.5 10,995.3 195.8 912.2 502.1		37.6 936.6 14.5 66.0 39.0
Chippawa Clifford Clinton Cobden Cobourg	25 25 25 60 60	505.4 160.2 962.2 210.0 2,954.7	552.5 182.3 1,126.3 254.2 3,114.3		47.1 22.1 164.1 44.2 159.6
Colborne Coldwater Collingwood Comber Cookstown	60 60 25	380.8 231.4 3,272.1 238.6 153.1	402.7 307.8 3,786.6 236.2 175.9	2.4	21.9 76.4 514.5
Cottam Courtright Creemore Dashwood Delaware	25 60 25	137.3 81.8 256.6 157.8 107.6	159.0 90.6 259.0 170.9 123.6		21.7 8.8 2.4 13.1 16.0

SOUTHERN ONTARIO SYSTEM-LOADS OF MUNICIPALITIES 1946-1947-Continued

Municipality		Peak l horse	oad in power	Change	Change in load	
,	ency cycles	July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp	
Delhi Deseronto Dorchester Drayton Dresden	25 60 25 25 25 25	1,041.8 380.5 176.3 189.6 666.2	1,115.1 431.2 186.3 202.2 899.7		73.3 50.7 10.0 12.6 233.5	
Drumbo Dublin. Dundalk Dundas. Dunnville	25 25 60 25 25	155.5 72.8 340.7 3.774.7 2,089.0	155.8 80.7 360.3 4,628.7 2,283.0		0.3 7.9 19.6 854.0 194.0	
Durham. Dutton. East York Twp.—Voted Area. Elmira. Elmvale.	60 25 25 25 25 60	601.2 367.1 15.471.6 1,922.4 306.2	686.5 340.3 16,855.0 2.246.1 337.0	26.8	85.3 1.383.4 323.7 30.8	
Elmwood Elora Embro Erieau Erie Beach	60 25 25 25 25 25	134.5 622.5 228.3 335.4 62.7	177.2 724.2 263.7 382.0 61.3	1.4	42.7 101.7 35.4 46.6	
Erin. Essex. Etobicoke Twp.—Voted Area. Exeter. Fergus.	60 25 25 25 25 25	175.0 888.8 15,860.9 1,078.9 1 928.8	200.0 883.5 18,993.4 1,165.8 1,981.2	5.3	25.0 3,132.5 86.9 52.4	
Finch. Flesherton Fonthill Forest Forest Hill	60 60 25 25 25	159.3 164.0 337.9 785.2 10,880.7	178.4 169.8 413.4 827.4 10,494.6	386.1	19.1 5.8 75.5 42.2	
Frankford. Galt. Georgetown Glencoe. Goderich.	60 25 25 25 25 25	270.0 14,469.5 2,796.9 294.6 2,178.7	297.0 15,613.5 3,121.3 328.2 2,308.0		27.0 1,144.0 324.4 33.6 129.3	
Grand Valley Granton Gravenhurst Grimsby Guelph	60 25 60 25 25	255.8 97.4 1,836.5 1,254.2 15,626.0	275.8 110.0 1,939.4 1,393.6 16,486.6		20.0 12.6 102.9 139.4 860.6	
Hagersville. Hamilton. Hanover Harriston. Harrow.	25 25 & 66 ¾ 60 25 25	1,425.2 181,227.8 1,858.4 675.8 840.5	1,521.9 193,420.6 2,205.4 746.6 915.5		96.7 12,192.8 347.0 70.8 75.0	
Hastings Havelock Hensall Hepworth Hespeler	60 25 60	244.9 300.2 346.0 44.6 3.550.4	240.8 304.3 420.5 53.7 4.048.0	4.1	4.1 74.5 9.1 497.6	

SOUTHERN ONTARIO SYSTEM—LOADS OF MUNICIPALITIES 1946-1947—Continued

Municipality			oad in power	Change	in load
	ency cycles	July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Highgate. Holstein. Humberstone. Huntsville. Ingersoll.	25 60 25 60 25	147.1 26.2 889.5 1,715.0 3,890.0	149.3 48.3 916.2 1,921.0 4,293.0		2. 2 22. 1 26. 7 206. 0 403. 0
Iroquois. Jarvis. Kemptville. Kincardine. Kingston.	60 25 60 60 60	413.7 239.7 588.6 1,081.6 20,575.8	476.1 263.0 588.6 1,308.1 22,156.8		62.4 23.3 226.5 1,581.0
Kingsville Kirkfield Kitchener Lakefield Lambeth	25 60 25 60 25	1,011.9 27.0 36,415.6 635.1 249.3	1,019.6 45.6 37,421.9 692.0 259.6		7.7 18.6 1,006.3 56.9 10.3
Lanark Lancaster. LaSalle. Leamington. Lindsay	60 60 25 25 60	158.2 87.7 445.3 2,984.3 4,479.4	177.2 83.1 490.6 3,200.0 5,064.0	4.6	19.0 45.3 215.7 584.6
Listowel	25 25 25 25 25 25	1,804.5 55,301.6 879.2 2,370.2 341.1	2,185.0 53,952.5 859.8 3,213.5 340.5	1,349.1 19.4 0.6	344.5 843.3
Lucknow. Lynden MacTier Madoc Markdale	60 25 60 60 60	575.6 154.7 189.5 386.4 292.8	609.3 203.5 171.1 453.6 365.1	18.4	33.7 48.8 67.2 72.3
Markham Marmora Martintown Maxville Meaford	25 60 60 60 60	532. 2 216. 9 83. 8 171. 4 1,148. 6	566.9 250.4 83.1 200.8 1,332.7	0.7	34.7 33.5 29.4 184.1
Merlin. Merritton Midland. Mildmay. Millbrook	25 25 60 60 60	173.4 10,592.7 4,896.7 244.7 161.9	198.4 12,337.2 5,900.5 265.9 208.6		25.0 1,744.5 1,003.8 21.2 46.7
Milton. Milverton. Mimico. Mitchell. Moorefield.	25 25 25 25 25 25	1,901.6 562.3 4,520.1 976.9 124.0	2,109.0 639.0 4,063.0 1,090.1 111.5	457.1 12.5	207.4 76.7
Morrisburg Mount Brydges Mount Forest Napanee Neustadt	60 25 60 60 60	550.9 158.4 913.6 2,007.0 48.6	763.9 178.0 907.7 2,116.5 106.4	5.9	213.0 19.6 109.5 57.8

SOUTHERN ONTARIO SYSTEM—LOADS OF MUNICIPALITIES 1946-1947—Continued

Municipality	Frequ-		load in power	Change	in load
	cycles	July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Newburgh. Newbury. Newcastle. New Hamburg. Newmarket	60 25 60 25 25	98.4 60.6 331.2 886.7 2,575.4	103.8 85.1 403.1 954.1 2,899.8		5.4 24.5 71.9 67.4 324.4
New Toronto. Niagara Falls. Niagara-on-the-Lake. North York Twp.—Voted Area. Norwich.	25 25 25 25 25 25	13,189.1 14,401.9 1,224.0 17,365.2 650.9	14,084.2 14,682.7 1,327.2 20,210.5 692.8		895.1 280.8 103.2 2,845.3 41.9
Norwood	60 25 &	306.9	297.3	9.6	
Oakville. Oil Springs Omemee. Orangeville	662% 25 60 60	2,316.1 244.6 336.2 1,304.0	2,559.4 238.0 354.8 1,318.7	6.6	243.3 18.6 14.7
Orono. Oshawa. Ottawa. Otterville. Owen Sound.	60 60 60 25 60	170.2 22,902.1 45,816.6 170.1 9,179.0	184.0 24,793.0 45,162.2 208.4 9,672.3	654.4	13.8 1,890.9 38.3 493.3
Paisley Palmerston Paris Parkhill Parry Sound	60 25 25 25 25 60	227.9 755.6 2,658.2 373.7 1,157.8	293.3 778.8 2,687.5 372.7 958.0	1.0	65.4 23.2 29.3
Penetanguishene Perth. Peterborough Petrolia. Picton.	60 60 60 25 60	1,422.9 2,402.1 23,821.7 1,268.2 2,088.5	1,830.3 2,535.2 23,313.7 1,297.4 2,148.8	508.0	407.2 133.1 29.2 60.3
Plattsville Point Edward. Port Carling. Port Colborne. Port Credit	25 25 60 25 25	229.9 1,955.8 466.2 2,900.1 1,487.4	301.6 2,330.8 522.2 2,962.4 1,602.5		71.7 375.0 56.0 62.3 115.1
Port Dalhousie Port Dover Port Elgin Port Hope Port McNicoll	25 25 60 60 60	1,362.9 890.1 881.0 3,321.2 163.4	1,460.8 963.7 977.5 4,167.8 184.8		97.9 73.6 96.5 846.6 21.4
Port Perry Port Rowan Port Stanley Prescott Preston	60 25 25 60 25	482.4 174.2 1,583.8 1,724.5 5,248.8			119.7 4.4 112.4 14.1 140.2
Priceville. Princeton Queenston. Renfrew Richmond	60 25 25 60 60	18.0 215.5 190.9 1,386.1 123.7	1,153.8	232.3	7.0 15.1 27.5

SOUTHERN ONTARIO SYSTEM-LOADS OF MUNICIPALITIES 1946-1947—Continued

Municipality	Frequ-		oad in power	Change	in load
	cycles	July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Richmond Hill. Ridgetown Ripley Riverside Rockwood	25 60	899.5 921.2 228.3 2,185.3 213.9	950.1 862.8 195.0 2,411.1 224.1	58.4 33.3	50.6 225.8 10.2
Rodney Rosseau, Russell	25 60 60	230.7 70.3 141.4	253.3 74.8 156.0		22.6 4.5 14.6
St. Catharines St. Clair Beach	25 & 663 25	33,395.0 144.4	35,155.0 154.2		1,760.0 9.8
St. George St. Jacobs. St. Marys. St. Thomas. Sarnia	25 25 25 25 25 25	263.5 420.9 2,358.9 10,542.9 9,519.4	265.3 445.7 2,608.9 10,668.9 15,345.8		1.8 24.8 250.0 126.0 5,826.4
Scarborough Twp Seaforth Shelburne Simcoe Smiths Falls	25	8,345.4 1,411.8 469.1 3,735.1 4,176.2	9,622.8 1,362.2 444.8 3,929.2 4,496.7	49.6 24.3	1,277.4
Smithville Southampton Springfield Stamford Twp.—Voted Area Stayner	60	421.2 861.5 118.6 4,749.3 443.3	563.0 939.8 148.4 5,135.5 499.3		141.8 78.3 29.8 386.2 56.0
Stirling Stoney Creek Stouffville. Stratford. Strathroy.	25 25	522.6 483.9 644.5 9,965.2 1,971.6	529.9 555.2 677.3 9,827.4 2,008.7	137.8	7.3 71.3 32.8 37.1
Streetsville. Sunderland. Sutton. Swansea. Tara.	25 60 25 25 60	314.6 146.1 795.9 4,273.4 211.9	776.7 231.4 952.5 4,545.7 215.3		462.1 85.3 156.6 272.3 3.4
Tavistock Tecumseh. Teeswater. Thamesford Thamesville.	25 25 60 25 25	860.4 703.0 289.6 367.0 359.0	887.8 776.7 281.7 388.9 408.2	7.9	27.4 73.7 21.9 49.2
Thedford. Thornbury. Thorndale. Thornton Thorold	25 60 25 60 25	196.5 241.3 153.0 64.4 4,120.6	240.2 274.0 163.3 67.4 4,183.5		43.7 32.7 10.3 3.0 62.9
Tilbury Tillsonburg Toronto. Toronto Twp.—Voted Area Tottenham	25 25	1,313.7 2,351.9 465,521.4 6,033.0 174.8	1,184.7 2,540.6 472,794.9 7,150.9 236.0	129.0	188.7 7,273.5 1,117.9 61.2

SOUTHERN ONTARIO SYSTEM-LOADS OF MUNICIPALITIES 1946-1947—Concluded

Municipality	Frequ- ency cycles	Peak load in horsepower		Change in load	
		July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Trafalgar Twp. Voted Area. Trenton. Tweed Uxbridge. Victoria Harbour.	25 & 66 ² / ₃ 60 60 60 60	1,024.3 6,926.3 455.4 576.3 126.7	1,102.9 7,080.4 523.6 639.7 176.0		78.6 154.1 68.2 63.4 49.3
Walkerton Wallaceburg Wardsville Warkworth Waterdown.	60 25 25 60 25	1,412.7 5,954.1 89.7 118.1 419.3	1,529.8 6,995.4 101.9 125.2 470.0		117.1 1,041.3 12.2 7.1 50.7
Waterford. Waterloo. Watford. Waubaushene. Welland.	25 25 25 60 25	663.5 8,567.0 525.5 272.1 13,445.7	738.6 8.778.8 559.7 303.3 13,506.4		75.1 211.8 34.2 31.2 60.7
Wellesley Wellington West Lorne Weston Westport	25 25	206.6 524.3 581.0 7,062.3 174.0	229.6 598.8 706.3 6,706.8 180.0	355.5	23.0 74.5 125.3
Wheatley Whitby Wiarton Williamsburg Winchester	60 60 60	355.4 2,096.8 602.6 168.6 620.2	393.3 2,376.9 691.6 160.6 697.3	8.0	37.9 280.1 89.0 77.1
Windermere. Windsor. Wingham. Woodbridge. Woodstock.	25 60 25	134.0 61,039.3 1,206.8 994.5 10,218.1	159.8 64,749.6 1,237.6 1,101.7 10,793.3		25.8 3,710.3 30.8 107.2 575.2
Woodville. Wyoming. York Township. Zurich.	25 25	126.2 181.7 31,191.7 197.4	174.6 190.4 32,920.0 210.2		48.4 8.7 1.728.3 12.8

SOUTHERN ONTARIO SYSTEM—LOADS OF NEW MUNICIPALITIES

Municipality	Frequ-	Date	Load in horsepower		Change in load		
		cycles	connected	Initial	July to Dec., 1947	Decrease hp	Increase hp
Oril	llia	60	Sept. 1, 1947	933.0	1,400.8		467.8

THUNDER BAY SYSTEM

Resources available to the Thunder Bay system were fully utilized throughout the year. During the latter part of the year, primary demands exceeded available resources and it was necessary to curtail delivery to the paper companies, principally the Great Lakes Paper Company, over a number of the daily peak load periods. The total load on the system 'eached a maximum of 114,200 kilowatts (153,100 hp) and during the year, 861,117,000 kilowatt-hours were produced from both generated and purchased sources. Compared with the previous year, this represents an increase of 3.8 per cent in energy produced.

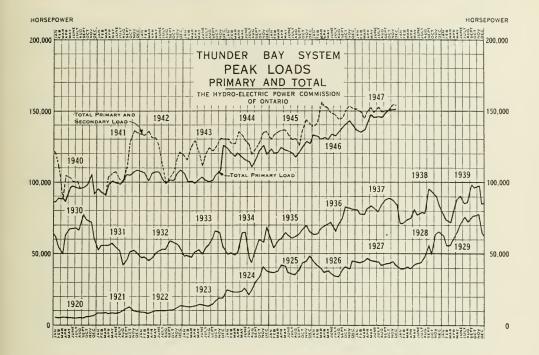
The maximum primary peak demand (actual load plus cuts), which includes power delivered to the Rainy River district, was 113,170 kilowatts (151,700 hp) as compared with 105,500 kilowatts (141,400 hp) in the previous year, an increase of 7.3 per cent. The year's primary energy demands totalled 765,857,000 kilowatt-hours, exceeding the corresponding demands of the previous year by 8 per cent.

The Nipigon river plants were operated in parallel with the Kakabeka Falls generating station of the Kaministiquia Power Company throughout the year, and over many of the high daily primary peak demands from May to October, inclusive, supplied upwards to 4,000 kilowatts (5,000 hp) of primary power. In all, the Company supplied 24,118,400 kilowatt-hours during the year, of which 1,595,000 kilowatt-hours were used to meet primary load demands, and the balance was supplied to the electric boilers at the Provincial and the Thunder Bay Paper Companies. During an emergency in September, when the output of No. 4 unit at the Alexander generating station was lost due to a damaged gate stem, 34,740 kilowatt-hours were obtained from the Port Arthur Public Utilities Commission. Commencing in August, rural service was supplied to the Fort Frances area. Power for this service is purchased from the Ontario-Minnesota Pulp & Paper Company, and during the balance of the year this Company supplied 65,000 kilowatt-hours.

On July 6, 1947, a second transformer bank of 15,000 kilovolt-amperes was placed in service at Port Arthur to relieve the load on the original bank. Also, two new distributing stations were placed in service, one at Jellicoe and the other at Fort Frances, of capacity of 150 kilovolt-amperes and 300 kilovolt-amperes, respectively.

THUNDER BAY SYSTEM-LOADS OF MUNICIPALITIES-1946-1947

Municipality	Frequency cycles	Peak load in horsepower		Change in load	
		July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
Atikokan Townsite Beardmore Townsite Fort William Geraldton Townsite Nipigon Twp.—Voted Area	60 60 60 60 60	223.9 204.1 21,085.8 859.5 398.6	268.1 280.6 21,402.1 946.6 463.2		44.2 76.5 316.3 87.1 64.6
Port Arthur	60	26,173.7	27,610.5		1,436.8



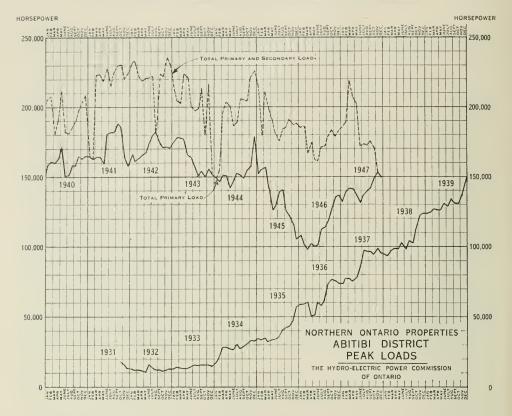
NORTHERN ONTARIO PROPERTIES

In the districts of the Northern Ontario Properties, the distribution of power, used principally in the mining and refining of gold and nickel, rose from a primary load in October 1946, of 169,109 kilowatts (226,687 hp) to a primary demand (actual load plus cuts) in October 1947, of 188,340 kilowatts (252,466 hp), an increase of 11.4 per cent. During the latter part of the year, resources available to the Sudbury-Nipissing district were insufficient to meet load requirements and load restrictions were necessary. Energy demands exceeded those of the previous year by 19 per cent.

Abitibi District

From October 1946 to October 1947, the primary peak loads of the Abitibi district rose from 95,520 kilowatts (128,043 hp) to 110,740 kilowatts (148,445 hp), an increase of 15.9 per cent. The year's primary energy demands exceeded those of the previous year by 27.2 per cent. Most of this increase resulted from greater activity at the plant of the International Nickel Company at Copper Cliff.

During the winter of 1946-47, water conditions in the Abitibi district were about normal. The effect of record-breaking spring flows was felt until mid-summer, after which several abnormally dry months caused storage basin levels and natural flows to drop to below-normal values.



Production at the Canyon plant during the year totalled 992,948,800 kilowatt-hours, an increase over the previous year of 7.9 per cent. Of the total production, 744,383,800 kilowatt-hours were for primary load purposes, 223,996,500 kilowatt-hours for electric boiler generation of steam at the paper mills of the Abitibi Power and Paper Company, and the balance of 24,568,500 kilowatt-hours was transferred to the Timiskaming district.

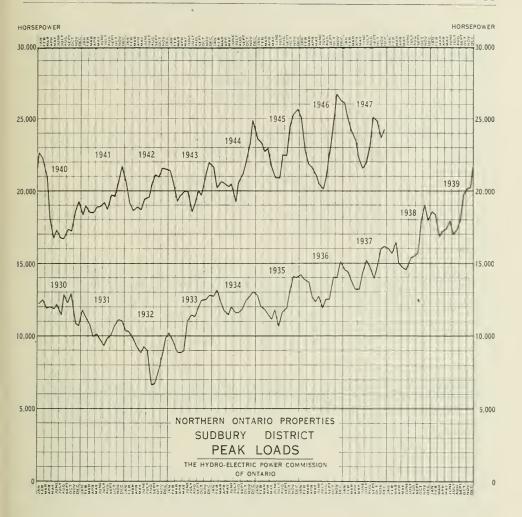
Timiskaming District

In the Timiskaming district, power is used only for primary power purposes. There was little change in the demands from the previous year. In October 1946 and 1947, peak demands were 38,300 kilowatts (51,340 hp) and 38,425 kilowatts (51,508 hp) respectively. The energy demands as compared with the previous year were 1.6 per cent greater.

Water conditions in the Timiskaming district closely paralleled those prevailing in the Abitibi area. During the latter part of the year, transfer of power from the Abitibi district was increased to conserve water in the

Timiskaming district for the coming winter season.

The total output of the eight generating stations in the Timiskaming district was 234,883,000 kilowatt-hours, 5.5 per cent below the output of the previous year. Due to certain line changes, the output of the Upper Notch generating station, of 8,400 kilowatts capacity, was made unavailable on Feb. 28, 1947. Before this plant is returned to service, its generators are to be converted from 25- to 60-cycle operation.



Sudbury District

Due to power demands exceeding available resources, loads were curtailed in the Sudbury district during the latter part of the year. The October 1947 peak demand (actual load plus cuts) was 19,850 kilowatts (26,609 hp) as compared with 18,705 kilowatts (25,074 hp) in the previous October, an increase of 6.1 per cent. The total energy demands for the year were 10 per cent greater.

Water conditions in the Sudbury district were about normal during the first part of the year. Late summer rains were heavier in some areas but by October the water situation became serious as a result of low natural run-off and decreased storage levels in the Sturgeon river basin.

The total combined capacity of the Commission's own generating stations in the Sudbury and Nipissing districts (the two districts are operated in parallel) was insufficient to meet the total load of the combined districts. Consequently, it was necessary to purchase additional power and energy from

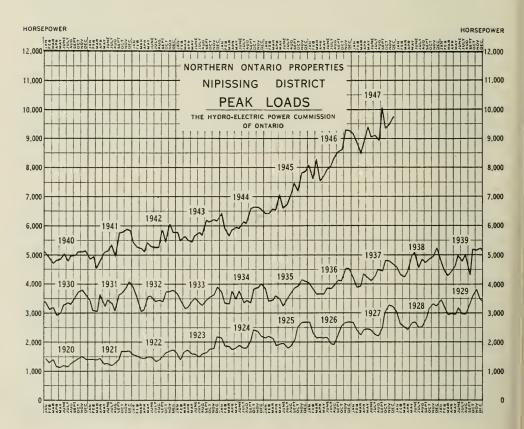
the Sturgeon Falls plant of the Abitibi Power and Paper Company. This purchase was in the order of 3,000 to 4,000 kilowatts (4,000 to 5,000 hp) and during the year amounted to 11,945,500 kilowatt-hours. However, the quantity of power and energy from this purchase source was limited during the last half of the year and it was necessary to curtail the loads of some customers. The curtailment during this period amounted to approximately 4,436,000 kilowatt-hours.

On October 22, 1947, a new distributing station, of 600 kilovolt-amperes capacity, was placed in service at Blezard Valley to supply a rural area.

Nipissing District

The Nipissing district peak load was 6,950 kilowatts (9,316 hp) in October 1947. Compared with the peak load of the previous October, it shows an increase of 8.1 per cent. The energy demand for the year was 18.6 per cent greater.

Better than average water conditions prevailed in the Nipissing district during the first half of the year and even the extended dry period of the late summer months of 1947 did not have such an adverse effect as might have been expected. On entering the 1947-48 winter season, storage basin levels were about average but estimates of anticipated winter natural run-off were low.

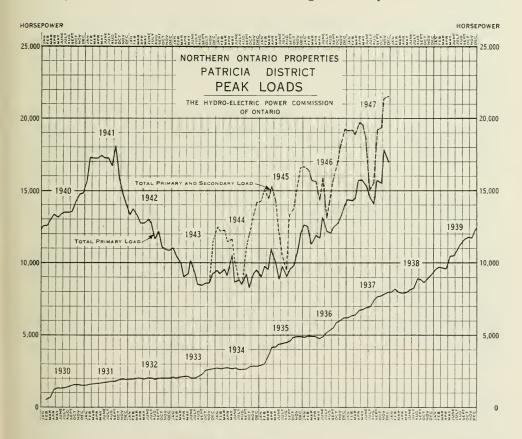


Generating capacity within this district was insufficient to meet the district load requirements. During 1947, the shortage of approximately 16,088,000 kilowatt-hours was supplied from the Sudbury district resources.

Patricia District

The Patricia district primary peak loads in October 1946 and 1947, were 9,490 kilowatts (12,721 hp) and 11,555 kilowatts (15,489 hp), respectively, showing an increase of 21.8 per cent. The primary energy demands for the year were 26.5 per cent greater. Exclusive of primary power, 20,821,000 kilowatt-hours were supplied to four mining customers for the operation of electric boilers during the year.

Operation of the Patricia district throughout the year was normal.



Manitoulin District

The Manitoulin district peak load rose from 664 kilowatts (890 hp) in October 1946, to 820 kilowatts (1,099 hp) in October 1947, an increase of 23.5 per cent. The year's energy requirements increased 29.7 per cent.

The Kagawong power development, owned and operated by the Manitoulin Pulp Company, was acquired by the Commission as of November 1,

1946. Formerly the power requirements of the Manitoulin district were purchased from the above Company.

With power demands approaching the capacity of the hydraulic units in the Kagawong generating station, two Diesel-driven generators, each of 100 kilowatts capacity, together with a 150 kilovolt-amperes, step-up transformer bank, were temporarily placed in service on December 25, 1946. During the winter of 1946-47, severe ice conditions developed in the Kagawong river, shutting off the normal flow of water, with the result that on many occasions it was impossible to generate the full power requirements of the district and service to some customers was interrupted over peak load periods.

Rainy River District

Power for the Rainy River district is purchased from the Thunder Bay system at cost. Also, a small amount of power has been purchased from the Ontario-Minnesota Pulp and Paper Company, for distribution in the Fort Frances rural area where a distributing station of 300 kilovolt-amperes capacity was placed in service on August 15, 1947. The load of the Rainy River district is included in the load statistics of the Thunder Bay system primary load. During the year, the average of the monthly peak loads supplied to the Rainy River district was 12,954 kilowatts (17,365 hp), approximately the same as was supplied in the previous year.

NORTHERN ONTARIO PROPERTIES-LOAD OF MUNICIPALITIES-1946-1947

Municipality	Frequency cycles	Peak load in horsepower		Change in load	
		July to Dec., 1946	July to Dec., 1947	Decrease hp	Increase hp
ABITIBI DISTRICT Hislop Townsite Kearns Townsite. King Kirkland Townsite Matachewan Townsite. Matheson Mooretown Ramore.	25 25	58.9 149.7 50.1 245.8 184.4 69.4 58.4	79.2 171.6 67.6 258.0 236.0 90.3 91.4		20.3 21.9 17.5 12.2 51.6 20.9 33.0
Sudbury DISTRICT Capreol	60 60	671.7 13,828.7	713.1 14,317.1		41.4 488.4
NIPISSING DISTRICT Callander Nipissing North Bay Powassan	60 60 60 60	140.6 3.0 7,258.6 191.4	169.3 3.0 7,799.8 232.3		28.7 541.2 40.9
PATRICIA DISTRICT Cottage Cove. Hudson. Red Lake Townsite. Sioux I ookout.	60 60 60 60	155.5 138.6 541.3 523.3	198.6 149.3 530.8 551.9	10.5	43.1 10.7 28.6

MAINTENANCE OF THE SYSTEMS

The post-war program of maintenance and rehabilitation of plants, as in the previous year, was handicapped by the continued high demand for power which has made it difficult to release any part of the overburdened plants for repairs. It was also slowed to some extent by a continued short supply of materials. Only the most urgent part of the program was undertaken in 1947.

Routine maintenance and inspection of all generating and associated auxiliary equipment were carried out, including the complete overhaul of ten large units, eight in the plants on the Niagara river and two at the Abitibi Canyon plant. On September 29, 1947, the penstock supplying water to four units in the DeCew Falls 66-cycle plant was taken out of service and is being rebuilt. During the summer the runner of one of the main turbines at the Barrett Chute generating station was replaced. Essential overhauling and reconditioning of the smaller generating units in the plants, chiefly those serving the Timiskaming district, were carried out during the year.

Regarding transformer stations and transmission lines, the main items of maintenance outside of routine inspection of equipment and patrol of transmission lines were as follows: Six large and 14 small transformers which had failed in normal service were repaired. The capacity of many transformer and distributing stations was increased by the addition of new units or the replacement of old ones, involving the addition of over 200,000 kilovolt-amperes in transformer capacity.

Defective wood poles on the older transmission lines were replaced during the year in accordance with an annual program of planned maintenance on all systems. High-tension insulators were tested and defective ones replaced on the older transmission lines in the Southern Ontario system and in the Abitibi district of the Northern Ontario Properties. Tower painting, which had been started the year before on the older lines of the Southern Ontario system, continued through 1947. Heavier conductor was erected and many defective poles replaced on 32 miles of 22,000-volt line in the Nipissing district. The rehabilitation of the 44,000-volt transmission lines in the Timiskaming district, which has been underway since these properties were acquired by the Commission, continued throughout the year.

FORESTRY DIVISION

Normal pre-war strength of the field staff was practically attained during the year by the return of men from military service and the employment of new personnel. This resulted in an increase in the overall volume of work that was performed.

Line Clearing Operations

The extent of line clearing operations for the Commission, municipalities and the Bell Telephone Company is shown in the Summary of Line Clearing Operations which follows:



FORESTRY SPRAYER MOUNTED ON TRUCK

SUMMARY OF LINE CLEARING OPERATIONS

	Brush cutting, pole spans	Trees treated	Miles of line cleared	Tree density per mile
Bell Telephone Company joint use of poles. New line construction. Municipal Hydro systems (16)*. Transmission and telephone lines. Rural operating areas.	18 50 703	17 3,360 8,209 43,856 37,655	1 81 106 2,318 878	34 41.5 77.4 18.9 42.9
Total	859	93,097	3,384	27.5

^{*}Includes Camp Borden operations—Department of National Defence.

Forestry Management

Forestry management activities were confined to the marking of trees to be used for fuel and improvement cutting on several properties owned by the Commission.

Reforestation

Approximately 25,000 seedling trees were planted along the banks and bridge approaches of the Queenston-Chippawa canal to replace losses due to military necessity during the war and other causes. The plantations at Eugenia and Sidney were kept under observation for recurrence of saw-fly infestation. A small amount of hand spraying was required at each location.

Spraying

Spraying of trees and shrubs on the grounds of the more important stations in the Eastern Ontario and Niagara divisions, was continued to control insects and fungus diseases. Experimental spraying was carried out to kill underbrush along high-tension power rights-of-way in the Niagara Falls area. The experiments will be continued and extended to other areas during the 1947-48 fiscal year.

SECTION III

MUNICIPAL WORK

Frequency Standardization Considered—Increased Municipal Loads
—Conservation Measures—Great Activity in Improving
Distribution Facilities

A T THE END of 1947 the Commission was serving 944 municipalities in Ontario. Of this number about two-thirds or 596, including 133 villages and 463 townships are served as an amalgamated rural division of Hydro service (dealt with in Section IV of this Report), and about one-third or 301 are supplied with power by the Commission under cost contracts and operate their own Hydro utilities either as a separate service or as part of a public utilities organization. In addition, 47 municipalities are operated direct by the Commission or are served under other forms of contract. This section of the Annual Report deals with the Commission's work in connection with these urban municipalities which operate their own Hydro utilities.

The Commission acting in an advisory capacity to the municipalities with which it has contracts, gave engineering advice and assistance in the purchase of electrical equipment required in the extension and improvement of plant, chiefly in transformer station projects.

There was no general revision of rates in the municipalities as the Commission considered that no rebates or reductions in rates should be recommended to the municipalities. Instead, improvement of facilities and of service to their customers was recommended.

Early in the year, preliminary studies were conducted by the Commission's staff on a proposal to standardize the frequency in Southern Ontario, and the cost of changing distribution equipment in 25-cycle municipalities was made a part of an interim report supplied to them for consideration. Following this, an engineering firm was engaged to supply a more detailed study of the engineering problems involved. The Provincial Auditors of the Commission's accounts were asked to bring in a report on financial aspects of the proposal.

Increased Municipal Loads

Power demands in municipalities continued to increase rapidly over requirements in the previous year and it became evident that the Commission's facilities for supply would be overtaxed during the winter months of 1947. In collaboration with the municipal authorities, plans were made during the spring of 1947 to conserve the power resources for essential use during the critical period when a shortage of supply was anticipated. A program of advertising was carried on to effect a saving of power and the elimination of the use of electrical energy for non-essential purposes, especially in domestic and commercial services. It became evident in September that more rigid restrictions would be necessary to effect further savings in electrical energy in practically all portions of the Province and mandatory powers were obtained by the Commission to prohibit use of energy for specific purposes.

A comparison of the average load supplied during 1947 to cost-contract municipalities with that supplied during 1946, indicates a continuing large increase in practically all municipalities. This is particularly noticeable in towns, villages and suburban areas adjacent to large urban centres. The percentage increase is as follows: Cities 9.4 per cent; towns 14.4 per cent; voted areas (suburban adjacent to large urban centres) 15.9 per cent; villages, police villages, etc., 14.0 per cent; total of all municipal loads 10.7 per cent.

Of the 301 urban Hydro utilities shown in the Commission's financial statement for Southern Ontario and Thunder Bay systems, 296 show increases in average load and 5 show decreases.

Industrial Loads Served Directly By The Commission

The Commission serves direct as system customers certain industries which cannot satisfactorily be provided with power from municipal Hydro systems. It also serves industries situated outside urban municipalities, including mines and pulp and paper companies in Northern Ontario.

During 1947 many industries throughout the Province completed conversion to a peace-time basis, and new plants were erected. This involved many revisions of existing arrangements for power supply and, in the case of new industries, provision for new power facilities.

The following tabulation shows the number of power agreements executed by the Commission with system customers in 1947, to replace agreements which expired during the year and to provide power to new system customers:

POWER AGREEMENTS EXECUTED WITH SYSTEM CUSTOMERS IN 1947

		Initial a	amount in horsepo	wer
Class of customer:	Number:	Firm	Interruptible	At-will
Industrial	15	19,660	21,500	49,000
Mining	5	2,030		
Total	20	21,690	21,500	49,000

The above includes renewed or revised agreements for existing customers with original contracts as follows:

Industrial	11	15,100	21,500	49,000
Increase	9	6,590		

At the end of the year negotiations were under way with 14 existing and 6 new customers, which would increase the existing load of 150,200 to 191,600 horsepower, or by 41,400 horsepower. Of this amount, 10,000 horsepower was an increase for the pulp and paper industry.

An endeavour was made to standardize agreements applicable to industrial, mining and paper industries as to form of rate and terms. This policy will be extended to existing agreements as they expire and are negotiated.

The plant layouts of 22 industrial consumers in Hydro municipalities were surveyed during 1947 and recommendations made as to means of improving power factor and the distribution and use of power throughout the plants.

Surveys were also made in ten plants chosen by the Canadian Manufacturers' Association to study the costs and means of converting the power supply from 25 to 60 cycle.

Assistance was rendered to new industries in obtaining locations for new plants, and existing industries were provided with technical information which would assist them in manufacturing processes.

Statistical Summary of Growth by Utilities

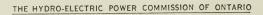
The annual growths in revenue and kilowatt-hour consumption, also the reduction in the average cost per kilowatt-hour from 1914 to 1946 for all domestic and commercial consumers are shown in the accompanying tables and graphs. The figures include all the municipal utilities listed 'in Statement "D" of Section X of this Report and also those municipal utilities owned and operated by The Hydro-Electric Power Commission of Ontario.

The tables give complete information for "all municipal utilities combined" for both domestic and commercial services; the graphs show only increased use and decreased cost for domestic and commercial services but give these data for cities, towns and villages as well as for "all municipalities combined."

It should be noted that the reduction in average cost per kilowatt-hour shown in accompanying tables is only in part due to reductions in rates or prices to consumers. Credit for the reduction in average cost belongs chiefly to the promotional form of modern rate schedules which are designed to give consumers the benefit of the low overall costs of providing additional energy by means of distribution facilities already established.

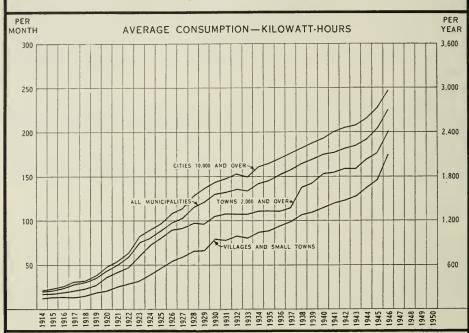
It should also be noted the tables indicate the amount charged to consumers on their regular accounts and that these figures do not include the further benefit that a large number of consumers obtain in the form of cash refunds from time to time.

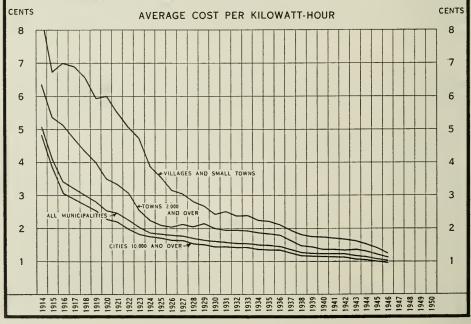
Under such promotional rate schedules, providing the initial rates are not too high, there is established a beneficial cycle of increased use leading to lower average costs which, if passed on to consumers in the form of lower rates or prices, start a repetition of the cycle. Under the Hydro practice of giving service at cost the promotional feature is inherent in the rate schedules, and the annual review of operations made by the Commission leads to appropriate rate reductions from time to time, although reduced average cost is chiefly a function and evidence of increased average use.

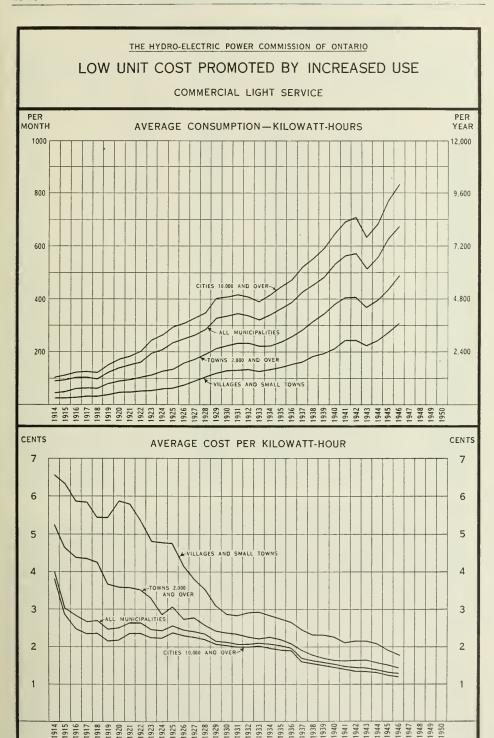


INCREASED USE BRINGS LOWER UNIT COST

DOMESTIC SERVICE







GROWTH IN HYDRO DOMESTIC SERVICE 1914 TO 1946 ALL URBAN MUNICIPALITIES COMBINED

Year	Number of munici- palities	Annual revenue	Kilowatt- hours consumed	Number of con-sumers	Average cost per kw-hr	Average monthly bill	Average monthly con- sumption
1913.		\$		49,200	cents	\$ c.	kw-hrs
1914.	49	730,168	14,359,100	64,866	5.08	1.06	21
1915.		854,748	20,935,000	85,865	4.08	0.92	22
1916.		992,628	29,359,900	108,364	3.42	0.82	24
1917.	123	1,340,855	41,930,200	131,313	3.20	0.91	29
1918.		1,583,677	52,731,700 68,409,100	146,885 169,455	3.00 2.82	0.92 1.01	31 35
1919. 1920.	166	1,933,577 2,514,658	98,211,000	193,892	2.56	1.01	45
1920.	100	3,086,051	124.619.800	219,465	2.48	1.13	50
1922.		3,761,172	166,182,000	245,577	2.26	1.34	59
1923.	206	4,955,420	242,926,600	286,852	2.04	1.54	76
1924.		5,548,835	292,608,400	303,787	1.89	1.56	80
1925.		6,414,134	342,356,700	326,307	1.85	1.67	90
1926.	242	7,353,394	404,722,959	349,882	1.81	1.79	98
1927.	267	8,497,190	469,851,690	387,573	1.80	1.87	103
1928.	268	9,411,812	551,010,035	408,071	1.71	1.97	115
1929.		10,256,860	612,141,722	424,419	1.67	2.05	122 130
1930. 1931.	289	10,752,720 11,226,091	671,028,310 704,784,457	433,260 447,466	1.61 1.59	2.09	133
1931.	298	11,676,222	740.900.418	452,615	1.57	2.15	136
1932.		11,639,178	742,195,402	460.878	1.57	2.10	134
1934.	300	12.078.069	797,532,709	463,913	1.51	2.17	143
1935.		12.393.536	826,972,873	471,265	1.50	2.19	146
1936.	302	12,922,466	881,972,324	482,557	1.47	2.23	152
1937.		12,680,921	926,350,703	490,140	1.37	2.16	157
1938.		12,880,180	1,003,489,453	507,132	1.28	2.12	165
1939.		13,300,898	1,056,310,109	518,123	1.26	2.14	170
1940.		13,905,290	1,115,888,837	531,514	1.25	2.18	175
1941.	320	14,452,796	1,169,273,964	546,613	1.24	2.20	178
1942. 1943.	323 323	15,022,931 15,069,547	1,224,195,712 1,266,930,625	559,605 570,470	1.23	2.24 2.20	182 185
1943.	323	15,009,547	1,266,930,625	579.890	1.19	2.20	194
1944.		16,053,818	1,348,033,019	608,905	1.07	2.20	205
1945.		17.526.854	1,704,125,246	628,118	1.03	2.32	226
1010.		21,020,001	2,701,120,210	, 320,110	1.00		

Financial Progress of Municipal Electrical Utilities

The consolidated balance sheet, published on page 206 of this Report, shows a total plant value in Hydro utilities of \$117,369,151 against which is a debenture balance debt of \$7,947,290. However, some municipalities are accumulating a sinking fund to pay for debentures at maturity and at the end of 1947 this fund amounted to \$4,387,586. If this sinking fund is deducted from the debenture balance debt the actual unpaid debenture debt would be \$3,559,704 or about 3 per cent of the original value of the distribution systems.

Automatic reduction in the debenture debt, due to the annual principal or sinking fund payments being provided for out of revenue, and the remarkable accumulation of assets reflect a satisfactory financial condition of the Hydro utilities generally. Statement "A" of this Report shows the relation of assets to liabilities in 304 municipalities. In 91 per cent of these municipalities the quick assets such as cash, bonds, accounts receivable and inventories exceed in value the total liabilities, including the debenture balance, and their Hydro utilities may fairly be considered as being out of debt.

GROWTH IN HYDRO COMMERCIAL LIGHT SERVICE 1914 TO 1946—ALL URBAN MUNICIPALITIES COMBINED

Year 1913.	Number of municipalities	Annual revenue	Kilowatt- hours consumed	Number of con-sumers	Average cost per kw-hr	Average monthly bill	Average monthly con- sumption
1913.	43	\$					Jumpuon
1914. 1915. 1916. 1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927. 1928. 1929. 1931. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1941. 1942. 1943. 1944. 1942.	123 166 206 242 267 268 273 289 298 300 300 302 305 312 317 317 317 320 323 323 323 340	624,781 649,585 753,784 860,475 947,769 1,158,406 1,477,963 1,818,211 2,143,981 2,613,257 2,907,427 3,836,946 4,176,595 4,823,781 6,377,520 6,402,882 6,149,792 6,344,921 6,601,461 7,001,893 6,676,968 6,909,454 7,256,262 7,785,024 7,991,091 7,695,928 6,787,241 7,298,848 8,429,573	15,669,700 21,444,900 26,866,000 31,983,500 35,053,500 47,087,000 59,336,900 68,863,500 81,216,000 105,482,600 120,474,800 151,555,200 171,797,014 200,606,137 234,526,831 272,343,330 287,838,022 305,121,640 306,596,543 292,335,489 306,632,722 327,413,421 355,235,553 393,067,119 427,020,841 459,635,100 508,986,422 540,995,581 531,680,336 472,129,977 524,905,356 634,878,480	13,113 15,657 19,324 22,216 27,453 29,570 33,307 36,496 39,333 43,098 46,383 50,137 56,018 58,444 64,039 68,013 70,106 71,873 75,286 75,705 75,443 75,016 74,884 75,878 76,620 78,021 78,949 79,512 79,824 77,326 76,194 78,256 84,413	cents 4.00 3.03 2.82 2.69 2.70 2.46 2.50 2.64 2.64 2.41 2.54 2.43 2.40 2.32 2.16 2.11 2.09 2.10 2.07 2.02 1.97 1.70 1.62 1.58 1.53 1.48 1.45 1.44 1.39 1.33	\$ c. 3.63 2.95 2.87 2.77 2.70 3.03 3.51 3.98 4.26 4.80 4.99 5.98 6.39 6.66 7.11 7.15 7.05 6.79 7.05 7.66 7.38 7.66 7.38 7.66 8.34 8.29 7.42 7.77 8.32	kw-hrs 91 97 102 103 99 123 140 151 162 196 207 235 250 267 287 329 338 344 338 323 341 364 390 428 456 485 573 516 559 627
1946.	339	9,364,009	725,475,237	89,109	1.29	8.76	679

Engineering Assistance to Municipalities

The Commission in an advisory capacity gave engineering assistance to many municipalities whose facilities had to be extended to serve added load. Many new municipal transformer stations were designed, or the plans were approved by the Commission's engineering staff. In some instances delay in delivery of equipment from the manufacturer required the substitution of temporary facilities in order to avoid serious overloading of existing equipment.

Large expenditures were made on capital account for improvements and extensions of plant and in many municipalities these are rapidly absorbing the funds available for such purposes. In a number of municipalities additional financing by debentures will be required to complete projects in hand.

Many municipalities installed improved street lighting equipment, or are about to do so, and have requested rates to apply for these improvements. Requests have been received from a few municipalities for consent of the Commission to the construction of office buildings, stores and garage facilities. The high construction costs prevailing indicate that these projects should be delayed if possible until it is more economical to undertake them.

The more important activities upon which the Commission's engineering advice and assistance were sought during the year are listed below. It should be understood that in most cases the changes and extensions made were to take care of increasing demands for power.

SOUTHERN ONTARIO SYSTEM

All Divisions

Ailsa Craig—The main transformer bank for power customers was enlarged.

Alliston—Distribution system poles were removed from the business section of the main street. The secondary bus was transferred to racks placed on the face of the buildings.

Improved street lights were erected on steel poles placed close to the buildings, leaving the curb clear of all poles in the business section.

Alvinston—Plans were completed for, and work was started on, the rehabilitation of the distribution system.

Amherstburg—Complete plans were furnished for rehabilitation and rebuilding the distribution system.

Arnprior—Primary lines were removed from the main street and a new street lighting service was provided from underground cable installations. The substation capacity was increased from 1,500 kva to 3,800 kva.

Aylmer—Work was commenced on moving the distribution system off the west end of Talbot street to the back of the lots, and installing a modern street-lighting system.

Barrie—Two feeders have been put in service from the new 3,000-kva Brock street station to supply Allandale. Rehabilitation of the distribution system is rapidly being completed.

Belleville—A new 3,000-kva unit type substation has been installed in the western portion of the city to serve two large new industries. Water heater control has been extended to the distribution system supplied out of this station.

Bothwell—A modern new street lighting system was installed in the business section.

Bradford—Plans were made to extend a 3-phase primary circuit to a new well at the south end of the town. This circuit can also be used as a second feeder to the existing pump house, and will give added security for water supply in case of fire.

Brantford—A site was purchased in the down-town area on which will be erected a substation which will supply the business district by means of an underground distribution system. Modern luminaire street lighting for a distance of 1,200 feet on the connecting link of No. 2 highway through the city was completed.

A unit type substation with 3,000-kva capacity, together with approximately 2,000 feet of 26,400-volt line and switching equipment was installed to supply a large industrial plant. A second 1,500-kva transformer was installed in Clarence street substation No. 3. Lighting and power feeders from this station were constructed.

Brantford Township Voted Area—The installation of two new 1,000-kva substations was completed and extensions to the distribution system were made.

Brechin—The distribution system is being changed to 8,000/4,600 volts in conjunction with the changeover in this district. The source of power for Brechin will be transferred from Beaverton to Thorah substation.

Brighton—A new feeder has been installed into the northern section of the municipality.

Brockville—The distribution station was sold to the Brockville Public Utilities Commission. The property was transferred November 1, 1947.

Studies were commenced to provide a new additional distributing station.

Carleton Place—A new switchboard was installed in the local distributing station.

Cayuga—The power distribution system was rehabilitated and a new power consumer with an initial load of 75 horsepower was served.

Chatham—The Grand Avenue municipal station was completed and placed in service.

Work was commenced on a new 3,000-kva municipal station on Richmond street, which will be placed in service early in 1948. Additional duct work to serve new industries in this area was undertaken.

Chesterville—Additions to the distribution system, required to supply increased load to an existing power consumer, were made.

Improved street lighting in the business section was completed.

Chippawa—The installation of a modern street lighting system, projected in 1946, was completed.

Cobourg—Additional distribution feeders and station capacity were required to serve the new Plastics manufacturing division of the Canadian General Electric Company.

Dresden—The distribution system was extended to supply two new industrial consumers.

Dunnville—Studies made in 1946 as to the advisability of increasing the substation capacity were implemented by further investigations.

Durham—The distribution system is being rehabilitated.

East York Township—This system supplied a large number of additional consumers. One additional 1,875-kva substation was added and material ordered for a second additional substation of 2,000-kva capacity to go into service early in 1948.

Elmvale—New steel street-light standards were ordered for installation in the business section. A large amount of work was done in rehabilitating the distribution system.

Erieau—The main 3-phase distribution feeder was rebuilt in a better situation, and secondaries and transformers were increased in several places.

Essex—The Public Utilities Commission purchased and renovated the Imperial Bank building for office accommodation.

Etobicoke Township Voted Area—Approval was given for the purchase of a 3,750-kva, unit-type substation to replace the existing Kingsway station.

The Aluminum Company of Canada plant, in the southwestern section of Etobicoke Township, was supplied with power as a direct customer of The Hydro-Electric Power Commission. In 1947 this customer was transferred to the township system.

Approval was given for the issuing of debentures in the amount of \$150,000 to provide for the construction of additional distribution facilities.

Exeter—Plans were drawn up to extend the distribution system to a large new housing development.

Forest—The street lighting system on the main street was improved and modernized.

Forest Hill—Approval was given for an expenditure of \$25,000 to cover the cost of purchase of a 3,000-kva station transformer to be used temporarily as spare equipment in the existing station and eventually to be installed in the new substation to be constructed in the village.

Approval was also given for the expenditure of \$48,000 for an underground extension to the distribution system, the Corporation agreeing to pay for 50 per cent of the labour cost. A street lighting installation on a local improvement basis is also included in this estimate.

Georgetown—A second substation of 1,200-kva capacity was completed and put in service.

Glencoe—Work was commenced on installing a modern street lighting system in the main business section.

Granton—Plans were drawn up and work commenced on a major job of rebuilding and enlarging the distribution system.

Hamilton—Unit type transformer stations of 6,000-kva capacity are being installed at Ferrie and Sherman substations.

The Spadina substation was enlarged by the addition of a 4,500-kva unit, bringing the total capacity of the substation up to 9,000 kva.

Modern street lighting luminaires of the pendant type were installed on about three-quarters of a mile on one of the main streets with a view to demonstrating the advantages of modern street lighting.

The 13,200-volt underground system was extended in order to supply a load of about 15,000 kva to the Steel Company of Canada.

Hanover—An additional feeder to supply the distribution system was constructed from the substation. Improvements were carried out on the street lights and distribution system.

Humberstone—Arrangements were completed for the purchase of a building to be remodelled as a new office for the electric utility. It is expected that improvements will be completed and the building occupied early in 1948.

Iroquois—The existing substation is being moved to a permanent position.

Kincardine—Modern street lighting units were installed in the business section of the town.

Kingston—The second 3,000 kva transformer with necessary switching was installed at No. 2 substation to give increased facilities in the western portion of the city.

Kirkfield—In order to take power from the new 44,000-volt No. 2 Kirkfield substation, the distribution system is being changed for operation at 8,000/4,600 volts.

Kitchener—A 550-kva Ignitron rectifier station was placed in service to supply direct current to the trolley coach system. The construction of a 3,000-kva substation building was completed but the installation of switching equipment was delayed.

Underground distribution system on Queen Street, which has been under construction for some time, was completed at an approximate cost of \$90,000. Work was continued on the conversion of the street lighting system from series to multiple and on increasing the sizes of primary and secondary conductor throughout the city.

Lambeth—Plans were prepared to move the distribution system on King's Highway No. 4 to the back of the lots, necessitated in part by the widening of the highway.

La Salle—The main distribution feeder on River Front road was rebuilt; transformers and secondary feeders were increased; and the street lighting system on the new feeder was rebuilt.

Leamington—The 4,000-volt underground system was further extended. The substation capacity was increased by adding a 2,000-kva bank. The distribution system was extended to supply service to 100 new V.L.A. homes. The present office quarters were enlarged by adding a modern addition to the front of the building.

Lindsay—Removal of line from the main street is under way as quickly as underground conductors and transformer vaults can be placed in operation Modernized street lighting is part of the program.

London—A new 13,200-volt line was constructed to serve the municipal substation on Carling street.

Lucan—Provision was made for service to two housing developments.

Lynden—Service was given to a new saw mill requiring 50 horsepower.

MacTier—The distribution system is being changed from 2,300 volts to 12,000/6,900 volts.

Merritton—A short extension of a 12,000-volt line was constructed between the two plants of the Alliance Paper Mills, Limited, and metering equipment was installed to measure the combined demand of both plants.

Milton—The distribution system is being changed to operate at 4,000 volts and a new 2,000 kva distributing station is being built.

Napanee—Modern street lighting brackets with high intensity lamps have made a marked improvement in the appearance of the main street and the central part of the town.

Newboro—Negotiations were carried on in respect to supplying the village with power and providing a new distribution system to replace that owned by the private company now supplying power to the municipality.

Newcastle—New street lighting fixtures have been placed in service in the business section of the village.

New Toronto—The New Toronto Public Utilities Commission is constructing and equipping a garage and stores building.

Niagara Falls—The rebuilding of a 1,500-kva, water-cooled transformer for outdoor use was completed, and the transformer was installed in Hickson Street station.

Arrangements were completed for the installation of telemetering equipment at the Victoria Avenue station to record the total city load. Street lighting equipment in the residential areas was replaced by modern street lighting units.

North York Township—The substation on Dufferin street, erected by the Department of Munitions and Supply to provide power to a portion of the De Havilland Aircraft hangars, was purchased by the North York Township system.

Orangeville—New street lights on steel standards were installed in the business section and part of the highway through the town.

Oshawa—Underground distribution facilities for secondary and street lighting circuits have been augmented extensively throughout the central portion of the city.

Ottawa—A new distributing station was installed to give more adequate service in the south-east portion of the city and to relieve the existing stations

Owen Sound—Two 750-kva synchronous condensers were put in service to improve voltage regulation. Further progress was made in changing a portion of the distribution system from 2,300 to 4,000 volts.

Parkhill—The work of installing thirty-one modern 300-watt street lights on Main street was commenced, as well as improvements in the distribution system to remove lines from Main street and to improve service throughout the town.

Peterborough—The city's distribution system has been extended to serve a newly acquired suburban area.

Picton—Construction has been started on the erection of a 2,700-kva municipal station.

Plattsville—The power bank supplying the Canada Sandpaper Company Limited was increased.

Port Rowan—Street lighting was improved on the main street.

Port Stanley—Plans were drawn up to enlarge distribution system facilities so as to serve a new 600-horsepower load.

Princeton—Modern street light luminaires were installed on the main street.

Renfrew—The street lighting system on Raglan street is being changed from series to multiple and a modern type of luminaire is being installed.

Riverside—Plans were drawn up for the installation of a water-heater control system.

St. George—Plans were made to rehabilitate and strengthen the local distribution system and modernize the street lighting system.

St. Thomas—A new municipal substation was constructed on Metcalfe street, consisting of three 150-kva transformers to supply power customers, and a three-phase 2,000-kva transformer for lighting service. This station is supplied by a new 13,200-volt underground feeder which, with control equipment, was installed during the year.

Some 4,000 feet of an overhead distribution system was installed for a new housing project.

Sarnia—Work was commenced on a new 2,000-kva municipal station. Distribution system extensions were provided for various new housing projects, one of which comprises 150 new homes. Work was continued on converting the distribution system in the business section from overhead to underground at a total estimated cost of \$100,000.

Scarborough Township—The construction of an additional 1,875-kva substation was proceeded with, to go into service early in 1948.

Simcoe—Further improvements in the street lighting system were made by installation of additional modern street lighting luminaires and brackets.

. Smiths Falls—Plans for a new substation were prepared.

Stoney Creek—Negotiations were carried out re the purchase of the local distribution system by this municipality.

Streetsville—Service was supplied to a large manufacturing plant in in the village, which substantially increased the amount of power used by Streetsville.

Swansea—A 1,875-kva substation was put in service to supply part of the municipality. The supply to the remaining part of the village is through the facilities of the Toronto Hydro-Electric System.

Tilbury—Plans were completed for a new ornamental street lighting system in the business area. The distribution system was extended to supply a new veterans' housing project.

Tillsonburg—Work was commenced on moving distribution circuits in the central part of the town from the streets to the back alleys.

Tottenham—The distribution system is being changed for operation at 8,000/4,600 volts in order to take advantage of a new substation to be placed north of the town.

Trafalgar Township—A lot has been purchased and work has been started on the construction of an office and stores building.

Trenton—Added 6,600-volt feeder capacity has been installed during the year to provide for increased industrial and residential loads.

Walkerton—The distribution system was changed to 4,000 volts and a large amount of work completed on the rehabilitation program.

Wallaceburg—Additional storeroom and garage facilities were constructed during the year.

Welland—Studies were completed and arrangements made for the installation of a new 3,000-kva outdoor substation.

Wellington—New canning factory loads have required additional feeder construction both in the east and west sections of the village.

West Lorne—The distribution system was removed from the main business section to the back of the buildings, and a modern ornamental street lighting system installed.

Plans and specifications were completed and approved for a new building to provide office, storeroom and garage accommodation for the utilities.

Weston—A new building was constructed for use as office quarters temporarily, until such time as a new office building is erected.

Whitby—A new office building is under construction by the local utilities commission.

Winchester—An additional primary feeder to serve new power customers in the municipality was constructed.

Windsor—An additional 3,000 kva transformer was placed in service in each of two municipal stations, and twelve low rupturing capacity oil breakers were replaced with 34,500-volt breakers having 1,000,000 kva rupturing capacity.

Approximately 6,000 feet of underground duct system was installed, including some 20,000 feet of three-phase, 250 m.c.m. primary cable.

Woodstock—A new 750-kva municipal substation was installed to supply a new woodworking plant, together with additional load in the same area.

York Township—Two additional 3,750-kva substations were constructed and put in service, and work on a third 3,750-kva substation was commenced. This station will be put in service early in the year.

THUNDER BAY SYSTEM

The Thunder Bay co-operative system serves the territorial district of Thunder Bay north of Lake Superior. Two power developments, the Alexander and Cameron Falls generating stations on the Nipigon river, supply 60-cycle power.

The co-operative municipalities include the cities of Port Arthur and Fort William, a voted area in Nipigon township and the various townships

of the Thunder Bay rural operating area. Power is also supplied to the mining townsites of Geraldton and Beardmore, to seven gold mines in the Beardmore and Long Lac mining districts, to six large paper mills and to the Rainy River district of the Northern Ontario Properties.

The total average load provided for and supplied to the Thunder Bay system by the Commission in 1947 was 142,301 horsepower, a net increase of 10,841 horsepower. The following table summarizes the load changes for the several groups of customers.

	Average load	Change in average load		
Group	supplied in 1947 horsepower	Increase horsepower	Decrease horsepower	
Municipal systems and				
Rural Operating Areas	44,577	3,200		
Pulp and Paper operations.	69,937	6,619		
Mining operations and				
Mining Townsites	10,939	1,531		
Rainy River District—				
Northern Ontario				
Properties	16,848		509	
	149.201	11.250	509	
	142,301	11,350	509	

New generating plants at Aguasabon and Pine Portage are under construction; details of capacity, etc., and progress on construction are given elsewhere in the Report.

Engineering assistance and advice was given during the year to the local Commissions of Port Arthur, Fort William and Nipigon township covering the operation and maintenance of their local systems, and advice was given to the various pulp and paper and mining companies in connection with the expansion of their plants.

NORTHERN ONTARIO PROPERTIES

The publicly-owned Hydro generating stations and transmission networks serving chiefly the mining areas of Northern Ontario and their associated communities are known as the Northern Ontario Properties. They are held in trust by the Commission for the Province and operated upon the financial responsibility of the Ontario government.

The policy of the Commission on behalf of the Government is to encourage and assist mining development and pulp and paper mill operation in northern Ontario, by supplying power at a low stabilized cost, as power cost constitutes an important item in the expense of operating these industries

The Northern Ontario Properties serve seven districts as follows:

The Abitibi district serves with 25-cycle power generated at Abitibi Canyon plant, the Porcupine, Matheson, Kirkland Lake, Matachewan and Larder Lake gold mining areas, and the International Nickel and Falcon-

bridge Nickel Companies at Sudbury. The total average load sold by the Abitibi district in 1947 was 134,938 horsepower, an increase of 21.2 per cent, due mainly to increased loads of the nickel and gold mines.

The Timiskaming district serves the Larder Lake, Kirkland Lake, Porcupine and Cobalt mining sections. Service is supplied at both 25 and 60 cycles from eight generating plants. The total average load sold in this district in 1947 was 50,979 horsepower, an increase of 8.6 per cent, mainly due to gold mines and municipal load.

The Timiskaming and Abitibi districts are inter-connected by three frequency-changer sets at Kirkland Lake, and plans are under way for a fourth. The plant at Upper Notch on the Montreal river is being changed to 60 cycle as the tie line from this plant to Timmins has been removed.

The **Sudbury district** serves with 60-cycle power the territory adjacent to the city of Sudbury and the International Nickel and Falconbridge Nickel Companies. The total average load sold in 1947 was 25,410 horsepower, an increase of 5.3 per cent.

The Nipissing district serves with 60-cycle power the area adjacent to the city of North Bay, the town of Powassan, and the village of Callander. The total load sold in this district in 1947 was 8,440 horsepower, an increase of 17.8 per cent due to municipal and rural growth.

The Sudbury and Nipissing district generating plants are all interconnected by transmission networks and the available power supplies were fully utilized in 1947. A further tie line is under construction to tie in the Timiskaming district with these two districts. This should be ready for service early in December 1947.

The Patricia district serves with 60-cycle power the Red Lake and Pickle Lake mining areas, and all territory as far east as Sioux Lookout, and as far south as Dryden. The total average load sold in 1947 was 14,173 horsepower, an increase of 27.6 per cent.

The Rainy River district serves with 60-cycle power purchased from the Thunder Bay system, the Steep Rock Iron Mines and adjacent territory, and the Rainy River rural operating area with power purchased from the Ontario-Minnesota Pulp and Paper Company. The total average load sold in 1947 was 16,482 horsepower, a decrease of 3.2 per cent.

The Manitoulin rural operating area, comprising all of Manitoulin and Cockburn Islands, is also included in the Northern Ontario Properties. Power is supplied by a hydraulic plant at Kagawong formerly owned by the Manitoulin Pulp Company but purchased by The Hydro-Electric Power Commission of Ontario on November 1, 1946. To this plant have been added two small portable diesel-driven generators. Plans are under way, in fact nearing completion, for the installation of two permanent diesel generators.

In the Northern Ontario Properties served by the Commission, power is supplied to thirty municipalities and townsites, five rural operating areas, fifty-five mining, two paper, two timber and nine miscellaneous companies. While mining operations at the present are not as active as in past years, negotiations are proceeding for a supply of power for paper companies, in which there is substantial expansion at the present time.

ELECTRICAL INSPECTION

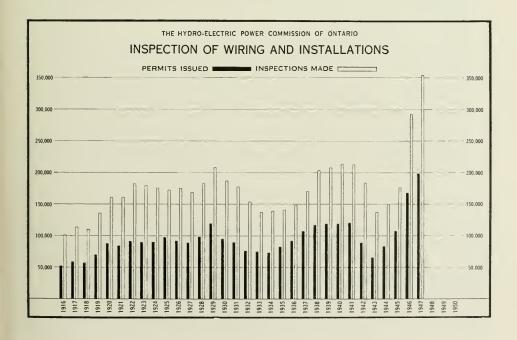
The volume of business handled in 1947, relating to the inspection of electric wiring and equipment, was the greatest for any year since the legislation of 1916 effectively placed the control of electrical installations in the hands of the Commission.

Statistical

A total of 198,028 permits was issued, an increase of 29,874 or 17.8 per cent. Inspections made numbered 352,766, an increase of 59,905 or 20.5 per cent. The accompanying graph shows the number of permits issued and inspections made during the fiscal years 1916 to 1947 inclusive.

Fires Attributed to Electricity

Every year, numerous fires are reported to the Commission as having been due to electric wiring or equipment. In only five instances in 1947 could it be definitely proved that the fires were of electrical origin. The various causes were, in brief, defective joint in service conduit, short-circuit in non-metallic sheathed cable, short-circuit in overfused branch-circuit wiring, pressing iron left on unattended and an extension lamp left lying on a cupboard shelf. There may have been other fires of electrical origin but direct evidence was destroyed by fire.



Electrocutions and Fatal Accidents

Twelve persons were reported as having been electrocuted during 1947 on electrical installations under the jurisdiction of the Electrical Inspection department. The details, in brief, are as follows,

- 1. An electrician was standing on the ground pulling a secondary taut. It came into contact with a 4,300-volt primary conductor.
- 2. A welding foreman came into contact with an ungrounded welder. Potential received, 430 volts.
- 3. A workman was electrocuted when he attempted to move a machine without first having disconnected the supply circuit. Potential 550 volts.
- 4. A child was electrocuted on touching a defective floor lamp while in contact with a radiator. Circuit potential 118 volts.
- 5. An electrician was electrocuted while attempting to adjust a switch-board relay. Potential of circuit 550 volts.
- 6. An electrician was electrocuted while standing on ground paying out a weatherproof conductor to electrician at top of pole. The conductor came into contact with a 4,600-volt transformer drop lead.
- 7. An electrician was electrocuted when he came into contact with a 2,400-volt bus in a paper mill.
- 8. 9. Two men were electrocuted while drilling a well at their summer cottage. They attempted to remove the well casing and it fell against a 4,600-volt primary conductor.
- 10. A child was electrocuted on coming into contact with an ungrounded sump pump. Potential received 55 volts.
- 11. A youth was electrocuted while repairing a broken trolley conductor on a crane. He had attempted to render the circuit "dead", but had opened the wrong switch in error. Potential received 90 volts.
- 12. A workman came into contact with a defective portion of a portable cable in a foundry. A conductor was bare at that point. Circuit potential 550 volts.

Canadian Electrical Code

In 1947, the Canadian Electrical Code, Part I, Fifth Edition was published. In accordance with the Ontario Regulations Act approximately two-thirds of the Canadian Electrical Code has been drafted into the form prescribed by the Attorney General's Department and the remaining work to be done in this connection is being expedited as rapidly as possible.

SECTION IV

RURAL ELECTRICAL SERVICE

IN ONTARIO

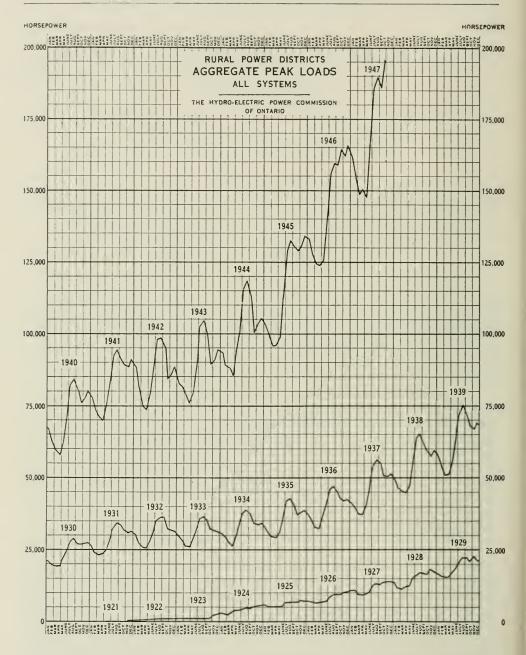
Comprehensive Province-wide Service with Uniform Rate Structure—
Provincial Assistance to Agriculture—Record Increase in
Number of Consumers Added—Great Increase in Aggregate Load Supplied

ONE OF THE most encouraging features of Hydro service through the years has been the steady progress made in supplying power to rural sections of the Province. Even before the physical facilities, generating stations and transmission networks, etc., had progressed to the point where an extensive rural service was a practical possibility, certain pioneer work was done in demonstrating the benefits that might be hoped for in the future.

As the rural system expanded, policies looking forward into the future, were formed by the Commission having as their objective a province-wide distribution to all rural communities. Foremost among these policies was the drastic reduction of rates, especially in the matter of service charges. The reductions progressively made relied heavily upon the revenues to be expected from increased sales of energy for their justification. In addition, as existing lines picked up new consumers, thus adding to the revenue, the Commission reduced the number of consumers per mile to be obtained for new lines until at the present time only two farms, or their equivalent in other classes of service, are required before construction may be undertaken.

Perhaps the boldest step taken in this regard was that considered in 1943 and put into effect in January 1944. As from January 1 of that year the Commission with the approval of the Government put into operation a comprehensive revision of its rural service which was without doubt the greatest step forward since the formation of rural power districts in 1920, and the subsequent grants-in-aid. The chief feature of the new set-up for rural service was the establishment for rural districts of a uniform rate structure with a common rate applicable to each class of service. Thus no matter where rural service is given in Ontario by the Hydro the rural consumer for the same class of service and with the same consumption of electricity now pays the same amount on his quarterly bill.

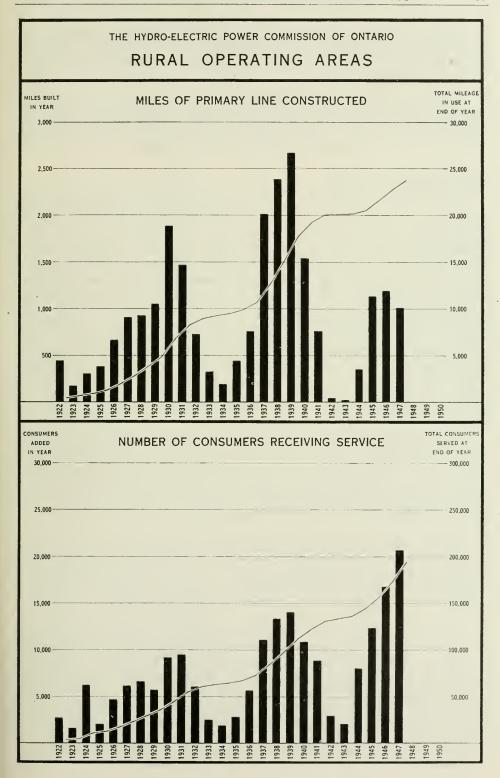
Although for convenience of administration, the local rural operating areas have been retained as administrative units, the whole rural service is amalgamated into one rural power division of Hydro service. This rural amalgamation and unification of rates is made possible by the financial



assistance given by the Province as part of its aid to agriculture. The extent and effect of the Province's financial assistance with respect to the distribution of power in rural operating areas should therefore be clearly understood.

Provincial Assistance

The government grant-in-aid of 50 per cent of the capital cost of lines and equipment for the supply of power, relates solely to the initial capital investment for distribution facilities in rural operating areas.



Having made this grant-in-aid the government further participates in the operation of the province-wide Hydro rural service in that it guarantees the Commission against loss due to the fixing of a maximum service charge or its reduction or removal.*

The new set-up is a means of apportioning the benefits from provincial assistance where they will do most good: namely, to the farmer in sparsely settled and less fertile farming areas where, because of these conditions, electrical service is necessarily more costly to provide.

Status of Rural Service in 1947

At the end of 1946 the Commission was distributing electrical power in 91 rural operating areas. During the year 1947 it was deemed advisable for administrative purposes to divide 3 existing areas, thus increasing the number of operating areas to 94. In addition 3 new areas were formed in northeastern Ontario for the purpose of extending rural service in this region as soon as lines may be constructed. The consumers in the 94 rural operating areas now total 196,506 of which 2,453 on partially constructed lines will receive service shortly after the month of November, 1947. The total power supplied during the month of October was 195,515 horsepower. It will thus be seen that the average demand per consumer is about one horsepower. The consumers are situated in 439 organized townships; 1 improvement district, 23 unorganized townships and 132 police villages, villages and small towns, and are served over a network of rural primary lines which aggregate 24,374 miles. In addition to the 463 townships served by rural operating areas, 10 townships are served jointly by rural operating areas and voted areas.

A large proportion of new material and equipment which became available during the year had to be used to strengthen the carrying capacity of existing lines, before new lines could be extended and new loads carried. This increase in capacity will enable the Commission to push ahead with many extensions, thus bringing nearer each year the ultimate objective of Province wide service to all rural communities.

On October 31, 1947, there were enough rural applications for service on hand to warrant the construction of 4,707 miles of new primary line in addition to 609 miles uncompleted in 1947. The total program therefore is now 5,316 miles of which the Commission hopes to construct 3,429 during 1948 and the remainder, with probable new additions, in 1949.

During the past year the mileage of rural-line extensions, approved for construction in rural operating areas in Ontario, was 734. The net increase in the number of consumers actually served, after allowance for cancellation and sale of lines in territories annexed to municipalities was about 21,000. Thus, although primary line extensions approved or constructed were below the proposed program, the number of consumers that were added to existing lines was so great that the total consumers added was considerably higher than in any year since the commencement of rural power distribution.

^{*}The Rural Power District Service Charge Amendment Act, 1944.

Since 1921 the Commission was unable, during two periods, to maintain the rate of growth of rural electrification. The first period occurred about 1932 and was the result of the depression during those years; the second occurred during the recent war when service was provided only to those farms which would aid the war effort by increased production. To illustrate this feature of rural service two graphs have been placed in this section showing for each year since 1921 the miles of primary line constructed and the number of consumers receiving service.

The average aggregate peak load supplied to all rural Hydro consumers, in rural areas in the Province, amounted to nearly 168,000 horsepower, an increase of 20 per cent over 1946.

In previous years the maximum aggregate power sold in rural areas occurred during the summer months of July or August. During August 1947 the peak was 189,490 horsepower or 19 per cent higher than the previous summer peak. Had the usual conditions prevailed the power sold to consumers during the fall and winter should have been slightly lower than the preceding summer peak; however, the use of rural power is increasing to such an extent that during the month of October a peak of 195,515 horsepower was established.

The remarkable growth of rural service is shown on the accompanying table of load growth during the last ten years. It is interesting to note that the rural peak load in 1947 was three times the peak load prior to the War.

LOAD	GROWTH-	-RURAL	OPERATING	AREAS
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Year	Maximum aggr during		Average aggregate peak load during year		
1 car	Horsepower	Increase for month	Horsepower	Annual increase	
1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947.	65,022 75,233 84,346 94,505 98,887 104,394 118,267 132,572 164,424 195,515	8.5 10.2 9.1 10.2 4.4 5.5 13.9 14.3 36.1 31.1	53,383 61,634 70,018 81,245 86,616 88,186 98,576 111,255 139,818 167,861	7.9 8.3 8.4 11.2 5.4 1.6 10.4 12.7 28.6 28.0	

Aggregate peak load is the summation of peak loads of all rural operating areas for highest aggregate month. Increase indicates per cent over same month in previous year.

Average aggregate peak load is the summation of twelve monthly peak loads for each and all rural operating areas divided by twelve.

RURAL LINE EXTENSIONS APPROVED BY THE COMMISSION DURING THE YEAR 1947

System			crease in number of consumers		Power supplied in	Capital approved for extensions	
	line	Farm	Non- farm	Total	October 1947	Total	Provincial grant-in-aid
Southern Ontario Niagara division Georgian Bay div Eastern Ontario div.	251.20 216.58 217.81	2,730 1,145 1,325	7,068 2,716 3,338	9,798 3,861 4,663	h.p. 131,027 20,821 38,407	\$ 3,007,728 1,153,058 1,450,380	\$ 1,503,864 575,879 725,190
Southern Ont. totals THUNDER BAY NORTHERN ONTARIO PROPERTIES	685.59 15.27 33.34	5,200 52 96	13,122 161 629	18,322 213 725	190,255 1,259 4,001	5,611,166 83,034 241,650	2,804,933 41,517 119,268
Totals	734.20	5,348	13,912	19,260	195,515	5,935,850	2,965,718

SUMMARY OF RURAL LINE CONSTRUCTION

Approved by the Commission from June 1, 1921 to October 31, 1947

Constructed or Under Construction

System	Miles of Number of consumers primary			Capital Expenditure†		
	line	Farm	Non- farm	Total	Total	Provincial grant-in-aid
Southern Ontario Niagara division Georgian Bay div Eastern Ontario div.	13,408.58 4,071.18 6,012.07	51,453 9,900 17,358	63,555 20,841 25,464	115,008 30,741 42,822	\$ c. 33,167,688.83 8,946,841.39 14,157,996.77	\$ c. 16,495,569.95 4,372,925.18 7,028,979.96
Southern Ont. totals THUNDER BAY NORTHERN ONTARIO PROPERTIES	23,491.83 327.57 554.79	78,711 727 1,068	109,860 1,210 4,930	188,571 1,937 5,998	56,272,526.99 678,405.45 2,011,912.52	27,897,475.09 440,202.72 874,480.33
Totals	24,374.19*	80,506	116,000	196,506	58,962,844.96	29,111,158.14

^{*}These totals include 609.05 miles of primary line under construction on October 31, 1947 and service to 2,453 new consumers not completed until after the end of the fiscal year.

During the year 359 rural consumers were annexed by urban municipalities and this group has been deducted from the total number of consumers.

†During previous years the figures published in this statement represented the summation of all estimates since the beginning of rural operation. As the Commission was able in a large number of cases to construct these lines for a sum lower than the original estimate, it is now deemed advisable to show the actual cost for all years 1921 to 1947. Included in these figures is an estimate of the cost of completing lines partially constructed in 1947.

NEW UNIFORM RURAL RATE STRUCTURE

The new uniform rural rate structure, for the sale of energy, was placed in effect on January 1, 1944 for all rural Hydro service throughout the Province and replaced the numerous rural rate schedules previously in effect.

A further reduction in the first energy charge was made on May 1, 1945. So that the new energy rates now consist of a three-step energy charge, as follows:

- 1. A first block or number of kilowatt-hours of energy consumption in the billing period, charged for at 3.5 cents gross per kilowatt-hour;
- 2. A second block or number of kilowatt-hours of energy consumption in the billing period, charged for at 1.6 cents gross per kilowatt-hour; and
- 3. All remaining kilowatt-hours of energy consumption in the billing period, charged for at 0.75 cents gross per kilowatt-hour.

In addition, the service charge in use prior to January 1, 1944, was eliminated in the case of Farm and Commercial service, reduced by 50 per cent for Hamlet service and changed to an annual fixed charge in the case of Summer service.

Under the new rate schedules, rural service is now available in four main classes. All rural contracts for service carry a symbol consisting of a letter indicating the classification of the contract, followed by a number which indicates the demand rating or permissible demand in kilowatts contracted for. These classes and symbols are: Farm service, F; Hamlet service, H; Commercial service, C, and Summer service, S.

The following are the rate schedules for the main classes of service with various demand ratings:

RATE SCHEDULES FOR RURAL SERVICE

FARM SERVICE

Minimum demand rating for billing purposes—3 kilowatts

Farm rating	Demand in kw	Service charge	Kw-hrs per month at 3.5 cents per kw-hr	Kw-hrs per month at 1.6 cents per kw-hr	Kw-hrs per month at 0.75 cents per kw-hr	Min. bill per month gross
F3 F4 F5 F6 F7 F8 F9 F10	3 4 5 6 7 8 9	Nil 	60 80 100 120 140 160 180 200	180 240 300 360 420 480 540 600	Balance " " " "	\$ c 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50

NOTE: Farm classes above F3 are computed by adding, for each month, 20 kw-hrs to the number of kw-hrs at the first rate, and 60 kw-hrs to the number of kw-hrs at the second rate, for each increase of 1 kw in demand.

For the minimum gross bill add 75 cents for each increase of 1 kw in demand.

Prompt payment discount 10 per cent.

HAMLET SERVICE

Minimum demand rating for billing purposes—2 kilowatts

Hamlet rating	Demand in kw	Monthly service charge	Kw-hrs per month at 3.5 cents per kw-hr	Kw-hrs per month at 1.6 cents per kw-hr	Kw-hrs per month at 0.75 cents per kw-hr	Min. bill per month gross
H2 H3 H4 H5 H6 H7 H8 H9	2 3 4 5 6 7 8 9	cents 56 " " " " " "	40 40 60 80 100 120 140 160 180	80 180 240 300 360 420 480 540 600	Balance " " " " " " " " " " " " " " "	\$ c 1.67 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50

Note: Hamlet classes above H3 are computed by adding, for each month, 20 kw-hrs to the number of kw-hrs at the first rate and 60 kw-hrs to the number of kw-hrs at the second rate for each increase of 1 kw in demand.

For the minimum gross bill add 75 cents for each increase of 1 kw in demand.

Prompt payment discount 10 per cent.

COMMERCIAL SERVICE

Minimum demand rating for billing purposes—2 kilowatts

Com- mercial rating	Demand in kw	Monthly service charge	Kw-hrs per month at 3.5 cents per kw-hr	Kw-hrs per month at 1.6 cents per kw-hr	Kw-hrs per month at 0.75 cents per kw-hr	Min. bill per month gross
C1* C2 C3 C4 C5 C6 C7 C8 C9 C10	1 2 3 4 5 6 7 8 9	Nil " " " " " " " " " " " " " " " " " " "	30 60 90 120 150 180 210 240 270 300	60 120 180 240 300 360 420 480 540 600	Balance " " " " " " " " " " " " " " " " " "	\$ c 0.75 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50

NOTE: Commercial classes above C2 are computed by adding, for each month, 30 kw-hrs to the number of kw-hrs at the first rate and 60 kw-hrs to the number of kw-hrs at the second rate, for each increase of 1 kw in demand.

For the minimum gross bill add 75 cents for each increase of 1 kw in demand.

Prompt payment discount 10 per cent.

*Only available in combination with a hamlet service.

SUMMER SERVICE

Minimum demand rating for billing purposes—2 kilowatts

Summer rating	Demand in kw	Annual fixed charge	Kw-hrs per annum at 3.5 cents per kw-hr	Kw-hrs per annum at 1.6 cents per kw-hr	Kw-hrs per annum at 0.75 cents per kw-hr	Minimum bill
S2 S3 S4 S5 S6 S7 S8 S9 S10	2 3 4 5 6 7 8 9	\$ c 11.11 15.56 15.56 16.67 20.00 23.33 26.67 30.00 33.33	150 225 300 375 450 525 600 675 750	450 675 900 1,125 1,350 1,575 1,800 2,025 2,250	Balance " " " " " " "	Nil a a a a a a

Note: Summer Service classes above S2 are computed by adding, for each year 75 kw-hrs to the number of kw-hrs at the first rate and 225 kw-hrs to the number of kw-hrs at the second rate for each increase of 1 kw in demand.

The annual fixed charge for all classes above \$4 is \$3.33 for each kw in demand.

Prompt payment discount 10 per cent.



RURAL ELECTRIC SERVICE IN ONTARIO

Interior of low-sot greenhouse showing installation of electric soil-heating cables and controls on the benches. This type of greenhouse can advantageously be used by many market gardeners and rural residents

DESCRIPTION OF MAIN CLASSES OF HYDRO RURAL SERVICE

Beginning January 1, 1944 electrical service was supplied in rural operating areas under four main classes described below. When the class of service which will meet the requirements of the individual consumer has been chosen, contracts are executed between the consumer and the corporation of the township concerned.

Farm Service

Farm service shall be considered to be service to property having lands used for the production of food stuff or industrial crops for sale and from which a substantial livelihood is obtained. It shall include electrical service to all farm buildings and equipment situated on the farm and used for farm purposes, including buildings and equipment required for processing the products of the customer's farm.

Service under a single farm contract may be supplied to all dwellings or separate domestic establishments situated on the farm property and occupied by persons who are regularly engaged in the operation of the farm.

Additional dwellings or domestic establishments situated on a farm property and occupied by persons not regularly engaged in the operation of the farm, if served, shall be classed as hamlet contracts and rated accordingly. Small properties of five acres and less will be classed as hamlet services except under special circumstances which would justify a farm classification.

The minimum demand rating of a farm service for billing purposes shall be taken as three kilowatts.

Hamlet Service

Hamlet service shall be considered to be service to a domestic establishment or residence in a rural or in a small suburban community served as part of a rural operating area. This class shall include isolated rural residences.

The demand rating of a two-wire hamlet service will be taken as two kilowatts and will be limited by a 20-ampere breaker or a 30-ampere fuse. Where the hamlet service exceeds two kilowatts, three-wire service shall be supplied and the minimum demand rating for a three-wire service shall be three kilowatts.

Commercial Service

Commercial service shall be considered to be service to community or business premises including schools, churches, public halls, hospitals, hotels, public boarding houses, tourist camps, business and professional offices, stores, repair shops, garages, gasoline stations, blacksmith and woodworking shops, small manufacturing and processing plants, chick hatcheries, sign and display lighting and all other premises used for commercial or community purposes.

Single-phase power only will be supplied under a commercial contract. Where three-phase power is required, the service will be classed as an "Industrial power service."

The minimum demand rating of a commercial contract shall be two kilowatts for a two-wire service and three kilowatts for a three-wire service.

Summer Service

Summer service is applicable to properties where service is used normally only during the summer months and which are not established as the consumer's permanent residence. This service is not limited to cottages, but may include summer hotels, tourist camps, refreshment booths and other commercial premises

The demand rating of a two-wire summer service will be taken as two kilowatts and will be limited to a maximum of a 20-ampere breaker or a 30-ampere fuse. Where the summer service exceeds two kilowatts, three-wire service shall be supplied and the minimum demand rating for a three-wire service shall be three kilowatts.

STANDARD NUMBER OF CONSUMERS PER MILE

The number of consumers required per mile of line extension varies according to classification and rating of all applicants. For this purpose a unit rating is allocated to each consumer, according to the classification and rating.

The following table shows the number of units and contracts per mile for each class of service:—

Classification of consumer	Rating in kilowatts	Units per contract	Contracts per mile
Single Services Farm. Hamlet. Hamlet. Hamlet. Hamlet. Commercial Commercial. Commercial. Commercial. Summer. Summer. Summer. Summer. Summer.	3 and over 2 3 4 5 and over 2 3 4 5 and over 2 3 4 5 and over	5333433342223	2 3.33 3.33 3.33 2.5 3.33 3.33 2.5 5 5 5 3.33
Multiple Services Farm Hamlet Hamlet Commercial Commercial Summer Summer	3 and over 5 and over 4 5 and over 4 5 and over	5 3 4 3 4 2 3	2 3.33 2.5 3.33 2.5 5 3.33
Combination Services Total kilowatts of: Combined Farm with Hamlet or Commercial. Combined Hamlet with Commercial. Combined Hamlet with Commercial.	4 and over up to 4 5 and over	5 3 4	2 3.33 2.5

RATE SCHEDULES FOR INDUSTRIAL POWER SERVICE SERVED THROUGH FACILITIES OF RURAL OPERATING AREAS

Industrial Power Service

Power service shall cover three-phase service to power users such as creameries, cheese factories, chopping mills, industries and special loads which cannot be supplied as Commercial single-phase service.

INDUSTRIAL POWER SERVICE—RATES TO CONSUMERS SERVED THROUGH FACILITIES OF RURAL OPERATING AREAS

Control office location Rural operating areas m	rate, vice 130 charge hours' per nonthly h.p. muse of per	nonth per	All additional per kw-hr	Prompt payment discount
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Southern Ontario System— Niagara Division

Tringilla Divisi								
AylmerBeamsvilleBlenheimBothwell.Brampton	Aylmer Beamsville Blenheim Bothwell Brampton	\$ c. 27.00 24.00 28.00 30.00 26.00	\$ c. 1.00 1.00 1.00 1.00	cents 2.3 2.3 2.5 2.8 2.2	cents 1.5 1.5 1.6 1.8 1.4	cents 0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10 10
Brantford Burlington Cayuga Chatham Clinton	Brantford Burlington Cayuga Chatham Clinton	26.00 25.00 33.00 25.00 31.00	1.00 1.00 1.00 1.00 1.00	2.2 2.0 3.2 2.0 2.9	1.4 1.3 2.1 1.3 1.9	0.33 0.33 0.33 0.33 0.33		10 10 10 10 10
Delaware Dorchester Dundas Elmira Essex	Delaware Dorchester Dundas Elmira Essex.	26.00 26.00 25.00 26.00 27.00	1.00 1.00 1.00 1.00 1.00	2.2 2.2 2.0 2.2 2.3	1.4 1.4 1.3 1.4 1.5	0.33 0.33 0.33 0.33 0.33		10 10 10 10 10
ExeterForestGuelphHarrowIngersoll	Guelph	30.00 31.00 24.00 28.00 25.00	1.00 1.00 1.00 1.00 1.00	2.8 2.9 2.3 2.5 2.0	1.8 1.9 1.5 1.6 1.3	0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10
Kingsville Kitchener Listowel London Lucan	Kingsville Kitchener Listowel London Lucan	28.00 26.00 26.00 25.00 30.00	1.00 1.00 1.00 1.00 1.00	2.5 2.2 2.2 2.0 2.8	1.6 1.4 1.4 1.3 1.8	0.33 0.33 0.33 0.33 0.33		10 10 10 10 10
Markham Merlin Mitchell St. Catharines. Norwich	Markham Merlin	26.00 28.00 28.00 23.00 26.00	1.00 1.00 1.00 1.00 1.00	2.2 2.5 2.5 2.1 2.2	1.4 1.6 1.6 1.4 1.4	0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10

INDUSTRIAL POWER SERVICE—RATES TO CONSUMERS SERVED THROUGH FACILITIES OF RURAL OPERATING AREAS

Control office oper	ural rating reas Basis of rate, 130 hours' monthly use of demand	Ser- vice charge per h.p. per month	First 50 hrs per month per kw-hr	Second 50 hrs per month per kw-hr	All addi- tional per kw-hr	Local dis- count	Prompt payment discount
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Niagara Division—Continued

Oil Springs Richmond Hill Ridgetown St. Thomas Stoney Creek.	Oil Springs Rich'd Hill Ridgetown St. Thomas Saltileet Caledonia	\$ c. 31.00 26.00 32.00 27.00 22.00	\$ c. 1.00 1.00 1.00 1.00 1.00	cents 2.9 2.2 3.1 2.3 1.9	cents 1.9 1.4 2.0 1.5 1.3	cents 0.33 0.33 0.33 0.33 0.33	76	10 10 10 10 10 10
Sarnia. Simcoe. Stratford. Sutton. Tillsonburg.	Sarnia Simcoe Stratford Sutton Tillsonburg	25.00 29.00 28.00 26.00 28.00 26.00	1.00 1.00 1.00 1.00 1.00 1.00	2.0 2.6 2.5 2.2 2.5 2.2	1.3 1.7 1.6 1.4 1.6 1.4	0.33 0.33 0.33 0.33 0.33 0.33		10 10 10 10 10 10
Wallaceburg Welland West Lorne Windsor Woodbridge	Windsor	27.00 20.00 30.00 25.00 27.00	1.00 1.00 1.00 1.00 1.00	2.3 1.6 2.8 2.0 2.3 2.0	1.5 1.0 1.8 1.3 1.5	0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10 10

Southern Ontario System-

Georgian Bay Division

			,	,				
Bala Barrie. Bracebridge Cannington Orillia.	Bala	\$ c. 25.00 30.00 29.00 31.00 24.00	\$ c. 1.00 1.00 1.00 1.00 1.00	cents 2.0 2.8 2.6 2.9 2.3	cents 1.3 1.8 1.7 1.9 1.5	cents 0.33 0.33 0.33 0.33 0.33	76	10 10 10 10 10 10
Huntsville Penetang Orangeville Owen Sound Shelburne	Midland Orangeville Owen Sound.	28.00 27.00 36.00 32.00 31.00	1.00 1.00 1.00 1.00 1.00	2.5 2.3 3.7 3.1 2.9	1.6 1.5 2.4 2.0 1.9	0.33 0.33 0.33 0.33 0.33		10 10 10 10 10
Stayner Uxbridge Walkerton Wingham	Uxbridge Walkerton	26.00 32.00 30.00 31.00	1.00 1.00 1.00 1.00	2.2 3.1 2.8 2.9	1.4 2.0 1.8 1.9	0.33 0.33 0.33 0.33		10 10 10 10

INDUSTRIAL POWER SERVICE—RATES TO CONSUMERS SERVED THROUGH FACILITIES OF RURAL OPERATING AREAS

Control office location	Rural operating areas	Basis of rate, 130 hours' monthly use of demand	Ser- vice charge per h.p. per month	First 50 hrs per month per kw-hr	Second 50 hrs per month per kw-hr	All addi- tional per kw-hr	Local dis- count	Prompt payment discount	
Southern Ont	ario System— rio Division	-							
Arnprior Belleville Bowmanville Brockville Carleton Place	Arnprior Renfrew Belleville Bowmanville. Brockville Carleton Pl	\$ c. 25.00 25.00 24.00 26.00 25.00 24.00	\$ c. 1.00 1.00 1.00 1.00 1.00 1.00	cents 2.0 2.0 2.3 2.2 2.0 2.3	cents 1.3 1.3 1.5 1.4 1.3 1.5	cents 0.33 0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10 10 10	
Cobourg Delta Fenelon Falls. Frankford Kingston	Cobourg Delta Fenelon Falls Frankford Brighton Kingston	25.00 26.00 28.00 23.00 23.00 25.00	1.00 1.00 1.00 1.00 1.00 1.00	2.0 2.2 2.5 2.1 2.1 2.0	1.3 1.4 1.6 1.4 1.4 1.3	0.33 0.33 0.33 0.33 0.33 0.33	10 10	10 10 10 10 10 10	
Lancaster Millbrook Minden Napanee Norwood	Martintown Millbrook Minden Napanee Norwood	33.00 28.00 28.00 24.00 31.00	1.00 1.00 1.00 1.00 1.00	3.2 2.5 2.5 2.3 2.9	2.1 1.6 1.6 1.5 1.9	0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10	
Oshawa Ottawa Perth Peterborough.	Oshawa Ottawa Perth Peterborough Lakefield Picton	25.00 22.00 26.00 20.00 25.00 29.00	1.00 1.00 1.00 1.00 1.00 1.00	2.0 1.9 2.2 1.6 2.0 2.6	1.3 1.3 1.4 1.0 1.3 1.7	0.33 0.33 0.33 0.33 0.33 0.33	10	10 10 10 10 10 10	
Plantagenet Tweed Winchester	Plantagenet Tweed Winchester	33.00 34.00 26.00	1.00 1.00 1.00	3.2 3.4 2.2	2.1 2.2 1.4	0.33 0.33 0.33		10 10 10	
Thunder Bay	System								
Thunder Bay.	Thunder Bay	\$ c. 24.00	\$ c. 1.00	cents 2.3	cents 1.5	cents 0.33	10	% 10	
Northern Ont	Northern Ontario Properties								
Matheson Kagawong North Bay Sudbury	Connaught Manitoulin North Bay Sudbury	\$ c. 40.00 35.00 36.00 35.00	\$ c. 1.00 1.00 1.00 1.00	cents 4.3 3.5 3.7 3.5	cents 2.8 2.3 2.4 2.3	cents 0.33 0.33 0.33 0.33	%	10 10 10 10 10	



LINE CONSTRUCTION FOR RURAL SERVICE

Surveying the Route Digging the Hole Erecting the Pole Stringing the Wire

FARM USES FOR ELECTRICITY

The use made of electrical service by farmers divides itself broadly into applications which provide a higher standard of living in the farm home, and applications which add to the productive capacity of a farm. Some applications, for example, lighting and water pumping, do both.

Farming is a productive industry and the ability of electrical service to provide light, heat and power in a wide range of intensities free from the hazards associated with oil or other fuel and the ease with which electricity may be controlled, permit applications to farm production problems not feasible with any other source of power.

These applications result in savings in labour, increased production, improved quality, prevention of waste, reduced costs and substantial increases in earnings.

To the farm home electricity can bring the same conveniences as are enjoyed by urban residents. It eliminates the drudgery of many household tasks, improves health and comfort and, through the radio, furnishes entertainment, news, discussions of current topics and market reports, all of which bring greater contentment in the rural way of life.

In building up his electrical equipment to receive the maximum benefit from Hydro rural service, the farmer should keep a nice balance between appliances for use in the home and appliances which will add to the productive capacity of his farm. It is especially desirable that following the installation of lighting service in the home and outbuildings his early concern should be to purchase equipment which will result in cash returns.

Lighting Service

Electric lighting is safe, convenient and reduces the fire hazard to a minimum. It adds comfort and attractiveness to the farm home. In the barn and other buildings it saves time and prevents accidents while doing chores.

In productive operations it is used in the poultry laying house to supplement daylight during the winter months, thus increasing egg production during a period when prices are highest.

In floriculture lighting may be used to promote or retard the flowering of certain flowering plants in order to meet the demand of special occasions.

Special applications of lighting include insect traps, infra-red lamps for brooders and ultra-violet lamps to improve the health of poultry and other stock.

Heating Service

The safety and ease of control of electricity as a source of heating has found many applications. In the home it makes possible many of the familiar appliances, such as irons, toasters, hot plates, electric ranges and water heaters, all of which add to the comfort and convenience of the home. The ease of automatic control of electric heat has found application in incubators and poultry brooders, where accurate control of temperature is necessary.



HYDRO COMES TO ANOTHER ONTARIO FARM

Water heaters and dairy sterilizing equipment assist in maintaining a high quality of milk production. Small capacity heaters are used to maintain drinking water at suitable temperature for poultry, with resultant increases in egg production during the winter months. Electric heat also finds application in brooders for pigs and lambs, preventing loss of these animals during cold weather and effecting very substantial savings and increased earnings.

In horticulture electric soil heating is used for the early germination and propagation of seeds and plants and their protection against frost.

Power for Electric Motors

Electric motors find many uses in replacing manual effort. A quarter-horsepower motor can operate any machine that can be operated by hand, thus effecting savings in time and effort.

In the home motors make possible washing machines, ironing machines, vacuum cleaners, fans, furnace blowers, water pumps and refrigerators and the new cold storage home locker for the preservation and storage of perishable foods in quantity. Thus, motors contribute toward making the farm home equal in comfort and convenience to the urban home.

In farming operations electric motors are used for grinding grain and the operation of feed mixers, effecting substantial cash savings. They are also used for pumping water for stock and the operation of milking machines, cream separators and milk coolers. These result in very substantial savings in labor, and increases in production, and permit the handling of larger herds, effecting increases in farm earnings.

Portable utility motors of various sizes find many applications, such as wood cutting, hoisting hay, elevating grain, seed cleaning and, in the workshop, motor-driven grinders and other equipment provide facilities for maintaining farm equipment in repair and facilitate the construction of various pieces of useful equipment in connection with farming operations.

Electrical Appliances in Use in Rural Areas

Due to war and post-war conditions no survey has been made of the number of appliances in use in rural areas since 1942. For statistics for 1942 consult Annual Report for 1946, pages 69 and 70.

Service	Year	Annual revenue	Kilowatt- hours consumed	Number of con sumers billed*	Average revenue per kw-hr.	Average monthly bill	Average monthly consump- tion. kw-hr.
Farm service	1944 1945 1946	\$ c. 2,396,508.94 2,606,431.15 3,072.921.16	113,706,660 137,194,727 176,460,859	59,639 65,141 72,285	cents 2.11 1.90 1.74	\$ c. 3.53 3.48 3.72	167 183 214
Hamlet service	1944	1,937,102.28	82,106,734	56,130	2.36	2.95	125
	1945	2,027,283.82	92,056,781	58,867	2.20	2.93	133
	1946	2,345,531.81	118,287,655	66,177	1.98	3.12	158
Commercial service	1944	341,646.50	15,010,213	8,262	2.28	3.51	154
	1945	381,570.09	18,915,619	8,870	2.02	3.72	184
	1946	468,391.94	25,069,924	10,315	1.87	4.07	218
Summer service	1944	435,622.43	11,859,662	19,291	3.67	1.93	53
	1945	473,887.53	14,250,142	20,947	3.33	1.96	59
	1946	555,833.10	18,352,748	24,244	3.03	2.05	68

^{*}It may be observed that the number of consumers reported here does not agree with those shown in other sections of the Annual Report of the Commission. This is due to the fact that the figures given here represent consumers actually billed, but do not include power or special contracts, whereas elsewhere in the Report the tables show the number of contracts executed to the end of the fiscal year. In many cases service is not given until the following year.

¹⁹⁴⁴ estimated—due to reclassification during the year.

HAMLET AND HOUSE LIGHTING SERVICE Classified as 1B, 1C and 2A from 1928 to 1943

	Annual revenue	Kilowatt- hours consumed	Number of consumers billed*	Average revenue per kw-hr.	Average monthly bill	Average monthly consumption. kw-hr.
1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942	\$ c. 530,407.00 663,311.00 757,558.00 974,224.17 1,075,081.03 1,133,368.70 1,149,876.67 1,171,873.28 1,239,010.83 1,331,919.46 1,439,681.39 1,649,496.29 1,812,550.53 1,995,468.46 2,118,911.57 2,170,221.41	10,702,031 14,424,770 17,815,987 22,127,474 24,654,386 25,410,470 27,768,460 30,802,290 35,666,241 40,935,040 47,612,820 54,787,544 60,839,240 67,587,082 72,613,472 73,980,871	17,585 21,219 25,013 31,176 33,368 35,941 37,466 39,751 43,014 46,785 52,514 58,328 62,973 67,939 69,766 70,919	cents 4.95 4.60 4.25 4.40 4.36 4.46 4.14 3.80 3.47 3.25 3.02 3.01 2.98 2.95 2.92 2.93	\$ c. 2.51 2.85 2.73 2.88 2.76 2.70 2.61 2.53 2.49 2.47 2.42 2.36 2.40 2.45 2.57	50.7 62.0 64.2 65.6 63.3 60.1 63.0 66.5 71.8 76.0 79.9 78.3 80.5 82.9 87.9 87.6

FARM SERVICE Classified as 2B, 3, 4, 5, 6A, 6B, 7A and 7B from 1928 to 1943

Year	Annual revenue	Kilowatt- hours consumed	Number of consumers billed*	Average revenue per kw-hr.	Average monthly bill	Average monthly consumption. kw-hr.
1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943	\$ c. 569,007.00 777,736.00 863,805.00 1,128,554.28 1,255,482.13 1,309,122.96 1,319,922.69 1,343,222.39 1,385,784.39 1,366,484.50 1,711,788.81 2,090,259.14 2,405,092.40 2,690,250.37 2,870,300.31 2,934,011.31	10,969,828 16,022,842 20,507,063 25,716,141 28,675,400 30,062,194 33,312,314 37,667,453 45,447,669 54,858,240 67,886,882 81,613,087 93,859,719 107,061,610 116,448,363 121,428,714	9,309 12,605 16,011 20,796 22,432 23,283 23,882 25,357 28,198 35,508 44,565 53,240 58,728 63,748 64,292	cents 5.18 4.85 4.21 4.39 4.38 4.35 3.96 3.57 3.05 2.49† 2.52† 2.56† 2.56† 2.46 2.42	\$ c. 4.97 5.85 5.03 5.11 4.84 4.75 4.66 4.55 4.31 3.57 3.56 3.56 3.41 3.54 3.75 3.81	96 121 119 116 110 109 118 128 141 144† 139† 133† 141 152 158

^{*} See footnote to table on previous page.

[†] In the period 1937 to 1940, there was an increase in the statistical average revenue per kilowatt-hour and a decrease in the statistical average monthly consumption per consumer. Actually there was a great increase in the use of electricity by nearly all individual Hydro consumers and a corresponding decrease to each consumer in the average cost per kilowatt-hour. But due to the tremendous growth at this time in new consumers, who for the first few years are not equipped to use large quantities of electricity each month, the smaller monthly consumption of the new consumers when averaged with the increased use of the older consumers produced per consumer averages which obscured the true trends of individual growth in use, and, individual reductions in costs.

RURAL OPERATING AREAS MILES OF LINE, NUMBER OF CONSUMERS—OCTOBER 31, 1947

Control office	Rural operating Miles Number of consumers								
location	area	of line	Farm	Ham- let	Com- mercial		Power	Total	
Southern Ontario Niagara Division	System—								
Aylmer Beamsville Blenheim Bothwell Brampton	Blenheim	306.98 283.52 121.59 298.25 361.85	1,663 546	836 220 209	160	131 146 89 1 146	5 14	2,362 2,823 908 1,296 2,181	
Brantford. Burlington Cayuga. Chatham Clinton.	Brantford	516.20 101.11 367.13 261.41 390.27	520	901 1,429 623 885 593	170 92 182 123 167	12 35 359 259		3,266 2,104 2,457 2,168 2,262	
Delaware. Dorchester Dundas. Elmira Essex.	Delaware Dorchester Dundas Elmira Essex	421.47 181.46 299.21 307.62 257.81	1,492 745 1,277 841 1,260	305 929 685	163 83 128 125 91	3 18 384	4 7 11 15 8	2,083 1,143 2,345 1,684 2,350	
Exeter Forest Guelph Harrow Ingersoll	Exeter Forest Guelph Harrow Ingersoll	193.85 262.66 375.89 211.50 275.50	1,218 1,068	110 831 480	94 58 136 85 62	562 327 96 963 2	6 7 11 4 4	1,724 1,450 2,292 2,600 1,258	
Kingsville Kitchener Listowel London Lucan	Kingsville Kitchener Listowel London Lucan.	221.07 447.48 374.04 264.38 225.35	1,455 1,510 1,316 986 701	557 2,159 467 3,008 108	104 229 159 177 67	923 159 1 3	10 44 7 12	3,049 4,101 1,950 4,186 876	
Markham	Markham Merlin Mitchell Niagara Norwich	325.81 316.89 436.51 227.86 194.13		2,001 296 505 2,057 198	169 119 152 174 54	755 154 155	23 5 10 25 8	4,240 1,802 2,257 3,784 1,127	
Oil Springs	Oil Springs Richmond Hill Ridgetown. St. Thomas Saltfleet.	234.83 267.33 151.86 265.08 358.88	548 1,025	201 1,009	92 171 49 124 275	267 386 9 269	5	1,053 3,742 1,188 2,172 5,586	
Sarnia. Simcoe. Stratford. Sutton. Tillsonburg. Wallaceburg.	Sarnia Simcoe Stratford Sutton Tillsonburg Wallaceburg	252.86 654.65 269.05 214.32 230.40 335.60	1,004 537 964	798 518	110	672 701 1,607 1	6 9 8 14 15 9	3,812 4,917 1,471 3,059 1,608 1,998	
Welland West Lorne Windsor Woodbridge Woodstock	Windsor	439.55 178.18 190.73 326.76 209.70	1,559 536 738 1,025 827	3,513 129 4,313 1,186 466	299 50 254 164 103	897 14 91 3	50 1 25 25 25 6	6,318 730 5,330 2,491 1,405	
Total Niagara	division	13,408.58	51.453	46,035	6,209	10,708	603	115,008	

RURAL OPERATING AREAS MILES OF LINE, NUMBER OF CONSUMERS—OCTOBER 31, 1947

		Miles		Νι	ımber o	f consu	consumers		
Control office location	Rural operating area	of line	Farm	Ham- let	Com- mercial	Sum- mer	Power	Total	
Southern Ontario Georgian Bay Div	•								
Bala Barrie Bracebridge Cannington Orillia	Bala Parry Sound Barrie. Bracebridge Cannington Hawkestone		1,606 419 422	268 91 1,183 478 285 508	2 224 87 84	2,051 1,050 760 1,066	3 3 1	966 93 5,067 2,037 1,552 2,072	
Huntsville	Huntsville Midland. Orangeville Owen Sound Shelburne	247.89	167 604 685 1,253 537	691 398 621 1,021 276	120 76 160 250 73	359 1,518 112 655 9	5	1,343 2,596 1,583 3,183 895	
Stayner Uxbridge Walkerton Wingham	Stayner Uxbridge Walkerton Wingham		617 856 1,255 1,024	446 688 506 482	93 155 181 166	1,997 509 157 208	4 3	3,157 2,212 2,102 1,883	
Total Georgian	Bay division	4,071.18	9,900	7,942	1,810	11,044	45	30.741	
Southern Ontario Eastern Ontario I									
Arnprior. Belleville. Bowmanville. Brockville Carleton Place.	Arnprior Belleville Bowmanville Brockville Carleton Place		280 606 483 1,202 203	570 945 386 971 67	130 119 71 261 36	81 17 47 328 33	8 4 5	1,071 1,695 991 2,767 340	
Cobourg. Delta. Fenelon Falls. Frankford. Kingston.	Cobourg Delta Fenelon Falls Frankford Brighton Kingston.	359.53 158.00 279.23 286.23 72.68 366.74	968 427 524 881 223 1,073	709 366 282 568 99 1,167	148 108 98, 106 20 278	378 164 1,040 103 144 304	4	2,205 1,065 1,948 1,662 487 2,832	
Lancaster Millbrook Minden Napanee. Norwood	Martintown Millbrook Minden Napanee Norwood	321.34 88.66 124.65 339.90 96.90	934 258 156 1,114 250	631 161 621 672 151	154 39 150 197 32	91 10 386 97 219	3	1,810 468 1,314 2,083 655	
Oshawa Ottawa Perth Peterborough	Oshawa Ottawa. Perth. Peterborough Lakefield Picton.	261.10 407.09 189.39 160.58 131.78 339.93	800 1,343 500 432 178 1,256	2,975 1,349 239 706 246 626	205 274 83 92 62 160	260 111 193 278 322 230	10 27 3 5 2 4	4,250 3,104 1,018 1,513 810 2,276	
Plantagenet. Cobden. Tweed. Winchester.	Plantagenet	188.77 150.13 206.71 535.86	573 307 418 1,969	496 669 357 824	116 132 82 265	8 50 153 22	3 7 1 6	1,196 1,165 1,011 3,086	
Total Eastern	Ontario division	6,012.87	17,358	16,853	3,418	5,069	124	42,822	

RURAL OPERATING AREAS MILES OF LINE, NUMBER OF CONSUMERS—OCTOBER 31, 1947

Control office		Miles		I	Number	of con	sumers	
Control office location	Rural operating area	of line	Farm	Ham- let	Com- mercial	Sum- mer	Power	Total
Thunder Bay Syst	tem							
Port Arthur	Thunder Bay	327.57	727	879	98	221	12	1,937
Northern Ontario	Properties							
Matheson. Kagawong North Bay Fort Frances Sudbury	Connaught. Manitoulin. North Bay. Rainy River. Sudbury. Timiskaming.	92.03 180.87 110.44 63.50 102.67 5.28	204 290 218 95 250	203 712 861 195 1,809	48 224 94 72 108 1	8 106 315	6 2	469 1,340 1,494 364 2,318
Total Northern	Ontario Properties.	554.79	1,068	3,781	547	573	29	5,998

SUMMARY

	Miles		f consur	nsumers					
System	of line	Farm	Ham- let	Com- mercial		Power	Total		
Southern Ontario Niagara division Georgian Bay division Eastern Ontario division	4.071.18	9,900	7,942	1,810	10,708 11,044 5,069	45	115,008 30,741 42,822		
Southern Ontario totals. Thunder Bay. Northern Ontario Properties.		727	879	98	221	772 12 29	188,571° 1,937 5,998		
Total all systems*	24,374.19	80,506	75,490	12,082	27,615	813	196,506		

^{*}These totals include 609.05 miles of primary line under construction on October 31. 1947 and service to 2,453 new consumers which was not completed at the end of the fiscal year.

SECTION V

PROMOTIONAL AND PUBLICITY SERVICES

Conservation, Better Lighting for Schools, Adequate Wiring for the Farm and Informative Publicity Feature 1947 Activities

PROMOTIONAL and publicity services in 1947 were largely devoted to furthering the Commission's efforts to alleviate the power deficiency.

Advertising and Publicity

Appeals to consumers of all types for voluntary conservation of electricity were made by a program of advertising and publicity. Advertisements published in 230 newspapers provided a total of some 6,000 messages to the public. They gave interesting information regarding progress on the construction of new Hydro developments, stressed the need for safety measures and the avoidance of any wasteful use of electricity.

Bill posters, exterior street-car cards and the radio were also used to emphasize the urgent need for the conservation of power. A number of special items, such as pamphlets, conservation reminder cards, blotters and industrial posters were developed and supplied to approximately 300 municipalities. In the distribution of this material rural consumers were not overlooked. A number of educational and informative booklets on the Commission's operations and developments were prepared for distribution through the municipal Hydro commissions.

During 1947 several press trips were arranged, so that members of the press could see, first hand, Hydro developments under way and better appreciate the magnitude of these undertakings and the problems involved.

Field Operations

Regular contacts were maintained with municipalities and rural offices in connection with programs and material aids developed to further the Commission's plans. The power conservation program was discussed with organizations such as chain stores, banks and other groups and associations whose activities are province-wide and who are, therefore, in a position to render valuable co-operation.

Motion Pictures

A new conservation film was produced entitled, "Light with Father". Prints of the film were made available to the larger municipalities for presenta-

tion to service clubs, schools and other public groups. The film was also produced in 35mm. size for use in theatres and was included in the program of 347 theatres, with an estimated attendance of 582,000.

Hydro motion pictures were also presented throughout the year to 921

individual organizations, with a total attendance of about 95,000.

Editorial Services Section

The Hydro News, distributed monthly to the municipal utilities throughout the Province, was published regularly. In the latter part of the year, feature articles on basic industries that are large users of electricity, drew attention to the tremendous increase in the use of power that was resulting from expanded production. Increasing circulation is evidence of the wide acceptance of Hydro News.

The Hydro News Courier was mailed regularly to Ontario daily, weekly and farm papers. The first issue of a new publication to be known as "Hydro Staff News" was published in co-operation with other departments. News releases and special articles were prepared throughout the year.

Exhibitions and Displays

A new type of educational display was designed for the first Canadian National Exhibition since the war. The many activities of the Commission were brought out through the use of models, photographs, and actual equipment required in connection with the Commission's operations.

A suitable display was also developed for the Royal Winter Fair, featuring the Commission's new developments and an appeal for the conservation of electricity.

Rural Activities

Advertisements of special interest to rural consumers were scheduled throughout the year in weekly papers and farm publications.

Suitable displays were arranged to explain and emphasize the need for adequate wiring on the farm. These displays, with supporting material, were used at the ploughing match, fall fairs and in rural offices.

A new leaflet entitled, "Hydro Rural Lines" was developed, to be mailed regularly every three months with Hydro bills to all rural consumers.

Lighting Service Section

During the year more than 500 recommended lighting plans were provided for schools and commercial and industrial consumers, and a large portion of this work was devoted to the educational field. Lighting plans and recommendations were supplied to approximately 340 schools throughout the Province.

In addition, a research installation was made in one of the Toronto area schools to provide information linking adequate lighting in the school with the welfare, health and development of the pupil. The data already procured from this research installation have been of substantial value.



HYDRO DISPLAY AT ROYAL WINTER FAIR

Electric Service League of Ontario

The Commission co-operated with the Electric Service League in carrying forward the better wiring campaign. The Red Seal wiring program was presented at several largely attended training schools held throughout the Province for members of municipal systems, contractors and contractor dealers. The necessary advertising, publicity and training school material was provided to those attending the meetings, and additional distribution of this material was made as a result of direct requests.

About 115 utilities appointed field representatives for local work. This provided an excellent foundation for the Red Seal wiring program throughout Ontario.

Merchandising and Lamp Sales

Merchandising activities were carried forward in the areas served by the Northern Ontario Properties. These activities included educational services for consumers, suitable display arrangements for merchandise, and a repair service for electrical appliances.

The sale of lamps to Hydro municipalities was maintained on a satisfactory level. A new discount schedule on lamps was introduced at the beginning of 1947, eliminating certain inequalities and providing an improvement for nearly all the municipal systems. An improvement in the sale of Hydro lamps through rural offices was also noted.

SECTION VI

ENGINEERING AND CONSTRUCTION

Planning, Design and Construction of Hydro-Electric Developments,
Transformer and Frequency-Changer Stations, Transmission Lines and Interconnection Facilities

THE PROBLEM of meeting the demands for power which continued undiminished after the cessation of hostilities, became even more acute during 1947. Shortages of labour and primarily shortages of materials were reflected in the abnormal length of time required to obtain deliveries of essential apparatus, and the continuing growth in load augmented the already heavy post-war demand for electrical energy.

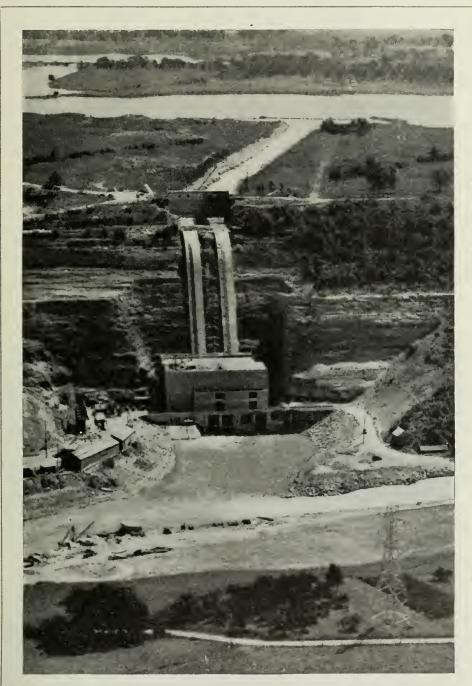
A great number of undertakings to increase generation and distribution facilities are under construction and many were completed by the intensive efforts of the engineering and construction staffs. Power developments, such as DeCew Falls No. 2 unit, Stewartville and Aguasabon which would contribute their production to the urgent needs of the power systems in the shortest possible time, were being brought to completion as rapidly as possible. These plants to some extent will provide for load growth but no entirely effective relief from the deficiency in power supply can be expected until some of the larger projects now under construction are placed in operation.

Planning

Extensive studies were made on details of the transmission line system required to deliver power from the new developments at Des Joachims, Chenaux, and Stewartville into system load centres, and on the main terminal stations for receiving power, involving extensions to Kipling and Burlington terminals and a new Westminster terminal station.

Plans were laid for additions to the step-down transformer capacity at nearly every major city, the additional capacity taking the form of extensions to existing stations or the erection of new stations.

Many studies were made in co-operation with Stone and Webster Engineering Corporation to aid in the preparation of its report on the long-term supply of power to the Southern Ontario system. Similar co-operation was given in connection with the report being made by this firm on frequency conversion.



DeCew Falls 150,000-horsepower station on Twelve Mile creek, near St. Catharines. The second unit, 77,000 horsepower, went in operation in September, 1947

Plans were prepared for the integration of power resources of the Abitibi Timiskaming and Sudbury districts to enable the maximum use to be made of the combined resources of the districts, particularly to mitigate the power shortage in the Sudbury district. Similar studies were made on the development and integration of the power resources of the Thunder Bay system and Patricia district.

The Commission's A.C. network analyzer was in continuous use throughout the year and has been of great value in planning studies. An addition to the analyzer is now ready for installation, with the whole equipment in a new location in the Head Office building. The network analyzer was made available on a rental basis to other Canadian utilities.

New Generating Capacity

At DeCew Falls generating station, the second unit was placed in service on September 26, 1947, increasing the station capacity to approximately 112,000 kw. In addition to those previously approved, new generating stations were authorized at Chenaux on the Ottawa river and at the Tunnel site on the Mississagi river.

PROGRESS ON NEW POWER DEVELOPMENTS

During 1947 actual construction proceeded on four major hydro-electric developments and two extensions, and on access roads and camps at two others.

The following paragraphs summarize the main features of the hydroelectric developments under construction and show the work performed during 1947 and the state of progress as at December 31.

Southern Ontario System

DECEW FALLS 25-CYCLE GENERATING STATION

Capacity—57,000 kilowatts (77,000 horsepower)
Total capacity of station—112,000 kilowatts (150,000 horsepower)

Head developed—280 feet

In service—Unit No. 2 placed in service September 26, 1947

The development draws its water supply from lake Erie via the Welland ship canal. From the intake water passes into the storage reservoir known as Gibson lake which, in the extension of the plant, has been enlarged by having the upper limit of its level raised. From the headworks, two steel penstocks lead to the powerhouse. Below the plant Twelve Mile creek, which has been enlarged, forms the tailrace of the plant to its junction with the Old Welland canal through which the water flows to its outlet to lake Ontario through Port Dalhousie harbour. Since the second unit came into service in September, 1947, construction activities have been confined to certain ancillary works. A complete description of the development appears in the 1943 Annual Report on pages 57 to 63, from which the accompanying sketch map is reproduced.

STEWARTVILLE GENERATING STATION—MADAWASKA RIVER

Capacity—60,000 kilowatts (80,000 horsepower)

Units-three

Head-148 feet

In service—September, 1948

This development on the Madawaska river, eight miles from Arnprior, comprises a concrete gravity dam 206 feet high and 1,300 feet in length, crossing the river between rock bluffs; a powerhouse immediately downstream from the dam; a tailrace channel excavated in the river bed, and a spillway section controlled by steel gates on high ground on the right bank. The river levels will be raised for a distance of 13 miles up-stream almost to Calabogie. Two highway bridges at Eurnstown and Springtown are being rebuilt at higher levels. The progress of the work indicates that the plant will be available for service in September, 1948.



WHERE WE DO EAT!

Modern cafeteria equipment is used in Hydro construction camps. The notice on board reads: "If you want more of anything it is yours for the asking"

DES JOACHIMS GENERATING STATION—OTTAWA RIVER

Capacity—358,000 kilowatts (480,000 horsepower)

Units -eight

Head-130 feet

In service—four units in 1950, four units in 1951.

This is the largest development now under construction and is exceeded in size among the Commission's plants only by the Queenston generating station on the Niagara river. It is situated on the Ottawa river at Des Joachims village, 40 miles upstream from Pembroke. The main dam, in which the powerhouse is incorporated, will span three channels into which the river is divided by islands at the head of the Des Joachims rapids, and an excavated tailrace will follow the bed of the river a distance of about 7,000 feet to what is known as the Deep River section of the Ottawa river. The river immediately above the dam will be raised approximately 100 feet above its natural level and slack water will be created for fifty miles upstream to Mattawa. Relocation of twelve miles of Highway No. 17 and 22.5 miles of the main line of the Canadian Pacific Railway is required by the raised water levels.

Sluiceways for disposing of flood flows of the river will be placed in the McConnell Lake dam, which spans a low divide about three and one-half miles to the north-west of the main dam, and flood waters will pass thence down a wide valley to the Ottawa river below the outlet of the tailrace.

At the end of 1947 cofferdams, enclosing the area upon which will be constructed the right-hand half of the main dam and a portion of the power-house, were completed and work on that part of the dam is progressing. The site of the McConnell Lake dam is entirely above the present water level and requires no unwatering. Clearing of lands to be flooded is well advanced and the relocated lines of Highway No. 17 and the Canadian Pacific Railway are approaching completion.

CHENAUX GENERATING STATION—OTTAWA RIVER

Capacity-119,000 kilowatts (160,000 horsepower)

Units-eight

Head-40 feet

In service—six units in 1951

The site of this development is near the village of Portage du Fort a few miles above the head of Chats lake. The main dam, in which the power-house is to be incorporated, will span the main channel of the river from the Ontario shore to Limerick island. An unwatering channel will be excavated through a minor depression across Limerick island and this, in the completed development, will be closed by the Limerick Island dam, a concrete structure over a thousand feet in length in which the principal sluiceways for disposal of flood waters will be placed. The Portage du Fort channel between Limerick Island and the Quebec shore will be closed by the Portage du Fort dam in which additional sluices will be located. Camp construction and other preliminary work is proceeding.

Thunder Bay System

AGUASABON GENERATING STATION—AGUASABON RIVER

Capacity—40,000 kilowatts (53,000 horsepower)

Units-two

Head-290 feet

In service—September, 1948

This development, about 70 miles east of the Nipigon river, is situated on the Aguasabon river down which flows the water diverted to lake Superior by the Long Lake diversion project. The main dam is two miles from the mouth of the river and its construction will create a lake expanse extending westerly from the river a distance of two miles, separated from lake Superior by a ridge of rock. Through this ridge a tunnel 3,000 feet in length has been driven to convey water from the intake to the powerhouse, situated on the shore of Terrace bay on lake Superior. The tunnel will be concrete lined with a finished diameter of fifteen feet. Near the downstream end of the tunnel a differential surge tank will be installed.

At the end of 1947 work on the dam was well advanced; the tunnel excavation was completed and lining was proceeding. The present rate of progress indicates that the plant will be in service by the scheduled date, September, 1948.



AGUASABON HYDRO-ELECTRIC DEVELOPMENT

Tunnel exit and construction equipment at 53.000 horsepower development on the north shore of Lake Superior

PINE PORTAGE GENERATING STATION—NIPIGON RIVER

Initial Capacity -- 60,000 kilowatts (80,000 horsepower)

Ultimate Capacity -- 120,000 kilowatts (160,000 horsepower)

Units—two in initial, four in ultimate development

Head -105 feet

In service—two units in December, 1950

The Pine Portage hydro-electric development on the Nipigon river is about midway between the Cameron Falls plant and lake Nipigon and will develop the whole of the utilizable head between these points. The dam will extend in a straight line from high ground on the east bank of the river for a distance of 3,000 feet to high ground to the west of the river. It will comprise, commencing at its easterly end, a concrete gravity section 570 feet long which will span the river channel; a sluiceway section 170 feet in length; a second gravity section 160 feet long extending to the powerhouse headworks and, beyond this, a long low concrete gravity section and, finally, a low earth dyke. The powerhouse will be immediately downstream from the headworks and the turbines will be supplied with water through short 20-foot diameter steel penstocks. A tailrace channel 80 feet wide and 700 feet long will lead from the powerhouse to the river.

Activities at the end of 1947 included the construction of an access road, camp buildings and a cable bridge across the river. Two units are expected to be in service in December, 1950. Two additional units will be installed when required to supply growth of load in the system.

Northern Ontario Properties

TUNNEL GENERATING STATION—MISSISSAGI RIVER

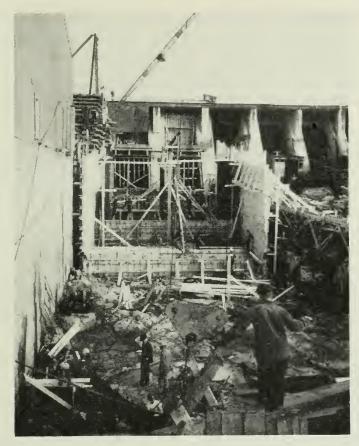
Campacity—42,000 kilowatts (56,500 horsepower)

Units—two

Head—210 feet

In service—December, 1949

The Tunnel development is the first of a number of projected generating stations on this river which flows into the north shore of lake Huron near Thessalon. At the site the river flows in a deep gorge in which a gravity concrete dam is being erected. The total height of the dam will be 230 feet and its length 900 feet and, to the left, sluiceways in a short excavated channel will be provided to dispose of flood waters. The powerhouse will be in the gorge immediately downstream from the dam, and the river channel, after improvements, will form the tailrace. During construction the river will be diverted through a tunnel excavated in the rock on the right bank of the river. Rock excavation in the tunnel and at the spillway channel, and clearing of flooded lands, are proceeding. The development is expected to be in service in December, 1949.



EAR FALLS GENERATING STATION — ENGLISH RIVER

Construction work during 1947 on the fourth unit — 5,500-kilowatts (7,500 horsepower)

EAR FALLS GENERATING STATION—ENGLISH RIVER

Capacity—5,500 kilowatts (7,500 horsepower)

Head-36 feet

In service—June, 1948

This is an extension of the existing plant, the new work consisting of the installation of a fourth unit similar in size and style to the third unit, and it will complete the plant as originally projected. The Ear Falls dam is at the outlet of Lac Seul, an important storage basin for regulation of the flow of the English and Winnipeg rivers. From the dam, two concrete supply pipes extend from the intake to the powerhouse where the turbine is installed in a concrete scroll case. Outflow from the turbines passes into the river through a short tailrace.

The substructure was practically completed at the end of the year and the unit is expected to be in service in June, 1948.

TRANSFORMER STATIONS AND TRANSMISSION LINES

In addition to the eight hydro-electric power developments which form an impressive feature of the Commission's post-war program, three major transmission network improvements, involving a combination of transformer and frequency-changer stations and important transmission lines of substantial length, were commenced or advanced during 1947, as follows:

Southwestern Ontario

- (1) A strengthening of the transmission network in the southwestern portion of the Province, between Sarnia and the vicinity of Niagara Falls. This important improvement centres in a new transformer and frequency-changer station known as "Westminster transformer station", situated just outside the city of London. Two main projects are recognized:
 - (a) During 1947 the Commission contracted with the Polymer Corporation for a supply of 60-cycle power from its steam plant at Sarnia. In order to transmit this power to the Dow Chemical Co. at Sarnia and to other parts of the system, facilities have been designed consisting of a step-up station at Sarnia, 63 miles of 115,000-volt line from Sarnia to Westminster transformer station and step-down and frequency-changer equipment at this station.
 - (b) The construction of a 230,000-volt transmission line between Allanburg in the Niagara peninsula, a few miles west of Niagara Falls, and Westminster transformer station at London, a distance of 103 miles; the construction of a main transformer station at Allanburg and the installation of transformers at the London terminal of the line.

At the end of 1947 major equipment had been ordered and line surveys were well advanced. At Westminster transformer station construction camps were completed to house 150 men. These were being enlarged. Excavations were completed for the frequency-changer foundations and form work was progressing.

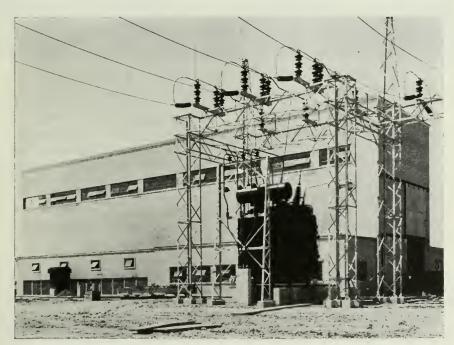
Toronto and Hamilton Areas

- (2) The second main addition to transmission network facilities is the Kipling transformer and switching station in Etobicoke township west of Toronto and certain long-distance transmission lines. Four projects are linked together at this important new station.
 - (a) The initial stage, nearing completion, consists of the installation of switching equipment for the control of five 115,000-volt transmission circuits.
 - (b) The second stage provides for two 25,000-kva, 115,000 26,400-volt, 3-phase transformers with voltage regulating transformers for distribution of power in the vicinity of Kipling transformer station.
 - (c) The third stage embraces the provision of terminal equipment for receiving power from eastern generating sources through a 230,000-volt

transmission line 253 miles long from Masson, near the mouth of the Lievre river in Quebec, a few miles east of Ottawa, and the construction of this transmission line.

(d) The fourth stage embraces the installation of terminal equipment to receive a portion of the power to be brought from the Des Joachims development by a 230,000-volt line 210 miles in length, and the construction of this transmission line, one branch of which will deliver power to Burlington.

At the end of 1947 the initial stage was almost completed. For the second stage the transformer foundations were formed and ready for pouring and the construction of railway sidings was in progress. For the third stage the site had been graded and plans made to commence the foundation work in February, 1948. The transmission line from Masson to Kipling transformer station was surveyed for 100 miles from the eastern end, 21 miles of footings had been set and 11 miles of towers were erected. The transmission line from Des Joachims to Kipling transformer station and to Burlington was surveyed for 100 miles from Des Joachims and the right-of-way was cleared for 10 miles.



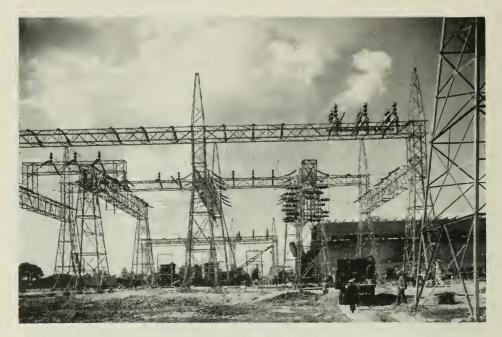
ADDITIONAL INTERCONNECTION FACILITIES AT SCARBOROUGH
FOR SOUTHERN ONTARIO SYSTEM

Modern building and outside electrical installation at the new 25,000 kva, 25-60-cycle frequency-changer station adjacent to Toronto

Eastern and Georgian Bay Areas

(3) Projects are in course of completion to facilitate the transfer of power between the Niagara, Georgian Bay and Eastern Ontario divisions of the Southern Ontario system.

This scheme centres in Scarborough frequency-changer and transformer station, which is the terminal station for 115,000-volt lines from Oshawa



SCARBOROUGH FREQUENCY-CHANGER STATION

The 25-cycle bus and switching structure of the new 25,000-kva station

in the Eastern Ontario division and from Barrie in the Georgian Bay division. These lines provide an interconnection between these two 60-cycle divisions and also by means of frequency-changers enable transfer of power to be made to and from the 25-cycle Niagara division. Associated with this interconnection improvement is an extension of the northerly 115,000-volt line from Barrie to Owen Sound, and the construction of a 115,000-volt transformer station at Owen Sound.

At the end of 1947 progress towards completion of this important improvement was as follows:

At Scarborough frequency-changer station the first 25,000-kva frequency-changer had been placed in service in July, 1947. The foundations for the second frequency-changer and the foundations for the building extension were completed and the building's structural steel was erected.

The transmission line from Oshawa to Scarborough was placed in service in July and also the transmission line from Scarborough to Barrie. At Owen Sound a site for the transformer station had been acquired, the main equipment had been ordered and design drawings were being prepared. For the transmission line extension from Barrie to Owen Sound purchases and easements of right-of-way had been arranged, clearing was in progress and the line was staked and ready for the erection of poles.

In Northern Ontario

The foregoing projects are for the Southern Ontario system. For the Thunder Bay system a new 15,000-kva transformer station was completed at Port Arthur and a 115,000-volt transmission line was erected between Alexander generating station and Aguasabon.

For the Northern Ontario Properties a number of important additions and changes were made or are under way. These include the coordination and amalgamation of portions of the Timiskaming district with the Abitibi district, in part by the completion of a 115,000-volt line between Upper Notch and Crystal Falls generating stations. At Sudbury work on a 25,000-kva frequency-changer was commenced.

Summing up transmission line construction for the year 1947 for all systems, it may be stated that approximately 300 miles of 230,000- and 115,000-volt lines and 100 miles of 44,000- and 26,400-volt lines were completed, as well as 1,000 miles of rural primary line.

Other Projects

In addition to the major hydro-electric developments and transmission improvement projects described above many other projects were completed or under active construction during 1947.

In the hydraulic engineering field improvements and repairs were in progress at numerous generating plants and storage reservoirs throughout the Province.

Among the more important of these may be recorded: the construction of a new intake for penstock No. 1 at the DeCew Falls 66-cycle plant; the reconstruction and improvement of log-driving facilities at various dams on the Mattagami river and improvements to the canal at the Kagawong development on Manitoulin island. Some of these items were completed during the year and on others work is continuing during 1948.

Surveys and investigations were conducted regarding prospective power developments and storage works at various points in the Province. Among the former were those at La Cave on the Ottawa river and at Mountain Chute on the Madawaska. Surveys of prospective storage sites were made on the York branch of the Madawaska and at several sites on the Mississagi river.

In the electrical engineering field the following paragraphs deal briefly with a number of matters of interest:

Acquired Properties

A number of distributing stations built by the Commission for various departments of the Dominion Government during the war were purchased from War Assets Corporation. These stations included Centralia, Dunnville, Jarvis, Brantford, and Hagersville D.N.D. and are now known as Centralia, Dunnville, Nanticoke, Mount Vernon and Garnet distributing stations. The final arrangements for the purchase of the 115,000-volt station at Monteith, owned by the Dominion Government, are nearing completion; this station is to be dismantled and the equipment used elsewhere. Transmission lines, totalling 20 miles, were purchased from War Assets Corporation and customers of the Commission.

Increased Transformer Capacity

At the end of this section a tabulation is presented which lists all major increases in transformer capacity installed during the year. A number of the transformer and distributing stations listed are new installations.

In addition to the transformer changes completed, new stations are being constructed and many existing stations are being extended. In the Southern Ontario system alone, approximately 40 new distributing stations are in the process of design or construction and when completed will increase distributing transformer capacity by more than 40,000 kva.

New Transmission Lines

New transmission lines placed in service include 115,000-volt steel-tower lines from Alexander generating station 64 miles to Aguasabon generating station and Long Lac Pulp and Paper Company, from Chatham 43 miles to Sarnia, from Leaside 5 miles to Scarborough, from Cyrville junction 5 miles to Ottawa; a 115,000-volt, wood-pole line from Chalk River 18 miles to Des Joachims development, and approximately 135 miles of 12,000-volt to 44,000-volt wood-pole lines.

Transmission line capacities were increased by restringing 23 miles of circuits with heavier conductor and by re-insulating 64 miles of circuits for high voltage.

Lines under construction include a steel-tower line of 230,000-volt construction from Barrett Chute generating station 135 miles to Oshawa junction of which 100 miles were completed during the year, plus 8 miles of 115,000-volt, wood-pole line to outskirts of Oshawa; 115,000-volt, steel-tower lines from Upper Notch generating station 58 miles to Crystal Falls generating station; 115,000-volt, wood-pole lines, from Ear Falls generating station 40 miles to Red Lake, from Ear Falls generating station 61 miles to Dryden, and from Belle River junction 16 miles to Kingsville.

Rural Extensions and Improvements

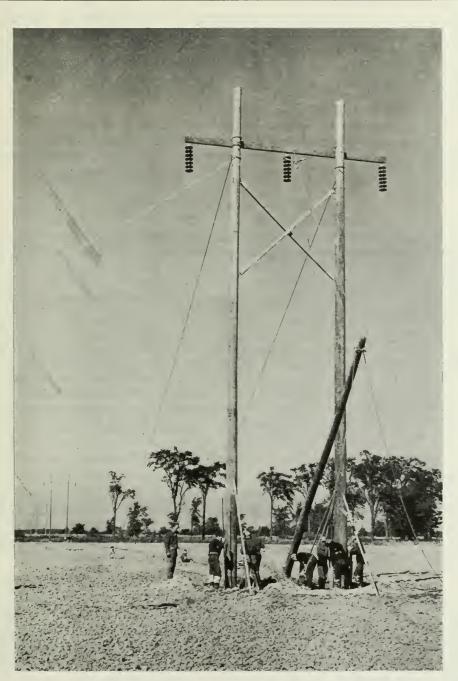
Although extensive inroads have been made on the large amount of work deferred and accumulated during the war years in the rural operating areas, many of the demands for new rural lines and services have not been satisfied.

A summary at the end of this section shows the mileage of rural distribution lines built and the number of additional consumers served.

Communications

Communication facilities were expanded with the installation of 338 miles of physical telephone circuits, 8 miles of telephone cable, 47 miles of telephone poles and 4 single channel telephone carriers. Several private automatic and manual telephone-exchange installations were completed, while satisfactory progress was made in providing radio communication coverage for the whole of the Southern Ontario system.

Near the end of this section is a brief summary dealing with communications, with a special report on the use of frequency-modulation radio communication.



NEW TRANSMISSION LINES FOR SOUTHWESTERN ONTARIO Erecting twin-pole structure on 115,000-volt line in the vicinity of Essex

Metering Equipment

In order to accommodate changing load conditions, installations of new metering equipment and improvements to existing metering facilities are continually being made. Activity in this work during 1947 was noteworthy in the areas served by the Northern Ontario Properties, where approximately 50 metering changes or installations are being carried out. This work is due principally to the resumption of operation of former mining customers and the addition of new mining loads.

As indicative of the magnitude and great variety of work now being carried out by the engineering and construction staff of the Commission, the following additional particulars of the more important work completed in 1947, or now being carried out, are given under system headings:

SOUTHERN ONTARIO SYSTEM

Barrett Chute to Oshawa.—The power received at Barrett Chute, from the new generating plant at Stewartville over an 18-mile, 115,000-volt transmission line, will be transmitted to Oshawa transformer station over a new 230,000-volt transmission line operated initially at 110,000-volts. Extensions to the switching yards at Barrett Chute and Oshawa are scheduled for completion early in 1948.

Cornwall Area.—Several extensive projects mentioned in last year's Annual Report have been completed. The new 15,000-kva, 115,000/11,000-volt Cornwall transformer station, including a 20,000-kva, circuit-capacity regulating transformer was placed in service to supply power to the plant of Canadian Industries, Limited. At the Cornwall transformer station the original 15,000-kva transformer bank was replaced with new equipment. A 15,000-kva, circuit-capacity regulating transformer was installed and the associated switching stations completed.

At Merivale in the vicinity of Ottawa the 115,000-volt switching station is nearing completion.

Ottawa.—A new Ottawa-Riverdale transformer station is being constructed. The first 15,000-kva, 115,000/11,000-volt transformer bank with one 5,000-kva spare unit was placed in service and a second 15,000-kva transformer bank is scheduled for service in 1948. This station will have an ultimate installation of three transformer banks to supply 45,000-kva to the city.

Kingston.—A second 15,000-kva transformer bank is being installed at Frontenac transformer station, to be placed in service early in 1948. The installation will consist of three 5,000-kva, 63,500/25,400/4,160-volt, single-phase transformers and a 15,000-kva, circuit-capacity regulating transformer. A new 44,000-volt feeder, five miles in length, with associated equipment, was placed in service to supply the Canadian Industries, Limited Nylon plant extension.

Owen Sound.—A new 15,000-kva transformer station will contain four 5,000-kva, 60-cycle, single-phase, 63,600 25,400 4,160-volt transformers and one 21,000-kva, circuit-capacity regulating transformer.

Caledonia.—A new 8,000-kva, 115,000/26,400-volt transformer station, consisting of one 8,000-kva, 3-phase transformer and two out-going 26,400-volt feeders was placed in service. This station was built to relieve the overload on Dundas transformer station and improve the service to Hagersville, Rainham, Nanticoke and intervening stations.

Wallaceburg.—A similar transformer station was placed in service to relieve the overload on the Kent transformer station and to provide for future growth in the Wallaceburg area.

- **St. Catharines.**—Installation of the second 8,000-kva, 3-phase transformer was completed.
- St. Marys.—Transformer changes were made to double the capacity of this station.

Toronto.—In the Toronto area extensive increases in transformer capacity are scheduled for service in 1948. These include at Toronto-Esplanade transformer station two 25,000-kva, 115,000/26,400/13,200-volt, 3-phase transformers with associated circuit breakers and switching equipment to increase the station capacity to 100,000-kva. All the equipment has been ordered and preliminary construction has commenced. At Toronto-Wiltshire transformer station the fifth and sixth transformer banks, each of 18,000-kva capacity, have been purchased for service by the summer of 1949.

Oshawa.—The capacity of the Oshawa transformer station is to be increased from 15,000-kva to 30,000-kva.

High-Voltage Oil Circuit-Breaker Changes

In order to maintain safety of operation, in view of the increasing system loads, extensive replacement of 115,000-volt oil circuit-breakers of insufficient capacity is being carried out. At Queenston generating station the installation of 2,500,000-kva interrupting capacity oil circuit-breakers on the outgoing lines is almost complete; and at Toronto-Leaside transformer station, similar oil circuit-breaker replacement is in the course of completion. Preliminary work for 115,000-volt oil circuit-breaker replacement is being carried out at London, Kitchener, St. Thomas, Kent, Essex, Toronto-Bridgman, Toronto-Fairbanks and Toronto-Wiltshire transformer stations.

Voltage Regulating Transformers

A 15,000-kva circuit capacity regulating transformer, mentioned in last year's report, has been installed at Preston transformer station to control the voltage on the Galt and Hespeler feeders. The installation of a 10,000-kva, circuit-capacity regulating transformer at Stratford transformer station will be completed early in 1948. At London transformer station the 8,000-kva, circuit-capacity regulating transformer designed to improve the voltage in the Dashwood and Exeter districts is scheduled for service in May, 1948. A 13,000-kva, circuit-capacity regulating transformer to improve the voltage in the Georgetown area is in the final stages of installation at York transformer station.

Synchronous Condensers

To assist in controlling voltage levels in the Peterborough area, a 3,000-kva synchronous condenser was installed at Peterborough municipal station and a 1,200-kva synchronous condenser at Auburn generating station. Similarly, to assist in maintaining satisfactory voltage levels in the Georgian Bay division, two 1,700-kva synchronous condensers were installed at Owen Sound and a 5,000-kva unit, scheduled for service early in 1948, is being installed at Barrie transformer station. Of the above units, the 3,000-kva and 5,000-kva machines were purchased as used equipment, whereas the other units were synchronous machines transferred from Sills Island generating station and Cobalt transformer station.

THUNDER BAY SYSTEM

In addition to the engineering and construction work, in connection with the Aguasabon and Pine Portage generating stations and the associated transmission lines, the following items are of interest:

Port Arthur.—Transformer station No. 2, 15,000-kva, 115,000/22,000-volt, was placed in service in July. This will relieve the overload on existing transformer banks and provide capacity for the load growth in the Port Arthur area. At transformer station No. 1 three oil circuit-breakers of 1,500,000-kva, interrupting capacity have been installed.

To control high-voltage circuits in the vicinity of Alexander and Cameron Falls and to accommodate the new line from Aguasabon, a 115,000-volt switchyard is being constructed at Alexander generating station with an initial installation of four oil circuit-breakers and provision for future extension.

Preliminary studies are in progress regarding the erection of a 115,000-volt switching station at Fort William.

Engineering assistance was given to the Long Lac Pulp and Pape $^{\rm r}$ Company in conjunction with the design of a 1,500-kva, 12,000/4,160-vol $^{\rm t}$ station to supply its new townsite at Terrace Bay.

NORTHERN ONTARIO PROPERTIES

Abitibi District

An extensive program of work, outlined in last year's Annual Report, is under way in the Porcupine area to amalgamate the Abitibi and Timiskaming districts and to establish Timmins transformer station as the main power centre. At Timmins transformer station three 9,500-kva transformers from Kirkland Lake transformer station, rebuilt for 120,000/26,400-volt operation, were placed in service, while the installation of three 2,500-kva, 44,000/26,400-volt transformers to receive power from Lower Sturgeon generating station was delayed for more urgent undertakings. Work is progressing on related projects, including the construction of the new Schumacher, South Porcupine, Hollinger Pumps, and Timmins No. 1 and No. 2 distributing stations, the auto-transformer stations at Dome, Coniaurum

and McIntyre mines, the outdoor switching station at Hollinger transformer station, and transformation changes and rehabilitation at Wawaitin and Sandy Falls generating stations. A number of these projects are scheduled for completion during 1948.

As an interim measure, three 3,000-kva, 115,000 12,000-volt, single-phase transformers have been placed in service at Schumacher transformer station.

A new 15,000-kva, 115,000 26,400-volt transformer station, authorized for construction to supply power to the Kerr-Addison Mining Company, is expected to be placed in service by the middle of 1948.

A new 1,000-kva, 115,000 26,400-volt station, known as Azilda transformer station, together with a 18-mile, 26,400-volt feeder to supply the Nickel Offset Mines is nearing completion.

Timiskaming District

The tie line for the transfer of surplus 60-cycle power from the Timiskaming district to supplement the resources of the Sudbury-Nipissing districts was placed in service in December, 1947. The tie line consists of a 44,000-volt transmission line between Matabitchuan and Upper Notch generating stations and a 115,000-volt line from Upper Notch to Crystal Falls generating stations with associated 15,000-kva, 115,000-44,000-volt transformation at Upper Notch.

Authorization has been granted for the conversion of Upper Notch generating station from 25-cycle to 60-cycle generation and eventual connection of the generators with the Timiskaming-Sudbury tie-line. A contract for rebuilding the generators has been placed.

In order to supplement generating capacity within the Timiskaming district, a 3,125-kva, 25,60 cycle frequency-changer is being installed at Kirkland Lake transformer station and is expected to be placed in service by the fall of 1948.

Sudbury District

The new 60-cycle, 42,000-kw generating station to be provided at the Tunnel site on the Mississagi river has already been described.

The construction of a new frequency-changer and transformer station at Sudbury has been authorized to provide for the exchange of power between the Abitibi and Sudbury districts and to supply power to mine and urban load centres at 22,000-volts. The initial installation will include a 25,000-kva, 13,800-volt, 25 60-cycle, 300 rpm, three-phase frequency-changer together with 25-cycle and 60-cycle transformation and switching, and two 8,000-kva, 115,000 24,000-volt, 60-cycle, three-phase transformers with associated high- and low-voltage switching. The major station equipment is being manufactured and it is expected that the station will be placed in operation late in 1949.

At Crystal Falls generating station extensions to the switchyard are being made to accommodate the new tie line from the Timiskaming district.

A new 600-kva distributing station at Blezard Valley was placed in service together with a 4.78-mile, 22,000-volt, wood-pole transmission line to serve the Blezard Valley-Chelmsford-Hanmer areas.

Engineering assistance was given to the Sudbury Hydro-Electric Commission in connection with an increase in transformer capacity at their Kathleen street municipal station.

Nipissing District

An extension of the North Bay distributing station to increase the transformer capacity from 1,000-kva to 2,000-kva, is being considered, together with secondary voltage change.

Manitoulin Rural Power District

In order to augment existing generation of power to meet increasing demands on Manitoulin Island, two 100-kva portable generating sets were placed in temporary service at Kagawong generating station, and the installation of a 312-kva and a 150-kva Diesel-electric generating set from Caledon generating station is nearing completion.

Patricia District

Work continued on the installation of the fourth generating unit at Ear Falls generating station and associated transmission facilities. The rehabilitation of the No. 1 unit superstructure is complete, the 5,500-kw No. 4 generator has been delivered, and four 4,000-kva, 138,000 69,000/6,600-volt transformers are being manufactured. The erection of a 41-mile, 115,000-volt, wood-pole transmission line from Ear Falls to Red Lake and a 61 mile 115,000-volt, wood-pole transmission line from Ear Falls to Dryden is proceeding. Changes are in progress at Uchi switching station and at Crow River transformer station in connection with a proposed voltage increase of the Ear Falls-Crow River transmission line to 69,000 volts. These transmission line projects are scheduled for completion before the new Ear Falls generator is placed in service during the summer of 1948.

The 2,000-kva, No. 1 generator with associated control equipment at Rat Rapids, mentioned in last year's Report was reinstalled for service.

Rainy River District

To supply the Rainy River rural operating area with 6,900/12,000-volt power, a new 300-kva distributing station, together with one outgoing feeder and associated switching and metering was placed in service at Fort Francis on the site of the Ontario-Minnesota Pulp and Paper Company's transformer station.

CHANGES IN TRANSFORMER CAPACITY DURING YEAR ENDED OCTOBER 31, 1947

Station	Date		Transf insta	ormers alled		Transformers removed	
Station	Date	No.	kva	Ph.	1 otal kva	No.	kva
SOUTHERN ONTARIO SYSTEM							
Aldershot No. 2. D.S. Alexandria No. 2. D.S. Alliston No. 2. D.S. Alvinston D.S. Ancaster D.S.	Oct. 12, 1947 Dec. 17, 1946 Feb. 6, 1947 Nov. 29, 1946 Aug. 24, 1947	1 3 1 1	2,000 200 250 300 1,000	3 1 1 3 3	2,000 600 750 300 1,000	1 1	150 600
Apple Hill D.S. Appin D.S. Arnprior D.S. Atwood D.S. Aylmer D.S.	June 5, 1947 Oct. 10, 1947 Oct. 5, 1947 Dec. 8, 1946 Nov. 3, 1946	1 3 3 3	300 333 1,000 333 667	3 1 1 1 1	300 1,000 3,000 1,000 2,000	1 3 3	150 500 250
Bass Lake D.S. Bolton D.S. Caledonia D.S. Caledonia T.S. Camp Borden D.S.	Feb. 5, 1947 May 18, 1947 Dec. 24, 1946 April 20, 1947 Oct. 7, 1947	1 3 1 1 1	600 250 600 8,000 50	3 1 3 3 1	600 750 600 8,000 50	3	150 300
Centralia D.S. Clinton D.S. Comet D.S. Cornwall T.S. Cornwall (C.I.L.) T.S.	May 19, 1947 July 11, 1947 June 19, 1947 Jan. 26, 1947 Mar. 1, 1947	1 3 3 3 3	600 333 333 5,000 5,000	3 1 1 1	600 1,000 1,000 15,000 15,000	3 3 3	150 150 5,000
Cyanamid T.S. DeCew Falls G.S. DeCew Falls G.S. Delhi D.S. Dunbarton D.S.	May 3, 1947 Sept. 26, 1947 Dec. 1, 1946 July 31, 1947 Jan. 6, 1947	3 3 3 1	22,500 22,000 22,000 667 600	1 1 1 1 3	67,500 66,000 66,000 2,000 600	3 3 3	7,500 22,500 250
Fonthill. D.S. Galt. D.S. Harriston D.S. Holyrood. D.S. Kincardine No. 2. D.S.	May 5, 1947 Aug. 31, 1947 Mar. 24, 1947 Sept. 14, 1947 Sept. 21, 1947	3 3 3 3	333 333 250 333 200	1 1 1 1	1,000 1,000 750 1,000 600	3 3 3 3 3	150 150 150 200 100
Kirkfield No. 2. D.S. Lambton. D.S. Lynden. D.S. Madoc No. 1 D.S. Millbrook No. 1 D.S.	July 8, 1947 Feb. 11, 1947 Aug. 17, 1947 June 29, 1947 June 8, 1947	1 1 3 1 1	300 1,875 250 300 100	3 1 3 1	300 1,875 750 300 100	3	150
Morrisburg. D.S. New Hamburg. D.S. Oakville. D.S. Oil Springs. D.S. Ostrander D.S.	Sept. 14, 1947 Nov. 10, 1946 Aug. 10, 1947 Dec. 11, 1946 June 3, 1947	3 3 1 3 3	250 333 2,000 250 333	1 1 3 1 1	750 1,000 2,000 750 1,000	3 6 2	100 75 150
Ottawa-Riverdale. T.S. Pelham Road D.S. Penetanguishene No. 1. D.S. Perch. D.S. Perth No. 1 D.S.	Aug. 19, 1947 Nov. 17, 1946 Jan. 12, 1947 July 18, 1947 Aug. 24, 1947	3 3 3 3	5,000 200 500 333 1,500	1 1 1 1 3	15,000 600 1,500 1,000 1,500	3 3 3 1	75 300 150 750

CHANGES IN TRANSFORMER CAPACITY DURING YEAR ENDED OCTOBER 31, 1948

Station	Date		Transf Inst	ormers alled	i	Transformers Removed		
Station		No.	kva	Ph.	Total kva	No.	kva	
SOUTHERN ONTARIO SYSTEM —Continued Port Dalhousie. D.S. Port Perry No. 1 D.S. Renfrew No. 1 D.S. Rideau T.S. Rondeau D.S.	May 23, 1947 Aug. 20, 1947 Nov. 1, 1946 Aug. 12, 1947 Sept. 9, 1947	1 1 2 1 3	1,000 600 75 3,000 333	3 3 1 3 1	1,000 600 150 3,000 1,000	1 1 3	300 1,500 150	
Russell. D.S. St. Catharines. T.S. St. Marys. T.S. St. Thomas. T.S. Scarborough. F.C.&T.S.	Oct. 19, 1947 June 22, 1947 April 6, 1947 June 15, 1947 July 15, 1947	3 1 3 2 2	500 8,000 2,500 5,000 25,000	1 3 1 3 3	1,500 8,000 7,500 10,000 50,000	2	1,250	
Seymour D.S. Stoney Creek D.S. Streetsville D.S. Thamesville D.S. Unionville D.S.	July 17, 1947 Aug. 10, 1947 April 15, 1947 Sept. 14, 1947 Oct. 17, 1947	1 1 3 6 1	75 1,000 667 150 600	1 3 1 1 3	75 1,000 2,000 900 600	1 3 3	600 250 150	
Uxbridge No. 2 D.S. Uxbridge No. 1 D.S. Walkerton D.S. Walkerville Junc. No. 2 D.S. Wallaceburg R.S.	Dec. 11, 1946 Aug. 21, 1947 July 13, 1947 April 11, 1947 Jan. 12, 1947	3 1 1 3 3	100 600 2,000 333 50	1 3 3 1 1	300 600 2,000 1,000 150	3	150	
Wasdells R.S. Watford No. 2 D.S. Wellesley D.S. Willowdale D.S. Wilsonville D.S.	May 18, 1947 Oct. 19, 1947 Dec. 1, 1946 July 24, 1947 June 29, 1947	3 1 1 1 1	333 300 600 2,000 1,000	1 3 3 3 3	1,000 300 600 2,000 1,000	3 1 1 1 1	150 150 300 1,000 600	
Winchester D.S. York T.S.	Oct. 22, 1947 Jan. 26, 1947	3 3	100 10,000	1	300 30,000	3	5,000	
THUNDER BAY SYSTEM								
Jellico D.S. Port Arthur No. 2 T.S.	Feb. 19, 1947 July 6, 1947	3 3	50 5,000	1	150 15,000			
Northern Ontario Properties								
Sudbury District Blezard ValleyD.S.	Oct. 22, 1947	3	200	1	600			
Manitoulin District KagawongG.S.	Jan. 1, 1947	3	50	1	150			
Rainy River District Fort FrancisD.S.	Aug. 15, 1947	3	100	1	300			

TOTAL MILEAGE OF TRANSMISSION LINES AND CIRCUITS

	Kind of		ne route o ucture mi		Circuit miles
System and voltage	struc- tures	Total to Oct. 31, 1946	Additions 1947	Total to Oct. 31 1947	Total to Oct. 31 1947
SOUTHERN ONTARIO SYSTEM					
Niagara division				1.005.10	1 000 07
230,000-volt	steel "	1,025.12 812.22	45.34	1,025.12 857.56	1,069.97 1,446.56
115,000-volt	wood	111.98		111.98	113.81
90,000-volt‡	steel	65.85		65.85	120.81
60,000-volt‡	" 1	35.23	*0.35	34.88	35.22
60,000-volt	wood "	0.25 898.56	95.53	0.25 994.09	0.25 1,167.40
26,400-volt	"	257.18	*47.50	209.68	277.00
13,200-volt	steel	0.82		0.82	1,64
12.000-volt	wood	71.65	5.61	77.26	101.05
Dominion Power district 44,000-volt Dominion Power district 44,000-volt	steel wood	34.97 39.68	*10.10 9.69	24.87 49.37	49.74 59.47
Dominion Power district 44,000-volt	wood "	28.02	3.03	28.02	28.02
Dominion Power district 10,000-volt	и	14.40		14.40	14.40
Georgian Bay division		40.00		40.00	40.00
115,000-volt	steel wood	49.68		49.68	49.68
115,000-voltBala district 44,000-volt	wood "	64.44		64.44	64.44
Eugenia district 44,000-volt	"	308.38		308.38	374.83
Muskoka district 44,000-volt & less	"	39.16	10.00	39.16	39.16
Severn district 44,000-volt & less	"	240.80	12.20 0.55	253.00	303.97 92.37
Wasdell district 44,000-volt & less Eastern Ontario division		90.40	0.55	31.00	32.01
115,000-volt	steel	241.70	3.26	244.96	248.27
115,000-volt	wood	337.94	19.98	357.92	359.74
44,000-volt	"	24.33 42.80		24.33 42.80	24.33 48.48
33,000-volt	4	504.90	57. 19	562.09	600.32
St. Lawrence district 44,000-volt.	"	144.03	0.02	144.05	144.43
Rideau district 26,400-volt	"	62.48		62.48	62.48 59.55
Madawaska district 33,000-volt THUNDER BAY SYSTEM		59.55		59.55	39.55
115,000-volt	steel	82.54	63.57	146.11	228.55
115,000-volt	wood	178.21	1.50	179.71	179.71
44,000-volt	"	113.81		113.81	113.81
22,000-volt	"	8.54		8.54	8.63
Northern Ontario Properties		1.40			
Abitibi district 132,000-volt		362.74	19.40	382.14	764.28
Abitibi district 132,000-volt	wood	190.19	3. 15	190.19	190.19
Abitibi district 26,400-volt	"	157.82 20.30	3.13	20.30	20.65
Sudbury district 115,000-volt	- "	46.23	1	46.23	46.23
Sudbury district 22,000-volt	4	73.74	4.78	78.37	78.58
Nipissing district 22,000-volt.		63.16	0.17	63.18	80.04
Patricia district 44,000-volt		348.95 33.51	0.17	33.51	33.64
Rainy River district 115,000-volt		119.81		119.81	119.81
Timiskaming district 115,000-volt	steel	112.82	*85.74	27.08	54.16
Timiskaming district 115,000-volt	wood	74.56		74.56 235.98	74.56 235.98
Timiskaming district 44,000-volt Timiskaming district 12,000 & 11,000-		235.98		200.90	200.30
volt	"	103.92	1.30	105.22	169.94
		7,000,55	1100 55	0.150.07	0.904.04
• Totals	1	7,960.57	†199.55	8,159.97	9,894.04

^{*}Removals. †Net increase. ‡Former T. & N.P. Co. circuits are now used at various voltages ranging from 4,000 volts to 115,000 volts.

Note: Circuit miles of 230,000-volt line in the Province of Quebec connected to H-E.P.C. lines=103.45. Total 230,000-volt system interconnected circuit miles=1,173.42.

TRANSMISSION LINE CHANGES AND ADDITIONS MADE DURING THE YEAR ENDED OCTOBER 31, 1947

SOUTHERN ONTARIO SYSTEM

HIGH-VOLTAGE LINES

A 115,000-volt, double-circuit, steel-tower line with one circuit only erected was built from Leaside transformer station 5.33 miles to Scarborough frequency-changer and transformer station.

A 115,000-volt circuit was erected on the steel-tower line from DeCew Falls generating station 2.72 miles to St. Johns Valley junction.

A 115,000-volt, single-circuit, steel-tower line was built from Kent transformer station 42.46 miles to St. Clair transformer station.

A 115,000-volt, single-circuit, wood-pole line was built from Chalk River transformer station 18.19 miles to Des Joachims development.

A 115,000-volt, double-circuit connection was built to Caledonia transformer station.

A portion of the 115,000-volt, double-circuit, steel-tower line from York transformer station to Strachan transformer station, 2.45 miles in length, was removed.

LOW-VOLTAGE LINES

Niagara Division

NIAGARA DISTRICT:—A 12,000-volt line was built from Niagara transformer station 2.75 miles to Lionite junction.

Two 26,400-volt connections were built 0.05 mile to Caledonia transformer station.

A 13,200-volt line was built from Waterdown junction 0.90 mile to Aldershot distributing station No. 2.

The 26,000-volt line from Oneida junction 3.03 miles to Hagersville Airport was purchased from War Assets Corporation.

The 26,400-volt line from Rainham junction 7.69 miles to Nanticoke distributing station was purchased from War Assets Corporation.

 $\hbox{London District:--A 26,000-volt line was built from Mt. Brydges junction 12.30 miles to Appin distributing station. } \\$

The 26,000-volt line from Mt. Brydges junction to Strathroy municipal station was relocated for 1.50 miles.

A 26,400-volt line was built from Main Street junction 8.07 miles to Dashwood junction.

The 26,400-volt line from Centralia junction 0.20 mile to Centralia distributing station was purchased from War Assets Corporation.

Guelph District:—A 26,400-volt line was built from King Street junction 0.35 mile to Georgetown municipal station No. 2.

PRESTON DISTRICT:—The 13,200-volt line from Hespeler junction to Hespeler municipal station was relocated for 0.27 mile.

KITCHENER DISTRICT:—The two 13,200-volt lines from Kitchener transformer station each 1.91 miles to Waterloo municipal station were rebuilt and restrung.

The 13,200-volt line from Waterloo municipal station to Waterloo rural station was relocated for 0.23 mile.

A 13,200-volt line was built from Duke Street junction 0.46 mile to Waterloo municipal station No. 2.

A 13,200-volt tap connection was built 0.16 mile to New Hamburg distributing station. Stratford District:—A 26,400-volt line was built from Atwood distributing station 6.49 miles to Monkton distributing station.

A 26,400-volt line was built from Listowel distributing station 6.53 miles to Atwood distributing station.

The 26,400-volt line from Stratford transformer station to Sebringville junction was relocated for 0.11 mile.

WOODSTOCK DISTRICT:—A 26,400-volt line was built from Springford junction 2.45 miles to Ostrander distributing station.

St. Thomas District:—The 13,200-volt line from Aylmer junction 9.53 miles to Aylmer distributing station was reinsulated for 26,400-volt operation.

The 13,200-volt lines from St. Thomas transformer station 12.50 miles to Port Stanley distributing station were reinsulated for 26,400-volt operation.

The 13,200-volt lines from St. Thomas transformer station 25.85 miles to West Lorne distributing station were reinsulated for 26,400-volt operation.

Brant District:—The 26,400-volt line from Silver Street junction 0.25 mile to Ayr junction was rebuilt.

A section of the 26,400-volt line from Paris junction to Silver Street junction was relocated for 0.23 mile.

ESSEX DISTRICT:—A section of the 26,400-volt line from Essex distributing station to Belle River distributing station 4.60 miles in length was restrung with heavier conductor.

A 26,400-volt tap connection was built to La Salle distributing station.

A 26,400-volt tap connection was built to Learnington distributing station.

A 26,400-volt tap connection was built to Maidstone distributing station.

A 26,400-volt tap connection was built to Walkerville junction distributing station.

YORK DISTRICT:—A 26,400-volt line was built from Prince Edward junction 1.73 miles to Swansea municipal station.

A 26,400-volt line was built from Lakeview junction 1.00 mile to Dixie distributing station.

A 13,200-volt line was built from Streetsville distributing station 0.44 mile to Graham Bell Enamelling Company Limited.

A 26,400-volt line was built from Neptune Meters Limited 0.38 mile to Murphy Paint Company Limited.

The 26,400-volt line from Brown's Line junction 0:22 mile to Aluminum Company of Canada Limited was purchased from that customer.

Two taps of 26,400-volt line were built from Robinson Cotton junction 0.04 mile to Robinson Cotton Mills, Limited.

A 26,400-volt tap connection was built 0.02 mile to the Toronto Transportation Commission, at New Toronto.

St. Clair District:—The 26,400-volt line from Indian Road junction to Polymer Corporation was relocated for 0.56 mile.

LEASIDE DISTRICT:—A 13,200-volt line was built from West Hill distributing station 4.00 miles to Dunbarton distributing station.

A 26,400-volt line was built from Port Union junction 1.60 miles to the Johns-Manville Company, Limited.

FAIRBANK DISTRICT:—A 26,400-volt line was built from Fairbank transformer station 2.01 mile to Lawrence Avenue junction.

The 26,400-volt line from Lawrence Avenue junction 1.09 miles to North York Township (Dayton) municipal station was restrung with heavier conductor.

The 26,400-volt line from North York Township (Dayton) municipal station 1.65 miles to Codsell Avenue junction was restrung with heavier conductor.

A 26,400-volt line was built from Codsell Avenue junction 2.30 miles to Willowdale regulator station.

A 26,400-volt tap connection was built from Jane Street junction 0.15 mile to the Dominion Cellulose Company, Limited.

A 26,400-volt tap connection was built to Unionville distributing station.

A 26,400-volt line was built from Hoffman junction 0.02 mile to the Canadian Hoffman Machinery Company, Limited, Newmarket.

THOROLD DISTRICT:—A 13,200-volt line was built from Martindale Road junction 2.67 miles to Pt. Dalhousie distributing station.

The 12,000-volt line from Alliance junction 0.17 mile to Alliance Paper Company Limited was restrung with heavier conductor.

A 12,000-volt line was built from Alliance junction 0.50 mile to Alliance Paper Company Limited for that customer.

The 12,000-volt line from Garden City junction to Lincoln distributing station was relocated for 0.29 mile.

A 12,000-volt line was built from Thorold transformer station 0.25 mile to the Exolon Company for that customer, replacing the existing line.

DOMINION POWER DISTRICT:—The 44,000-volt circuit from Niagara Falls frequency-changer station 1.40 miles to the Niagara weir was removed.

The 44,000-volt line from Irondale station 0.51 mile to the Steel Company of Canada Limited was removed.

Georgian Bay Division

SEVERN DISTRICT:—A 22,000-volt line was built from Coldwater junction 12.20 miles to Bass Lake distributing station.

A 22,000-volt circuit was added to the line from Painswick distributing station 4.81 miles to Thornton junction and the existing circuit was reinsulated for 44,000-volt operation.

Wasdells District:—A 44,000-volt line was built from Kirkfield distributing station No. 1, 0.55 mile to Kirkfield distributing station No. 2.

The 22,000-volt line from Pt. Perry junction 4.07 miles to Pt. Perry distributing station was reinsulated for 44,000-volt operation and 3.00 miles were restrung with heavier conductor.

The 22,000-volt line from Pt. Perry junction 6.17 miles to Uxbridge distributing station No. 1 was reinsulated for 44,000-volt operation.

A 44,000-volt connection was built from Uxbridge distributing station No. 1 to Uxbridge distributing station No. 2.

Eastern Ontario Division

A 115,000-volt, single-circuit, steel-tower line was built from Cyrville junction 4.69 miles to Ottawa Riverdale transformer station.

A 115,000-volt, single-circuit, wood-pole line was built from New York Central junction 0.36 mile to Cornwall "C.I.L." transformer station.

CENTRAL DISTRICT:—A 44,000-volt line was built from Frontenac transformer station 4.87 miles to Canadian Industries, Limited.

A 44,000-volt line was built from Belleville distributing station No. 1, 1.65 miles to Belleville distributing station No. 3.

A 44,000-volt line was built from Sidney junction 0.65 mile to Belleville distributing station No. 3.

The 44,000-volt line from Weller Bay junction 8.53 miles to Mountain View distributing station was purchased from War Assets Corporation.

A 44,000-volt circuit was removed from the double-circuit line, Oshawa transformer station 0.43 mile to Oshawa distributing station No. 2, and configuration was changed to pole-top-pin.

A 44,000-volt line was built from Heely Falls generating station 24.7 miles to American Nepheline, Limited.

A 44.000-volt line was built from Oshawa transformer station 17.45 miles to Reach Road junction.

A 44,000-volt tap connection was built to Norwood distributing station No. 2.

St. Lawrence District:—The 44,000-volt line from Iroquois distributing station to Cardinal distributing station was converted to pole-top-pin construction for 5.46 miles.

THUNDER BAY SYSTEM

A 115,000-volt, single-circuit, wood-pole line was built from Alexander generating station $1.50\,\mathrm{miles}$ to Cameron Falls generating station.

A 115,000-volt, single-circuit, steel-tower line was built from Alexander generating station 60.98 miles to Aguasabon generating station.

A 115,000-volt, single-circuit, steel-tower line was built from Aguasabon generating station 2.59 miles to Long Lac Pulp and Paper Company Limited.

NORTHERN ONTARIO PROPERTIES

ABITIBI DISTRICT:—The 12,000-volt line from Naybob junction 1.00 mile to Naybob "1945" Gold Mines Limited was restrung and reinsulated for 26,400-volt operation.

A 26.400-volt line was built from Hislop distributing station 1.50 miles to Kelwren Gold Mines, Limited,

NIPISSING DISTRICT:—The 22,000-volt line from Crystal Falls junction 7.73 miles to Sturgeon Falls junction was restrung with heavier conductor.

Sudbury District:—A 22,000-volt line was built from Blezard Valley distributing station 4.78 miles to Garlake junction.

PATRICIA DISTRICT:—A 44,000-volt tap connection was built to Orlac Red Lake Mines, Limited

COMMUNICATIONS—ALL SYSTEMS

Several of the power developments now under construction were equipped with new telephone switching equipment, communication instruments, and radio equipment to provide important communication facilities urgently required to facilitate the development of these power sites. At Des Joachims a 40-line cord type private branch exchange and at Aguasabon a 10-line cordless private branch exchange were installed for the construction camps. At the Head Office in Toronto communication trunking facilities were installed for service requirements between Head Office, Leaside transformer station and Islington service centre.

VHF fixed and portable FM radio equipment was used during the construction of the double-circuit Crystal Falls to Upper Notch 115,000-volt transmission line and the Barrett Chute to Oshawa 115,000-volt transmission line. Several portable FM radio stations were established at Des Joachims and Aguasabon for use during the construction of these developments.

A fixed FM radio station and associated mobile communication equipment was installed at Fairbank transformer station as part of the projected radio network for the Southern Ontario system. (Consult special statement on page 108.)

SOUTHERN ONTARIO SYSTEM

For the Southern Ontario system, a five-circuit telephone pole line was constructed from Leaside transformer station 7.3 miles to Highland junction along with 5.7 miles of 52-pair telephone cable between Leaside and Scarborough stations. A four-circuit telephone pole line was constructed for 9.4 miles between Brock Road and Highway number 12 while two circuits were added for 4.3 miles on an existing double-circuit telephone pole line between Highway number 12 and Brooklin junction. An additional single telephone circuit was erected on an existing telephone pole line for 79 miles between Brooklin junction and Sidney transformer station and two additional telephone circuits were erected for 15 miles between Sidney transformer station and Belleville office on an existing telephone pole line.

A double-circuit telephone pole line was erected for 2.8 miles between Des Joachims and Moor Lake, one circuit interconnecting with the leased telephone circuit between Moor Lake and Amprior. Three telephone circuits were erected for 13 miles between Amprior and Chats Falls which enable a single channel telephone carrier to be installed between Des Joachims and Chats Falls. Four telephone circuits were erected from the Stewartville development 7 miles to the Amprior airport station.

Between Waubaushene switching station and Coldwater distributing station, a single telephone circuit was erected for 4.7 miles and between Coldwater junction and Bass Lake distributing station, 13 miles of single telephone circuit were erected.

Single telephone circuits were erected between Heely Falls generating station and American Nepheline Company station, a distance of 17 miles; Exeter Main Street junction and Dashwood junction, a distance of 8 miles; Listowel distributing station and Atwood distributing station, a distance of 5.6 miles. Between Erbs junction and Stratford transformer station the single-circuit telephone pole line was reconstructed for 2.6 miles.

Installations were completed for a temporary telemetering and load control channel between Chats Falls and Cornwall transformer stations and a single channel telephone carrier between Smith Falls and Cornwall transformer stations.

THUNDER BAY SYSTEM

For the Thunder Bay system, two miles of 76-pair telephone cable was installed between Port Arthur transformer station numbers 1 and 2, while 21 miles of new single-circuit telephone pole line was completed between Cameron Falls generating station and the Aguasabon development with a single-channel telephone carrier installed at Cameron Falls and Aguasabon for operation between these two points.

NORTHERN ONTARIO PROPERTIES

For the Northern Ontario Properties, a new single telephone circuit was erected for 4.78 miles between Blezard Valley distributing station and Garlake junction and a single-channel telephone carrier was installed between Kirkland Lake and New Liskeard transformer stations.

FREQUENCY MODULATION (FM) RADIO COMMUNICATION Report on Installations of Main Stations and Mobile Units

The Commission first employed FM (frequency modulation) Radio to make experimental tests in July, 1945, between Barrett Chute generating station and Bark Lake control dam. These tests indicated that its use under properly engineered conditions would provide reliable communication of a superior nature to the existing AM (amplitude modulation) facilities.

With this initial experience to draw on it was decided to provide five portable FM stations in construction camps and two fixed FM terminal stations for communication during line construction between Cameron Falls and Aguasabon. Slowness of delivery of equipment ordered in the spring of 1946 prevented the carrying out of this program. However, by the time the equipment was delivered it was possible to make use of it for camp communication during line construction between Barrett Chute and Oshawa. A 250-watt terminal was installed at the construction office in Cloyne and three 60-watt portable stations were provided for isolated camps.

This form of communication was of great value as the camps so equipped were in constant touch with the construction office, whereas sending a truck out and back would require at least half a day's time. As the camps were moved to other locations during progress of the work these stations were moved and set up again by the camp personnel, indicating that they were of suitable design for unskilled persons to move them and perform simple servicing operations.

In September, 1946, an order was placed for one 250-watt main terminal and two 60-watt mobiles to be installed in the Toronto area for experimental purposes. The 250-watt station was placed in service at Fairbank transformer station and a mobile unit installed in truck No. 272 operating out of this station. This equipment was manufactured by Canadian General Electric Co. To compare the merits of the various makes of equipment available a third mobile unit was purchased from R.C.A. Victor Co. and installed in truck No. 19. A fourth mobile unit was purchased from the Rogers Majestic Co., agents for Motorola equipment and installed in truck No. 303 operating out of Cooksville transformer station. The main station at Fairbank transformer station is remotely controlled from the Operator's desk in the control room at that station. Test runs made with the mobile units available compared favourably with results anticipated from calculations of signal paths using contour maps.

In May, 1947, an order was placed for five 60-watt portable stations and two 250-watt terminals for camp communications during line construction between Upper Notch and Crystal Falls. A sixth 60-watt portable station was later obtained to complete the necessary installations in all camps not served by telephone. From the construction office in Timagami it was possible to maintain contact with all the line camps either directly or by relay and thereby speed up the important steel tower line construction.

In July, 1947, two 60-watt portable stations were installed at the Des Joachims development between Camp No. 1 on the Ontario side of the river and Camp No. 2 on the Quebec side. These stations provided the sole means of communication between these points for several months until Commission telephone facilities became available.

In August, 1947, a 250-watt terminal was installed at Camp No. 1, Aguasabon, and a 60-watt station at Camp No. 2. These provided rapid means of communication between the two main camps of this important development. The 250-watt terminal is eventually to provide communication between Aguasabon and Cameron Falls and also mobile equipment in patrol trucks to operate in that area.

The need for suitable communication between Islington service centre and Hanna Avenue stores was met by two 50-watt installations. Each was installed in the stores office and gave immediate contact between these offices while limited temporary telephone facilities were available.

During the sleet storm damage at New Year's time, 1948, three mobile units and one portable station were moved to the Chatham-Windsor area to provide emergency communication during the period of restoring power service. Field supervision of repair crews was made possible on a scale never before realized and the time taken to restore service was substantially reduced.

The Commission now has available five 60-watt portable stations with conversion accessories necessary to convert any two of these 60-watt portable stations to mobile units.

The Commission is at present authorized to use frequencies of 39.90, 40.02 and 158.25 megacycles per second for this type of service. However, experience has definitely shown that 39.90 mc is unsuitable due to skip interference from United States police stations. Permission has been given to use 40.14, 41.2, 49.7, 75.5 and 75.66 mc on an experimental basis to determine the transmission characteristics of these individual frequencies. Further engineering investigation will determine the best selection of frequencies to meet requirements.

The initial step in expanding the mobile communication system will be the installation of a main 250-watt terminal at Barrie transformer station and the equipping of three trucks operating in that area. Following this, plans are being laid to install main stations in the Belleville, London and Chatham regions and to equip several trucks in each area. An appropriation has been authorized to complete the installation of fixed and mobile stations throughout the Southern Ontario system. It is anticipated that considerable progress will be made during 1948.

DISTRIBUTION LINES AND SYSTEMS IN RURAL OPERATING AREAS

The following summary shows the mileage of distribution lines constructed by the Commission in rural operating areas and the number of consumers served.

The summary indicates a total net increase in construction during the year of 1,007 miles of new primary line completed and an increase of 20,691 in the total number of consumers served.

SUMMARY OF CONSTRUCTION IN RURAL OPERATING AREAS

	At Octobe	r 31, 1946		At October 31, 1947				
	Miles	Number	Miles	of prima	ry line		umber nsume	
System and division or district	of primary line constructed ceiving service		Con- structed	Under con- struc- tion or author- ized	Total	Re- ceiv- ing ser- vice	Au- thor- ized	Total
SOUTHERN ONTARIO SYSTEM								
Niagara division Georgian Bay division. Eastern Ontario	12,836 3,683			242 139	13,408 4,071	114,168 30,291	840 450	115,008 30,741
division	5,496	36,888	5,835	177	6,012	41,905	917	42,822
THUNDER BAY SYSTEM	303	1,677	308	20	328	1,868	69	1,937
NORTHERN ONTARIO PROPERTIES								
Abitibi district Timiskaming district	75 0		79	13 5	92 5	434	35 13	469 13
Sudbury district	66		102	1	103		6	
Nipissing district	95				111	1,371	123	1,494
Manitoulin district Rainy River district	167 37	1,194 0	180 61	$\frac{1}{2}$	181 63	1,340 364	0	1,340 364
Totals	22,758	173,362	23,765	609	24,374	194,053	2,453	196,506

SECTION VII

RESEARCH, TESTING AND INSPECTION

New Developments Aid Commission's Operations Record Volume of Inspection and Testing

IN ALL sections and divisions of the Laboratories the volume of work has grown, reflecting increased construction activity and power demands. These have produced their quotas of new problems, extra tests and more operating equipment, considerably overtaxing the facilities available. Some relief was experienced with the release of floor space by the Stores department, permitting additional staff to be taken on. Full relief will not be obtained until the new laboratory building is erected and occupied. To this end, preliminary plans have been prepared and considerable thought given to its facilities and location.

With new equipment acquired during the year, the Laboratories are in a better position to serve the varied needs of the Commission. Many of these additions were designed and constructed by the staff and have made possible tests and investigations that could not have been undertaken otherwise.

The highlights of the individual sections and projects are recounted on the following pages. Least spectacular, and yet most permanent, are the reports and specifications which record final progress and eventually govern future practice. These are not included here but still constitute one of the principal contributions of the Laboratories.

Research and Testing

There are now 19 research sub-committees in varying degrees of activity, each responsible for a particular field of investigations and reporting to the main research committee. Their membership is drawn from all departments so that problems of all classes are brought to the attention of the investigators. In the ensuing paragraphs there is evidence where investigations have benefited construction projects and methods, operations, maintenance and currently used processes and procedures.



PHOTOGRAPH RECORD FROM KLYDONOGRAPH
Record from lightning recorder showing 2,000,000-volt positive
lightning surge

Electrical Insulation

During the summer months, extensive field measurements were made on many types of high-voltage equipment to determine the condition of the insulation. Several test methods were used to compare their usefulness and limitations. From the results of these and succeeding periodic measurements, it is hoped that records will be established from which incipient failures may be spotted before breakdown occurs. Even now, certain types of failures have been anticipated where measurements on one piece of equipment were significantly different from those on other similar pieces.

Laboratory developments of equipment for observing and recording lightning surges have made possible a profitable investigation into this field. From the information now accumulating, there should evolve a better understanding of such surges and of adequate protective measures.

Overcurrent Protection for Transformers

This is a new study to provide information on the more commonly available "hot-spot" and other temperature indicators. It is hoped to obtain a better understanding of their limitations and eventually to improve the service from the Commission's transformers.

Grounding

Recent grounding investigations have obtained lower ground resistances for stations, tower footings and rural lines. The last item has resulted in safer secondary circuits, and all factors tend to improve operations generally. Changes have been recommended in ground-rod specifications which will result in a lower cost article.

For two summers now, extensive records have been made of surges, lightning or power, appearing on distribution circuits in two districts. This information will assist in improving rural circuit protection.

Connections and Joints in Electrical Conductors

Extruded aluminum sleeves have been developed for compression joints in aluminum cable steel-reinforced, replacing the cast type of sleeve. They are cheaper, lighter, more easily used and make joints which are stronger and tighter than were previously obtainable. Cleansing and lubricating materials for joints and contacts have been evaluated and the covering specifications revised.

Extensive corrosion studies of different metal clamps on aluminum and copper conductors have shown that aluminum clamps are the best for universal use.

A wartime development being adapted to serve Commission needs is the bolometer, which will detect the infra-red radiations from a hot body. Hence it should be capable of spotting hot joints in transmission lines.

Electric Welding

Welding studies have been directed to explore the stresses created by welding processes, and the effectiveness of various methods of relieving stress. It was confirmed that these stresses approach the yield strength of the material. All relieving methods were effective in reducing residual stresses, though not to the same degree.

Illumination

Economic studies have been made on group replacement of lamps to determine when commercial installations should be changed in toto, instead of replacing the lamps as they burn out individually. Diffusing glasses and plastics have been classified so that suitable selections can be made quickly in designing luminaires for both fluorescent and incandescent lighting. Two illumination instruments have been developed having somewhat broader ranges than are normally available commercially.

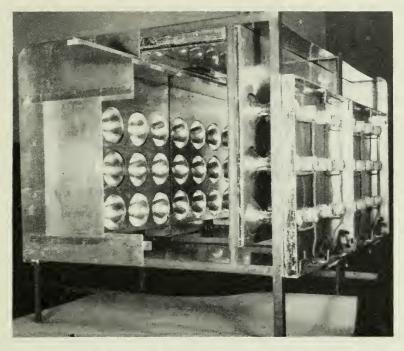
Electronic Applications

During 1946, a laboratory model of an echo-ranging fault locator was constructed and tried out. It has now become the "Linascope", an instrument of proven worth for determining the location and type of fault on open wire circuits. Newer models are under construction for installation at Leaside transformer station will be capable of being switched on to any line, in or out of service, to investigate trouble.

Radio Interference from Corona

In cooperation with the Electrical Engineering department at the University of Toronto, a project was directed toward clarification of the basic concepts and theories of radio noise production, and into the field of radio noise control.

From the experimental work it was observed that radio interference was absent from smooth dry conductors on positive direct current and from totally wet conductors on negative direct current.



EXPERIMENTAL INFRA-RED OVEN

Used to study problems of drying by infra-red heating. Side and front cover removed to show construction

Wooden Transmission Structures

Highly effective remedial and control measures have been developed against the various forms of deterioration occurring in wooden structures. Currently pentachlorophenol preservatives are generally used for impregnating wood poles, and as a result of laboratory research, a more effective and more economical method of impregnation may be possible. Constant liaison is maintained with the Forest Products Laboratory of Canada.

Paints and Protective Coating

The constant stream of new paints appearing on the market requires a continuous study of their properties, particularly as they affect service life in the wide variety of applications throughout the systems of the Commission. Synthetic-resin base paint showed advantages where resistance to alkalis or acids was desirable. Tests on waterproofing materials revealed wide variation in retarding water seepage, with all materials inferior to a bituminous coating for this purpose. Paint purchases have been systematized to simplify ordering and testing, and at the same time ensure the best quality paint for each purpose.

Petroleum Products

Insulating oils in transformers and oil circuit-breakers gradually deteriorate in service. For several years an annual inspection has been made of all

insulating oils to try to anticipate failure and take appropriate action before serious trouble develops. Some success has been achieved and, with additional experience and information, better results can be expected. Reclaiming used insulating oils has been investigated extensively and is being tried to a limited extent. New oils are being continually investigated to evaluate their suitability for Commission use. This work is done in cooperation with the American Society for Testing Materials.

Domestic Hot Water Tanks and Heaters

The "packaged unit" automatic hot-water storage tank is now in production and is gradually becoming available to consumers through the municipal offices. It comes completely assembled and requires only two connections to the water pipes and one to a power circuit.

A long term life study on tanks was completed and showed that faulty mechanical construction was the major cause of failures. Heavy galvanizing, free from tin, has proved desirable. A long range study has begun on the use of magnesium rods for cathodic protection of tanks. The magnesium should control the galvanic cell action, which destroys the tank, and thus extend the tank's service life.

Masonry Materials

Studies and tests related to concrete have increased considerably reflecting the large volume of current construction. Directly involved are the mass concrete studies to determine temperature and stress conditions produced when large single lifts are poured for gravity dams.

Equipment has been developed for transmitting ultrasonic (high-frequency sound) waves through concrete masses up to 50 feet thick. This serves as a means of "x-raying" the concrete for internal or surface cracks. The same equipment is being used to measure changes in properties of laboratory test specimens over an extended period. These developments have aroused considerable outside interest.

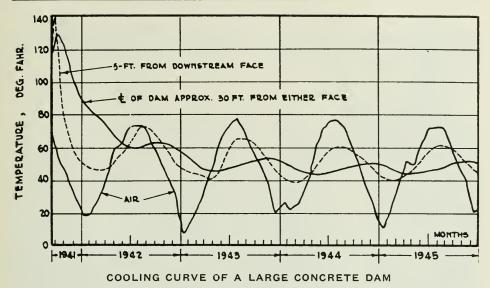
Accelerated tests are being sought to give information on the durability of concrete mixes. Comparative pull-out tests on plain and deformed reinforcing bars exhibited a much greater ultimate bond to the concrete for the latter type.

Soil Mechanics

While soil is one of the oldest building materials, its engineering properties have only recently been understood. From laboratory tests the engineer can now determine the soil characteristics before construction is begun on an earth dam or dyke. Similarly before structural foundations are placed, the safe bearing load of the soil can be determined and subsequent settlement predicted. The Laboratory is equipped to conduct the usual soil tests and is adding to its equipment to extend this service.

Routine Testing

Much of the routine testing is performed as a quality control measure on Commission purchases of oil, paint, lamps, insulators, line materials,



Temperature history of concrete at the interior and face of Barrett Chute dam shows that the dam took two and a half years to cool down. Air temperature is shown for comparison

steel and cement. Similar tests are made on project materials and equipment such as concrete, aggregates, soil, wood poles, equipment repaired at Bloor Street stores, linemen's gloves, watthour meters and insulating oils. All these tests help assure quality products and improved operations.

Several types of tests were originally performed as part of investigations but have now been adopted as routine checks. Testing of insulating oils and aggregates are cases in point.

The volume of this work has been rising steadily and has increased over sixty per cent during the current fiscal year.

Approvals Testing

The business of Approvals testing of electrical equipment has continued to grow, although the actual increase was only 24 per cent as compared with 120 per cent in the year previous. Applications for motor-driven appliances showed the largest number as well as practically the highest percentage increase, (i.e. 57%), with electrically-heated appliances, lighting devices and wiring devices being next in order. In only two types was there a decrease in number of applications submitted.

There was an increase of 25 per cent in the sale of labels of all types, apparently due to the continued increasing demand for construction materials. The footage of wire, cable and conduit labelled increased 28 percent.

In order to cope with this relatively large increase in business over the sudden growth of the year before, a further addition to technical and clerical personnel was required and some rearrangement of space to accommodate them. It was necessary to reorganize the engineering personnel providing more supervisors and adding to the specification writing group.

Members of the staff attended meetings of the Approvals Administrative Board, the Approvals Council and the Canadian Electrical Code Committees, Parts I and II. Meetings of the CSA Fire Hazard Committee were also attended by the approvals engineer.

New Equipment

New equipment, both additional and replacement, is required to keep the Laboratories modern and progressive. The Structural Materials section has improved its facilities by adding an impact tester, a hardness tester, a jaw crusher for crushing stone, and a strain gauge. The chemical laboratory has a new refrigerator capable of -70° Fahrenheit, and a colormetric analyser to expedite quantitative analysis. Electrical measurements and testing have benefited from several general purpose instruments, an audio oscillator, two twin-beam oscillographs and a Westinghouse high-voltage oscillograph.

This last item is the most important addition of the year, as it makes possible a much more comprehensive and detailed study of lightning phenomena. The instrument will record impulses of less than one millionth of a second duration so that the actual shape of the lightning surge can be photographed and studied.

The Laboratory complements its purchases with equipment of its own design. To quote only a few examples, there are the compressometer for tests on concrete cylinders, a consolidometer for soil tests, an electronic decade amplifier and a continuous process developer for the thousands of sheets of photographic film used in taking lightning records. Also, modifications and additions to existing equipment have considerably extended and improved their usefulness.

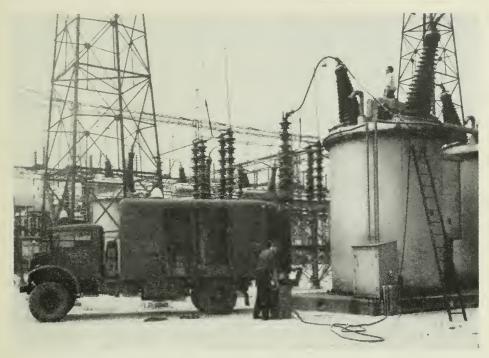
Materials and Equipment Inspection

Factory inspection and acceptance witness testing of equipment and materials purchased by the Commission is undertaken by the Laboratories. The quality of materials and workmanship in fabrication and assembly of equipment is checked to assure satisfactory operating characteristics and reliability in service.

Electrical Equipment

Factory inspection of generator and synchronous motor equipment being manufactured but not completed within the year, included—three 24,000-kva generators for Stewartville development on the Madawaska river, two 22,500-kva generators for Aguasabon, four 50,000-kva generators for Des Joachims generating station, four 25,000-kva 25-60-cycle frequency-changers of which three are for the Southern Ontario system and one for Sudbury, and one 40,000-kva synchronous condenser for Burlington transformer station. Inspection of the 64,000-kva generator for DeCew Falls was completed during the year.

Factory inspection and final acceptance tests were completed on transformers of various ratings which included 190 units with total capacity of 340,000 kva, some of these being transformers of the highest ratings installed



FIELD TESTING INSULATION OF POWER APPARATUS

Making power-factor measurements on bushings of an oil circuit-breaker. Truck

serves as a field laboratory

on the Commission's power systems. A very large number of oil circuit-breakers, 141, were inspected, tested, and found acceptable, the total capacity being 13,578, 225-kva, and 121 air-break disconnecting switches with a total capacity of 8,195, 230-kva.

Distribution transformers, amounting to 7,039 units, were inspected and tested. No less than 31,694 service entrance breakers and 14,387 transformer cutouts and fused switches were inspected. Inspection also covered about 307,000 line and bus insulators.

Routine tests were made in the Laboratories on 6,751 pairs of linemen's rubber gloves and on 2,038 samples of insulating oil. Special tests were made on 1,594 samples of oil.

A total of 1,850 instrument and distribution transformers were tested, and 13 motors of various ratings. As part of the development and production of the automatic electric water heaters, 3,800 thermostats were inspected and checked for calibration. Flash over tests were made on 19,690 insulators; 15,165 watthour meters were repaired and 320 indicating instruments were calibrated.

Mechanical and Structural Equipment

Factory inspection of equipment completed during the year included:—One 75,000 hp turbine for DeCew Falls, three 28,000 hp turbines for the

Stewartville development, the crane for Scarborough frequency-changer set, the crane for the Stewartville development, tainter gates and hoists and head gates, and hoists for DeCew Falls, a replacement runner for Chats Falls, and a spare turbine bearing for Alexander generating station. Field inspection of erection of equipment completed during the year included the head gates, tainter gates and hoists, the penstock, spiral casing, turbine and generator for DeCew Falls, and the building, crane and frequency-changer for Scarborough frequency-changer station.

A large amount of inspection work was started on equipment that was not completed during the year, including one 7,500-hp turbine for Ear Falls, two 27,500-hp turbines for Aguasabon, six 62,000-hp turbines for Des Joachims, two 29,000-hp turbines for Tunnel, three cranes for Aguasabon, Westminster and Sudbury, head gates and hoists, and sluice gates and hoists for Stewartville and Des Joachims, three butterfly valves for Aguasabon, three pumps for Stewartville, two pumps for DeCew Falls, two stop-log winches for Aguasabon, one stop-log transfer spud winch for Ear Falls, and an eight-ton chain hoist for DeCew Falls.

Concrete

Eight resident inspectors and 26 "roving" inspectors supervised concrete work on construction projects at Stewartville, DeCew, Aguasabon, Ear Falls, Kipling, Scarborough, Des Joachims, and Espanola. The inspectors test aggregates, check mixtures and quality of concrete and supervise the placing of the concrete in the prepared forms.

Field surveys were made in search of suitable concrete materials at five sites, near proposed construction projects at Tunnel Site on the Mississagi river, Chenaux on the Ottawa river, Mountain Chute on the Madawaska river, Pine Portage on the Nipigon river and Ear Falls on the English river in Northern Ontario.

Microscopical Examinations

Materials used in fabrication and construction are examined by microscope to determine the quality of steel castings, welds, machine parts and plastic forms. In all 144 samples were inspected.

Transmission Line Materials

Materials that pass through Strachan Avenue stores are inspected by the Laboratories. These included cross arms, brackets, insulator pin clamps, general hardware, wire and cable. Copper wire and cable, galvanized steel cable and reinforced aluminum cable inspected amounted to 5,644 tons.

Steel and Timber

A total of 2,717 tons of structural and reinforcing steel was inspected, and more than 235,400 pine and cedar poles for extensions to distribution systems.

Lamps

Laboratory inspection covered 1,111,278 lamps. Life tests were made on 4,579 lamps.



GENERATING-TYPE ELECTROSTATIC VOLTMETER

A laboratory-constructed instrument—shield removed—for testing cable insulation.

It draws no current from the charged cable

Specification and Committee Work

From the experience gained in testing and investigations, the Research and Testing department is able to give valuable assistance in the preparation of specifications for paints, oils, line materials, and much other equipment. Staff members are active on many committees of the various technical societies and bodies and are making valued contributions as well as keeping up-to-date on progress and new products. Currently they represent the Commission in the following societies: American Concrete Institute, American Institute of Electrical Engineers, American Instrument Society, American Society for Testing Materials, American Standards Association, Canadian Electrical Association, Canadian Manufacturers' Association, Canadian Radio Technical Planning Board, Canadian Standards Association, Chemical Institute of Canada, Committee on Co-ordination of Underground Structures Dominion Board of Fire Underwriters, Engineering Institute of Canada Illuminating Engineering Society, International Association of Electrical Inspectors, International Standardization Conference, Joint Communications Committee, Department of National Defence, National Research Council, Ontario Research Commission, Ontario Municipal Electric Association and Portland Cement Association.

SECTION VIII

PERSONNEL ADMINISTRATION

Increased Conception of Importance—The Organization and Functions of the Personnel Branch—The Year's Activities

THE CENTRAL fact in the record of personnel matters within the Commission during 1947 was the establishment in February of the Personnel branch. This action involved the re-organization of the former Employees Relations department into a Personnel branch with five functional divisions at head office, together with certain field staff.

The creation of the Branch was the result of a recommendation by the Commission's consultants, J. D. Woods and Gordon, Limited, and a determination on the part of the Commission to make the work of its employees more attractive, more fruitful, and in every respect more worthwhile. The Commission has always had a reputation for fair dealing and for maintaining a genuine interest in the lives of the men and women who work for it; the work contemplated for the new Personnel branch represents, therefore, an extension of old and familiar policies rather than a radical departure from them.

This determination to intensify the concern of the Commission in the lives of its employees, to help them grow and develop as a result of their work, to give them the fullest possible sense of participation in a great joint enterprise is well founded. It is based on the conviction that since the work of the Commission must be done through people, it will best be done under policies that take into account the needs, the aspirations, and personal satisfactions of these people themselves. Viewed in this proper light, the new personnel program will be recognized as one that makes a vital contribution to the achievement of the Commission's true objectives.

Implementation of Program

It is fully recognized that the principles which govern satisfactory personnel relationships can only effectively be put into practice by the line organization. The line organization comprises those who make decisions and give instructions, and thus are in the direct line of authority. While executive authority remains always the prerogative of the line organization,

being exercised by the managers down through executives, department heads and eventually to supervisors and foremen, in large organizations these often have advisers. It is the responsibility of the Personnel branch and other staff officers to render skilled professional advice to the line organization at every level of the direct line of authority.

In the building of a generation unit, for example, the line organization must have as its primary concern the actual construction on schedule and to specifications of that unit, and in the same project the Personnel branch must have as its primary concern, the selection and recruitment of the men, the provision for their training and development, the provision for their physical and emotional needs, all in the interest of the actual construction of the unit.

Working in this advisory capacity, officers of the Personnel branch, by the formulation of new policies and the expansion of older ones, by the initiation of new methods and the provision of leadership in employing these methods, are developing a service broad enough to reach every individual employee of the Commission, and sensitive enough to treat each employee as an individual.

The role of the Personnel branch is a vital, positive, vigorous one designed not only to make all parts of the organization aware of the importance of the individual employee, but also to give impetus to those enlightened modern practices of man management which should normally grow from such an awareness.

Organization

To perform this live function of advice plus leadership within the Personnel field, five departments have been set up and staffed at head office:

- (1) Planning and Records
- (2) Collective Relations
- (3) Training
- (4) Research
- (5) Medical

In 1947, recruitment chiefly from among employees already on the staff of the Commission got under way immediately to fill the senior and subordinate positions within these departments.

Provision was also made for the appointment of regional personnel officers in each of the nine regions, each of whom is expected to assume the role of a senior adviser to his regional manager. Furthermore, plans were laid for the installation of camp personnel officers, again to act as senior advisers to the camp superintendents of the major construction projects. Plans were also laid for the selection of a limited number as a field force available for special duties in recruiting or for special assistance to camp personnel officers or regional personnel officers.

By the end of the fiscal year many of these appointments had already been made and a large number of names of potential personnel officers were under consideration for the remaining vacancies. It is still too early to evaluate the fruits of the policies outlined above Suffice it to say that the omens are good and there is evidence to justify the hope that the whole organization may be stimulated to new efforts in the interests of the men and women who work for it, and through them to the provision of increasing benefits to the people of Ontario.

In carrying on this work the Commission, through its Personnel branch, deals with two organized groups of employees. The Employees' Association of The Hydro-Electric Power Commission of Ontario represents non-supervisory employees, other than those engaged in professional engineering work and includes technicians, clerks, trade workers, operators, regular employees of the Construction department, etc. The Federation of Employee Professional Engineers and Assistants (Unit No. 1)embraces all employees engaged in non-supervisory professional engineering work.

The Year's Activities

The year recorded a remarkable increase in the total staff of the Commission which grew from 7,963 at October 31, 1946, to 12,758 at October 31, 1947. This increase is reflected in the gross earnings of all employees which grew from \$1,350,000 for October, 1946, to \$2,250,000 for October, 1947. A large increase is to be found in the Construction department, whose total of temporary and regular employees rose from 2,257 at October 31, 1946 to 5,874 at October 31, 1947.

One of the major responsibilities of the Personnel branch through 1947 was that of finding men for the large construction projects. Through most of the year labour, both skilled and unskilled, was in high demand and it was difficult to obtain or to hold a sufficient number of workers at the major projects. Towards the end of 1947 the situation gradually changed for the better.

The camp personnel officers and recruitment officers mentioned above divided their time between the construction projects and the areas adjacent to the camps, looking for workmen, taking them on the job and doing what they could, through the development of recreational programs, to hold their interest and reduce labour turn-over.

Throughout the year the Personnel branch maintained its Linemen's Training School and laid extensive plans for other aspects of employee training.

A group of 40 graduate engineers, who joined the Commission in the spring of 1947, were started immediately upon a training course, which served the dual purpose of acquainting the young engineers with the general work of the Commission and provided an opportunity for the senior employees to determine where these men could most effectively fit into the organization.

In addition approximately 60 rural foremen were given a two-weeks course at the Training Centre in Toronto, which stressed supervisory duties, job relations and laying out work, with instructions and training in job skills. The three-year program for Operators-in-training was maintained throughout the year.



MODERN HOSPITALS ARE PROVIDED AT MAJOR CONSTRUCTION PROJECTS Above: The hospital and ambulance at Des Joachims power development Below: Modern X-ray equipment is provided



Safety training was carried on by the Commission's representatives visiting the actual jobs, in connection with accident prevention work.

A feature in the personnel activities within the Commission is the development at head office of a fully staffed medical department headed by a medical officer, with a complement of trained nurses and part-time medical assistance. Planning and maintenance of modern hospitals at the major construction projects is an important feature of its work.

The program of re-organization created a large amount of work in connection with job qualifications and job specifications, the valuation of individual positions, the functions and duties of individual branches and departments and other matters.

SECTION IX

FINANCIAL STATEMENTS

Relating to

Properties Operated by The Hydro-Electric Power Commission on Behalf of Co-operating Municipalities of the Southern Ontario System (Niagara, Georgian Bay and Eastern Ontario Divisions) and the Thunder Bay System,

and to

Northern Ontario Properties Held and Operated by the Commission in Trust for the Province of Ontario

In this section of the Report financial statements relating to the activities of The Hydro-Electric Power Commission, segregated into certain distinct divisions, are presented. The first division relates to those activities on behalf of the co-operative municipalities, which are partners in the main Hydro undertaking comprising the Southern Ontario system (Niagara, Georgian Bay and Eastern Ontario divisions), the Thunder Bay system, and Rural Power districts associated with these two systems. The second relates to the administration of the Northern Ontario Properties which are held and operated by the Commission in trust for the Province of Ontario.

Co-operative Systems

In the Foreword to this Report a brief reference is made to the basic principle governing the operations of the Hydro undertaking in supplying electrical service at cost, and to the wholesale and retail aspects of the work. A description is also given of the systems into which the partner municipalities are co-ordinated for securing common action with respect to power supplies, through the medium of The Hydro-Electric Power Commission of Ontario which, under The Power Commission Act, functions as their Trustee.

Although for the purpose of financial administration the Southern Ontario and Thunder Bay systems are separate units, there is a similarity of procedure with respect to their operation which enables certain financial statements, as for example the various reserves, to be co-ordinated and presented in summary tables.

The first set of tables in Section IX gives collective results for the co-operative activities related to the two systems. These tables include a balance sheet; a statement of operations as detailed in the "cost of power" tables referred to below; schedules respecting fixed assets, capital expenditures and grants—rural power districts, account with the Provincial Treasurer of the Province of Ontario, funded debt issued or assumed, power accounts receivable, renewals reserves, contingencies and obsolescence reserves, stabilization of rates reserves and sinking fund reserves.

The tables which follow these general financial statements relate more particularly to the individual municipality's aspects of the wholesale activities of the Commission and for each system show the cost of power to the individual municipal utilities, the credit or debit adjustment remaining at the end of the fiscal year, and the sinking fund equity that has been acquired by the individual municipality. There is also included for each system a rural operating statement.

The charges for power supplied by the Commission to the various municipalities vary with the amounts of power used, the distances from the sources of supply and other factors. The entire capital cost of the various power developments and transmission systems is annually allocated to the connected municipalities and other wholesale power consumers, according to the relative use made of the lines and equipment. In general each municipality assumes responsibility for that portion of property employed in providing and transmitting power for its use, * together with such expenses-including the cost of purchased power if any—as are incidental to the provision and delivery of its wholesale power. The annual expenses and the appropriations for reserves are provided out of revenues collected in respect of such power, through the medium of power bills rendered by the Commission. The municipalities are billed at an estimated interim rate each month during the year and credit or debit adjustment is made at the end of the year, † when the Commission's books are closed and the actual cost payable by each municipality for power taken has been determined.

Included in the municipality's remittance to the Commission for the wholesale cost of power—besides such current expenses as those for operation and maintenance of plant, for administration, and for interest on capital—are sums required to build up reserves for sinking fund, for renewals, and for contingencies and obsolescence. The first-mentioned reserve, namely, sinking fund, is being created on a 40-year basis for the purpose of liquidating

^{*}Subject to maximum rate: see footnote on page 152.

 $[\]dagger$ The financial year for the Commission ends on October 31. The financial year for the municipal electric utilities however, ends on December 31, and the municipal accounts are made up to this date, and are so recorded in Section X.

capital liabilities. The other reserves are, respectively, being created to provide funds for the replacing or rebuilding of plant as it wears out; to enable the undertaking to replace existing equipment with improved equipment as it becomes available through advances in science and invention, and to meet unforeseen expenses which from time to time may arise.

The ultimate source of all revenue to meet costs—whether for the larger operations of The Hydro-Electric Power Commission or for the smaller local operations of the municipalities—is, of course, the consumer. Out of the total revenue collected by each municipal utility from its consumers for service supplied, only an amount sufficient to pay the wholesale cost of power supplied by the Commission as outlined above is remitted to the Commission; the balance of municipal electrical revenue is retained to pay for the expense incurred by the local utility in distributing the electrical energy to its consumers.

Tabular Data

The following comments relate to the tabular data presented:

Balance Sheet.—The first tabular statement given in Section IX is a balance sheet showing the assets, and the liabilities and reserves of the co-operative systems.

Statement of Operations.—This statement is a summary of operating expenses and fixed charges as shown in the "cost of power" tables and rural operating statements relating to the individual systems as referred to more particularly below.

Fixed Assets.—Details are given concerning the various fixed assets of each system and of the miscellaneous properties, showing in separate classifications the values of plant under construction and in service, depreciable and non-depreciable and supplemented by a statement showing expenditures, adjustments and retirements occurring during the year.

Capital Expenditures and Grants—Rural Power Districts.— This schedule gives summary information respecting the total capital expenditures on rural power districts and grants-in-aid of construction paid or payable by the Province with respect to such rural districts.

Account with the Provincial Treasurer.—This schedule lists, both for the systems operated on a cost basis and for the Northern Ontario Properties which are held and operated by the Commission in trust for the Province, the advances from the Province of Ontario and the repayments which have been applied to reduce this liability. It should be noted that Provincial advances to finance Northern Ontario Properties are shown in memorandum form only on the balance sheet of the Commission as the direct liability is carried on the Northern Ontario Properties' balance sheet.

Funded Debt Issued.—This schedule presents a complete list of the outstanding securities issued by the Commission on account of the systems, and the Northern Ontario Properties. It should be

noted that securities issued to finance Northern Ontario Properties are shown only in memorandum form on the balance sheet of the Commission, while the direct liability is shown on the balance sheet of the Northern Ontario Properties.

Power Accounts Receivable.—This schedule sets forth the amounts collectable from all classes of power consumers and includes the annual adjustment figures from the "credit or charge" statements for municipalities. The amounts of debit balances three months or more overdue are stated.

Renewals Reserves, Contingencies and Obsolescence Reserves, and Stabilization of Rates Reserves.

These schedules show the provisions made to, the expenditures from, and the balance to the credit of, these reserves for each of the systems and other properties included in the power undertakings operated on a cost basis.

Sinking Fund Reserves.—This schedule summarizes the appropriations of principal and interest with respect to these reserves for each of the systems and certain other properties.

Following these statements, which are common to all systems, there are given for each of the co-operative systems four tabular statements as follows:

Cost of Power statement, which shows the apportionment to each municipality of the items of cost summarized in Statement of Operations, as well as the apportionment of fixed assets in service listed in the balance sheet and the amount of power taken by each municipality. It should be noted that the cost of power given in this table is the wholesale cost—that is, the cost which the Commission receives for the power delivered from the main transformer stations serving the local utility. In the case of municipal electrical utilities not directly administered by the Commission, the respective costs of power appear in Statement "B" of Section X as cost of power supplied by H-E.P.C.

Credit or Charge statement, which shows the adjustments made in order to bring the amounts paid by each municipal electric utility to the actual cost of service.

Sinking Fund statement, which gives the accumulated total of the amounts paid by each municipality as part of the cost of power together with its proportionate share of other sinking funds.

Rural Operating statement, which summarizes for the rural power district of the system the various items of cost, and the revenues received, in connection with the distribution of electrical energy to rural consumers.

Northern Ontario Properties

The statements and schedules respecting these properties which are held and operated by the Commission in trust for the Province of Ontario include the balance sheet, operating account, schedules of fixed assets, renewals reserve, contingencies and obsolescence reserve, and sinking fund reserve. These schedules are similar in form to the corresponding schedules relating to the co-operative systems.

Municipal Utilities

All municipal Hydro utilities have current expenses to meet similar to the expenses of the Commission and have adopted the same financial procedure with respect to their operations. In other words, concurrently with the creation of funds to liquidate their debt to the Commission and to provide the necessary reserves to protect generating, transforming and transmission systems, the municipalities are taking similar action with respect to their local Hydro utility systems.

The balance sheets, operating reports and statistical data appearing in Section X, under the heading of "Municipal Accounts," relate to the operation of local distribution systems by individual municipalities which have contracted with the Commission for their supply of electrical energy. To this section there is an explanatory introduction to which the reader is specially referred.

Auditing of Accounts

The accounts of The Hydro-Electric Power Commission of Ontario are verified by auditors specially appointed by the Provincial Government. The accounts of the "Hydro" utility of each individual municipality are prepared according to approved and standard practice and The Public Utilities Act requires that they shall be audited by the auditors of the municipal corporation.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

FINANCIAL ACCOUNTS

For the year ended October 31, 1947

Relating to Properties operated on a "Cost Basis" for the Co-operating Municipalities and Rural Power Districts which are supplied with Electrical Power and Services from the following Properties:

Southern Ontario System

Thunder Bay System

Service and Administrative Buildings and Equipment

STATEMENTS

Balance Sheet as at October 31, 1947

Statement of Operations and Cost of Power for the year ended October 31, 1947

Schedules supporting the Balance Sheet as at October 31, 1947:

Fixed Assets—By Systems and Properties

Fixed Assets-Changes during year

Capital Expenditures and Grants-Rural Power Districts

Account with the Provincial Treasurer of the Province of Ontario

Funded Debt Issued or Assumed

Power Accounts Receivable

Renewals Reserves

Contingencies and Obsolescence Reserves

Stabilization of Rates Reserves

Sinking Fund Reserves

Statements for Municipalities Receiving Power under Cost Contracts

THE HYDRO-ELECTRIC POWER

SOUTHERN ONTARIO AND

BALANCE SHEET AS AT

ASSETS	
FIXED ASSETS: Southern Ontariò system	
Less grants-in-aid of construction: Province of Ontario—for rural power districts	
CURRENT ASSETS: \$ 3,109,770.19 Cash in banks. \$ 109,762.29 Employees' working funds 109,762.29 Sundry accounts receivable. 638,855.22 Power accounts receivable. 4,058,136.41 Rural power district grants receivable 2,857,762.04 Interest accrued. 658,797.54	
Consumers' deposits — \$ 49,450.50 Cash deposits — \$ 1,061,350.00 Securities — at par value — — 1,110,800.50 Prepayments and sundry deposits — 92,968.03	
Inventories: Construction and maintenance materials and supplies \$ 10,015,565.38 Construction and maintenance tools and equipment 6,692,907.82 Office equipment 195,278.73	- ,,
DEFERRED CHARGES AND SUNDRY ASSETS: Unamortized discount on debentures \$ 654,538.48 Sundry investments. 234,125.00 Agreements and mortgages 24,381.72 Rural district loans 1,413.12 Work in progress—deferred work orders 901,426.49	
RESERVE FUND INVESTMENTS: Investments in government and government guaranteed bonds, at amortized cost: Employers' liability insurance fund. \$ 1,653,368.96 Pension fund. \$ 11,810,242.57 Savings and retirement fund. \$ 314,625.00 Other reserves. 69,143,545.94	
	\$480.489.457.48

COMMISSION OF ONTARIO

THUNDER BAY SYSTEMS

OCTOBER 31, 1947

LIABILITIES AND RESERVES

Long Term Liabilities (at par of exchange);		
Funded debt	3132,914,000.00 30,450,000.00	
Advances from the Province of Ontario\$ 88,759,987.34 Less advances for Northern Ontario	5102,464,000.00	
Properties 5,344,938.35	83,415,048.99 18,497.44	- 10
CURRENT LIABILITIES:	\$185,897,546	1.43
Accounts and payrolls payable Power accounts—credit balances Northern Ontario Properties—current account Advances from the Province of Ontario for rural loans Consumers' deposits Debenture interest accrued Miscellaneous accruals	468,837.50 1,077,236.09 1,413.12 1,172,674.96 740,217.25 665,403.67	.65
RURAL POWER DISTRICTS—rates suspense, net	3,587,263	3.30
Reserves:		
Renewals \$ 76,083,641.27 Contingencies and obsolescence 66,262,131.47 Stabilization of rates 20,836,412.16 Fire insurance 212,740.57	S163 394 925 47	
Employers' liability insurance. Pension fund. Savings and retirement fund. Miscellaneous.	1,677,235.46 12,755,443.80 392,496.73	5.58
SINKING FUND RESERVE:		
Represented by funded debt and provincial advances retired through sinking funds	100,346,771	.52
	\$480,489,457	7.48

Contingent liability under uncompleted contracts for the construction of fixed assets, approximately \$34,500,000.

Auditors' Report

We have made an examination of the balance sheet of the Southern Ontario and Thunder Bay Systems of The Hydro-Electric Power Commission of Ontario, as at October 31, 1947 and of the attached statement of operations for the year ended on that date. In connection therewith we reviewed the system of internal control and the accounting procedures of the Commission, and, without making a detailed audit of the transactions, have examined or tested accounting records of the Commission and other supporting evidence by methods and to the extent we deemed appropriate

We report that in our opinion the foregoing balance sheet and related statement of operations (as more fully reported upon by us to the Lieutenant-Governor in Council) have been drawn up so as to exhibit a true and correct view of the state of the affairs of the Southern Ontario and Thunder Bay Systems of the Commission at October 31, 1947 (subject to the trusts which prevail in respect thereto) and of the results of their operations for the year ended on that date, according to the best of our information and the explanations given us and as shown by the books.

CLARKSON, GORDON & CO. Chartered Accountants.

THE HYDRO-ELECTRIC POWER

SOUTHERN ONTARIO AND

STATEMENT OF OPERATIONS

	Southern Ontario system
Cost of power: Cost of power purchased. Operating, maintenance and administrative expenses. Interest (including interest on sinking fund, renewals, and other reserves and after deducting interest earned on investments) Provision for renewals. Provision for contingencies and obsolescence. Provision for stabilization of rates. Provision for sinking fund.	\$ c. 12,842,841.99 8,043,774.55 11,326,505.32 2,315,340.51 9,697,982.20 2,863,814.43
Total	47,090,259.00
Amounts received from or billed against municipalities and other customers: Municipalities (at interim rates). Rural power districts. Companies. Mining area. Local distribution system Rural line operated by municipality.	32,912,884.41 3,885,854.48 13,285,738.82 121,091.93 92.48
Total	50,205,662.12
Balance, credited to municipalities on annual adjustment of the cost of power	3,115,403.12

COMMISSION OF ONTARIO

THUNDER BAY SYSTEMS

For the Year Ended October 31, 1947

Thunder Bay system	Distribution in rural power districts	Elimination of inter-departmental billings	Total
S c.	\$ c.	S c.	S c.
18.895.90 577,116.82	3,911,607.55 2,358,054.69	3,911,607.55	12,861,737.89 10,978,946.06
864,379.17 171,924.83 656,070.23 54,233.97 209,613.89	1,061,842.05 500,673.16 266,975.78		13.252,726.54 2.987,938.50 10.354,052.43 54,233.97 3,340,404.10
2,552,234.81	8.099,153.23	3,911,607.55	53,830,039.49
869,615.03 25,753.07 1,183,631.40 541,330.02	8,239,688.11	3,911,607.55	33,782,499.44 8,239,688.11 14.469,370.22 541,330.02 121,091.93 92.48
2,620,329.52	8,239,688.11	3,911,607.55	57,154,072.20
68,094.71	140,534.88		3,324,032.71

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO SYSTEM

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

FIXED ASSETS—October 31, 1947

		In service		
Property	Under construction	Non- depreciable	Depreciable	Total
POWER PLANTS Niagara Division:	\$ c.	\$ c.	\$ c.	\$ c.
Niagara river: Queenston-Chippawa Ontario Power Toronto Power Ottawa river:	934.99 4,909.65 19.51	46,629,784.27 7,281,151.42 3,823,379.60	28,725,793.48 14,435,397.40 7,618,491.39	75,356,512.74 21,721,458.47 11,441,890.50
Chats Falls	6,964,934.88	818,263.01		7,196,208.76 16,264.85 6,964,934.88 50,002.00
DeCew Falls. Long Lake diversion. Ogoki diversion. Preliminary river surveys.		258,400.78 3,189,190.91	620,831.97	22,073,971.45 879,232.75 4,869,606.35 30,242.35
Georgian Bay Division: Muskoka river: (below lake) Bala No. 1 and No. 2 Ragged Rapids Big Eddy Land and water rights Severn river:	1,240.10	29,191.00 70,889.49 170,434.74 17,224.03	1,261,109.55	72,612.36 1,333,239.14 1,293,653.13 17,224.03
Wasdells	9,072.90 674.92			
Beaver river: EugeniaSaugeen river:		142,538.73	1,180,496.94	
HanoverWalkertonMuskoka river: (above lake)		10,000.00 100,372.31		10,000.00 199,495.65
South Falls Trethewey Falls Hanna Chute Hollow Lake dam		33,256.73	305,718.47 207,504.10	357,267.92 240,760.83
Sauble river: Lands and rights Credit river:		4,200.00)	4,200.00
Credit river: Caledon Miscellaneous	3.00	8,000.00	27,969.11	35,969.11 3.00
Eastern Ontario Division: Fenelon river: Fenelon Falls. Otonabee river: Auburn. Lakefield.	18,350.62	60,000.00	301,192.65	332,592.65
Trent river: Heely Falls. Seymour. Ranney Falls.			1,209,550.23 315,877.79	1,209,550,23 315,877,79

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO SYSTEM

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

FIXED ASSETS—October 31, 1947

		In se	ervice	
Property	Under construction	Non- depreciable	Depreciable	Total
POWER PLANTS—(Continued) Trent river—continued	\$ c.	S c.	\$ c.	\$ c.
Crow river Hagues Reach Meyersburg Sills Island Frankford Sidney Mississippi river:	43.16		573,262.30 837.865.91	1,000.00 573,262.30 837,865.91 320,105.38 253,009.09 250,996.46
High Falls		13,154.84 20,000.00		716,008.67 151,222.60
Barrett Chute		79.825.74		4,591,507.94 759,875.48 6,120,835.06
Bark Lake dam. Kaminiskeg Lake dam. Undeveloped sites. Miscellaneous. Intangible.		609,748.37 22,933.49 620,000.00	46,071.28	1,410,499.79 24,728.95 620,000.00 47,483.38 2,217,761.29
	13,238,506.42	73,960,894.14	92,309,390.26	179,508,790.82
TRANSFORMER STATIONS Niagara Division. Georgian Bay Division. Eastern Ontario Division.	5,638,165.64 207,089.13 683,406.30		54,298,488.90 2,605,536.42 5,938,782.14	59,936,654.54 2,812,625.55 6,698,484.70
	6,528,661.07	76,296.26	62,842,807.46	69,447,764.79
TRANSMISSION LINES Niagara Division: Lines. Right-of-way. Georgian Bay Division. Eastern Ontario Division.	1,368,515.24 298,539.73 3,070,694.79	8,954,212.98 128,372.64 742,366.02	30,255,313.89 3,731,926.19 7,623,865.47	31,623,829.13 8,954,212.98 4,158,838.56 11,436,926.28
	4,737,749.76	9,824,951.64	41,611,105.55	56,173,806.95
LOCAL SYSTEMS Niagara Division Georgian Bay Division Eastern Ontario Division.			84,062.03 134,846.87 35,467.23	84,062.03 134,846.87 35,467.23
			254,376.13	254,376.13
Sub-total	24,504,917.25	83,862,142.04	197,017,679.40	305,384,738.69

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO SYSTEM

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions FIXED ASSETS—October 31, 1947

	Under Ir		rvice		
Property	construction	Non- depreciable	Depreciable	Total	
RURAL POWER DISTRICT H-E.P.C. investment		\$ c. 37,559.97	\$ c. 26,567,688.93 26,127,672.09		
		37,559.97	52,695,361.02	52.732,920.99	
RURAL LINE Georgian Bay Division			922.02	922.02	
	24,504,917.25	83,899,702.01	249,713,962.44	358,118,581.70	

	Cost statements	Transfers for cost purposes	Fixed assets as above
Cost of Power schedules	26,770,116.26	164,867.36	\$ c. 305.384,738.69 26.605,248.90 922.02

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO THUNDER BAY SYSTEM FIXED ASSETS—October 31, 1947

	Under	In service			
Property	construction	Non- depreciable	Depreciable	Total	
Power Plants: Nipigon river:	\$ c.	\$ c.	\$ c.	S c.	
Cameron Falls	94,874.09 45,588.64	77,090.06	9,026,214.53 6,513,696.42	9,978,507.46 6,636,375.12	
Pine Portage Virgin Falls dam Aguasabon river:	237,059.65	55,450.41	426,736.74	237,059.65 482,187.15	
Aguasabon	5,823,423.03		, ,	5,823,423.03	
	6,200,945.41	989,959.31	15,966,647.69	23,157,552.41	
Transformer Stations. Transmission Lines. Local Systems.	8,210.77 1,210,988.67		1,722,579.71	1,524,335.45 3,897,851.85 99,222.10	
Sub-total	7,420,144.85	2,419,984.32	18,838,832.64	28,678,961.81	
RURAL POWER DISTRICT: H-E.P.C. Investment Government grants			297,158.73 297,158.72	297,158.73 297,158.72	
			594,317.45	594,317.45	
	7,420,144.85	2,419,984.32	19,433,150.09	29,273,279.26	

	Cost statements	Fixed assets as above
Cost of Power schedules. Rural Operating schedules.	\$ c. 28,678,961.81 297,158.73	

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO ADMINISTRATIVE AND SERVICE BUILDINGS AND EQUIPMENT

FIXED ASSETS—October 31, 1947

		In service			
Property	Under construction	Non- depreciable	Depreciable	Total	
Administrative Buildings: Toronto:	\$ c.	\$ c.	\$ c.	\$ c.	
University Avenue	164,084.55	353,617.39	2,774,990.86	3,292,592.80	
SERVICE BUILDINGS AND EQUIPMENT: Toronto: Strachan avenue			681,688.84 50,000.00	681,688.84 50,000.00 647,529.18	
Cobourg. Hamilton.			22,245.08	22,245.08 550,000.00	
	647,529.18	550,000.00	753,933.92	1,951,463.10	
	811,613.73	903,617.39	3,528,924.78	5,244,155.90	

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO AND THUNDER BAY SYSTEMS

FIXED ASSETS—Summary, October 31, 1947

		In se		
System or Property	Under construction	Non- depreciable	Depreciable	Total
Southern Ontario system Thunder Bay system Service and administrative buildings and equipment	\$ c. 24,504,917.25 7,420,144.85 811,613.73 32,736,675.83	2,419,984.32 903,617.39	249,713,962.44 19,433,150.09	29,273,279.26 5,244,155.90
Less grants-in-aid of construction—Province of Ontario for rural power districts				26,424,830.81 366,211,186.05

THE HYDRO-ELECTRIC POWER CHANGES IN FIXED ASSETS—

Class of asset	Balance at beginning of year	Expenditure during year
SOUTHERN ONTARIO SYSTEM		
POWER PLANTS Niagara Division: Queenston-Chippawa Ontario Power Toronto Power Chats Falls.	\$ c. 75,403,379.21 21,717,477.15 11,441,889.76 7,190,738.30	\$ c. 22,164.45 3,981.32 .74 5,820.46
Chenaux. Des Joachims DeCew Falls. Ogoki diversion Other properties. Georgian Bay Division:	526.501.57 18,813,207.47 4,867,232.19 958,036.57	16,264.85 6,438,433.31 3,386,844.58 2,374.16 1,440.53
Eugenia. Ragged Rapids. Big Eddy. Big Chute. South Falls. Trethewey Falls. Other properties.	1,334,398.57 1,332,250.39 1,293,653.13 685,764.92 455,918.34 357,267.92 865,560.18	1,707.58 988.75 1,852.83 31,982.85 3,109.88
Eastern Ontario Division: Hagues Reach Auburn. Seymour. Ranney Falls. Heely Falls. Meyersburg. High Falls. Barrett Chute. Bark Lake dam Calabogie Stewartville.	573,262.30 321,675.05 315,877.79 1,438,452.15 1,203,920.41 837,865.91 716,008.67 4,540,316.81 1,405,071.67 759,527.44 2,422,153.45	11,217.60 7,507.85 53,191.13 5,428.12 1,348.04 3,698,681.61
Sills Island Intangible and undeveloped sites Other properties.	320,105.38 2,687,761.29 1,111,916.96	150,000.00 20,377.46
T	165,897,190.95	13,864,718.10
Transformer Stations Niagara Division Georgian Bay Division Eastern Ontario Division	52,768,067.21 2,486,009.94 5,458,605.49	7,275,333.26 430,643.49 1,171,263.18
Transmission Lines	60,712,682.64	8,877,239.93
Niagara Division: Lines Right-of-way Georgian Bay Division Eastern Ontario Division	30,268,644.37 8,854,781.97 3,766,653.61 8,092,596.13	1,704,588.95 98,739.19 420,443.59 3,240,365.94
Local Systems	50,982,676.08	5,464,137.67
Niagara Division. Georgian Bay Division. Eastern Ontario Division.	117,217.12 123,206.61 33,346.06	11,531.73 11,916.85 2,121.17
	273,769.79	25,569.75
Sub-total	277,866,319.46	28,231,665.45

COMMISSION OF ONTARIO During Year Ended October 31, 1947

Retirements				
Adjustment for equipment re-located	Values recovered (stores, sales and salvage)	Charged to reserves for renewals and contingencies	Balance at end of year	
\$ c.	S c. 39,315.92	S c. 29.715.00	\$ c. 75,356,512.74 21,721,458.47	
			11,441,890.50 7,196,208.76 16,264.85	
104,129.00	14,747.60	7,294.00	6,964,934.88 22,073,971.45 4,869,606.35	
			959,477.10	
		12,178.45	1,323,927.70 1,333,239.14	
		200.00	1,293,653.13 687,417.75 487,901.19	
11,235.23	24,100.00	4,190.00	357,267.92 829,144.83	
		500.00	573,262.30 332,592.65 315,877.79	
	110.00 25.03	165.00 1.853.00	1,438,177.15 1,209,550.23 837,865.91	
		2,000.00	716,008.67 4,591,507.94	
	1,000.00		1,410,499.79 759,875.48 6,120,835.06	
		300.00	320,105.38 2,837,761.29 1,131,994.42	
115,164.23	79,648.55	58,305.45	179,508,790.82	
48,918.84 46,039.99 107,343.20	14,328.34 41,933.71 2,819.56	141,336.43 16,054.18 35,907.61	59,936,654.54 2,812,625.55 6,698,484.70	
110,222.05	59,081.61	193,298.22	69,447,764.79	
228,901.80 60,833.52 8,699.00 146,442.50	17,261.91 60,141.70 2,655.94 3,757.03	103,240.48 16,903.70 38,721.26	31,623,829.13 8,954,212.98 4,158,838.56 11,436,926.28	
30,324.78	83,816.58	158.865.44	56.173,806.95	
	44,686.82	276.59	84,062.03 134,846.87 35,467.23	
	44,686.82	276.59	254,376.13	
35,266.96	267,233.56	410,745.70	305,384,738.69	

THE HYDRO-ELECTRIC POWER

CHANGES IN FIXED ASSETS—

Class of asset	Balance at beginning of year	Expenditure during year
SOUTHERN ONTARIO SYSTEM—(Continued)		
RURAL POWER DISTRICT H-E.P.C. investment Government grants	\$ c. 23,948,562.42 23,520,194.63	\$ c. 3,065,730.00 3,016,109.70
	47,468,757.05	6,081,839.70
RURAL LINES Georgian Bay Division	922.02	
Southern Ontario system—Total	325,335,998.53	34,313,505.15
THUNDER BAY SYSTEM:		
Power plants. Transformer stations. Transmission lines. Local system.	17,709,066.91 1,440,517.38 3,639,596.49 92,152.07	5,525,935.50 80,389.54 256,462.01 7,125.03
Sub-total	22,881.332.85	5,869,912.08
RURAL POWER DISTRICT H-E.P.C. investment Government grants.	282,716.69 282,716.69	14,703.67 14,703.67
	565,433.38	29,407.34
Thunder Bay system—Total	23.446,766.23	5,899,319.42
SERVICE AND ADMINSTRATIVE BUILD-INGS AND EQUIPMENT: Toronto—University avenue. —Strachan avenue. Islington—service centre. Other properties and equipment.	3,102,571.04 639,168.14 62,336.82 622,245.08	192,328.29 44'126.47 585,192.36
Total	4,426,321.08	821,647.12
Grand total	353,209,085.84	41,034,471.69
Province of Ontario for rural power districts.	23,802,911.32	2,621,919.49
Total fixed assets	329,406,174.52	88,412,552.20

COMMISSION OF ONTARIO

During Year Ended October 31, 1947

Retirements			
Adjustment —— for equipment re-located	Values recovered (stores. sales and salvage)	Charged to reserves for renewals and contingencies	Balance at end of year
8 c. 14,480.80 14,480.81	S c. 392,840.52 392,826.26	\$ c. 30.683.80 30.286.79	\$ c. 26,605,248.90 26,127,672.09
28,961.61	785,666.78	60,970.59	52,732,920.99
			922.02
6,305.35	1.052,900.34	471.716.29	358.118,581.70
4,512.00 1,793.35 	175.00	77.450.00 908.47 55.00	23,157,552.41 1,524,335.45 3,897,851.85 99,222.10 28,678,961.81
	4.13 4.14	257.50 257.50	297,158.73 297,158.72
	8.27	515.00	594,317.45
6,305.35	183.27	78,928.47	29,273,279.26
	64.53 1,026.62	*2,142.00 579.15	3,292,692.80 681,688.84 647,529.18 622,245.08
	1,091.15	2,721.15	5,244,155.90
	1,054,174.76	553,365.91	392,636,016.86
			26,424,830.81
	1,054,174.76	553,365.91	366,211,186.05

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

RURAL POWER DISTRICTS

CAPITAL EXPENDITURES AND GRANTS—Summary at October 31, 1947

Statement showing the Total Capital Expenditures in Rural Power Districts to October 31, 1947; the Grants payable to the Commission by the Province of Ontario in respect thereto; and the amounts paid to the Commission on account of such Grants to October 31, 1947

	Accumulated total to October 31, 1946	During the year	Accumulated total to October 31, 1947
Total capital expenditures less retirements— Southern Ontario district	\$ c. 47,468,757.05 565,433.38	\$ c. 5,264,163.94 28,884.07	\$ c. 52,732,920.99 594,317.45
Northern Ontario Properties district	48,034,190.43 1,262,780.08	5,293,048.01 536,250.44	53,327,238.44 1,799,030.52
	49,296,970.51	5,829,298.45	55,126,268.96
Less portion of expenditures not subject to Provincial grant*—			
Southern Ontario district Thunder Bay district Northern Ontario Properties district	428,367.79 84,960,26	49,209.02	477,576.81 262,951.85
,	*513,328.05	227,200.61	740,528.66
Balance of expenditures less retirements subject to Provincial grants (all districts)	48,783,642.46	5,602,097.84	54,385,740.30
Grants payable by the Province as authorized by Order-in-Council (50%)—			
Southern Ontario district and Thunder Bay district Northern Ontario Properties district	23,802,911.32 588,909.91	2,621,919.49 179,129.42	26,424,830.81 768,039.33
	24,391,821.23	2,801,048,91	27,192,870.14
Amounts paid by the Province to the Commission on account of such authorized grants.	23,645,108.10	†690,000.00	24,335,108.10
Balance owing by the Province	746,713.13	2,111,048.91	‡2,857,762.04

^{*}Grants not paid by the Province in respect of a summer resort, street lighting systems, service buildings, a generating and transformer station (Manitoulin) and amounts paid for business already established.

[†]Paid in respect of 1946.

[‡]On January 19, 1948, the Commission received from the Province \$2,485,995.86 in respect of this balance.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO Account with The Provincial Treasurer of the Province of Ontario As at October 31, 1947

ADVANCES FROM AND REPAYMENTS TO THE PROVINCE OF ONTARIO

	7		
	Total	Northern Ontario Properties operated for the Province of Ontario	Southern Ontario and Thunder Bay systems operated on a "cost basis"
Advances for Capital Expenditures: Cash advances made by the Province to the Commission for capital expenditure purposes during			\$ c.
the years 1909 to 1934, inclusive		8,331,113.46	198,919,144.88
advances by the Commission in that year	247,507.98	74,001.99	173,505.99
Total advances for capital expenditures	207,002,750.36	8,257,111.47	198,745,638.89
REPAYMENT OF ADVANCES—1926 to 1933: Cash repayments made by the Commission annually to October 31, 1933, in accordance with the 1926 debt retirement plan		3,061.39	17,005,555.34
Balance of advances at October 31, 1934 (before deducting \$2,412,398.33 on deposit with the Province at that date for debt retirement)		8,254,050.08	181,740,083.55
REPAYMENT OF ADVANCES—1934 to 1947: Cash repayments made by the Commission under new retirement plan, equal to the maturities in the period November 1, 1934, to October 31, 1947, of Province of Ontario bonds allocated as issued for the Commission's purposes— Total to October 31, 1946\$98,026,806.49 During the year ended October			
31, 1947	101,234,146.29	2,909,111.73	98,325,034.56
Balance of advances at October 31, 1947	88,759,987.34	5,344,938.35	83,415,048.99
Payable in the following currencies: Canadian	15,448,813.54 8,718,026.01 64,593,147.79	533,650.61 4,799.73 4,806,488.01	8,713,226.28
	88,759,987.34	5,344,938.35	83,415,048.99

THE HYDRO-ELECTRIC POWER

FUNDED DEBT as at

(Guaranteed as to principal and

Description	Date of maturity	Date of issue
2½% Serial debentures. 2½% " " " 2½% Debentures. 2½% " " " " " " " " " " " " " " " " " " "	Feb. 15, 1948/49 May 1, 1948/49 Sept. 1, 1948 Feb. 1, 1949 Jan. 1, 1950	Feb. 15, 1941 May 1, 1942 Sept. 1, 1943 Feb. 1, 1943 Jan. 1, 1945
3 % Serial debentures 3 % Debentures. 3 % " 3 % " 2 % "	May 1, 1950/52 Feb. 1, 1951 Jan. 1, 1953 Feb. 1, 1953 April 1, 1956	May 1, 1942 Feb. 1, 1943 Jan. 1, 1943 Feb. 1, 1938 April 1, 1947
4 67 " 4 67 " 4 60 " 3 60 " 23/470 "	Aug. 1, 1957 June 1, 1958 Dec. 1, 1958 Jan. 1, 1960 April 1, 1967	Aug. 1, 1917 June 1, 1918 Dec. 1, 1918 Jan. 1, 1945 April 1, 1947
234% " 434% " 234% "	Oct. 1, 1968 Jan. 1, 1970 June 1, 1971	Oct. 1, 1947 Jan. 1, 1930 June 1, 1946
Total Funded Debt (at par of exchange)		
Summary of Changes in Funded Debt during year Outstanding as at October 31, 1946 Redemptions during the year	· · · · · · · · · · · · · · · · · · ·	\$103,623,000.00
New bond issues during the year Outstanding as at October 31, 1947		

COMMISSION OF ONTARIO

October 31, 1947

interest by the Province of Ontario)

Principal outstanding October 31, 1947	Where payable	Remarks
\$ c. 3,750,000.00 2,000,000.00 4,500,000.00 2,000,000.00 5,000,000.00	Canada Canada N.Y. Canada Canada	\$1.875,000.00 maturing annually. \$1,000,000.00 maturing annually.
3,000,000.00 6,000,000.00	Canada Canada	\$1,000,000.00 maturing annually.
5,000,000.00 9,000,000.00 10,000,000.00	N.Y. Canada Canada	Callable on or after Jan. 1, 1951, at 101. Callable on or after Feb. 1, 1950, at 100. Non-callable.
8,000,000.00 200,000.00 100,000.00 7,500,000.00 15,000,000.00 20,000,000.00	C., N.Y., L. Toronto Toronto Canada Canada Canada Canada Canada	Callable on or after Jan. 1, 1955, at 100. Callable in whole or in part on or after Apr. 1, 1964, at 100. Callable in whole or in part on or after Oct. 1, 1965, at 100. Callable at 100, in whole or in part, June 1, 1961.
132,914,000.00		
Funded Debt issued to fina Southern Ontario and Northern Ontario Prop	Thunder Bay Systems	s
		\$132,914,000.00
	es, or Sterling	
		\$132,914,000.00

THE HYDRO-ELECTRIC POWER POWER ACCOUNTS RECEIVABLE

		Wholesale consumers					
System or property	Interim power bills	Accumulate standing as a control on October	Net total for wholesale				
		Charge	Credit	consumers			
SOUTHERN ONTARIO SYSTEM: Municipalities. Companies, Local and rural.	\$ c. 3,795,265.91 1,015,016.36	\$ c.	\$ c. 3,115,403.12	\$ c. 679,862.79 1.015,016.36			
	4,810,282.27		3,115,403.12	1,694,879.15			
THUNDER BAY SYSTEM: Municipalities Companies Local and rural	152,659.17 176,629.17		68,094.71	84,564.46 176,629.17			
	329,288.34		68,094.71	261,193.63			
Grand totals	5,139,570.61		3,183,497.83	1,956,072.78			

Sundry Accounts Receivable

Arising from construction of works, sale of electrical equipment, etc		
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THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO AND THUNDER BAY SYSTEMS RENEWALS RESERVES-October 31, 1947

	Southern Ontario system	Thunder Bay system	Service and administrative buildings and equipment	Totals for power undertakings operated on a "cost basis"
Balances at November 1, 1946. Interest at 4% on reserve balances Provision in the year—direct —indirect	\$ c. 65,066,533.03 2,602,661.32 2,810,247.09	\$ c. 4,900,416.14 196,016.65 177,691.41	\$ c. 829,781.87 18,637.92 39,660.22	\$ c. 70,796,731.04 2,817,315.89 2,987,938.50 39,660.22
Sub-total	70,479,441.44	5,274,124.20	888,080.01 2,598.84	76,641,645.65 102,515.45
service, etc	246,809.38 129,146.70 2,456.13	67,510.66 11,316.53 (2,485.56)	735.09	315,055.13 140,463.23 (29.43)
Balances at October 31, 1947	70,001,255.94	5,197,639.25	884,746.08	76,083,641.27

COMMISSION OF ONTARIO

-October 31, 1947

Retail power consumers	Net total of	Balance sh	Debit balances three months or more overdue	
local and rural districts	power accounts receivable	ower accounts		
S c.	\$ c. 679,862:79 1,015,016.36 1,595,605.14	\$ c. 1,141,564.79 1,016,637.80 1,595,605.14	1,141,564.79 1,016,637.80 461,702.00 1,621.44	
1,595,605.14	3,290,484.29	3,753,807.73	463,323.44	9,608.76
37,620.99	85,564.46 176,629.17 37,620.99	86,289.05 180,418.64 37,620.99	1,724.59 3,789.47	1,111.00
37,620.99	298,814.62	304,328.68	5,514.06	1,111.00
1,633,226.13	3,589,298.91	4,058,136.41	468,837.50	10,719.76
—October 31, 194	7			

8 c.	\$ c.
638.855.22	3,700.03

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO AND THUNDER BAY SYSTEMS CONTINGENCIES AND OBSOLESCENCE RESERVES—October 31, 1947

	Southern Ontario system	Thunder Bay system	Totals for power undertakings operated on a 'cost basis'
Balances at November 1, 1946	\$ c. 49,567,348.58	\$ c. 4,659,982.05	\$ c. 54,227,330.63
Interest at 4% on reserve balances Provision in the year as per cost statement Excess renewals provision accumulated against assets retired, transferred from renewals		180,689.09 656,070.23	2,159,621.38 10,354,052.43
reserve. Profit on sale of investments, etc	129,146.70 161,172.96	11,316.53 6,515.54	140,463.23 167,688.50
Sub-total	61,534,582.73	5,514,573.44	67,049,156.17
Less: Contingencies met with during the year. Excess of fixed asset retirements over ac-	547,937.96	2,762.02	550,699.98
cumulated renewals provision	224,906.91	11,417.81	236,324.72
Balances at October 31, 1947	60,761,737.86	5,500,393.61	66,262,131.47

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO AND THUNDER BAY SYSTEMS STABILIZATION OF RATES RESERVES—October 31, 1947

	Southern	Thund	Totals for power undertakings operated on a "cost basis"	
	Ontario System system			
Balances at November 1, 1946 Interest at 4% on reserve		\$ c. 475,276.16	\$ c. 296,454.95	\$ c. 19,982,863.64
balances	768,445.30	19,011.05	11,858.20	799,314.55
per cost statements			54,233.97	54,233.97
Balances at October 31, 1947	19,979,577.83	494,287.21	362,547.12	20,836,412.16

Note: The above amount of \$19,979,577.83 includes special accounts of \$1,607,787.63 \$382,432.90 and \$721,254.71 pertaining to municipalities of the Niagara, Georgian Bay and Eastern Ontario divisions respectively.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SOUTHERN ONTARIO AND THUNDER BAY SYSTEMS SINKING FUND RESERVES—October 31, 1947

	Southern Ontario system	Thunder Bay system	Service and administrative buildings and equipment	Totals for power undertakings operated on a "cost basis"
Balances at November 1, 1946 Interest at 4% on reserve balances		\$ c. 4,780,817.17 191,232.68	\$ c. 935,674.30 37,426.98	3,729,441.70
Provision in the year—direct—indirect Balances at October 31, 1947		212,649.99 5,184,699.84	40,883.17	3,340,404.10 40,883.17 100,346,771.52
Dalances at October 31, 1947	54,140,007.23	3,104,099.04	1,013,964.43	100,540,771.55

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

STATEMENTS FOR MUNICIPALITIES RECEIVING POWER UNDER COST CONTRACTS

For the year ended October 31, 1947

STATEMENTS FOR EACH SYSTEM

Cost of Power

Credit or Charge

Sinking Fund

Rural Operating

Embracing Niagara, Georgian Bay,

	Interim rates per horsepower		Average horse- power	1	Share of operating		
Municipality	collected by Com- mission during year	Share of capital cost of system	supplied in year after correc- tion for	Cost of power pur-chased	Operating main- tenance and adminis-	Interest	
	To October 31, 1947		power factor		trative expenses*		
Acton. Agincourt. Ailsa Craig. Alexandria. Alliston.	\$ c. 27.50 27.50 35.50 39.00 37.50	\$ c. 332,930.30 46,547.97 33,587.02 93,251.42 120,959.91	2,235.7 298.5 186.4 462.8 689.0		\$ c. 10,217.33 1,430.64 1,117.24 2,692.36 3,488.65	\$ c. 13,428.86 1,881.60 1,339.71 3,748.38 4,773.10	
Almonte	28.00 39.00 31.50 26.00 39.00	94,614.47 44,228.86 257,492.99 98,637.42 9,217.12	667.4 184.1 1,497.1 580.2 55.4	3,885.66 1,071.85 8,716.25 3,377.97 322.54	3,1±2.56 1,866.84 7,765.66 2,814.90 431.41	3,810.42 1,782.88 10,406.05 3,951.23 357.08	
Arkona Arnprior Arthur Athens Aurora	39.00 25.00 39.00 39.00 27.00	29,247.26 248,485.01 67,594.70 39 371.95 269,122.57	1,814.7 258.6 181.7	579.30 10,565.35 1,505.59 1,057.87 10,868.10	1,025.54 6,745.95 2,606.67 1,217.86 7,503.79	1,205.12 9,315.66 2,600.25 1,599.86 10,806.31	
Aylmer	29.00 32.00 26.50 26.50 39.00	222,985.31 62,973.61 97,893.02 726,681.48 20,601.24	1,373.4 355.3 674.0 6,094.4 70.1	7,996.06 2,068.59 3,924.09 35,482.15 408.13	7,173.98 2,140.03 2,914.93 19,422.99 643.58	28,678.36	
Beachville Beamsville Beaverton Becton Belle River	27.50 25.00 36.00 39.00 31.50	134,787.25 95,700.19 58,590.51 26,805.83 60,329.15	883.1 729.4 390.4 149.5 329.2	5,141.49 4,246.63 2,272.94 870.40 1,916.63	4,100.64 3,009.78 2,105.51 1,261.02 2,194.62	5,452.55 3,816.89 2,313.01 1,500.95 2,435.76	
Belleville Blenheim Bloomfield Blyth Bobcaygeon	22.00 30 50 39.00 39.00 39.00	1,060,049.18 150,309.20 34,256.11 35,467.93 34,417.13	918.4 179.6 173.9	1,012.46	28,916.49 5,243.84 1,203.25 1,502.58 102.16	41,631.23 6,071.33 1,368.46 1,433.00 1,413.56	
Bolton Bothwell Bowmanville. Bradford Braeside.	31.00 35.50 26.00 39.00 27.00	59,775.43 39,731.90 524,277.08 92,887.84 38,218.89	205.6 3,839.9 537.0	3,126.46	1,950.65 1,514 40 18,209.94 2,860.51 1,131.11	2,326.32 1,588.15 21,124.44 2,682.53 1,443.29	
Brampton. Brantford. Brantford Twp. Brechin. Bridgeport. * After crediting t		529,836.79 3,342,080.29 314,985.87 13,816.66 49,018.90	25,937.0 2,393.3 67.6 308.9	151,007.56 13,924.01 393.57 1,798 44	97,348.84 9,813.64 467.12 1,691.88	135,430,44 12,643,50 558,57 1,976,73	

^{*} After crediting the amounts, totalling \$2,347.78 required to reduce the costs of power to \$39.00 per horsepower maximum.

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

		J	,			-
Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	Revenue received in excess of cost of power sold to private companies Credit	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c. 2,988.01 414.17 334.99 1,277.60 1,535.02	\$ c. 10,087.21 1,347.22 859.13 2,144.91 3,119.17	\$ c. 3,425.77 479.55 346.25 964.43 1,236.45	\$ c. 1,483.17 198.03 123.66 307.02 457.08	\$ c. 51,680.46 7,093.04 4,958.90 13,215.12 17,706.73	\$ c. 61,481.07 8,208.75 6,615.72 18,048.90 25,835.63	\$ c. 9,800.61 1,115.71 1,656.82 4,833.78 8,128.90
1,033.07 476.64 2,441.30 933.96 111.34		964.68 455.01 2,656.86 997.32 93.54	442.75 122.13 993.18 384.91 36.75	15,323.16 6,421.78 37,898.70 14,347.72 1,531.53	18,687.50 7,179.59 47,158.38 15,085.61 2,159.29	3,364.34 757.81 9,259.68 737.89 627.76
338.86 2,338.58 936.24 555.31 2,255.56	8,024.28 1,224.54 843.45	302.95 2,375.36 653.67 406.92 2,767.56	66.01 1,203.88 171.56 120.54 1,238.37	3,880.53 38,161.30 9,355.40 5,560.73 41,313.57	3,880.53 45,366.84 10,086.70 7,084.67 50,400.68	7,205.54 731.30 1,523.94
2,038.71 590.04 858.06 6,933.54 322.55	6,267.08 1,638.24 3,029.23 26,622.72 339.11	2,249.68 625.44 1,006.86 7,438.64 214.02	911.12 235.71 447.13 4,043.04 46.50	33,635.94 9,270.23 15,239.72 120,535.36 2,732.26	39,827.62 11,369.35 17,860.35 161,501.36 2,732.26	40,966.00
1,228.53 806.63 684.96 542.91 586.43	1,750.62 707.95	975.49 603.29 378.77	585.85 483.89 258.99 99.18 218.39	5,162.82	24,284.30 18,234.77 14,054.40 5,829.20 10,370.59	2,628.17 4,583.06 666.38
8,694.85 1,403.88 455.69 373.50 578.24	4,202.66 825.66	10,630.98 1,546.80 353.15 368.08 358.29	6,369.39 609.27 119.15 115.37 56.65	5,388.41	211,223,44 28,009,94 7,004,42 6,780,15 3,329,62	4,803.69 1,871.71 1,391.74
537.62 397.15 5,581.13 1,168.64 383.50	2,433.24	949.07	226.29 136.40 2,547.40 356.25 174.28	5,927.00	10,575.12 7,298.19 99,838.26 20,943.97 7,092.93	1,371.19 12,654.23 7,079.77
4,308.15 26,851.98 2,576.74 192.04 455.35	114,953.04 10,626.90 312.32	34,269.74 3,231.69 143.12	44.85	542,654.94 51,238.76 2,021.89	101,894.38 583,581.54 64,619.33 2,636.41 8,957.86	40,926.60 13,380.57 614.52

Embracing Niagara, Georgian Bay,

	Interim rates per		Average horse-	Share of operating			
Municipality	horsepower collected by Com- mission during year	Share of capital cost of system	power supplied in year after correc- tion for	Cost of power pur-chased	Operating main-tenance and adminis-	Interest	
	To October 31, 1947		power factor		trative expenses*		
Brigden Brighton Brockville Brussels Burford	\$ c. 39.00 27.50 24.50 39.00 28.00	\$ c. 37,331.69 95,764.26 1,195,867.24 62,232.76 57,560.48	163.6 679 1 9,227.3 310.2 391.3	\$ c. 952.49 3,952.78 53,722.17 1,806.01 2,278.18	\$ c. 1,367.75 3,164.19 32,834.62 2,310 62 2,091.88	\$ c. 1,507.04 3,787.51 48,091.60 2,378.52 2,321.21	
Burgessville. Burlington. Caledonia. Campbellville. Cannington.	39.00 24.50 27.00 39.00 34.50	22,510.76 287,796.49 83,394.39 17,197.59 49,852.43	2,201.9 556.2 76.2	683.51 12,819.67 3,238.25 443.64 1,981.84		907.80 11.645.60 3,357.00 688.00 1,973.71	
Cardinal Carleton Place Cayuga Chatham Chatsworth	26.50 25.50 39.00 25.50 37.50	68,809.15 311,242.12 54,063.49 1,335,030.35 25,737.22	473.1 2,447.0 282.9 9,571.7 147.1	2,754.43 14,246.66 1,647.07 55.727.30 856.43	8,157.01 2,011.52 39,474.02	2,747.20 12,326.31 2,164.20 54,020.34 1,011.09	
Chesley	31.00 30.00 21.50 39.00 30.50	121,375.86 70,555.60 49,419.04 37,080.97 156,174.66	454.4 481.5 155.4	4,757.23 2,645.56 2,803.34 904.75 5,653.25	2,020.48 1,470.05 1,420.32	4,765.65 2,835.00 1,977.54 1,511.34 6,314.97	
Cobden Cobourg Colborne Coldwater Collingwood	39.00 26.50 30.50 33.50 27.50	51,084.37 386,378.85 53,438.87 35,750.81 438,028.16	217.1 2,930.9 353.2 237.4 3,227.2	1,263.98 17,063.96 2,056.36 1,382.16 18,789.05	16,371.71 1,746.39 1,009.47	2,080,79 15,448,50 2,140,77 1,423,17 17,504,66	
Comber	38.50 35.50 38.00 39.00 38.50	38,170.16 23,753.85 24,163.95 19,559.51 36,526.61	145.6	1,143.46 847.70 723.10 460.53 1,282.02	724.38 870.83	1,534.30 932.52 967.70 797.91 1,437.21	
Dashwood Delaware Delhi Deseronto Dorchester	34.00 29.00 31.00 35.00 33.00	34,362.65 15,860.65 136,371.24 59,028.87 24,564.57	147.2 106.3 836.3 362.8 150.9	857.01 618.89 4,869.01 2,112.25 878.55	4,682.79 3,321.35	1,219.24 635.97 5,358.85 2,346.58 975.76	
Drayton. Dresden. Drumbo. Dublin. Dundalk.	39.00 32.50 31.50 39.00 31.00	42,306.55 129,885.32 23,048.61 14,273.15 49,562.03	700.9 141.0 72.7	974.04 4,080.70 820.91 423.27 1,805.43	1,064.26 832.50	1,748.48 5,236.72 927.69 574.71 1,980.79	

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	Revenue received in excess of cost of power sold to private companies	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
395.80	784.82	384.85	108.53	5,284 22	6,382.03	1,097 81
1,030.84	3,047.50	970.89	450.52	15,504.19	18,675.49	3,171.30
12,128.81	40,669.90	12,203.29	6,121.41	193,528.98	226,069.88	32,540.90
602.30	1,441.63	611.69	205.79	8,944.98	12,099.12	3,154.14
511.67	1,764.63	591.82	259.59	9,299.80	10,956.39	1,656.59
232.20	543.25	232.86	77.88	3,421.18	4,577.96	1,156.78
2,359.34	9,760.81	2,951.11	1,460.75	47,817.48	53,947.56	6,130.08
750.47	2,518.19	854.37	368.98	13,153.59	15,018.09	1,864.50
183 91	358.54	173.91	50.55	2,427.86	2,971.83	543.97
573.75	1,520.77	513.66	225.82	8,268.79	11,742.65	3,473.86
771.34	2,132.98	704.38	313.86	11,067.44	12,536.48	1,469.04
3,074.54	10,807.51	3,161.49	1,623.35	50,150.17	62,399.57	12,249.40
555.30	1,310.73	556.42	187.68	8,057.56	11,032.46	2,974.90
11,188.77	42,877.31	13,704.12	6,349.89	210,641.97	244,078.12	33,436.15
326.62	679.52	263.40	97.59	3,841.05	5,514.68	1,673.63
1,382.27	3,662.98	1,235.66	542.07	18,563.49	25,329.56	6,766.07
830.42	2,053.39	723.70	301.45	10,807.10	13,630.75	2,823.65
338.41	2,077.73	504.34	319.43	8,851.98	10,352.80	1,500.82
403.06	743.16	380.29	103.09	5,259.83	6,059.64	799.81
1,457.47	4,408.29	1,614.38	644.16	23,842.99	29,615.50	5,772.51
744.39	1,032,29	528.79	144.02	7,221.96	8,464.97	1,243.01
3,984.16	13,024,37	3,945.48	1,944.37	67,893.81	77,669.53	9,775.72
617.67	1,604,90	547.88	234.31	8,479.66	10,773.61	2,293.95
421.62	1,069,54	369.55	157.49	5,518.02	7,953.45	2,435.43
4,739.47	14,292,21	4,501.28	2,140.93	70,949.01	88,748.45	17,799.44
395.93	913.47	394.67	130. 29	5,567.03	7,559.80	1,992.77
288.24	659.05	242.26	96. 59	3,597.56	5,167.32	1,569.76
244.51	579.24	249.88	82. 39	3,552.87	4,719.91	1,167.04
214.00	382.79	201.97	52. 48	2,788.06	3,084.24	296.18
456.17	993.10	377.05	146. 08	5,874.41	8,475.77	2,601.36
318.16	694.02	311.07	97.65	4,212.21	5,003.66	791.45
141.65	480.35	162.80	70.52	2,558.17	3,081.49	523.32
1.245.41	3,797.27	1,374.89	554.80	20,773.42	25,925.81	5,152.39
718.19	1,659.56	606.86	240.68	10,524.11	12,697.10	2,172.99
231.87	687.18	252.71	100.11	3,805.97	4,978.87	1,172.90
476.86	811.34	439.54	110.99	5,940.72	6,522.75	
1,289.03	3,267.59	1,333.25	464.98	19,299.92	22,780.33	
218.04	643.00	236.88	93.54	3,817.24	4,442.80	
147.83	341.81	148.04	48.23	2,419.93	2,834.96	
604.54	1.406.52	511.04	205.72	7,741.80	9,612.82	

Embracing Niagara, Georgian Bay,

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	Interim rates per		Average horse-		Share o	of operating
Municipality	horsepower collected by Com- mission during year	Share of capital cost of system	power supplied in year after correc- tion for	Cost of power pur-chased	Operating main- tenance and adminis-	Interest
	To October 31, 1947		power factor		trative expenses*	
Dondas Dunnville. Durham Dutton. East York Twp.	\$ c. 22.50 25.00 32.50 31.50 24.00	\$ c. 514,153.58 265,545.99 93,853.33 56,799.78 1,767,351.00	594.4 322.2	\$ c. 23,423.43 11,535.31 3,460.65 1,875.88 79,632.81	8,088.30 3,061.03 2,228.05	\$ c. 20,730.74 10,724.06 3,755.91 2,114.19 71,171.81
Elmira Elmvale Elmwood Elora Embro	28.50 33.00 39.00 29.50 31.50	270,735.99 44,035.54 24,071.35 104,365.51 35,448.41	1,967.8 278.2 133.2 633.5 211.8	1,619.71 775.50 3,683.29	8,105.46 1,251.75 682.75 3,494.15 1,194.42	10,800.25 1,789.34 955.81 4,218.92 1,433.76
Erieau Erie Beach. Essex Etobicoke Twp. Exeter	39.00 39.00 30.50 24.00 30.00	50,045.30 7,093.10 129,044.19 1,939,102.58 177,106.67	29.8 761.0	173.50 4,430.61	362.40 3,936.37 55,656.11	2,027.43 292.40 5,201.04 77,879.71 7,127.99
Fergus Finch Flesherton Fonthill Forest	27.50 38.50 39.00 28.00 36.50	270,110.68 26,127.49 21,542.51 42,064.69 166,427.44	156.8 141.2	822.08 1,694.81	939.76 1,194.24	10,868.52 1,035.65 848.34 1,632.94 6,649.26
Forest Hill	22.00 22.50 29.00 39.00 32.50	1,130,207.11 1,881,081.06 436,300.25 65,566.81 380,664.85	9,045.4 14,419.3 2,769.8 282.0 2,090.1		2,497.69	45,690.76 76,197.55 17,616.93 2,646.32 15,421.62
Grand Valley Granton. Gravenhurst. Grimsby. Guelph.	39.00 38.00 25.00 26.00 23.00	45,293.42 21,782.35 209,882.64 164,252.10 1,948,229.23	229.3 90.2 1,656.2 1,166.5 15,227.6	1,335.01 525.15 9,642.55 6,791.47 88,656.47	1,649.38 729.89 5,811.61 5,028.16 60,594.99	1,827.58 713.99 8,396.08 6,574.37 78,841.99
Hagersville Hamilton Hanover Harriston Harrow	23.00 20.50 27.00 34.50 33.50	202,216.98 21,718,710.23 241,412.09 129,351.87 146,939.74	1,227.2 176,574.1 1,876.5 660.6 807.8	7,144.87 1,028,030.37 10,925.15 3,846.07 4,703.08	6,466.27 4,500.51	8,144.99 879,597.54 9,478.47 5,170.20 5,937.76
Hastings. Havelock Hensali. Hespeler. Highgate	37.00 39.00 37.50 24.00 36.50	34,542.51 48,115.01 61,266.34 475,394.24 24,514.38	213.5 259.2 290.7 3,657.7 128.8	1,243.02 1,509.09 1,692.48 21,295.46 749.89		1,365.50 1,921.70 2,468.97 19,144.90 987.07

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	Revenue received in excess of cost of power sold to private companies Credit	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
4,107.39	17,807.77	5,252.67	2,669.00	82,164.12	90.521.06	8,356.94
2,330.74	8,751.28	2,724.09	1,314.40	42,839.38	49.533.53	6,694.15
1,135.82	2,673.63	967.47	394.33	14,660.18	19.317.18	4,657.00
497.57	1,474.96	541.31	213.75	8,518.21	10,148.80	1,630.59
13,494.85	60,377.17	18,124.38	9,073.82	280,424.49	328,265.20	47,840.71
2,277.74	8,765.53	2,779.96	1,305.44	42,880.21	56,082.78	13,202.57
538.62	1,261.01	456.50	184.56	6,732.37	9,179.23	2,446.86
311.04	620.70	246.55	88.37	3,503.98	5,193.84	1,689.86
992.63	2,896.12	1,073.18	420.27	15,943.02	18,688.50	2,745.48
341.47	970.01	365.74	140.51	5,398.01	6,671.71	1,273.70
537.90 78.79 1,212.96 15,736.50 1,673.74	1,085.85 142.37 3,501.58 65,825.58 4,940.54	517.99 73.52 1,330.88 19,788.38 1,820.64	152.38 19.77 504.85 9,840.25 718.73	6.979.30 1,103.21 19,108.59 311,405.10 26,460.63	1,163.18 23,211.00	1,977.07 59.97 4,102.41 44,587.90 6,040.37
2,374.08	8,307.16	2,768.75	193.12	42.807.92	51,016.81	8,208.89
322.17	706.62	268.48		4,166.01	6,037.47	1,871.46
254.77	632.10	221.90		3,625.28	5,505.51	1,880.23
365.37	1,297.60	419.10		6,410.94	8,151.26	1,740.32
1,727.87	3,665.70	1,713.83		23,114.46	27,953.50	4,839.04
8,321.62	39,768.65	11,579.79	6,000.74	9,318.89	198,997.64	16,246.87
15,224.16	63,985.80	19,263.52	9,565.80		324,433.50	21,192.04
4,055.78	12,547.40	4,492.66	1,837.49		80,324.67	13,786.86
710.79	1,338.02	671.32	187.08		10,998.01	1,679.12
3,804.67	9,610.59	3,943.52	1,386.58		67,929.32	13,150.86
619.91	1,059.52	468.91	152.12		8,940.75	2,132.56
184.44	419.86	183.23	59.84		3,428.53	731.81
2,136.22	7,275.98	2,154.17	1,098.73		41,404.58	7,086.70
1,458.04	5,204.66	1,678.03	773.86		30,329.00	4,368.13
15,560.64	67,508.29	19,970.04	10,102.02		350,235.55	29,205.15
1,924.23 167,828.47 2,437.70 1,289.25 1,437.72	5,616.57 778,387.53 8,282.40 3,088.46 3,756.55	2,073.51 221,768.69 2,449.84 1,318.83 1,518.13	814.13 117,139.41 1,244.87 438.24 535.90	3,519,598.00 38,794.96 18,775.08		4,856.04 100,170.32 11,869.18 4,016.78 5,462.24
417.39 630.31 655.28 3,835.26 248.80	1,191.19 1,360.03 16,226.64	354.26 495.27 633.25 4,867.84 253.38	171.95 192.85 2,426.53	7,037.39 8,346.96 76,927.29		2,532.87 3.042.72 2,554.28 10,857.91 1,070.48

Embracing Niagara, Georgian Bay,

	Interim rates per		Average horse-		Share o	of operating
Municipality	horsepower collected by Com- mission during year	Share of capital cost of system	power supplied in year after correc- tion for	Cost of power pur-chased	Operating main-tenance and adminis-	Interest
	To October 31, 1947		power factor		trative expenses*	
Holstein. Humberstone. Huntsville. Ingersoll. Iroquois.	\$ c. 39.00 24.00 28.00 25.00 25.50	\$ c. 7,552.87 102,649.77 246,617.46 549,655.61 50,713.90	29.1 760.0 1,662.0 4,005.5 410.9	\$ c. 169.42 4,424.79 9,676.31 23,320.38 2,392.30	\$ c. 340.27 2,861.81 6,865.34 16,442.46 1,571.49	\$ c. 312.31 4,153.99 9,938.96 22,201.06 2,018.26
Jarvis. Kemptville. Kincardine. Kingston Kingsville.	34.50 32.00 35.50 22.50 32.50	51,160.80 93,720.68 189,361.67 2,332,787.42 160,154.98	223.0 565.5 1,123.2 20,419.9 891 4		1,432.24 2,504.33 5,430.85 63,417.32 4,805.05	2,065.51 3,773.19 7,574.13 92,988.35 6,484.24
Kirkfield Kitchener. Lakefield Lambeth Lanark.	39,00 22.50 25.00 32.00 39.00	9,632.78 4,565,769.19 78,051.96 34,209.34 40,018.89	35,803.2 563.0 201.6	208,449.47 3,277.84 1,173.73	125,017.63 2,439.17 1,022.33	3,132.13 1,374.08
LancasterLaSalleLeamingtonLindsayListowel.	39.00 31.00 32.00 26.50 30.00	16,082.64 78,504.47 486,525.90 651,104.85 320,473.16	4,410.5	2,416.17 15,478.03 25,678.33	2,649.51 14,001.36 22,125.09	
London London Twp. Long Branch. Lucan. Lucknow.	22.50 27.00 24.50 31.00 39.00	6,725,399.08 105,943.02 299,841.64 46,091.60 104,530.79	704.7 2,250.3 292.3	4,102.83 13,101.45 1,701.80	3,081.67 8,741.93 1,611.58	4,267.92 11,943.87 1,846.14
Lynden. Madoc. Markdale. Markham. Marmora.	39.00	25,673.64 57,867.94 39,231.26 78,663.58 33,913.26	351.1 275.4 514.4	2.044.14 1,603.40 2,994.88	2,372.82 1,410.00 2,498.57	2,289.13 1,516.68 3,169.30
Martintown. Maxville. Meaford. Merlin. Merritton	39.00 32.50 34.00	10,538.89 31,594.22 178,646.29 26,772.14 1,219,210.28	164.3 1,107.1 150.0	956.57 6,445.64 873.31	5,545.83 983.34	1,260.74 7,151.96 1,083.21
Midland Mildmay Millbrook. Milton Milverton	35.50 31.50 28.00	593,071.92 39,079.91 33,283.10 267,723.48 96,738.03	235.4 170.5 1,924.3	1,370.52 992.67 11,203.45	1,379.80 1,285.68 8,317.31	1,567.96 1,319.45 10,703.19

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

					1	
Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	Revenue received in excess of cost of power sold to private companies Credit	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c. 114.77 887.89 2,856.21 4,646.70 489.18	S c. 138.29 3,403.65 7,407.17 17,882.32 1,808.94	\$ c. 78.51 1,052.39 2,536.86 5,645.43 516.60	\$ c. 19.31 504.19 1,102.57 2,657.26 272.59	\$ c. 1,134.26 16,280.33 38,178.28 87,481.09 8,524.18	S c. 1,134.26 18,240.60 46,534.60 100,137.49 10,478.18	S c. 1,960.27 8,356.32 12,656.40 1,954.00
560.33	1,059.94	524.68	147.94	6,793.08	7,695,22	902.14
1,146.38	2,559.49	960.10	375.15	13,860.73	18,096,53	4,235.80
2,386.47	5,074.65	1,954.63	745.13	28,214.97	39,873,31	11,658.34
20,574.89	88,972.67	23,706.68	13,546.61	394,999.80	459,448,49	64,448.69
1,556.62	4,139.58	1,654.27	591.36	23,238.21	28,970,21	5,732.00
153.25 36,065.12 835.22 330.59 600.32	155.74 158,550.66 2,502.88 921.20 742.43	100.32 46,805.29 794.69 352.23 414.04	20.96 23,751.92 373.50 133.74 103.09	1,231.44 736,044.32 12,608.43 5,040.42 5,219.08	1,231.44 805,572.74 14,074.16 6,451.20 6,061.24	69,528.42 1,465.73 1,410.78 842.16
234.75	320.00	166.47	45.11	2,296.59	2,651.05	354.46
783.62	1,947.39	811.53	275.31	11,526.23	12,863.96	1,337.73
4,728.84	12,317.43	4,994.31	1,763.65	69,336.78	85,072.53	15,735.75
7,336.05	19,727.61	6,643.09	2,925.94	104,834.06	116,879.13	12,045.07
2,981.62	8,883.01	3,306.69	1,285.34	48,418.07	58,123.50	9,705.43
54,647.83	226,923.59	68,755.35	33,831.19	1,066,323.11	1,147,424.48	81,101.37
950.48	3,183.65	1,087.22	467.50	16,206.27	19,026.24	2,819.97
2,441.17	9,996.31	3,036.76	1,492.85	47,768.64	55,133.37	7,364.73
426.64	1,332.05	473.70	193.91	7,198.00	9,060.77	1,862.77
1,380.80	2,563.38	1,075.13	371.57	15,252.96	21,842.59	6,589.63
236.26	740.16	261.96	108 27	4,049.37	5,057.92	1,008.55
708.92	1,600.05	594.60	232.92	9,376.74	13,693.56	4,316.82
422.72	1,219.95	393.74	182.70	6,383.79	8,673.54	2,289.75
689.09	2,322.08	810.05	341.25	12,142.72	14,401.80	2,259.08
413.99	949.42	348.41	137.26	5,538.19	6,827.72	1,289.53
116.72	329. 19	107.85	48.83	1.749.07	2,650.20	901.13
421.91	765. 01	325.72	109.00	4.549.92	6,408.0 ²	1,858.13
2,192.31	4,981. 85	1,842.39	734.45	27,125.53	35,979.14	8,553.61
263.10	692. 43	276.37	99.51	4.072.25	5,098.60	1,026.35
8,652.17	48,572. 83	12,344.89	7,414.92	211,202.76	223,542.17	12,339.41
5,870.92	20,985.46	6,077.65,	3,187.58	97,866.68	124,926.53	27,059.85
492.61	1,068.98	405.68,	156.16	6,129.39	8,356.12	2,226.73
432.29	803.06	335.09,	113.11	5,055.13	5,371.03	315.90
2,291.96	8,554.96	2,740.34,	1,276.58	42,534.63	53,881.34	11,346.71
928.80	2,567.15	998.97	367.46	14,453.58	16,894.71	2,441.13

Embracing Niagara, Georgian Bay,

	Interim rates per		Average horse-		Share o	of operating
Municipality	horsepower collected by Com- mission during year	Share of capital cost of system	power supplied in year after correc- tion for power	Cost of power pur-chased	Operating main-tenance and administrative	Interest
	31, 1947		factor		expenses*	
Mimico. Mitchell. Moorefield Morrisburg. Mount Brydges.	\$ c. 23.00 28.00 39.00 28.00 31.50	\$ c. 486,310.22 145,719.45 28,021.10 76,580.31 23,729.68	570.9	\$ c. 22,965.82 5,674.21 634.61 3,323.83 864.58		\$ c. 19,548.07 5,875.37 1,155.63 3,051.71 950.40
Mount Forest Napanee Neustadt Newbury Newcastle	38.50 25.50 36.00 39.00 29.50	156,785.89 248,564.83 9,946.17 11,511.85 48,786.75	1,920.9 64.9 58.1	4,772.95 11,183.65 377.85 338.26 1,962.63	9,236.31 425.78 486.17	6,289.11 9,968.07 395.37 458.84 1,946.48
New Hamburg Newmarket New Toronto Niagara Falls Niagara-on-the-Lake	27.50 27.25 24.50 17.75 22.50	146,416.77 372,138.81 1,838,346.79 1,201,554.48 117,423.07	2,524.5 13,273.2 13,557.6	4,852 13 14,697.87 77,277.77 78,933.57 6,188.88	10,591.68 54,890.47 34,032.59	5,946.97 14,958.97 74,513.28 48,133.99 4,683.19
North York Twp Norwich Norwood Oil Springs Omemee	24.00 29.00 31.50 35.00 30.00	2,073,898.71 92,749.70 37,197.98 47,475.58 46,104.00	605.4 275.4 216 9	3,524.69 1,603.40	2,857.14 1,268.83 1,681.72	83,683.22 3,740.31 1,457.63 1,895.06 1,841.20
Orangeville Orono Oshawa Ottawa (11,000-volt). Ottawa.	37.50 37.00 26.00	197,384.08 24,889.57 3,036,762.12 160.79 4,111,952.06	151.1 22,785.0 3,278.1	879.72 132,656.33 36,058.91	789.45 101,349.27	6.73
Otterville. Owen Sound. Paisley. Palmerston. Paris.	33.00 27.00 39.00 33.00 23.00	30,163.44 1,233,794.04 40,268.29 136,224.85 316,575.60	8,791.0 226.2 754.4	51,182.00 1,316.96 4,392.18	34,043.77 1,425.75 4,752.56	1,218.53 48,911.82 1,589.15 5,511.89 12,830.96
Parkhill	39.00 28.50 25.00 22.00 32.50	71,094.36 207,617.99 309,127.92 2,599,421.06 259,278.72	1,501.2 2,298.3 22,208.9	8,740.12 13,380.91 129,302.22	5,744.07 7,832.28 71,716.38	8,223.55 12,217.06 103,554.97
Picton Plattsville Point Edward Port Colborne Port Credit	31.50 36.00 32.00 24.00 25.50	302,114.58 51,921.83 345,499.70 338,541.67 176,890.10	250.9 1,949.1 2,506.5	1,460.76 11,347.84 14,593.07	1,583.86 15,709.35 9,460.24	13,682.39

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

costs and fixe	d charges		Revenue	Amount		
Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	received in excess of cost of power sold to private companies	chargeable to each munici- pality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c. 3,772.41 1,291.12 317.54 802.04 221.48	\$ c. 17,374.20 4,397.28 529.75 2,543.41 674.98	\$ c. 4,967.45 1,499.79 291.19 782.20 243.98	\$ c. 2,616.86 646.55 72.31 378.74 98.52	\$ c. 80,637.40 23,035.00 3,821.61 12,349.82 3,833.20	\$ c. 90,725.60 27,287.86 4,249.39 15,986.19 4,676.72	\$ c. 10,088.20 4,252.86 427.78 3,636.37 843.52
2,113.38 2,517.87 116.25 116.49 545.19	8,535.18 290.45 270.68	1,622.26 2,536.71 101.54 117.29 499.57	1,274.33 43.05		31,560.36 48,981.65 2,337.30 2,266.24 9,943.96	6,278.19 673.11 517.05
1,441.56 3,166.84 15,699.21 6,679.87 871.96	11,320.61 59,452.67 57,628.27	1,512.16 3,824.56 18,824.81 12,200.78 1,201.06	1,674.76 8,805.47	56,885.77 291,852.74 228,614.92	22,917.60 68,793.30 325,192.58 240,646.49 23,917.32	11,907.53 33,339.84 12,031.57
16,239,58 847,42 391,22 490,05 532,61	2,743.05 1,230.82 1,043.39		401.62 182.70 143.89	14,266.12 6,148.81 6,715.01	372,431.20 17,557.79 8,675.09 7,589.75 9,062.75	3,291.67 2,526.28 874.74
2,440.24 304.81 31,587.40 3.22 31,844.27	687.10 100,897.99 0.80	255.74 30,995.86 1.69	100.24 15,115.62	3,802.43 504,057.62 39,396.31	592,409.56 39,396.31	1,786.44 88,351.94
299.20 13,443.14 516.00 1,332.05 2,572.13	38,942.39 1,028.74 3,498.57	12,542.09 412.28 1,407.64	5,831.97 150.06 500.47	193,233.24 6,138.82 20,394.42	237,358.13 8,823.11 24,896.04	44,124.89 2,684.29 4,501.62
764.28 2,257.90 3,167.15 23,356.53 2,546.97	6,640.32 10,190.17 96,936.28	2,121.89 3,116.50 26,299.11	995.90 1,524.70 14,733.43	48,379.37 436,432.06	42,784.91 57,458.14 488,595.41	10,052.96 9,078.77 52,163.35
3,518.33 551.60 3,225.32 2,928.31 1,491.84	1,174.63 9,035.00 11,225.34	536.38 3,538.96 3,470.80	166.45 1,293.04 1,662.82	7,251.97 55,414.20 53,697.33	9,031.80 62,372.28 60,155.20	1,779.83 6,958.08 6,457.87

Embracing Niagara, Georgian Bay,

	Interim rates per		Average horse-		Share of	of operating
Municipality	horsepower collected by Com- mission during year	Share of capital cost of system	power supplied in year after correc- tion for	Cost of power pur-chased	Operating maintenance and adminis-	Interest
	To October 31, 1947		power factor		trative expenses*	
Port Dalhousie. Port Dover. Port Elgin. Port Hope. Port McNicoll.	\$ c. 24.50 31.00 34.00 26.00 32.00	\$ c. 189,792.72 129,755.33 138,832.04 463,985.67 20,959.47	1,306.5 738.1 712.7 3,616.7 154.8	4,297.28 4,149.40 21,056.75	\$ c. 5,206.65 3,930.06 4,062.21 19,502.73 789.99	\$ c. 6,804.52 5,209.10 5,582.94 18,601.01 825.09
Port Perry Port Rowan Port Stanley Prescott Preston	39.00 34.50 32.50 25.00 23.00	88,973.93 31,709.13 174,583.12 224,706.56 648,942.71	482.9 160.6 878.8 1,656.7 5,070.5	935.03 5,116.45 9,645.46	2,802.27 1,539.33 4,966.44 6,446.89 18,981.88	3,329.87 1,292.49 6.928.36 9,021.51 26,193.46
Priceville Princeton Queenston Renfrew Richmond	39.00 37.50 23.00 28.00 39.00	4,333.33 43,566.44 20,363.24 143,777.18 27,918.95	210.3 188.2	118.77 1,224.39 1,095.72 6,364.71 703.89	141.38 1,693.93 774.65 7,148.29 920.38	178.67 1,762.57 814.73 5,755.12 1,127.55
Richmond Hill Ridgetown Ripley Riverside Rockwood	24.00 30.50 39.00 30.00 31.00	114,162.60 125,099.18 38,948.11 330,220.14 31,897.59	794.1 772.7 169.7 1,913.7 192.8	4,623.32 4,498.73 988.01 11,141.73 1,122.50	3,258.76 4,254.62 1,558.38 9,265.79 1,035.15	4,642.97 5,051.85 1,585.92 13,414.21 1,283.39
Rodney. Rosseau. Russell. St. Catharines. St. Clair Beach.	39.00 39.00 39.00 19.50 35.00	45,694.31 22,523.90 25,407.53 3,601,737.96 27,129.44	219.1 52.4 137.6 33,003.3 142.5	1,275.62 305.08 801.12 192,148.20 829.65	1,873.50 (56.13) 950.67 102,130.66 959.01	1,764.84 936.11 1,015.72 144,613.61 1,095.10
St. George St. Jacobs. St. Marys St. Thomas. Sarnia.	35.00 27.50 30.00 23.50 28.00	41,721.92 58,260.22 358,129.75 1,383,668.54 1,579,969.95	233.2 412.1 2,317.8 10,075.3 8,672.4	1,357.71 2,399.28 13,494.44 58,659.31 50,491.50	1,556.66 1,784.35 14,254.24 46,511.39 43,087.29	1,673.31 2,336.46 14,227.02 55,188.43 63,610.32
Scarborough Twp Seaforth. Shelburne. Simcoe. Smiths Falls.	25.00 29.00 36.50 25.00 23.50	1,096,282.23 190,838.00 64,888.36 483,663.08 503,771.01	7,757.4 1,246.2 404.0 3,468.4 4,243.9	45,164.28 7,255.49 2,352.12 20,193.34 24,708.37	28,900.64 6,320.29 2,150.04 14,492.65 14,383.59	44,317.90 7,699.38 2,569.62 19,475.32 19,990.03
Smithville Southampton Springfield Stamford Twp Stayner	29.50 32.50 39.00 17.75 32.50	69,467.78 138,095.85 23,576.32 382,557.09 59,304.29	457.9 729.2 117.3 4,329.4 403.5	2,665.94 4,245.47 682.93 25,206.16 2,349.21	2,206.68 4,035.48 952.45 11,114.91 1,999.99	2,788.16 5,555.10 931.90 15,342.91 2,356.95

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

				1		
Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	Revenue received in excess of cost of power sold to private companies	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c. 1,424.23 1,259.95 1,864.94 4,660.37 226.19	\$ c. 5,778.85 3,394.29 3,270.86 16,002.40 686.13	\$ c. 1,732.85 1,326.32 1,424.89 4,733.88 215.30	\$ c. 866.74 489.66 472.81 2,399.33 102.69	\$ c. 27,686.93 18,927.34 19,882.43 82,157.81 3,541.27	\$ c. 32,008.05 22,881.87 24,232.37 94,033.52 4,954.13	3,954.53 4,349.94 11,875.71
1,074.43 329.20 1,776.10 2,377.57 5,165.53	2,185.22 751.62 4,128.89 7,367.34 22,469.06	865.84 327.23 1,770.56 2,296.28 6,641.98	320.36 106.54 583.00 1,099.06 3,363.78	12,748.76 5,068.36 24,103.80 36,055.99 105,609.04	18,833.75 5,539.28 28,559.38 41,418.54 116,621.87	470.92 4,455.58
61.23 463.04 147.99 1.479.19 405.04	98.04 982.00 814.37 4,843.15 563.70	44.92 450.08 208.16 1,468.02 288.90	13.53 139.51 124.85 725.23 80.21	6,436.50	796.25 7,886.88 4,328.21 30,609.11 4,713.14	1,450.38 597.44 4,275.86
954.68 1,163.12 563.90 3,138.95 305.48	8,853.18	1,173.92 1,288.74 402.37 3,409.03 328.98	526.81 512.61 112.58 1,269.55 127.90	17,684.55 19,269.89 5,780.85 47,953.34 4,829.62	19,057.20 23,567.60 6,619.62 57,409.50 5,975.25	4,297.71 838.77 9,456.16
457.51 385.10 332.31 25,605.94 270.50	1,023.71 272.91 626.29 143,384.51 665.48	451.75 235.32 261.71 36,482.82 279.65	145.35 34.76 91.28 21,894.47 94.54	6,701.58 2,043.63 3,896.54 622,471.27 4,004.85	8,545.25 2,043.63 5,367.40 643,563.87 4,987.51	
416.53 500.45 3,132.96 11,338.47 14,984.59	1,075.79 1,848.05 10,530.29 45,014.28 40,303.22	431.04 598.64 3,641.65 13,964.21 16,191.27	154.71 273.39 1,537.64 6,683.98 5,753.29	6,356.33 9,193.84 57,742.96 223,992.11 222,914.90	8,162.30 11,333.44 69,532.75 236,769.34 242,826.73	1,805.97 2,139.60 11,789.79 12,777.23 19,911.83
9,061.78 1,726.56 793.95 4,090.45 4,611.75	34,669.29 5,633.05 1,823.42 15,488.95 18,624.82	11.267.85 1,970.85 669.13 4,947.72 5,103.71	5,146,28 826,73 268,01 2,300,94 2,815,41	168,235,46 29,778,89 10,090,27 76,387,49 84,606,86	193,934.58 36,139.31 14,746.93 86,711.01 99,731.27	25,699.12 6,360.42 4,656.66 10,323.52 15,124.41
644.90 1.829.12 242.20 2,116.01 683.33	3,340.24 546.41 18,395.92	709.63 1,416.28 239.93 3,884.12 610.58	303.77 483.75 77.82 2,872.13 267.68	10,762.41 19,937.94 3,518.00 73,187.90 9,546.93	13,508,28 23,699,55 4,576,00 76,846,10 13,114,02	3,658.20

Embracing Niagara, Georgian Bay,

	Interim rates per		Average horse-		Share o	of operating
Municipality	horsepower collected by Com- mission during year	Share of capital cost of system	power supplied in year after correc- tion for power	Cost of power pur-chased	Operating main-tenance and administrative	Interest
	31, 1947		factor		expenses*	
Stirling Stoney Creek Stouff ville Stratford Strathroy	\$ c. 23.00 23.00 31.00 25.00 26.50	\$ c 52,819.49 60,739.73 100,060.51 1,260,078.07 277,698.00	407.1 614.3 9,069.8			\$ c. 2,096.15 2,455.60 4,036.34 50,950.70 11,173.63
Streetsville	29.00 39.00 38.00 25.00 36.50	80,614.84 32,463.51 101,072.76 480,680.37 35,399.31	171.0 505.8	22,181.58	3,622.08 25,344.70	3,167.71 1,310.08 4,083.51 19,491.04 1,402.80
Tavistock. Tecumseh Teeswater Thamesford Thamesville.	29.00 32.00 39.00 33.00 31.50	129,352.13 108,502.59 46,387.74 58,562.51 55,475.55	594.2 245.4 350.7	4,687.36 3,459.48 1,428.74 2,041.81 1,829.88	3,305.27 1,277.23 1,837.74	5,234.99 4,404.63 1,857.85 2,343.62 2,079.03
Thedford. Thornbury. Thorndale. Thornton. Thorold.	39.00 39.00	45,727.75 35,284.04 28,380.07 12,516.40 427,906.86	178.5 141.2 57.8	1,039.24 822.08 336.52	1,304.13	1,875.79 1,400.89 1,145.29 502.10 17,015.40
Tilbury. Tillsonburg. Toronto. Toronto Twp. Tottenham.	30.00 26.50 21.50 26.00 39.00	194,077.78 329,538.40 4,400,886.32 787,102.80 44,560.18	2,279.1 432,575.7 5,763.7	13,269.12 2,518,494.83 33,556.79	9,651.55 1,401,909.69 23,577.17	7,845.98 13,336.63 2,203,\$80.67 31,682.35 1,824.98
Trafalgar Twp Trenton Tweed Uxbridge Victoria Harbour	27.50 21.00 39.00 39.00 33.50	139,198.62 685,311.56 84,153.74 100,669.66 22,506.58	6,477.8 438.5 539.0	2,552.99 3,138.11	18,546.35 3,614.73 3,283.70	5,640.18 27,261.90 3,374.26 3,902.31 909.06
Walkerton Wallaceburg Wardsville Warkworth Waterdown	28.00 30.00 39.00 34.00 26.00	174.718.49 \$80,500.48 16,185.19 22,518.15 53,161.53	6,372.5 77.5 108.3	451.21 630.53		6,954.60 39,465.13 649.30 919.54 2,140.54

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

costs and fixe	ed charges		Revenue	Amount		
Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	received in excess of cost of power sold to private com- panies	chargeable to each munici- pality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c. 449.16 537.84 914.71 10,575.15 2,474.68	1,836.59 2,784.43 40,644.67	\$ c. 536.21 617.31 1,031.81 12,946.33 2,850.08	\$ c. 315.38 270.07 407.53 6,016.93 1,238.78	\$ c. 9,264.69 9,103.90 14,846.68 201,288.14 42,395.21	\$ c. 10,933.22 9,362.13 19,044.58 226,745.54 49,482.35	\$ c. 1,668.53 258.23 4,197.90 25,457.40 7,087.14
681.41 435.65 1,033.06 3,584.79 466.72	2,345.76 16,787.56	804.13 335.66 1,046.06 4,926.24 362.96	367.59 113.44 335.55 2,527.50 125.12	13,006.16 5,030.56 14,739.73 89,788.41 5,142.91	16,067.96 6,668.02 19,219.45 95,246.68 6,882.73	1,637.46 4,479.72 5,458.27
1,201.21 1,064.19 621.73 560.98 483.07	2,763.83 1,145.21 1,606.23	1,333.47 1,121.37 479.88 602.82 531.20	534.11 394.20 162.80 232.66 208.51	6,647.84 8,760.54	23,346.45 19,015.47 9,570.62 11,572.85 9,900.73	3,290.90 2,922.78 2,812.31
513.30 483.08 297.89 176.10 3,155.76	832.20 656.49 272.38	472.83 365.29 293.27 128.64 4,338.65	118.42 93.67 38.34	4,177.18 1,814.00	8,927.08 5,508.43 2,253.56	317. 85 3,620.67 1,331.25 439.56
1,823.17 2,895.75 404,383.07 6,659.96 659.57	10,216.08 1,905,179.98 25,725.85	557,476.47 8,064.05	1,511.96 286,970.95 3,823.64	51,246.16 8,704,453.76 125,442.53	60,397.04 9,300,377.53 149,854.90	9,150.88 595,923.77 24,412.37
1,262.72 5,432.08 1,121.38 1,289.55 287.52	28,070.54 2,019.55 2,458.45	6,944.01 866.86 1,013.97	4,297.39 290.90 357.57	119,671.83 13,258.87 14,728.52	136,032.76 17,103.13 21,021.99	16,360.93 3,844.26 6,293.47
1,798.46 8,883.10 167.83 312.04 455.86	28,886.00 3 363.13 4 512.80	10,089.16 165.18 232.57	4,227.53 51.41 71.85	3 149,683.80 2,418.83 5 3,202.88	191,175.50 3,023.80 3,680.49	41,491.70 604.97 477.61

Embracing Niagara, Georgian Bay,

	Interim rates per		Average horse-		Share	of operating				
Municipality	horsepower collected by Com- mission during year To October 31, 1947	Share of capital cost of system	power supplied in year after correc- tion for power factor	Cost of power pur-chased	Operating main- tenance and adminis- trative expenses*	Interest				
Waterford	\$ c. 27.00 23.00 35.50 30.00 19.50	\$ c. 87,415.61 1,067,870.95 105,525.34 25,823.31 1,407,406.96	504.6 193.0	48,091.05 2,937.83	3,441.36	S c. 3,516.21 43,176.63 4,225.71 1,024.69 56,893.61				
Wellesley Wellington West Lorne Weston Westport	32.00 31.00 35.50 22.50 39.00	35,665.04 57,812.09 100,672.12 781,058.08 40,952.41	386.8 554.5	2,251.98 3,228.35 35,727.84		31,554.09				
Wheatley. Whitby. Wiarton Williamsburg. Winchester	39.00 25.50 39.00 28.50 28.50	77,866.88 268,474.56 114,558.03 17,823.19 83,819.92	2,064.4 563.2 133.5	12,019.12 3,279.00 777.25		4,577.20 706.39				
Windermere Windsor Wingham Woodbridge Woodstock	39.00 25.00 37.50 27.50 24.50	18,675.73 9,319,977.81 194,227.21 149,324.65 1,312,599.36	62,016.7 1,121.4 1,006.8	5,861.68	5,739.80 4,223.28	379,711.15 7,708.71 6,027.35				
Woodville	39.00 39.00 23.00 39.00 formatory	26,177.41 37,872.73 3,383,583.94 47,815.43 45,193.19		1,011.30 159,404.76 1,050.31	981.69 1,286.62 92,482.40 1,356.45 1,454.33	1,519.32 136,068.00 1,729.98				
Toronto Transporta	tion Comm	60,868.20	488.9	2,846.42	1,748.22	2,345.85				
Totals—Municipali	ties	185,327,236.58	1,431,304.2	8,350,155.93	5,182,620.49	7,473,959.42				
Totals—Rural power district Totals—Companies Totals—Local distribution sys		25,685,924.97 69,136,691.49 565,101.04	163,288.8 601,080.2 1,979.0	3,499,543.36	2,100,207.28					
Non-operating capital		280,714.954.08 24,504,917.25								
Grand Totals		305,219,871.33	2,197,652.2	12,842,841.99	8,043,774.55	11,326,457.10				

S.O.—COST OF POWER

and Eastern Ontario Divisions

Municipality as the Cost-under Power Commission Act-of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

Provision for renewals	Provision for contingencies and obsolescence	Provision for sinking fund	Revenue received in excess of cost of power sold to private companies Credit	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each municipality
\$ c. 764.66 8,532.44 1,073.32 275.81 10,309.23	36,616.56 2,393.29 858.61	\$ c. 896.92 10,947.14 1,083.50 265.18 14,334.96	\$ c. 399.10 5,479.77 334.75 128.04 8,575.61	171,483.24 14,820.26 4,282.48	189,982.08 17,914.78 5,789.75	\$ c. 2,566.46 18,498.84 3,094.52 1,507.27 9,595.68
355.85 662.11 933.30 5,860.08 611.91	1,738.28 2,553.40	985.64	129.70 256.60 367.86 4,071.03 106.74	9,110.91 15,216.87	11,991.58 19,683.87 138,073.48	
842.27 2,732.79 1,570.71 185.79 929.83	9,090.45 2,600.02 594.02	802.36 2,740.34 1,177.05 181.99 857.87	222.31 1,369.53 373.63 88.56 387.56	16,631.75 3,003.34	52,642.42 21,963.17 3,804.27	2,355.69 8,023.80 5,331.42 800.93 3,360.88
272.34 80,971.65 2,486.10 1,279.14 10,652.98	280,803.86 5,088.39 4,526.48	193.79 95,908.29 2,005.97 1,536.62 13,463.96	53.80 41,141.93 743.94 667.91 6,673.16	1,425,954.95 28,813.93 22,786.64	1,550,418.30 42,051.89 27,686.76	344.20 124,463.35 13,237.96 4,900.12 34,548.25
351.45 393.77 24,627.32 475.46 380.01	827.11 120.260.13 864.81	390.03 34,656.64 441.29	91.81 115.23 18,163.49 119.68 220.25	549,335.76 5,798.62	6,772.35 629,722.74 7,036.59	1,388.45 1,459.43 80,386.98 1,237.97 1,659.60
483.67	2,156.40	626.98	324.34	9,883.20	14,314.75	4,431.55
1,523,005.56	6,319,762.46	1,895,332.06	(947,354.63)	29,797,481.29	32,912,884.41	3,115,403.12
251,352.96 532,440.54 8,523.01	2,627,301.57	260,241.51 702,365.93 5,858.33	(108,326.15) 1,029,910.59 25,770.19	13,285,738.82	3,885,854.48 13,285,738.82 121,091.93	
2,315,322.07	9,697,972.98	2,863,797.83		47,090,166.52	50,205,569.64	3,115,403.12

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating		Net credit or charge at October 31, 1946	
		Credit	Charge	
Acton. Agincourt Ailsa Craig Alexandria. Alliston.	Jan. 1913 Nov. 1922 Jan. 1916 Jan. 1921 June 1918	\$ c. 8,225.44 1,090.24 1,344.13 3,462.53 6,111.16	\$ c.	
Almonte. Alvinston. Amherstburg. Ancaster Township. Apple Hill.	Feb. 1945 April 1922 Nov. 1925 May 1923 April 1921	1,470.27 1,018.21 6,774.10 683.97 559.21		
Arkona. Arnprior Arthur. Athens. Aurora.	Dec. 1926 Jan. 1939 Dec. 1916 Jan. 1929 April 1943	5,522.37 945.43 8,355.46		
Aylmer. Ayr Baden. Barrie. Bath.	Mar. 1918 Jan. 1915 May 1912 April 1913 Nov. 1931	5,321.43 1,780.63 1,965.38 35,478.89		
Beachville Beamsville. Beaverton Beeton Belle River	Aug. 1912 May 1937 Nov. 1914 Aug. 1918 Dec. 1922	2,870.21 2,666.19 3,352.98 246.00 1,032.23		
Belleville. Blenheim. Bloomfield. Blyth. Bobcaygeon.	April 1929 Nov. 1915 April 1919 July 1924 July 1946	27,188.78 3,485.27 1,416.87 1,249.34 423.18		
Bolton Bothwell Bowmanville Bradford Braeside	Feb. 1915 Sept. 1915 Oct. 1931 Oct. 1918 Jan. 1945	1,469.39 866.09 8,290.85 3,761.32 775.14		
Brampton Brantford Brantford Township Brechin Bridgeport	Nov. 1911 Feb. 1914 May 1924 Jan. 1915 Mar. 1928	14,564.15 38,055.35 8,779.80 454.67 1,223.10		

S.O.—CREDIT OR CHARGE

Eastern Ontario Divisions

power supplied to it to October 31, 1946, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Cash receipts and payments on account of such credits and charges, also adjustments made during the year		upon annual respect of pov	dited or charged adjustment in ver supplied in October 31, 1947	Accumulated amount standing as a credit or charge on October 31, 1947	
Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c. 8,225.44 1,090.24 1,344.13 3,462.53 6,111.16	\$ c. 9,800.61 1,115.71 1,656.82 4,833.78 8,128.90	\$ c.	\$ c. 9,800.61 1,115.71 1,656.82 4,833.78 8,128.90	\$ c.
	1,470.27 1,018.21 6,774.10 683.97 559.21	3,364.34 757.81 9,259.68 737.89 627.76		3,364.34 757.81 9,259.68 737.89 627.76	
	5,522.37 945.43 8,355.46	7,205.54 731.30 1,523.94 9,087.11	•	7,205.54 731.30 1,523.94 9,087.11	
	5,321.43 1,780.63 1,965.38 35,478.89	6,191.68 2,099.12 2,620.63 40,966.00		6,191.68 2,099.12 2,620.63 40,966.00	
	2,870.21 2,666.19 3,352.98 246.00 1,032.23	3,542.81 2,628.17 4,583.06 666.38 1,305.81		3,542.81 2,628.17 4,583.06 666.38 1,305.81	
	27,188.78 3,485.27 1,416.87 1,249.34 423.18	30,111.80 4,803.69 1,871.71 1,391.74		30,111.80 4,803.69 1,871.71 1,391.74	
•	1,469.39 866.09 8,290.85 3,761.32 775.14	1,858.81 1,371.19 12,654.23 7,079.77 1,242.09		1,858.81 1,371.19 12,654.23 7,079.77 1,242.09	
	14,564.15 38,055.35 8,779.80 454.67 1,223.10	16,312.32 40,926.60 13,380.57 614.52 1,334.61		16,312.32 40,926.60 13,380.57 614.52 1,334.61	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

		,		
Municipality	Date commenced operating		Net credit or charge at October 31, 1946	
	op	Credit	Charge	
Brigden. Brighton Brockville Brussels. Burford	Jan. 1918 Nov. 1929 April 1915 July 1924 June 1915	\$ c. 861.65 3,006.63 19,216.07 2,030.87 1,383.27	8 c.	
Burgessville. Burlington. Caledonia Campbellville Cannington.	Nov. 1916 Jan. 1945 Oct. 1912 Jan. 1925 Nov. 1914	697.91 4,233.99 1,734.23 178.89 2,668.08		
Cardinal Carleton Place Cayuga Chatham Chatsworth	July 1930 May 1919 Nov. 1924 Feb. 1915 Dec. 1915	2,045.14 10,191.77 2,011.71 21,560.38 1,260.73		
Chesley Chesterville Chippawa Clifford Clinton	July 1916 April 1914 Sept. 1919 May 1924 Mar. 1914	5,850.09 1,819.53 1,209.39 64.62 4,382.36		
Cobden. Cobourg. Colborne. Coldwater. Collingwood.	Nov. 1925 Jan. 1932 Jan. 1933 Mar. 1913 Mar. 1913	943.95 10,217.62 1,581.59 1,816.76 15,853.04		
Comber. Cookstown Cottam Courtright Creemore.	May 1915 May 1918 Nov. 1926 Dec. 1923 Nov. 1914	1,316.47 1,187.03 953.64 270.03 2,352.43		
Dashwood. Delaware. Delhi Deseronto. Dorchester	Sept. 1917 Mar. 1915 May 1938 Jan. 1931 Dec. 1914	786.68 437.61 4,481.38 2,624.83 1,054.50		
Drayton. Dresden. Drumbo. Dublin. Dundalk.	Mar. 1918 April 1915 Dec. 1914 Oct. 1917 Dec. 1915	2,774.74 616.35 581.07 2,062.79		

S.O.—CREDIT OR CHARGE

Eastern Ontario Divisions

power supplied to it to October 31, 1946, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Cash receipts and payments on account of such credits and charges, also adjustments made during the year		Net amount credited or charged upon annual adjustment in respect of power supplied in the year ended October 31, 1947		Accumulated amount standing as a credit or charge on October 31, 1947	
Credited	Charged	Credited	Charged	Credit	Charge
S c.	\$ c. 861.65 3,006.63 19,216.07 2,030.87 1,383.27	\$ c. 1,097.81 3,171.30 32,540.90 3,154.14 1,656.59	S c.	\$ c. 1,097.81 3,171.30 32,540.90 3,154.14 1,656.59	S c.
	697.91 4,233.99 1,734.23 178.89 2,668.08	1,156.78 6,130.08 1,864.50 543.97 3,473.86	-	1,156.78 6,130.08 1,864.50 543.97 3,473.86	
	2,045.14 10,191.77 2,011.71 21,560.38 1,260.73	1,469.04 12,249.40 2,974.90 33,436.15 1,673.63		1,469.04 12,249.40 2,974.90 33,436.15 1,673.63	
	5,850.09 1,819.53 1,209.39 64.62 4,382.36	6,766.07 2,823.65 1,500.82 799.81 5,772.51		6,766.07 2,823.65 1,500.82 799.81 5,772.52	
	943.95 10,217.62 1,581.59 1,816.76 15,853.04	1,243.01 9,775.72 2,293.95 2,435.43 17,799.44		1,243.01 9.775.72 2,293.95 2,435.43 17,799.44	
	1,316.47 1,187.03 953.64 270.03 2,352.43	1,992.77 1,569.76 1,167.04 296.18 2,601.36		1,992.77 1.569.76 1,167.04 296.18 2,601.36	
	786.68 437.61 4,481.38 2,624.83 1,054.50	791.45 523.32 5,152.39 2,172.99 1,172.90		791.45 523.32 5,152.39 2,172.99 1,172.90	
	2,774.74 616.35 581.07	582.03 3,480.41 625.56 415.03 1,871.02		582.03 3,480.41 625.56 415.03 1,871.02	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating		Net credit or charge at October 31, 1946	
		Credit	Charge	
Dundas. Dunnville Durham. Dutton. East York Township.	Jan. 1911 June 1918 Dec. 1915 Sept. 1915 July 1925	\$ c. 7,410.21 4,750.13 3,395.93 1,716.11 42,242.57	\$ c.	
Elmira. Elmvale. Elmwood. Elora. Embro.	Nov. 1913 June 1913 April 1918 Nov. 1914 Jan. 1915	10,417.63 1,006.71 930.48 2,088.16 872.13		
Erieau Erie Beach Essex Etobicoke Township Exeter	July 1924 July 1925 Nov. 1923 Aug. 1917 June 1916	1,359.00 1.85 3,481.39 35,014.23 4,681.02		
Fergus Finch Flesherton Fonthill Forest	Nov. 1914 Feb. 1928 Dec. 1915 June 1926 Mar. 1917	6,036.30 1,378.83 1,187.82 1,386.18 6,562.45		
Forest Hill Galt Georgetown Glencoe Goderich	Jan. 1938 May 1911 Sept. 1913 Aug. 1920 Feb. 1914	16,681.87 18,402.43 10,598.77 1,021.43 10,844.64		
Grand Valley Granton Gravenhurst Grimsby Guelph	Dec. 1916 July 1916 Nov. 1915 Jan. 1942 Dec. 1910	1,539.63 614.30 7,051.78 4,166.70 25,481.62		
Hagersville Hamilton Hanover Harriston. Harrow	Sept. 1913 Feb. 1911 Sept. 1916 July 1916 Nov. 1923	4,250.58 115,613.24 10,629.62 3,105.59 4,179.29		
Hastings Havelock Hensall Hespeler Highgate	June 1931 Feb. 1921 Jan. 1917 Feb. 1911 Dec. 1916	1,849.35 2,004.00 2,005.28 9,207.04 765.84		

S.O.—CREDIT OR CHARGE

Eastern Ontario Divisions

power supplied to it to October 31, 1946, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

on account of such credits and charges, also adjustments		Net amount credited or charged upon annual adjustment in respect of power supplied in the year ended October 31, 1947		Accumulated amount standing as a credit or charge on October 31, 1947	
Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c. 7,410.21 4,750.13 3,395.93 1,716.11 42,242.57	\$ c. 8,356.94 6,694.15 4,657.00 1,630.59 47,840.71	\$ c.	\$ c. 8,356.94 6,694.15 4,657.00 1,630.59 47,840.71	\$ c.
	10,417.63 1,006.71 930.48 2,088.16 872.13	13,202.57 2,446.86 1,689.86 2,745.48 1,273.70		13,202.57 2,446.86 1,689.86 2,745.48 1,273.70	
	1,359.00 1.85 3,481.39 35,014.23 4,681.02	1,977.07 59.97 4,102.41 44,587.90 6,040.37		1,977.07 59.97 4,102.41 44,587.90 6,040.37	
	6,036.30 1,378.83 1,187.82 1,386.18 6,562.45	8,208.89 1,871.46 1,880.23 1,740.32 4,839.04		8,208.89 1,871.46 1,880.23 1,740.32 4,839.04	
	16,681.87 18,402.43 10,598.77 1,021.43 10,844.64	16,246.87 21,192.04 13,786.86 1,679.12 13,150.86		16,246.87 21,192.04 13,786.86 1,679.12 13,150.86	
	1,539.63 614.30 7,051.78 4,166.70 25,481.62	2,132.56 731.81 7,086.70 4,368.13 29,205.15		2,132.56 731.81 7,086.70 4,368.13 29,205.15	
	4,250.58 115,613.24 10,629.62 3,105.59 4,179.29	4,856.04 100,170.32 11,869.18 4,016.78 5,462.24		4,856.04 100,170.32 11,869.18 4,016.78 5,462.24	
		2,532.87 3,042.72 2,554.28 10,857.91 1,070.48		2,532.87 3,042.72 2,554.28 10,857.91 1,070.48	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating		Net credit or charge at October 31, 1945	
		Credit	Charge	
Holstein. Humberstone Huntsville. Ingersoll. Iroquois.	May 1916 Oct. 1924 Sept. 1916 May 1911 Feb. 1940	\$ c. 1,378.94 6,225.07 10,753.03 1,505.55	\$ c.	
Jarvis. Kemptville Kincardine Kingston Kingsville	Feb. 1924 Dec. 1921 Mar. 1921 Nov. 1937 Nov. 1923	895.15 1,917.07 7,992.66 54,484.23 4,395.40		
Kirkfield Kitchener Lakefield Lambeth Lanark.	June 1920 Jan. 1911 Aug. 1920 April 1915 Sept. 1921	56,175.30 1,268.52 1,088.77 128.75		
Lancaster LaSalle Leamington Lindsay Listowel	May 1921 Nov. 1925 Nov. 1923 Mar. 1928 June 1916	224.50 1,330.11 11,756.49 7,502.80 7,382.80		
London	Jan. 1911 Jan. 1925 Jan. 1931 Feb. 1915 Jan. 1921	83,622.45 2,376.57 5,711.32 1,597.17 5,122.24		
Lynden Madoc Markdale Markham Marmora	Nov. 1915 Jan. 1930 Mar. 1916 April 1920 Jan. 1921	781.60 2,962.29 1,765.99 2,157.59 781.34		
Martintown Maxville Meaford. Merlin Merritton	May 1921 Feb. 1921 Jan. 1924 Dec. 1922 Nov. 1920	574.90 1,374.75 6,996.25 662.60 14,283.65		
Midland. Mildmay Millbrook Milton Milverton	July 1911 Dec. 1932 Dec. 1938 April 1913 June 1916	24,143.54 1,790.33 585.45 8,955.88 2,110.41		

S.O.—CREDIT OR CHARGE

Accumulated amount

Eastern Ontario Divisions

Cash receipts and payments

power supplied to it to October 31, 1946, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Net amount credited or charged

Cash receipts a on account of and charges, als made durin	such credits so adjustments	Net amount credited or charged upon annual adjustment in respect of power supplied in the year ended October 31, 1947		Accumulate standing as or char October 3	a credit ge on
Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
	1,378.94 6,225.07 10,753.03 1,505.55	1,960.27 8.356.32 12,656.40 1,954.00		1,960.27 8,356.32 12,656.40 1,954.00	
	895.15 1,917.07 7,992.66 54,484.23 4,395.40	902.14 4,235.80 11,658.34 64,448.69 5,732.00		902.14 4,235.80 11,658.34 64,448.69 5,732.00	
	56,175.30 1,268.52 1,088.77 128.75	69,528.42 1,465.73 1,410.78 842.16		69,528.42 1,465.73 1,410.78 842.16	
	224.50 1,330.11 11,756.49 7,502.80 7,382.80	354.46 1,337.73 15,735.75 12,045.07 9,705.43		354.46 1.337.73 15.735.75 12.045.07 9,705.43	
	83,622.45 2,376.57 5,711.32 1,597.17 5,122.24	81,101.37 2,819.97 7,364.73 1,862.77 6,589.63		81,101.37 2,819.97 7,364.73 1,862.77 6,589.63	
	781.60 2,962.29 1,765.99 2,157.59 781.34	1,008.55 4,316.82 2,289.75 2,259.08 1,289.53		1,008.55 4,316.82 2,289.75 2,259.08 1,289.53	
	574.90 1,374.75 6,996.25 662.60 14,283.65	901.13 1.858.13 8.553.61 1,026.35 12,339.41		901.13 1,858.13 8,553.61 1,026.35 12,339.41	
	24,143.54 1,790.33 585.45 8,955.88 2,110.41	27,059.85 2,226.73 315.90 11,346.71 2,441.13		27,059.85 2,226.73 315.90 11.346.71 2,441.13	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating		Net credit or charge at October 31, 1946	
		Credit	Charge	
Mimico	May 1912 Sept. 1911 Mar. 1918 June 1938 Mar. 1915	\$ c. 8,938.98 3,719.93 108.25 2,424.92 772.38	\$ c.	
Mount Forest. Napanee Neustadt. Newbury. Newcastle	Dec. 1915 Nov. 1929 Dec. 1918 Mar. 1921 Jan. 1937	6,504.93 5,135.88 343.86 320.16 1,645.99		
New Hamburg. Newmarket. New Toronto. Niagara Falls. Niagara-on-the-Lake.	Mar. 1911 April 1945 Feb. 1914 Dec. 1915 Aug. 1919	2,816.20 10,514.89 16,578.80 17,055.25 3,814.09		
North York Township Norwich Norwood Oil Springs Omemee.	Nov. 1923 May 1912 Feb. 1921 Feb. 1918 Jan. 1940	34,572,00 2,695.03 2,027.06 1,490.29 1,479.08		
Orangeville. Orono. Oshawa Ottawa. Otterville.	July 1916 Nov. 1938 Feb. 1929 Jan. 1914 Feb. 1916	11,378.25 1,223.93 67,330.62 76,487.94 787.42		
Owen Sound Paisley Palmerston Paris. Parkhill	Dec. 1915 Sept. 1923 July 1916 Feb. 1914 May 1920	42,007.93 1,981.10 3,581.94 3,818.82 2,174.88		
Penetanguishene	July 1911 Feb. 1919 Mar. 1913 May 1916 April 1919	8,607.56 6,879.08 44,825.65 8,605.28 11,612.86		
Plattsville. Point Edward. Port Colborne. Port Credit. Port Dalhousie.	Dec. 1914 Nov. 1916 Mar. 1920 Aug. 1912 Nov. 1912	1,091.57 9,281.82 5,247.67 4,245.68 3,682.30		

S.O.—CREDIT OR CHARGE

Eastern Ontario Divisions

power supplied to it to October 31, 1945, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Cash receipts and payments on account of such credits and charges, also adjustments made during the year

Net amount credited or charged upon annual adjustment in respect of power supplied in the year ended October 31, 1947

Accumulated amount standing as a credit or charge on October 31, 1947

the year end		the year ended t			51, 1947
Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c. 8,938.98 3,719.93 108.25 2,424.92 772.38	\$ c. 10,088.20 4,252.86 427.78 3,636.37 843.52	S c.	\$ c. 10,088.20 4,252.86 427.78 3,636.37 843.52	\$ c.
	6,504.93 5,135.88 343.86 320.16 1,645.99	8,855.99 6,278.19 673.11 517.05 2,250.70		8,855.99 6,278.19 673.11 517.05 2,250.70	
	2,816.20 10,514.89 16,578.80 17,055.25 3,814.09	2,315.59 11,907.53 33,339.84 12,031.57 2,855.84		2,315.59 11,907.53 33,339.84 12,031.57 2,855.84	
	34,572.00 2,695.03 2,027.06 1,490.29 1,479.08	43,090.47 3,291.67 2,526.28 874.74 1,945.55		43,090.47 3,291.67 2,526.28 874.74 1,945.55	
	11,378.25 1,223.93 67,330.62 76,487.94 787.42	15,382.69 1,786.44 88,351.94 36,802.58 1,170.91		15,382.69 1,786.44 88,351.94 36,802.58 1,170.91	
	42,007.93 1,981.10 3,581.94 3,818.82 2,174.88	44,124.89 2,684.29 4,501.62 4,473.26 3,040.76		44,124.89 2,684.29 4,501.62 4,473.26 3,040.76	
	8,607.56 6,879.08 44,825.65 8,605.28 11,612.86	10,052.96 9,078.77 52,163.35 5,817.64 15,553.70		10,052.96 9,078.77 52,163.35 5,817.64 15,553.70	
	1,091.57 9,281.82 5,247.67 4,245.68 3,682.30	1,779.83 6,958.08 6,457.87 4,971.96 4,321.12		1,779.83 6,958.08 6,457.87 4,971.96 4,321.12	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating		Net credit or charge at October 31, 1946	
		Credit	Charge	
Port Dover Port Elgin Port Hope Port McNicoll Port Perry	Dec. 1921 Mar. 1931 Nov. 1929 Jan. 1915 Sept. 1922	\$ c. 2,768.42 3,494.36 9,626.54 1,206.97 4,406.28	S c.	
Port Rowan Port Stanley. Prescott Preston Priceville	Nov. 1926 April 1912 Dec. 1913 Jan. 1911 Mar. 1920	392.81 4,584.87 5,266.21 9,714.76		
Princeton. Queenston. Renfrew. Richmond. Richmond Hill.	Jan. 1915 Mar. 1921 Dec. 1944 Aug. 1928 June 1925	1,171.98 553.70 3,513.57 839.79 1,143.94		
Ridgetown. Ripley. Riverside. Rockwood. Rodney.	Dec. 1915 Jan. 1921 Nov. 1922 Sept. 1913 Feb. 1917	3,076.83 644.53 6,153.31 1,011.82 1,323.03		
Rosseau. Russell. St. Catharines. St. Clair Beach. St. George.	July 1931 Feb. 1926 April 1914 Nov. 1922 Sept. 1915	920.34 22,280.66 715.26 1,657.85		
St. Jacobs St. Marys St. Thomas Sarnia Scarborough Township	Sept. 1917 May 1911 April 1911 Dec. 1916 Aug. 1918	1,839.64 10,666.10 15,884.38 32,703.58 20,398.05		
Seaforth. Shelburne. Simcoe. Smiths Falls. Smithville.	Nov. 1911 July 1916 Aug. 1915 Sept. 1918 Nov. 1940	5,718.52 3,516.38 8,655.55 12,927.51 1,451.83		

Eastern Ontario Divisions

power supplied to it to October 31, 1946, the cash receipts and payments theron or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Cash receipts and payments on account of such credits and charges, also adjustments made during the year

Net amount credited or charged upon annual adjustment in respect of power supplied in the year ended October 31, 1947 Accumulated amount standing as a credit or charge on October 31, 1947

a	Credited	Charged	Credited	Charged	Credit	Charge
	8 c.	\$ c. 2,768.42 3,494.36 9,626.54 1,206.97 4,406.28	\$ c. 3,954.53 4,349.94 11,875.71 1,412.86 6,084.99	\$ c.	\$ c. 3,954.53 4,349.94 11,875.71 1,412.86 6,084.99	\$ c.
		392.81 4,584.87 5,266.21 9,714.76	470.92 4,455.58 5,362.55 11,012.83 166.77		470.92 4,455.58 5,362.55 11,012.83 166.77	
		1,171.98 553.70 3,513.57 839.79 1,143.94	1,450.38 597.44 4,275.86 783.89 1,372.65		1,450.38 597.44 4,275.86 783.89 1,372.65	
		3,076.83 644.53 6,153.31 1,011.82 1,323.03	4,297.71 838.77 9,456.16 1,145.63 1,843.67		4,297.71 838.77 9,456.16 1,145.63 1,843.67	
		920.34 22,280.66 715.26 1,657.85	1,470.86 21,092.60 982.66 1,805.97		1.470.86 21,092.60 982.66 1,805.97	
		1,839.64 10,666.10 15,884.38 32,703.58 20,398.05	2,139.60 11,789.79 12,777.23 19,911.83 25,699.12		2,139.60 11,789.79 12,777.23 19,911.83 25,699.12	
		5.718.52 3,516.38 8,655.55 12,927.51 1,451.83	6,360,42 4,656,66 10,323,52 15,124,41 2,745,87		6,360.42 4,656.66 10,323.52 15,124.41 2,745.87	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1946			
		Credit	Charge		
Southampton Springfield. Stamford Township. Stayner. Stirling.	Feb. 1931 Aug. 1917 Nov. 1916 Oct. 1913 Jan. 1920	\$ c. 3,249.98 898.42 4,711.10 2,993.68 1,508.98	\$ c.		
Stoney Creek Stouffville Stratford Strathroy. Streetsville	Nov. 1946 Sept. 1923 Jan. 1911 Dec. 1914 Dec. 1934	2,845.40 23,092.32 6,716.94 1,357.25			
Sunderland	Nov. 1914 Aug. 1923 Oct. 1937 Feb. 1918 Nov. 1916	935.44 3,075.90 4,730.60 1,588.30 2,930.35			
Tecumseh Teeswater Thamesford. Thamesville Thedford.	Nov. 1922 Dec. 1920 Feb. 1914 Oct. 1915 May 1922	2,325.69 1,996.56 2,245.15 1,408.22 218.04			
Thornbury Thorndale Thornton. Thorold Tilbury.	Sept. 1944 Mar. 1914 Nov. 1918 Jan. 1921 April 1915	2,198.63 904.56 347.08 10,148.06 4,068.43			
Tillsonburg Toronto Toronto Township Tottenham Trafalgar Township.	Aug. 1911 June 1911 Aug. 1913 Oct. 1918 Nov. 1936	6,765.64 615,550.43 18,356.52 107.96 2,490.47			
Trenton. Tweed Uxbridge. Victoria Harbour. Walkerton.		14,972.28 3,067.91 5,298.62 638.39 8,833.52			

S.O.—CREDIT OR CHARGE

Eastern Ontario Divisions

power supplied to it to October 31, 1946, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Cash receipts and payments on account of such credits and charges, also adjustments made during the year		Net amount credited or charged upon annual adjustment in respect of power supplied in the year ended October 31, 1947		Accumulated amount standing as a credit or charge on October 31, 1947	
Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c. 3,249.98 898.42 4,711.10 2,993.68 1,508.98	\$ c' 3,761.61 1,058.00 3,658.20 3,567.09 1,668.53	\$ c.	\$ c. 3,761.61 1,058.00 3,658.20 3,567.09 1,668.53	\$ c.
	2,845.40 23,092.32 6,716.94 1,357.25	258.23 4,197.90 25,457.40 7,087.14 3,061.80		258.23 4,197.90 25,457.40 7,087.14 3,061.80	
	935.44 3,075.90 4,730.60 1,588.30 2,930.35	1,637.46 4,479.72 4,458.27 1,739.82 4,804.75		1,637.46 4,479.72 4,458.27 1,739.82 4,804.75	
	2,325.69 1,996.56 2,245.15 1,408.22 218.04	3,290.90 2,922.78 2,812.31 1,742.21 317.85		3,290.90 2,922.78 2,812.31 1,742.21 317.85	
	2,198.63 904.56 347.08 10,148.06 4,068.43	3,620.67 1,331.25 439.56 12,084.85 6,526.53		3,620.67 1,331.25 439.56 12,084.85 6,526.53	
	6,765.74 615,550.43 18,356.52 107.96 2,490.47	9,150.88 595,923.77 24,412.37 506.31 3,563.95		9,150.88 595,923.77 24,412.37 506.31 3,563.95	
	14,972.28 3,067.91 5,298.62 638.39 8,833.52	16,360.93 3,844.26 6,293.47 849.09 9,778.79		16,360.93 3,844.26 6,293.47 849.09 9,778.79	

Embracing Niagara, Georgian Bay and

Statement showing the net Credit or Charge to each Municipality in respect of and adjustments made during the year. Also the net amount Credited ended October 31, 1947, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1946	
		Credit	Charge
Wallaceburg	Feb. 1915 June 1921 Oct. 1923 Nov. 1911 April 1915	\$ c. 27,738.73 324.70 247.43 1,061.71 2,140.46	8 c.
Waterloo	Dec. 1910 Sept. 1917 Dec. 1914 Sept. 1917 Nov. 1916	15,770.52 3,456.84 1,239.96 5,621.85 822.33	
Wellington West Lorne Weston Westport Wheatley	April 1919 Jan. 1917 Aug. 1911 Nov. 1931 Feb. 1924	2,320.01 2,952.92 12,552.07 387.58 1,366.12	,
Whitby. Wiarton. Williamsburg Winchester. Windermere.	Jan. 1926 May 1931 April 1915 Jan. 1914 June 1930	6,458.82 4,147.37 708.13 2,246.02	
Windsor. Wingham. Woodbridge Woodstock Woodville	Oct. 1914 Dec. 1920 Dec. 1914 Jan. 1911 Nov. 1914	89,084.72 10,569.52 4,274.46 30,349.53 881.77	
Wyoming York Township. Zurich Ontario Central Reformatory Toronto Transportation Commission	Nov. 1916 Jan. 1941 Sept. 1917 Sept. 1913 Jan. 1927	1,217.19 76,866.83 1,052.14 1,544.36 5,574.02	
		2,794,887.84	

SYSTEM

S.O.—CREDIT OR CHARGE

Accumulated amount

Eastern Ontario Divisions

Cash receipts and payments

power supplied to it to October 31, 1946, the cash receipts and payments thereon or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1947

Net amount credited or charged

on account of such credits and charges, also adjustments made during the year		upon annual adjustment in respect of power supplied in the year ended October 31, 1947		standing as a credit or charge on October 31, 1947	
Credited	Charged	Credited Charged		Credit	Charge
\$ c.	8 c. 27,738.73 324.70 247.43 1,061.71 2,140.46	S c. 41,491.70 604.97 477.61 1,163.56 2,566.46	\$ c.	S c. 41,491.70 604.97 477.61 1.163.56 2,566.46	S c.
	15,770.52 3,456.84 1,239.96 5,621.85 822.33	18,498.84 3,094.52 1,507.27 9,595.68 1,162.39		18,498.84 3,094.52 1,507.27 9,595.68 1,162.39	
	2,320.01 2,952.92 12,552.07 387.58 1,366.12	2,880.67 4,467.00 13,130.14 830.94 2,355.69		2,880.67 4,467.00 13,130.14 830.94 2,355.69	
		8,023.80 5,331.42 800.93 3,360.88 344.20		8,023.80 5.331.42 800.93 3,360.88 344.20	
	89,084.72 10,569.52 4,274.46 30,349.53 881.77	124,463.35 13,237.96 4,900.12 34,548.25 1,388.45		124,463.35 13,237.96 4,900.12 34.548.25 1,388.45	
	1,217.19 76,866.83 1,052.14 1,544.36 5.574.02	1,459.43 80,386.98 1,237.97 1,659.60 4,431.55		1,459.43 80,386.98 1,237.97 1,659.60 4,431.55	
•••••	2,794,887.84	3,115,403.12		3,115,403.12	

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

SINKING FUND

Municipality	Period of years ended Oct. 31, 1947	Amount	Municipality	Period of years ended Oct. 31, 1947	Amount
Acton. Agincourt Ailsa Craig Alexandria Alliston	30 years 24 " 27 " 23 " 24 "	19,749.92 24,361.17 47,911.47	Brigden Brighton Brockville Brussels Burford	25 years 18 " 27 " 24 " 27 "	\$ c. 18,919.42 23,057.38 314,449.07 22,213.79 23,648.68
Almonte	3 " 24 " 24 " 24 " 23 "	31,583.37	BurlingtonCaledonia	26 " 3 " 30 " 23 " 28 "	8,797.78 11,543.31 38,748.73 4,867.45 25,379.98
Arkona Arnprior. Arthur. Athens. Aurora	21 " .9 " 26 " 19 " 5 "	25,270.12 31,449.54 11,568.24	Cardinal Carleton Place Cayuga Chatham. Chatsworth.	18 " 23 " 23 " 27 " 27 "	12,969.31 135,422.22 17,339.13 676,500.99 8,093.73
Aylmer Ayr Baden Barrie Bath	24 " 28 " 30 " 29 " 16 "	25,608.03 53,822.49 279,575.96	Chesley	26 " 28 " 26 " 24 " 28 "	60,815.83 41,961.31 28,704.69 12,935.69 78,655.35
Beachville	30 " 11 " 28 " 24 " 25 "	14,149.23 33,491.76 24,978.18	Cobden	12 " 16 " 15 " 29 "	4,793.08 98,630.71 9,840.33 23,667.62 231,845.10
Belleville Blenheim. Bloomfield. Blyth. Bobcaygeon.	27 "	64,233.53 11,284.05	Comber	27 " 24 " 21 " 24 " 28 "	29,029.73 9,400.51 8,127.38 9,419.01 19,630.15
Bolton Bothwell Bowmanville Bradford Braeside	27 " 27 " 16 " 24 " 3 "	29,010.73 27,081.67 128,005.99 30,842.33 1,386.53	Deseronto	25 " 27 " 10 " 17 " 28 "	14,268.04 6,002.12 17,695.33 14,250.38 12,799.33
Brampton Brantford Brantford Township Brechin Bridgeport	31 " 28 " 24 " 28 " 20 "	69,915.63 11,723.09	Drayton. Dresden. Drumbo. Dublin. Dundalk	24 " 27 " 28 " 25 " 27 "	21,526.04 54,240.55 11,310.54 9,078.14 21,876.97

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

SINKING FUND

	 		1		,
Municipality	Period of years ended Oct. 31, 1947	Amount	Municipality Period oversend Oct.31,1		Amount
Dundas Dunnville Durham Dutton East York Township.	31 years 25 " 27 " 27 " 23 "	110,354.02 50,599.45 32,490.54	Holstein. Humberstone. Huntsville. Ingersoll Iroquois.	26 years 24 " 26 " 31 " 8 "	\$ c. 4,321.95 39,148.35 103,813.60 311,087.71 4,905.38
Elmira Elmvale Elmwood Elora Embro	29 " 29 " 24 " 28 " 28 "	7,380.65 60,570.78	Jarvis Kemptville Kincardine. Kingston Kingsville	24 " 23 " 23 " 10 " 24 "	25,487.13 35,304.38 74,796.64 312,612.87 70,627.84
Erieau	24 " 23 " 24 " 25 " 26 "	2,853.53 55,809.93 452,167.65	Kirkfield Kitchener Lakefield Lambeth Lanark	23 " 31 " 19 " 27 " 23 "	5,195.22 2,247,892.21 24,109.22 16,343.65 10,861.01
Fergus. Finch. Flesherton. Fonthill. Forest.	28 " 20 " 27 " 22 " 25 "	8,103.26 10,523.00 12,362.34	Lancaster. LaSalle. Leamington Lindsay. Listowel.	23 " 22 " 24 " 19 " 26 "	9,689.38 25,251.58 160,883.15 190,372.24 136,702.81
Forest Hill	31 " 29 " 24 "	942,973.46 181,419.97 33,957.98	London	31 " 23 " 17 " 27 " 23 "	4,047,198.84 38,822.19 60,080.67 29,263.73 35,885.27
Grand Valley	26 " 27 " 6 "	12,767.26 59,111.67 14,014.26	Lynden Madoc Markdale Markham Marmora	27 " 18 " 26 " 24 " 19 "	20,306.91 14,966.87 17,553.68 33,906.03 10,384.44
Hagersville Hamilton Hanover Harriston Harrow	31 " 26 " 26 "	9,028,415.42 135,532.23 57,417.79	Martintown. Maxville Meaford. Merlin Merritton	23 "	3,611.21 15,673.40 55,801.04 18,219.70 360,278.34
Hastings. Havelock Hensall. Hespeler. Highgate	19 " 26 " 31 "	20,074.22 28,147.31 207.118.56	Midland. Mildmay. Millbrook Milton Milverton.	29 " 15 " 9 " 29 " 26 "	366,505.82 7,578.82 2,977.02 163,837.22 66,630.06
	1		II .		1

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

SINKING FUND

Municipality	Period of years ended Oct. 31, 1947	Amount	Municipality	Period of years ended Oct. 31, 1947	Amount
Mimico Mitchell Moorefield Morrisburg Mount Brydges	30 years 31 " 24 " 10 " 27 "	74,905.74 10,346.83 7,320.59	Port Dover	24 years 17 " 18 " 28 " 23 "	\$ c. 46,291.27 27,304.35 117,855.66 10,434.67 30,992.49
Mount Forest Napanee Neustadt Newdury Newcastle	27 " 18 " 24 " 24 " 11 "	78,007,66 9,669.00 7,016.87	Port Rowan Port Stanley Prescott Preston Priceville	21 " 30 " 28 " 31 " 23 "	11,952.27 68,816.48 87,487.17 418,846.43 1,573.41
New Hamburg Newmarket New Toronto Niagara Falls Niagara-on-the-Lake.	31 " 3 " 28 " 27 " 24 "	13,205.31 811,692.55 909,905.32	Princeton	28 " 24 " 3 " 20 " 23 "	16,266.21 11,403.39 4,194.20 5,874.12 36,699.71
North York Township Norwich Norwood Oil Springs Omemee	24 " 30 " 19 " 24 " 8 "	58,552.94 10,891.14 37,828.28	Ridgetown Ripley Riverside Rockwood Rodney	27 " 23 " 25 " 29 " 25 "	69,921.13 13,855.68 136,818.60 18,090.48 22,285.60
Orangeville Orono Oshawa Ottawa Otterville.	26 " 9 " 19 " 32 " 26 "	488,370.95	Rosseau Russell. St. Catharines. St. Clair Beach. St. George.	17 " 22 " 26 " 25 " 27 "	6,540,72 9,443,14 1,222,117,46 11,509,81 22,823,69
Owen Sound	27 " 23 " 26 " 28 " 24 "	18,379.09 71,821.52 185,353.02	St. Jacobs St. Marys St. Thomas Sarnia. Scarborough Twp.	25 " 31 " 31 " 26 " 24 "	28,170,54 210,484,12 806,266,59 1,020,788,65 345,364,01
Penetanguishene Perth Peterborough Petrolia Picton	31 " 23 " 19 " 26 " 19 "	162,349.13	Seaforth	31 " 26 " 27 " 24 " 7 "	99,440.64 31,697.83 193,853.26 178,792.51 4,375.77
Plattsville Point Edward Port Colborne Port Credit Port Dalhousie	28 " 25 " 26 " 30 " 26 "	113,336.96 167,852.26 71,772.32	SouthamptonSpringfieldStamford TownshipStaynerStirling	17 " 25 " 26 " 29 " 18 "	25,914.51 14,181.69 169,220.95 28,302.18 16,299.02

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

SINKING FUND

Municipality	Period of years ended Oct. 31, 1947	Amount	Municipality	Period of years ended Oct. 31, 1947	Amount
Stoney Creek. Stouffville. Stratford. Strathroy. Streetsville.	1 year 24 years 31 " 28 " 13 "	29,971.35 940,625.87 147,704.70	Waterloo Watford. Waubaushene. Welland. Wellesley.	31 years 25 " 28 " 25 " 26 "	\$ c. 451,770.40 40,749.70 8,122.04 559,409.73 24,734.58
SunderlandSuttonSwanseaTaraTavistock.	28 " 24 " 22 " 24 " 26 "	29,869.91 160,796.14 14,262.96	Wellington. West Lorne. Weston. Westport. Wheatley.	19 " 26 " 31 " 16 " 24 "	18,263.18 39,458.41 399,026.11 9,852.36 24,189.26
Tecumseh. Teeswater Thamesford. Thamesville. Thedford.	25 " 23 " 28 " 27 " 24 "	20,684.21 28,042.53 28,143.65	Whitby Wiarton Williamsburg Winchester Windermere	19 " 17 " 27 " 28 " 18 "	92,446,43 27,776,77 10,149,11 32,817,10 4,613,32
Thornbury Thorndale Thornton Thorold Tilbury	3 " 28 " 24 " 25 " 27 "	13,719.65 5,476.90 178,745.99	Windsor. Wingham. Woodbridge. Woodstock. Woodville.	28 " 23 " 28 " 31 " 28 "	5,021,581.09 66,858.79 55,063.50 682,432.10 15,560.60
Tillsonburg Toronto Toronto Township Tottenham Trafalgar Township	31 " 31 " 3 29 " 24 " 11 "	51,100,927.95 213,503.62 17,969.59	Wyoming York Township Zurich Ontario Central Reformatory	26 " 27 " 25 " 13 "	13,396.41 1,289,089.50 21,366.73 12,615.05
Trenton	16 " 17 " 23 " 28 " 17 "	174,035.79 19,247.69	Toronto Transporta- tion Commission Sandwich, Windsor & Amherstburg Rly	26 "	246,905.75
Wallaceburg	27 " 24 " 19 " 31 " 27 "	333,678.81 6,072.49 6,900.41 34,802.03 52,169.02	Total Municipal Total—Rural I trict Total—Rural L	Power Dis- ines	8,642,016.19 829.71
		55,100.05			

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

SOUTHERN ONTARIO SYSTEM

Embracing Niagara, Georgian Bay and Eastern Ontario Divisions

RURAL POWER DISTRICT

Operating Account for the year ended October 31, 1947

Revenue from customers in rural power district	\$8,166,759.52
Cost of power as provided to be paid under Power Commission Act. \$3,885,854.46	3
Cost of operation, maintenance and administration	5
Interest (including interest on sinking fund, renewals, and other	
reserves and after deducting interest earned on investments) 1,049,935.77	7
Provision for renewals	3
Provision for sinking fund. 263,939.68	3
	- 8,028,952.86
Excess of revenue over operating cost for the year	\$137,806.66

Rates Suspense Account—as at October 31, 1947

Balance at credit November 1, 1946	\$3,339,199.65
Interest on account balances	
Operating balance for the year	
Adjustments made during the year	\$1,696.67
Balance at credit October 31, 1947	. 3,608,820.17

\$3,610,516.84 \$3,610,516.84

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

SOUTHERN ONTARIO SYSTEM-Rural Lines

Georgian Bay Division

Statement showing Interest, Renewals, Contingencies and Obsolescence and Sinking Fund charged by the Commission to the Municipality that operates the rural line for the year ended October 31, 1947

Operated by	Capital cost	Interest	Provision for renewals	Provision for con- tingencies and ob- solescence	Provision for sinking fund	Total interest, renewals, contingencies and obsolescence, and sinking fund charged
Brechin	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
	922.02	48.22	18.44	9.22	16.60	92.48

Statement showing the total Sinking Fund in respect of the line, together with interest allowed thereon to October 31, 1947

Operated by	Period of years ended October 31, 1947	Amount
Brechin	29 years	\$ c. 829.71

THUNDER BAY

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount billed by the Commission against or charged to each Municipality in respect of power

	Interim rates per		Average horse-	Share of operating			
Municipality	horsepower collected by Com- mission during year	epower lected Share of Com- capital cost of system		Cost of power purchased	Operating main-tenance and adminis-	Interest	
	To October 31, 1947		tion for power factor	parended	trative expenses		
Fort William Nipigon Township Port Arthur	\$ c. 20.00 28.00 20.00	\$ c. 2,780,951,32 67,733,31 3,658,535,18	381.0	35 52	70,555.76 1,547.23	112,628.85	
Totals—Municipalities Totals—Rural power district Totals—Companies.		6,507,219 81 221,216.30 9,917,994.00	1,248.3	116.39	164,827.61 4,946.70 265,031.98	9.025.29	
Totals—Rainy River district (N.O.P.)		2,257,108.16 2,032,610.43 322,668.26	9.963.4		64,576.64	83,758.61	
Non-operating capital		21,258,816.96 7,420,144.85					
Grand totals		28,678,961 81	142,301.2	18,895.90	577,116.82	864,379.17	

THUNDER BAY

Statement showing the net Credit or Charge to each Municipality in respect of power ments made during the year; also the net amount Credited or Charged to each and the accumulated amount standing as a Credit

Municipality	Date commenced operating	Net credit or charge at October 31, 1946		
		Credit	Charge	
Fort William Nipigon Township Port Arthur	Oct. 1926 Jan. 1925 Dec. 1910	\$ c. 24,515.88 1,666.50 33,627.27	\$ c.	
Totals		59,809.65		

SYSTEM

T.B.—COST OF POWER

Municipality as the Cost—under Power Commission Act—of Power supplied to each Municipality at interim rates, and the balance credited supplied to it in the year ended October 31, 1947

Provision for renewals	Provision for contingencies and obsolescence	Provision for stabiliza- tion of rates	Provision for sinking fund	Cost in excess of revenue from power sold to private companies	Amount chargeable to each municipality in respect of power supplied to it in the year	Amount billed against each munici- pality at interim rates	Balance credited to each munici- pality
\$ c. 24,576.16 681 41 32,262.02	93.437.86 1,981.34		\$ c. 28,866.96 712.45 37,974.82	10,853.03 223.34	7,931.47	\$ c. 370,294.84 10,667.53 488,652.66	27,649.94 2,733.06
2,163.04	218,666.35 6,468.47 344,894.45		2,301.45	25,398,39 731,73 (26,130,12)	25,753.07	25,753.07	
18,855.26 8,963.10 878.11	61,506.54	42,332.95 11,901.02	12,356.30		203,006.47 274,423.10 63,900.45	274,423.10	
171,924.83	656,070.23	54,233.97	209,613.89		2,552,234.81	2,620,329.52	68,094.71

SYSTEM

T.B.—CREDIT OR CHARGE

supplied to it to October 31, 1946, the cash receipts and payments thereon, and adjust-Municipality in respect of power supplied in the year ended October 31, 1947, or Charge to each Municipality at October 31, 1947

Cash receipts and payments on account of such credits and charges, also adjustments made during the year		Net amount credited or charged in respect of power supplied in the year ended October 31, 1947		Accumulated amount standing as a credit or charge on October 31, 1947	
Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c. 24,515.88 1,666.50 33,627.27	\$ c. 27,649.94 2,733.06 37,711.71	\$ c.	\$ c. 27,649.94 2,733.06 37,711.71 68,094.71	\$ c.
************	59,809.65	68,094.71		68,094.71	

THUNDER BAY SYSTEM

SINKING FUND

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder, as part of the cost of power delivered thereto, together with the proportionate share of other sinking funds provided out of other revenues of the system, and interest allowed thereon to October 31, 1947

Municipality	Period of years ended October 31, 1947	Amount
Fort William Nipigon Township. Port Arthur.	21 years 21 years 21 years	\$ c. 1,445,625.60 16,361.23 3,646,979.62
Total—Municipalities Total—Rural power district.		5,108,966.45 75,733.39
Grand total		5,184,699.84

THUNDER BAY SYSTEM—RURAL POWER DISTRICT

Operating Account for year ended October 31, 1947

Revenue from customers in rural power district		\$72,928.59
Cost of power as provided to be paid under Power Commission Act	\$25,753.07	
Cost of operation, maintenance and administration	23,738.34	
Interest (including interest on sinking fund, renewals, and other reserves		
and after deducting interest earned on investments)	11,906.28	
Provision for renewals	5,766.58	
Provision for sinking fund	3,036.10	
		70,200.37
	-	
Excess of revenue over operating cost for the year		\$2,728.22
	=	

Rates Suspense Account as at October 31, 1947

Balance at debit, November 1, 1946	
Operating balance for the year	

\$24,285.09 \$24,285.09

(Operated by The Hydro-Electric Power Commission of Ontario)

FINANCIAL ACCOUNTS

For the year ended October 31, 1947

Relating to Power Properties which are held and operated by the Commission in trust for the Province of Ontario, and which are situated in the following Northern Districts:

Abitibi Timiskaming Sudbury Nipissing
Patricia Rainy River Rural Power

STATEMENTS

Balance Sheet as at October 31, 1947

Operating Account for the year ended October 31, 1947

Schedules supporting the Balance Sheet as at October 31, 1947

Fixed Assets—By Districts

Fixed Assets—Changes during year

Renewals Reserve

Contingencies and Obsolescence Reserve

Sinking Fund Reserve

THE HYDRO-ELECTRIC POWER

NORTHERN ONTARIO

Held and operated by The Hydro-Electric Power Commission

BALANCE SHEET AS AT

· ASSETS		
FIXED ASSETS:		
Abitibi district\$	29.451.677.11	
Timiskaming district	14,079,542.22	
Sudbury district	5,089,890.10	
Nipissing district	1,498,687.43	
Patricia district	6,447,581.04	
Rainy River district.	1,563,916.36	
Rural Power district.	1,799,030,52	
Rufal Fower district	1,799,030.52	
	59.930.324.78	
	39,930,324.78	
Less grants-in-aid of construction:	700 000 00	
Province of Ontario—for rural power district		EO 100 00E 4E
Cypppy Access		59,162,285.45
CURRENT ASSETS:	01.007.00	
Employees' working funds\$ The Hydro-Electric Power Commission of Ontario—current	21,295.00	
The Hydro-Electric Power Commission of Ontario—current		
account with Southern Ontario and Thunder Bay		
systems	1,077,236.09	
Sundry accounts receivable.	67,278.14	
Power accounts receivable	796,825.61	
Interest accrued	16,984.38	
Consumers' deposits—securities:		
Bonds at par value\$ 1,290,050.00		
Bonds at par value . \$ 1,290,050.00 Stocks at market value . 260,643.75		
	1,550,693.75	
Prepayments	49,921.46	
		3,580,234.43
Inventories:		-,,
Maintenance materials and supplies\$	447,267.53	
Maintenance tools and equipment	198,618.09	
-		645,885.62
DEFERRED CHARGES AND SUNDRY ASSETS:		010,000.0=
Work in progress—deferred work orders\$	399,598.20	
Unamortized discount on debentures	139.714.93	
-	100,111.00	539,313.13
INVESTMENTS (Including sinking fund investments of \$1,533,654.3	(6)	000,010.10
Province of Ontario and Dominion of Canada bonds at amort	ized cost	1,547,382.74
2 10 1 more of contacts and 20 minor of Canada boilds at affort		1,011,002.11
	\$	65,475,101.37

COMMISSION OF ONTARIO

PROPERTIES

of Ontario in trust for the Province of Ontario

OCTOBER 31, 1947

LIABILITIES AND RESERVES

LONG TERM LIABILITIES	(at par of exchange):
Funded debt in the	hands of the public

Power againsts andit balances

runded debt in the hands of the public	5 30,430,000.00
Advances from the Province of Ontario for capital purposes.	5,344,938.35
Purchase agreements	5,367.00
	\$ 35,800,305.35

CURRENT LIABILITIES:

Tower accounts—credit balances	m,340.1 m	
Consumers' deposits	1,752,778.35	
Denbenture interest accrued	184,036.90	
Miscellaneous accruals	18,602.17	
		1,958,358.14

RESERVES:

Renewals	50.94
Contingencies and obsolescence	85.84
Miscellaneous	.24.94
	9,943,261.72

\$ 30.450,000,00

2.040.72

SINKING FUND RESERVES:

Represented by:

Funded debt and provincial advances retired through sinking		
funds\$	16,222,173	. 12
Sinking fund investments		

17,755,827,48 17,348.68 Surplus....

\$ 65,475,101.37

Auditors' Report

We have made an examination of the balance sheet of the Northern Ontario Properties, held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario, as at October 31, 1947 and of the attached statements of operations and surplus for the year ended on that date. In connection therewith we reviewed the system of internal control and the accounting procedures of the Commission, and, without making a detailed audit of the transactions, have examined or tested accounting records of the Commission and other supporting evidence by methods and to the extent we deemed appropriate.

We report that in our opinion the foregoing balance sheet and related statements of operations and surplus (as more fully reported upon by us to the Lieutenant-Governor in Council) have been drawn up so as to exhibit a true and correct view of the state of the affairs of the Northern Ontario Properties operated by the Commission at October 31, 1947 and the results of their operation for the year ended on that date, according to the best of our information and the explanations given us and as shown by the books.

Toronto, Canada, July 8, 1948.

CLARKSON, GORDON & CO. Chartered Accountants. REVENUE:

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

NORTHERN ONTARIO PROPERTIES

Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario

STATEMENT OF OPERATIONS for the year ended October 31, 1947

Power sold to private companies and other customers	\$6,786,115.01	
Cost of Operation:		
Power purchased Operating, maintenance and administrative expenses Interest (including interest on sinking fund, renewals, and other	\$241,450.95 2,655,513.83	
reserves and after deducting interest earned on investments) Provision for renewals	1,884,792.33 493,437.57 150,000.00	
Provision for sinking fund	1,567,656.21	6,992,850.89
Net loss on operations for year	=	\$206,735.88
Statement of Surplus for the year ended Oc	tober 31, 1947	7
Balance at credit November 1, 1946	\$224,084.56 206,735.88	
Balance at credit October 31, 1947		\$17,348.68

Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario

FIXED ASSETS—October 31, 1947

		In se	ervice	
Property	Under construction	Non- depreciable	Depreciable	Total
ABITIBI DISTRICT: Power Plants:	\$ c.	\$ c.	\$ c.	\$ c.
Abitibi river: Abitibi CanyonFrederick House dam Dasserat Lake diversion Watabeag Lake dam	15,139.82 41,529.79		730,512.13 34,471.80	18,993,926.01 896,555.78 38,692.69 71,549.31
	56,669.61	5,666,581.01	14,277,473.17	20,000,723.79
Transformer Stations. Transmission Lines. Local Systems.	188,553.33 131,020.99 360.39	863,194.74		2,498,918.07 6,853,135.20 98,900.05
	376,604.32	6,745,632.44	22,329,440.35	29,451,677.11
TIMISKAMING DISTRICT: Power Plants: Matabitchuan river: Matabitchuan. Storage dams. Montreal river: Upper Notch. Fountain Falls. Ragged Chute. Hound Chute. Indian Chute. Storage dams. Mattagami river: Sandy Falls. Wawaitin. Lower Sturgeon. Storage dams. Intangible.	49.80 3,246.41	4,860.00 3,240.00 53,250.00	673,314.19 134,000.00 1,378,172.00 349,751.00 959,172.00 451,995.69 430,657.41 165,000.00 553,370.51 775,385.60 776,572.56 161,056.00	682,789.47 134,000.00 1,460,641.98 349,800.80 959,172.00 455,285.49 433,903.82 165,000.00 555,852.84 788,069.87 831,266.98 177,326.47 925,651.14
	118,128.76	992,185.14	6,808,446.96	7,918,760.86
Transformer Stations	88,367.38 1,160,998.13 94.12	223,258.00	1,157,361.04 1,898,768.87 178,516.34 1,453,417.48	1,245,728.42 3,283,025.00 178.610.46 1,453,417.48
	1,367,588.39	1,215,443.14	11,496,510.69	14,079,542.22

Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario

FIXED ASSETS—October 31, 1947

		In se	rvice		
Property	Under Construction	Non- depreciable	Depreciable	Total	
SUDBURY DISTRICT: Power Plants: Wanapitei river:	\$ c.	\$ c.	\$ c.	\$ c.	
Coniston McVittie Stinson.		13,597.20 13,323.00 33,000.00	393,696.61	756,959.31 407,019.61 698,503.57	
Storage dam		25.00 830,514.53	194,870.00	194,895.00 830,514.53	
Crystal Falls and Storage dams Mississagi river:	17,775.11	44,531.27	938,469.02	1,000,775.40	
Tunnel	280,085.57			280,085.57	
	305,177.55				
Transformer Stations			98,408.12 480,582.62	422,761.95 498,375.16	
	647,323.92	934,991.00	3,507,575.18	5,089,890.10	
NIPISSING DISTRICT: Power Plants: South river: Nipissing Bingham Chute Elliot Chute Storage dams Miscellaneous Intangible		12,105.05 119,307.09	244,795.29 334,834.33 76,122.70 2,678.64		
		211,980.08	900,990.48	1,112,970.56	
Transformer Stations	776.40	2,219.65	66,370.44 275,666.66 40,683.72		
	776.40	214,199.73	1,283,711.30	1,498,687.43	
PATRICIA DISTRICT: Power Plants: English river:					
Ear Falls					
Rat Rapids	118,220.96				
Transferment Chris	919,766.78				
Transformer Stations. Transmission Lines. Local Systems.	1,015,554.88		187,993.33 1,848,003.37 54,638.76	2,863,558.25	
	1,947,337.97	39,864.19	4,460,378.88	6,447,581.04	

Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario

FIXED ASSETS—October 31, 1947

		In se		
Property	Under Construction	Non- depreciable	Depreciable	Total
RAINY RIVER DISTRICT: Transformer Stations Transmission Lines Local System	5,903.74	\$ c. 349,669.88	\$ c. 163,993.04 1,009,637.52 34,311.99	\$ c. 164,393.23 1,365,211.14 34,311.99
	6,303.93	349,669.88	1,207,942.55	1,563,916.36
NORTHERN ONTARIO PROPERTIES RURAL POWER DISTRICT: Distribution System: H.E.P.C. investment Government grants Power Plant (Manitoulin) Transformer station (Manitoulin)	33.73 33.73 69,114.80	43,396.98	842,231.55 768,005.60 65,393.90 10,820.23	842,265.28 768,039.33 177,905.68 10,820.23
	69,182.26	43,396.98	1,686,451.28	1,799,030.52

FIXED ASSETS—Summary, October 31, 1947

		In se	rvice	
Property	Under Construction	Non- depreciable	Depreciable	Total
Abitibi district. Timiskaming district. Sudbury district. Nipissing district. Patricia district. Rainy River district. Rural power district.	\$ c. 376,604.32 1,367,588.39 647,323.92 776.40 1,947,337.97 6,303.93 69,182.26	1,215,443.14 934,991.00 214,199.73 39,864.19 349,669.88	\$ c. 22,329,440.35 11,496,510.69 3,507,575.18 1,283,711.30 4,460,378.88 1,207,942.55 1,686,451.28	14,079,542.22 5,089,890.10 1,498,687.43 6,447,581.04 1,563,916.36 1,799,030.52
Less grants-in-aid of constructio	768,039.33 \$59,162,285.45			

NORTHERN ONTARIO CHANGES IN FIXED ASSETS—

Class of asset	Balance at beginning of year	Expenditure during year
Power Plants: Abitibi district	\$ c. 19,980,055.70 7,660,249.27 3,850,477.05 1,113,029.82 2,542,186.39	\$ c. 20,973.36 208,387.60 318,275.94 787,188.00
3	35,145,998.23	1,334,824.90
TRANSFORMER STATIONS: Abitibi district. Timiskaming district. Sudbury district. Nipissing district. Patricia district Rainy River district	2,330,417.40 1,218,117.94 77,061.22 65,676.06 188,752.28 148,661.94	169,514.67 83,490.92 346,482.73 870.38 12,922.22 15,731.29
	4,028,686.84	629,012.21
TRANSMISSION LINES: Abitibi district. Timiskaming district. Sudbury district. Nipissing district. Patricia district. Rainy River district.	6,582,625.32 2,277,497.80 458,444.56 261,646.08 2,098,557.87 1,361,411.70	114,119.08 1,219,974.20 40,190.60 25,538.13 767,434.33 3,799.44
	13,040,183.33	2,171,055.78
LOCAL SYSTEMS: Abitibi district. Timiskaming district. Nipissing district. Patricia district. Rainy River district.	95,492.98 1,369,102.06 38,743.92 56,186.00 32,267.57	3.661.07 93.885.04 4,159.45 2,627.90 2,075.42
	1,591,792.53	106,408.88
OFFICE AND SERVICE BUILDINGS: Timiskaming district	153,967.79	642.67
RURAL POWER DISTRICT: H-E.P.C. Investment Government grants Power Development (Manitoulin) Transformer Station	663,049.94 588,909.91 10,820.23	191,339.47 191,241.56 177,755.68
	1,262,780.08	560,336.71
	55,223,408.80	4,802,281.15
Less grants in aid of construction— Province of Ontario for rural power district.	588,909.91	179,129.42
2 To the of official for fural power district.	000,000.01	4,623,151.73

PROPERTIES

During Year Ended October 31, 1947

	Retire	ements	
Adjustments	Values recovered (stores, sales and salvage)	Charged to reserves for renewals and contingencies	Balance at end of year
\$ c. 53,383.28	8 c. 305.27 2,818.30	\$ c. 440.99 59.26	S c. 20,000,723.79 7,918,760.86 4,168,752.99 1,112,970.56 3,329,374.39
53,383.28	3,123.57	500.25	36,530,582.59
5,420.00 29,330.00 150.00	22,926 .53 6 .90 5,592 .00	6,434.00 3,623.91 775.10 26.00 190.00	2,498,918.07 1,245,728.42 422,761.95 66,370.44 195,892.50 164.393.23
24,060.00	28,525.43	11,049.01	4,594.064.61
156,468.00 210,973.28 260.00	500.00 434.40	77.20 2,973.72 10,741.15 1,999.55	6,853,135.20 3,283,025.00 498,375.16 276,443.06 2,863.558.25 1,365,211.14
54,765.28	934.40	15.791.62	15,139,747.81
1,032.00		254.00 10,601.62 58.00 31.00	98,900.05 1,453,417.48 42,903.37 58,755.90 34,311.99
1,032.00		10,944.62	1,688,288.79
24,000.00			178,610.46
130.00 130.00 150.00	12,073.13 12,073.14	181.00 169.00	842,265.28 768,039.33 177,905.68 10,820.23
410.00	24,146.27	350.00	1.799,030.52
	56,729.67	38,635.50	59,930,324.78
			768,039.33
	56.729.67	38,635.50	59,162,285.45
	Renewals	4,538.46 34,097.04	
		38,635.50	

Held and operated by The Hydro-Electric Power Commission of Ontario in trust for the Province of Ontario

RENEWALS RESERVE—October 31, 1947

Balance at November 1, 1946 Interest at 4% on reserve balance Provision in the year	212,008.91 \$493,437.57	\$5,300,222.47 705,446.48
I	-	\$6,005,668.95
Less: Expenditures in the year for renewals	\$385.85	
year	320.42	
etc	4,538.46 173.28	5,418.01
Balance at October 31, 1947	-	\$6,000,250.94
CONTINGENCIES AND OBSOLESCENCE RESERVE-	-October 3	1, 1947
Balance at November 1, 1946 Interest at 4% on reserve balance Provision in the year Excess renewals provision accumulated against assets retired—	138,218.28 150,000.00	\$3,401,620.74
transferred from renewals reserve	173.28 2,006.98	290,398.54
Less:		\$3,692,019.28
Contingencies met with during the year Excess of fixed asset retirements over accumulated renewals	\$42,036.40	
provision	34,097.04	76,133.44
Balance at October 31, 1947	- = =	\$3,615,885.84
SINKING FUND RESERVE-October 31,	1947	
Balance at November 1, 1946		\$15,582,042.94
Interest at 4% on reserve balance	606,128.33	2,173,784.54
Balance at October 31, 1947		\$17,755,827.48

SECTION X

MUNICIPAL ACCOUNTS

and

Statistical Data Relating to Hydro-Electric Distribution Systems
Operated by Individual Municipalities Served by
The Hydro-Electric Power Commission
of Ontario

The Municipal Accounts section of this report presents in summary, and individually, the results of the operation of the local electrical utilities in municipalities owning their own distributing systems and operating with energy supplied by or through The Hydro-Electric Power Commission.

Financial statements prepared from the books of these Hydro utilities are submitted herein to show how each has operated during the past year, and its financial status at the present time. Other tables give useful statistical information respecting average costs for the various classes of service and the rates in force.

The books of account of the electrical utilities in all municipalities which have contracted with The Hydro-Electric Power Commission of Ontario for a supply of power are kept in accordance with an accounting system designed by the Commission.

Periodical inspections are made of the books of all Hydro electrical utilities and local officials are assisted in the improvement of their office routine with a view of standardizing, as far as possible, the methods employed. In the majority of the smaller municipalities much of the book-keeping for the electrical utilities is performed by representatives of the municipal accounting department of the Commission as a measure of economy. This arrangement insures the correct application of the standard accounting system, with resultant uniformity in classification of revenues and expenditures; secures true reflections of the actual operating results for the year, and greatly enhances the comparative values of the reports.

The first financial statement in this section presents consolidated balance sheets for the past eight years. Similar data for earlier years since 1913 were published in the Report for 1943. This consolidated statement combines

the balance sheets of all local municipal Hydro utilities receiving power under cost contracts. It is worth noting that the total plant value has increased from \$10,081,469.16 in 1913 to \$117,369,150.63 in 1947, and the total assets from \$11,907,826.86 to \$246,877,540.05. The liabilities have not increased in the same proportion as the assets, rising from \$10,468,351.79 to a maximum of \$52,685,316.86 in 1932, and receding to \$14,232,033.22 in 1947. The reasons for this are the regular fulfilment of debt retirement schedules under serial debenture provisions or by maturity of sinking funds. and also the fact that much of the cost of the increasing plant value has been financed out of reserves and surplus without increasing the capital liabilities of the respective utilities. By this procedure the funds of the systems are used to best advantage. Examination of the results will also show that there is a steady decline in the percentage of net liabilities to total assets; being from 88.0 per cent in 1913 to 5.4 per cent in 1947. The equities in The Hydro-Electric Power Commission's systems automatically acquired through the inclusion of sinking funds as part of the cost of power are not taken into account in arriving at these percentages.

The second financial statement presents consolidated operating reports for the past eight years and combines the results from all local municipal Hydro utilities receiving power under cost contracts. After providing for every cost of operation and fixed charges, including the standard provision for depreciation, the combined operating reports show a net surplus of \$4,124,-872.85 for 1947. (See also diagrams in Foreword to Report.)

The five statements, "A" to "E", following the two consolidated reports show the financial status of each municipal utility and the results of operations, giving classified information respecting revenue, operating costs, number of consumers and consumption, cost of power to municipalities, power and lighting rates charged to consumers, etc. In statements "A" and "B", the municipalities are arranged alphabetically under each system; in statement "D" the municipalities are arranged in four groups—cities, surburban areas, towns and small municipalities; in statements "C" and "E" all municipalities are arranged alphabetically. (Statement "C" suspended, see below.)

Statement "A" presents the balance sheet of each electrical utility. The plant values are shown under the general subdivisions specified in the standard accounting system and the other items on the positive side of the ledger which are included in total assets are self-explanatory.

In conformity with a policy of service at cost to the customer, refunds by cash or credit are made during the year in many municipalities from surplus funds accrued to the credit of municipal services, such as street lighting, water works, sewage disposal, etc., and to individual customers. The total thus returned to customers during the year 1947 amounted in round figures to \$427,000.

The reserves for depreciation, and the acquired equity in The Hydro-Electric Power Commission's systems, are listed individually and totalled; and under the heading "surplus" are included not only the operating surplus but the accumulation of sinking fund applicable to debenture debt and also the amount of debentures already retired out of revenue.

The depreciation reserve now amounts to 36.2 per cent of the total depreciable plant, while the depreciation reserve and surplus combined have already reached the sum of \$140,282,967.15, being equal to 119.5 per cent of the total plant cost.

Statement "B" shows the detailed operating report for each municipal electrical utility. It gives annual revenues from the various classes of consumers; the items of expenditure which make up the total annual expenditure and the sums set aside for depreciation. The population served by each local utility and the number of consumers of each class are also shown.

The item "cost of power supplied by H-E.P.C." in this statement includes the debit or credit balances ascertained by the annual adjustment of the cost of power supplied to the municipalities by the Commission.*

Of the 304 municipal electrical utilities included in this statement, 297 received from consumers revenue sufficient to meet in full all operating expenses, interest, debt retirement instalments, and standard depreciation reserve allocation and to yield an aggregate net surplus of \$4,137,851.39 for the year; 6 were able to defray out of revenue all such charges except a portion of the standard depreciation allocation aggregating \$12,542.12, in the case of 1 utility the revenue was less than the total operating expenses, interest and debt retirement instalments by \$225.42.

Statement "C". Conditions respecting street lighting were not back to normal throughout 1947, the statement is therefore again omitted in this year's Report.

Statement "D" presents statistics relating to the supply of electrical energy to consumers in Ontario municipalities served by the Commission. It shows the revenue, kilowatt-hour consumption, number of consumers, average monthly consumption, average monthly bill and the net average cost per kilowatt-hour both for domestic and for commercial light service in each municipality. For power service this statement shows the revenue, the number of consumers and the average horsepower supplied by the municipal utility.† For further reference to this informative statement, consult the special introduction to it on page 320.

Statement "E" presents the cost per horsepower of the power provided for and delivered to the municipalities by the Commission, and the local rates to consumers in force in the respective municipalities, during the year 1947, for domestic service, for commercial light service and for power service.

^{*}In 1939 and 1940 a number of municipalities asked permission to take power cost adjustments into the following year, to facilitate the earlier closing of their books. On this account, from 1941 on, with few exceptions the Balance Sheet shows the previous year's equity in Hydro Commission properties; and the Cost of Power in the Operating Statement includes the previous year's adjustments.

[†]The statistics include retail power only. Wholesale industrial power as supplied by the Commission direct, is reported in Section IX.

CONSOLIDATED

Year	1940	1941	1942	
Number of municipalities included	295	296	297	
ASSETS Lands and buildings. Substation equipment Distribution system—overhead Distribution system—underground Line transformers Meters. Street lighting equipment—regular Street lighting equipment—ornamental. Miscellaneous construction expenses Steam or hydraulic plant. Old plant	\$ c. 11,218,258, 69 24,282,151, 78 24,653,458, 44 6,214,957, 69 11,030,643, 29 9,927,971, 40 2,879,996, 65 1,534,320, 08 4,341,259,94 498,575, 87 1,332,606, 12	\$ c. 11,488,173.96 24,896,262.26 25,228,363.52 6,391,399.25 11,817,440.89 10,644,655.81 2,940,055.38 1,540,369.82 4,366,893.41 445,118.58 1,329,860.41	\$ c. 11,546,286.55 25,359,352.47 25,572,132.86 6,446,133.75 12,209,624.79 10,938,305.73 2,928,896.30 1,543,717.00 4,091,006.92 422,172.72 1,028,830.05	
Total plant	97,914,199.95	101,088,593.29	102,086,459.14	
Bank and cash balance. Securities and investments. Accounts receivable. Inventories. Sinking fund on local debentures. Equity in H-E.P.C. systems. Other assets.	4,462,197.18 5,315,855.49 4,715,848.86 1,630,987.28 5,829,573.87 52,457,676.76 258,395.70	2,991,173.27 8,368,139.57 4,116,252.29 1,984,025.53 5,530,647.79 52,458,225.18 226,034.26	2,482,945.50 12,592,455.09 3,614,066.68 2,047,430.38 5,445,199.46 57,080,491.77 197,190.92	
Total assets	172,584,735.09	176,763,091.18	185,546,238.94	
LIABILITIES Debenture balance Accounts payable Bank overdraft Other liabilities	20,636,363.20 3,095,613.25 187,038.91 3,004,624.22	17,805,415.36 3,088,145.27 302,744.63 2,987,132.70	16,184,642.53 2,399,404.91 105,571.05 2,806,844.10	
Total liabilities	26,923,638.58	24,183,437.96	21,496,462.59	
RESERVES For equity in H-E.P.C. systems. For depreciation. Other reserves. Total reserves.	52,457,676.76 25,733,628.33 3,326,591.65 81,517,896.74	52,458,225,18 27,795,985,72 3,592,384,90 83,846,595,80	57,080,491.77 29,840,207.73 4,907,609.88 91,828,309.38	
Total reserves	01,517,090.74	00,040,090.00	91,020,309.38	
SURPLUS Debentures paid. Local sinking fund. Operating surplus.	37,245,922.84 5,829,573.87 21,067,703.06	39,943,340.75 5,530,647.79 23,259,068.88	41,183,741.27 5,445,199.46 25,592,526.24	
Total surplus	64,143,199.77	68,733,057.42	72,221,466.97	
Total liabilities, reserves and surplus	172,584,735.09	176,763,091.18	185,546,238.94	
Percentage of net debt to total assets	17.4	14.6	11.9	

BALANCE SHEET

1943	1944	1945	1946	1947
298	298	304 304		304
\$ c. 11,664,887.81 25,392,202.96 25,773,224.22 6,451,393.47 12,353,367.17 11,117,612.15 2,903,704.11 1,542,294.82 3,740,027.08 397,576.71 936,561.90	\$ c. 11,713,108.74 25,805,344.10 26,075,416.77 6,385,742.19 12,698,080.21 11,339,479.64 2,926,365.70 1,542,819.42 3,414,557.25 368,022.38 820,607.24	\$ c. 11,879,469,56 26,201,620,92 26,835,864,78 6,539,797,63 13,360,997,73 11,742,720,68 3,066,246,06 1,551,628,63 3,469,256,69 1,005,980,83 692,517,55	\$ c. 11,830,325,45 26,778,943,63 27,810,938,64 6,848,694,50 14,247,872,95 12,325,105,86 3,268,433,46 1,555,698,39 3,802,802,98 1,080,730,83 658,421,95	\$ C. 12,220,747.92 28,430,102.81 29,230,801.09 7,400,874.88 15,698,549.76 13,112,187.77 3,827,634.40 1,536,957.94 4,242,837.80 1,080,976.81 587,479.45
102,272,852.40	103,089,543.64	106,346,101.06	110,207,968.64	117,369,150.63
2,341,996.68 17,037,057.29 3,347,449.72 1,750,799.42 5,028,551.56 62,031,673.13 537,366.80	1,947,073.36 21,245,620.67 3,710,514.76 1,622,866.57 4,880,499.77 69,486,548.01 192,661.46	1,744,827.39 27,530,379.33 3,682,108.35 1,735,925.21 4,952,718.62 75,002,351.38 290,022.85	3,584,075.84 27,152,189.81 4,133,184.23 2,193,231.80 4,609,214.16 80,670,336.85 326,083.52	2,759,333.88 27,721,988.41 4,381,276.48 3,140,379.57 4,387,586.13 86,574,096.81 543,728.14
194,347,747.00	206,175,328.24	221,284,434.19	232,876,284.85	246,877,540.05
13,657,032.51 2,699,630.77 118,834.40 2,618,742.94	11,612,359.10 1,701,420.70 174,491.81 2,584,979.26	10,612,595.02 2,528,081.42 429,585.64 2,707,515.21	9,049,583.60 2,267,268.71 355,417.71 2,636,251.52	7,947,290.14 3,028,306.12 613,465.91 2,642,971.05
19,094,240.62	16,073,250.87	16,277,777.29	14,308,521.54	14,232,033.22
62,031,673.13 32,138,469.64 5,449,398.96	69,486,548.01 34,006,953.37 6,308,596.82	75,002,351.38 36,331,919.08 6,979,074.47	80,670,336.85 38,253,203.71 7,356,359.46	86,574,096.81 40,146,511.52 5,788,442.87
99,619,541.73	109,802,098.20	118,313,344.93	126,279,900.02	132,509,051.20
43,552,091.22 5,028,551.56 27,053,321.87	45,475,788.84 4,880,499.77 29,943,690.56	47,340,018.06 4,952,718.62 34,400,575.29	48,935,858.04 4,609,214.16 38,742,791.09	50,208,313.28 4,387,586.13 45,540,556.22
75,633,964.65	80,299,979.17	86,693,311.97	92,287,863.29	100,136,455.63
194,347,747.00	206,175,328.24	221,284,434.19	232,876,284.85	246,877,540.05
10.0	7.4	7.0	5.6	5.4

CONSOLIDATED

YEAR	1940	1941	1942
Number of municipalities included	295	296	297
EARNINGS Domestic service. Commercial light service Commercial power service Municipal power Street lighting Merchandise. Miscellaneous	\$ c. 13,705,710.79 7,642,679.90 12,458,439.08 1,741,235.23 1,842,443.63 56,818.83 577,959.98	\$ c. 14,287,828,19 7,885,693,81 14,591,053,03 1,832,379,38 1,880,560,01 58,695,51 526,771,53	\$ c. 14,874,937.14 7,604,860.27 15,433,320.91 2,026,826.92 1,820,216.28 50,276.58 680,825.29
Total earnings	38,025,287.44	41,062,981.46	42,491,263.39
EXPENSES Cost of power supplied by H-E.P.C Substation operation Substation maintenance. Distribution system, operation and maintenance. Line transformer maintenance.	23,756,863.14 544,234.10 322,375.73 930,055.53 101,617.16	26,017,260.84 552,820.54 316,677.27 993,886.44 114,304.18	26,459,900.78 581,259.02 361,643.95 1,087,818.81 133,888.95
Meter maintenance. Consumers' premises expenses. Street lighting, operation and maintenance. Promotion of business Billing and collecting. General office, salaries and expenses.	372,562.74 568,135.41 366,911.70 293,022.17 1,020,648.93 960,065.70	409,252.72 604,642.97 379,905.55 262,910.03 1,074,173.90 1,053,367.83	440,877.18 513,565.10 397,614.93 193,692.33 1,171,345.63 1,067,535.39
Undistributed expense	555,414.26 79,848.64 1,464,381.29 2,389,723.60	480,317.80 93,032.89 1,027,985.34 2,248,937.42	553,599.71 99,379.20 973,383.83 2,006,148.29
Total expenses	33,725,860.10	35,629,475.72	36,041,653.10
Surplus Depreciation and other reserves	4,299,427.34 2,644,127.10	5,433,505.74 2,933,730.99	6,449,610.29 3,586,198.82
Surplus less depreciation	1,655,300.24	2,499,774.75	2,863,411.47

OPERATING REPORT

1943	1944	1945	1946	1947
298	298	304	304	304
\$ c. 14,933,681.48 6,713,348.61 15,687,273.31 2,031,027.12 1,686,149.29 31,300.28 782,170.04	\$ c. 15,371,752,19 7,219,403,43 16,222,143,48 2,111,454,22 1,729,320,48 35,378,31 897,433,28	\$ c. 15,543,145,28 8,150,923,90 15,544,685,89 2,134,062,24 1,922,281,13 65,590,57 1,097,719,02	\$ c. 16,852,308.83 8,979,037.16 15,707,154.73 2,161,079.81 1,975,024.68 179,252.65 1,210,440.76	\$ c. 18,172,574,54 9,819,043,11 17,613,525,22 2,216,812,71 2,057,215,86 233,117,94 1,267,485,38
41,864,950.13	43,586,885.39	44,457,808.03	47,064,298.62	51,379,774.76
26,587,877.32 612,227.01 370,797.74 1,143,720.84	26,937,460.31 611,878.05 419,983.12 1.147,646.14	26,633,166.70 654,305.46 423,473.57 1,243,381.36	29,131,997.88 753,931.65 444,276.75	31,760,128.32 855,965.41 475,837.06
1,143,720.84 145,094.88 443,307.27 527,810.36	145,701.29 445,437.44 513,953.14	1,540,381.30 155,240.82 470,203.18 581,603.20	1,404,441.08 168,429.61 528,810.47 699,773.37	1,628,081.77 219,164.00 607,758.38 822,675.89
380,405.50 171,894.14 1,226,185.63 1,117,334.29 510,448.34 94,830.33 844,161.48	445,945,93 156,566,54 1,264,759,35 1,139,174,46 522,204,17 104,222,84 707,925,20	487,565.20 171,063.89 1,305,542.48 1,201,915.79 640,831.75 123,720.21 710,300.94	493,443.23 183,606.79 1,428,246.45 1,319,972.30 831,176.06 147,458.42 525,588.16	547,556.40 231,488.57 1,643,780.22 1,521,688.93 840,075.97 202,997.29 423,041.93
1,871,119.81	1,564,537.45	1,255,825.57	1,239,108.29	992,793.11
36,047,214.94	36,127,395.43	36,058,140.12	39,300,260.51	42,773,033.25
5,817,735.19 3,867,107.58	7,459,489.96 3,521,114.82	8,399,667.91 3,953,728.83	7,764,038.11 4,328,127.38	8,606,741.51 4,481,868.66
1,950,627.61	3,938,375.14	4,445,939.08	3,435,910.73	4,124,872.85

STATEMENT

Balance Sheets of Electrical Departments of

SOUTHERN ONTARIO SYSTEM—

Municipality	Acton	Agincourt	Ailsa Craig	Alexandria	Alliston
Population	1,940	P.V.	470	2,069	1,700
Assets Lands and buildings. Substation equipment. Distribution system—overhead	\$ c. 1,627.38 2,318.36 34,624.76			\$ c. 202.00	
Distribution system—underground. Line transformers. Meters. Street light equipment, regular Street light equipment, ornamental	21,238.27 16,570.36 2,537.30		4,909.37 3,327.78 457.58	14,000.85 10,617.80 2,251.57	
Miscellaneous construction expense Steam or hydraulic plantOld plant	2,671.14	217.77			395.89 7,846.49
Total plant	81,587.57	25,773.07	17,157.30	57,283.85	79,803.24
Bank and cash balance	2,701.11 9,000.00 1,747.18 998.90	578.66		33,000.00	8,500.00
Sinking fund on local debentures Equity in H.E.P.C. systems Other assets	117,318.25 2.16			44,943.34	38,900.12 5.44
Total assets	213,355.17	62,365.49	50,684.48	143,570.31	127,608.02
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	63.93	177.94	106.74 120.00	1,296.58	331.83
Total liabilities	1,391.50	177.94	226.74	1,296.58	685.83
RESERVES For equity in H-E.P.C. systems For depreciation. Other reserves.	117,318.25 13,927.28		9,081.94	44,943.34 25,810.16 1,800.00	38,900.12 16,101.94 7,832.51
Total reserves	131,245.53	26,091.36	32,093.44	72,553.50	62,834.57
SURPLUS Debentures paid Local sinking fund. Operating surplus.	14,500.00	8,072.65 28,023.54	6,883.38 11,480.92	38,299.23	
Total surplus			18,364.30	69,720.23	64,087.62
Total liabilities, reserves and surplus.	213,355.17	62,365.49	50,684.48	143,570.31	127,608.02
Percentage of net debt to total assets.	1.4	0.4	0.8	1.3	0.8

"A"

Hydro Municipalities as at December 31, 1947

Almonte	Alvinston	Amherstburg	Ancaster	Apple Hill	Arkona	Arnprior
2,243	643	2,951	Twp. V.A.	P.V.	389	4,153
\$ c. 10,037.25 24,581.90	\$ c. 1,939.72	\$ c.	\$ c. 243.56	\$ c. 169.06	\$ c.	\$ c. 8,000.00
35,715.61	17,371.57	52,399.44	29,995.40	3,009.09	10,580.14	32,547.74
19,313.90 14,067.32 6,368.80	3,821.47 4,594.67 1,343.59	40,171.24 20,844.54 2,975.73	21,197.02 9,092.50 1,679.17	1,723.37 1,474.28 421.12	3,521.48 2,761.40 779.88	21,291.93 18,295.17 9,669.72
1,323.42 105,153.80	932.33	5,598.72 5,368.18	2,376.33	7.85	245.98	79.31
					1,030.30	
216,562.00	30,003.35	127,357.85	64,583.98	6,804.77	18,919.18	89,883.87
4,976.96 7,950.00 4,481.88 5,296.26	2,714.76 11,300.00 48.23	23,350.00	1,810.19 449.40	2,902.81 4,000.00 507.73	1,501.29 4,000.00 45.01	25.00 39,000.00 782.55 9,112.99
1,611.81	22,918.87	89,062.51 30.01	29,165.85 38.23	5,176.92	9,981.37	21,237.61
240,878.91	66,985.21	242,303.58	96,047.65	19,392.23	34,446.85	160,042.02
24,614.67 5,247.12 486.00	3.67 355.00		821.47	25.12	20.69	10,473.94 4,430.25 4,755.21 6,025.76
30,347.79	358.67	6,843.49	12,166.86	25.12	20.69	25,685.16
1,611.81 44,699.24	22,918.87 12,914.65 59.50		29,165.85 13,628.99 38.69	3,619.31		21,237.61 8,006.84 10,000.00
46,311.05	35,893.02	134,671.08	42,833.53	8,796.23	15,733.14	39,244.45
47,385.33	23,529.24	32,053.60	11,846.18	5,080.12	13,112.83	44,995.19
116,834.74	7,204.28	68,735.41	29,201.08	5,490.76	5,580.19	50,117.22
164,220.07	30,733.52	100,789.01	41,047.26	10,570.88	18,693.02	95,112.41
240,878.91	66,985.21	242,303.58	96,047.65	19,392.23	34,446.85	160,042.02
12.7	0.9	0.8	18.2	0.2	0.1	18.5

STATEMENT

Balance Sheets of Electrical Departments of

SOUTHERN ONTARIO SYSTEM—Continued

Municipality	Arthur	Athens	Aurora	Aylmer	Ayr
Population	1,153	718	3,016	2,441	731
Assets Lands and buildingsSubstation equipment		\$ c.	\$ c. 1,000.00 1,491.05		\$ c. 125.00
Distribution system—overhead Distribution system—underground.	18,757.90	14,742.12	31,126.34	37,276.44	13,884.32
Line transformers	9,176.77 5,507.93 2,090.28	3,308.57 3,827.76 698.90		31,323.02 18,980.29 6,820.49	8,228.07 5,253.07 1,170.78
Miscellaneous construction expense Steam or hydraulic plant	475.54	,			1,012.03
Old plant	1,086.62				4,002.53
Total plant	37,095.04	23,699.74	90,073.21	109,722.84	33,675.80
Bank and cash balance	679.86 7,000.00 7.40	7,500.00	1,548.82 12,000.00 523.75	693.17 12,000.00 2,273.78 22.23	1,880.01 3,500.00 505.44
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	29,500.75	10,654.28	13,474.90	71,682.62	23,869.67
Total assets	74,283.05	42,745.42	117,620.68	196,394.64	63,430.92
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.		1,110.43	42.49		746.02 0.72 68.64
Total liabilities	3,303.03	1,110.43	836.49	1,806.31	815.38
RESERVES For equity in H-E.P.C. systems For depreciation. Other reserves.	29,500.75 21,681.50	10,654.28 6,888.26 206.06	13,474.90 33,106.26	71,682.62 28,987.65 9,578.99	23,869.67 8,200.66 517.29
Total reserves	51,182.25	17,748.60	46,581.16	110,249.26	32,587.62
SURPLUS Debentures paid Local sinking fund	22,191.93	12,889.57		38,701.92	16,757.36
Operating surplus	*2,394.16	10,996.82	70,203.03	45,637.15	13,270.56
Total surplus	19,797.77	23,886.39	70,203.03	84,339.07	30,027.92
Total liabilities, reserves and surplus.	74,283.05	42,745.42	117,620.68	196,394.64	63,430.92
Percentage of net debt to total assets.	7.4	3.5	0.8	1.4	2.1

^{*}Deficit

"A"—Continued

Hydro Municipalities as at December 31, 1947

Baden	Barrie	Bath	Beachville	Beamsville	Beaverton	Beeton
P.V.	10,103	344	P.V.	1,360	842	516
\$ c. 660.64 10,479.57 5,340.40	\$ c. 21,370.44 68,689.91 89,078.70 66,582.89 64,973.33	8 c. 8,496,75	\$ c. 176.13 17,091.87 5,329.97	\$ c. 20,190.78 12,583.23	\$ c. 499.50 26,308.32 10,407.74	\$ c. 428.50 12,926.59
5,009.81 748.17	67,043.89 14,036.22	1,380.68, 684.68,	4,134.46 542.79	10,094.26 3,081.50	8,250.88 1,748.67	2,965.27 1,472.04
11.19	2,600.00	727.38	71.82		2,404.66	1,406.77
22,249.78	394,375.38	13,227.09	27,347.04	45,094.77	49,619.77	21,148.99
5,524.27 6,500.00 841.77	6,597.68 100,600.00 2,531.14 16,450.60	234.54	3,421.52 21,500.00 166.36	5,354.67 16,000.00 229.38	1,901.08 7,200.00 1,186.26	377.36 11,500.00 194.75
50,495.83	259,062.47 58.10	3,733.13	65,704.85	12,354.92	31,456.46	23,589.30
85,611.65	779,675.37	17,266.46	118,139.77	79,888.74	91,363.57	56,810.40
98.25	797.24 5,817.52	2,680.02	695.92	470.14 861.90	2,959.10	929.31 69.20
108.25	6,614.76	2,820.02	695.92		3,572.55	1,103.51
50,495.83	259,062.47 159,512.51 12,400.00	3,733.13 3,442.67		12,354.92	31,456.46 21,240.63 400.00	23,589.30 11,850.99 1,590.68
54,858.09	430,974.98	7,175.80	76,827.00	24,896.17	53,097.09	37,030.97
5,000.00	65,365.68	4,819.98	5,536.66	37,500.00	15,000.00	14,070.69
25,645.31	276,719.95	2,450.66	35,080.19	16,160.53	19,693.93	4,605.23
30,645.31	342,085.63	7,270.64	40,616.85	53,660.53	34,693.93	18,675.92
85,611.65	779,675.37	17,266.46	118,139.77	79,888.74	91,363.57	56,810.40
0.3	1.3	20.8	1.3	2.0	6.0	3.3

STATEMENT

Balance Sheets of Electrical Departments of

SOUTHERN ONTARIO SYSTEM—Continued

26.11	D 11 D:	D 11 111	D1 1 1	DI CII	DI (I
Municipality			Blenheim	Bloomfield	
Population	1,063	15,982	2,035	633	701
Assets Lands and buildings. Substation equipment. Distribution system—overhead.	25,036.90	\$ c. 44,154.10 90,879.87 157,680.06	\$ c. 14,472.85 1,264.64 45,335.76		\$ c.
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plant.	8,010.45 6,677.22 2,239.59 223.88	763.94 10,805.90			254.59
Old plant					
Total plant	42,392.24	477,313.63	107,380.29	19,894.08	22,643.01
Bank and cash balance. Securities and investments. Accounts receivable. Inventories.	38.11	100,000.00	25.00 4,000.00 237.36 1,376.52	12,100.00 84.44	137.55
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	17.430.95	308,428.25 30,082.95	59,882.68 179.00	10,433.62	
Total assets	62,812.66	978,721.47	173,080.85	46,593.36	49,314.14
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities		13,979.78	6,159.43 886.53 1,817.97		403.72
Total liabilities	724.16	13,979.78	8,863.93	1,713.44	591.92
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	17,430.95 11,981.68 1,100.00		59,882.68 29,676.18 280.97	9,203.05	15,939.35 8,697.29
Total reserves	30,512.63	436,247.15	89,839.83	19,636.67	24,636.64
SURPLUS Debentures paid Local sinking fund. Operating surplus.		174,997.19 353,497.35	14,000.00		16,032.52
Total surplus		528,494.54	74,377.09		24,085.58
Total liabilities, reserves and surplus.	62,812.66	978,721.47	173,080.85	46,593.36	49,314.14
Percentage of net debt to total assets.	1.6	2.1	6.6	4.7	1.8

"A"—Continued

Hydro Municipalities as at December 31, 1947

Bobcaygeon	Bolton	Bothwell	Bowmanville	Bradford	Braeside	Brampton
1,039	716	695	3,996	1,098	424	6,152
\$ c. 740.00 27,853.75	\$ c.	\$ c.	\$ c. 35,685.49 894.47 54,094.80	\$ c. 388.50 29,888.81	\$ c.	\$ c. 6,175.76 35,006.39 63,743.80
9,459.40 8,591.58 4,917.96	7,600.41 4,877.44 887.89	3,879.58 4,405.73 4,495.83	19,026.89 27,238.37 9,071.08	12,246.22 8,997.47 974.72	1,661.85 1,859.02 62.94	58,392.01 40,050.78 12,830.87
209.50 75,000.00	1,269.24	1,131.22 784.71	6,640.43	2,094.76		4,979.07
126,772.19	29,467.34	23,777.97	152,651.53	54,591.48	6,905.49	221,178.68
1,961.68 619.62 749.56	3,031.41 12,000.00 287.47 74.00	1,027.31 13,000.00 5.96	32,826.92 100,000.00 7,205.95 11,238.37	1,721.94 7,800.00 2,145.82	1,067.73	3,349.80 61,500.00 497.36 142.50
121.89 155.00	27,178.02	25,563.19	116,286.19	28,513.71 21.72	867.38	270,140.61 6.68
130,379.94	72,038.24	63,374.43	420,207.96	94,794.67	10,048.92	556,815.63
41,899.77 122.43	90.32	119.09	564.33	1,121.70 3,658.77 75	5,371.02 15.76 105.00	516.40
42.022.20	226.71	1,356.26		5,512.22	5,491.78	2,586.40
121.89 33,579.15	27,178.02	25,563.19	116,286.19 30,578.97	28,513.71 15,985.10 2,629.88	867.38 400.00	270,140.61 91,429.98 150.00
33,701.04	37,482.11	36,522.80	146,865.16	47,128.69	1,267.38	361,720.59
48,100.23	12,500.00	5,534.19	71,000.00	24,078.30	628.98	69,050.64
6,556.47	21,829.42	19,961.18	199,946.15	18,075.46	2,660.78	123,458.00
54,656.70	34,329.42	25,495.37	270,946.15	42,153.76	3,289.76	192,508.64
130,379.94	72,038.24	63,374.43	420,207.96	94,794.67	10,048.92	556,815.63
32.2	0.5	0.6	1.4	8.3	59.8	0.9

STATEMENT

Balance Sheets of Electrical Departments of

SOUTHERN ONTARIO SYSTEM—Continued

Municipality	Brantford	Brantford Twp.	Brechin	Bridgeport	Brigden
Population	34,810	V.A.	P.V.	P.V.	P.V.
Assets Lands and buildings. Substation equipment. Distribution system—overhead Distribution system—underground. Line transformers.	\$ c. 123,938.35 274,084.86 283,105.30 450.58 257,443.39	872.02 34,139.68 126,766.48	2,135.59	\$ c. 11,536.29 5,172.10	1,482.03 9,830.02
Meters. Street light equipment, regular. Street light equipment, ornamental	185,943.12 46,632.42	39,549.86	955.04	4,174.41 1,737.82	3,389.40
Miscellaneous construction expense Steam or hydraulic plant. Old plant.	25,955.64		546.92		972.62
Total plant					20,014.69
Bank and cash balance. Securities and investments. Accounts receivable. Inventories.	2.157.87	75.00 951.86	3,576.22 500.00	1,776.52 6,000.00 195.81	2,507.66 6,800.00
Sinking fund on local debentures. Equity in H-E.P.C. systems Other assets	1,500,852.28 1,062.66		11,105.65		
Total assets	3,024,501.28	337,980.48	20,515.00	42,407.52	47,274.49
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	5,056.10 14,955.32 30,707.87	31,916.11		531.54 245.00	
Total liabilities	50,719.29	106,878.80	369.06	776.54	5.00
RESERVES For equity in H-E.P.C. systems For depreciation. Other reserves.	519 121 77	55,038.25	2,610.69		17,751.69 7,519.07 97.24
Total reserves	2,028,747.77	118,215.36	13,724.83	20,503.14	25,368.00
SURPLUS Debentures paid. Local sinking fund.	530,000.00	61,443.22	2,919.74	12,368.03	8,000.00
Operating surplus.	415,034.22	51,443.10	3,501.37	8,759.81	13,901.49
Total surplus	945,034.22	112,886.32	6,421.11	21,127.84	21,901.49
Total liabilities, reserves and surplus.	3,024,501.28	337,980.48	20,515.00	42,407.52	47,274.49
Percentage of net debt to total assets.	3.3	38.9	3.9	2.5	0.0

"A"—Continued

Hydro Municipalities as at December 31, 1947

1						
Brighton	Brockville	Brussels	Burford	Burgessville	Burlington	Caledonia
1,766	11,038	762	P.V.	P.V.	4,560	1,450
\$ c. 600.00 21,088.80	\$ c. 45,591.03 39,212.30 112,142.01	\$ c.	\$ c. 202.00		\$ c. 18,281.47 3,900.00 96,348.11	\$ c. 656.01 25,026.07
8,220.72 8,731.16 1,305.85	71,025.98 62,362.47 28,937.73	6,284.98 5,768.49 1,707.79	7,811.98 5,650.71 481.50	1,648.78	38,060.17 28,417.51 7,044.63	13,933.96 10,778.56 2,587.69
372.01	3,620.28	1,666.48	76.97	45.00	10,783.72	1,056.44
40,318.54	362,891.80	32,603.65	26,110.14	10,730.46	202,835.61	54,038.73
25.00 19,000.00 8,763.62 7,122.70	64,687.01 83,350.00 2,711.35 9,861.12	328.81	251.68 5,000.00 68.34	2,800.00	20,802.67 7,500.00 1,023.15	50.00 200.00 264.57 2,256.60
20,946.39	286,672.22 561.48	20,638.50	22,002.61	8,185.26	7,319.46 *35,900.62	36,203.03
96,176.25	810,734.98	69,139.37	53,462.77	22,059.18	275,381.51	93,012.93
214.21 7,050.98 1,111.39	2,105.24 4,234.81	17.50	299.32		127,618.70 3,236.38 3312.30	3,206.15 903.43 507.19
8,376.58	6,340.05	120.78	394.62	383.41	134,167.38	4,616.77
20,946.39 7,967.46 4,224.23	286,672.22 117,022.89 13,927.27	20,638.50 11,066.43			7,319.46 27,134.98 35,900.62	36,203.03 6,805.05
33,138.08	417,622.38	31,704.93	28,440.90	13,297.45	70,355.06	43,008.08
25,000.00 29,661.59	174,869.92				32,881.30	4,624.00
54,661.59					70,859.07	45,388.08
96,176,25					275,381.51	93,012.93
11.1	1.2	0.2	1.3	2.8	57.8	8.1
	1.2	0.2	4- 4-4-14			

^{*}Not used in figuring net debt to total assets.

STATEMENT

Balance Sheets of Electrical Departments of

SOUTHERN ONTARIO SYSTEM—Continued

				1	
Municipality	Campbell- ville	Canning- ton	Cardinal	Carleton Place	Cayuga
Population		806	1,678	4,239	649
ASSETS	\$ c.	\$ c.	\$ c.		\$ c.
Lands and buildings				13,390.32 15,979.65	
Distribution system—overhead Distribution system—underground.	3,168.33	13,663.14	14,412.69	51,472.46	23,550.75
Line transformers	1,643.46	7,182.17	4,711.68		10,375.91
MetersStreet light equipment, regular	1,189.85 335.61			23,260.75 6,919.74	5,846.39 1,461.17
Street light equipment, ornamental		_,			
Miscellaneous construction expense Steam or hydraulic plant	6.82	510.58	521.05	2,897.79	187.20
Old plant			3,474.80	5,289.19	
Total plant	6,344.07	29,499.25	28,625.08	137,959.06	41,421.42
Bank and cash balance		2,670.92	1,667.60	521.58	4.566.13
Bank and cash balance	3,600.00	6,000.00 602.92			5,200.00 249.27
Inventories		477.57	198.47	1,416.85 3,029.12	288.51
Sinking fund on local debentures.	4 480 41	23,764.25	11 590 74	126,126.62	16.017.60
Equity in H-E.P.C. systemsOther assets					2.14
Total assets	14,424.48	63,014.91	47,581.89	311,553.23	67,745.07
LIABILITIES					
Debenture balance	2.71	81.24	2,777.80 415.42	2.741.47 3,065.50	224.80
Accounts payable. Bank overdraft.	158.85	01.24			
Other liabilities		45.00	5.00	1,873.05	280.00
Total liabilities	161.56	126.24	3,198.22	7,680.02	504.80
RESERVES	4 400 41	00.504.05	44 500 54		10.017.00
For equity in H-E.P.C. systems For depreciation	4,480.41 2,200.71	23,764.25 14,915.62	11,590.74 5.444.56	126,126.62 28,397.71	16,017.60 11,307.85
Other reserves		564.05	29.40	887.56	152.30
Total reserves	6,681.12	39,243.92	17,064.70	155,411.89	27,477.75
Surplus					
Debentures paid Local sinking fund	5,447.77	15,000.00	12,222.20	63,258.53	20,000.00
Operating surplus.	2,134.03	8,644.75	15,096.77	85,202.79	19,762.52
Total surplus	7,581.80	23,644.75	27,318.97	148,461.32	39,762.52
Total liabilities, reserves and surplus	14,424.48	63,014.91	47,581.89	311,553.23	67,745.07
Percentage of net debt to total assets.	1.6	0.3	8.9	4.1	1.0

"A"—Continued

	- 1					
Chatham	Chatsworth	Chesley	Chesterville	Chippawa	Clifford	Clinton
18,380	362	1,591	1,123	1,339	461	2,050
\$ c. 157,597.43 211,850.34 180,692.41 162,382.40	S c. 364.89 5,368.35	\$ c. 6,000.00 2,305.58 24,136.25	\$ c. 335.00	S c. 1,434.46 17,156.93	\$ c.	\$ c. 10,227.74 11,473.46 28,140.03
141,347.46 98,511.58 27,546.83 35,426.10	2,704.42 573.12	13,382.99 8,964.88 2,747.55	5,284.51 6,134.94 1,138.75	10,100.29 7,021.54 7,505.83	3.155.34 2,913.56 1,014.93	17,075.50 14,719.31 5,748.22
43,274.52	127.73	367.50	33.19	436.00	37.44	5,163.68
42,752.31	11.050.10					
1,101,381.38					· .	92,547.94
50.00 40,000.00 36,967.14 15,032.80	1,000.00 16.84		14,000.00 289.85		103.60 4,500.00	25.00 25,500.00 1,481.57 5,591.62
633,208.59 1,026.67	7,466.21	56,938.95	39,457.10	26,909.67 0.18	12,006.00	73,662.33
1,827,666.58	21,870.00	131,311.85	82,372.96	79,399.15	32,635.23	198,808.46
39,329.26 10.50 54,788.29 43,821.85	19.56		66.00	1,040.00	3,128.19 830.12 5.00	128.49 701.42 826.45
137,949.90	52.79	2,260.26	66.00	1.040.00	3,963.31	1,656.36
633,208.59 243,258.18 40,703.28	4,841.34	56,938.95 21,581.11 3,500.00	10,221.43	26,909.67 9,848.70		73,662.33 29,355.42 440.94
917,170.05	12,307.55	82,020.06	49,678.53	36,758.37	17,359.42	103,458.69
330,670.74	5.014.10	24,410.34	5,889.32	13,350.00	4,871.81	44,500.00
441,875.89	4,495.56	22,621.19	26,739.11	28,250.78	6,440.69	49,193.41
772,546.63	9,509.66	47,031.53	32,628.43	41,600.78	11,312.50	93,693.41
1,827,666.58	21,870.00	131,311.85	82,372.96	79,399.15	32,635.23	198,808.46
8.8	0.4	3.0	0.2	2.0	19.2	1.3

Balance Sheets of Electrical Departments of

Municipality		Cobourg	Colborne	Coldwater 583	Colling- wood
Population	629	5,419	908	565	7,027
Assets Lands and buildings Substation equipment Distribution system—overhead	6,722.81	\$ c. 31,806.94 1,668.35 97,091.55		\$ c. 275.00	\$ c. 15,950.08 25,354.35 73,490.23
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental	4,184.63 2,876.35 499.69	37,874.56	2,783.11 5,172.11 2,629.54	6,847.00 4,750.69 846.22	
Miscellaneous construction expense Steam or hydraulic plant	83.25			153.00	
Old plant	2,853.85				
Total plant	17,220.58	227,856.38	25,141.21	23,821.30	197,647.55
Bank and cash balance	132.17	24,169.68 45,000.00 6,631.05 12,393.79	5,500.00 1,626.88	3,500.00 1,473.19	5,090.92 40,000.00 918.11
Sinking fund on local debentures. Equity in H-E.P.C. systems Other assets.	4,007.37	89,789.25			217,218.79
Total assets	23,299.14	405,850.79	47,814.35	56,325.31	460,875.37
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	79.31			127.88	296.59 4,000.63
Total liabilities	782.71	38,297.86	4,370.08	363.25	4,297.22
RESERVES For equity in H-E.P.C. systems For depreciation. Other reserves.	4,007.37 288.65	62,184.58			75,855.98
Total reserves	4,296.02	153,473.83	14,289.80	36,222.99	293,080.46
SURPLUS Debentures paidLocal sinking fund		72,273.33	8,161.51	6,867.47	38,183.42
Operating surplus	10,773.04	141,805.77	20,992.96	12,871.60	125,314.27
Total surplus	18,220.41	214,079.10	29,154.47	19,739.07	163,497.69
Total liabilities, reserves and surplus.	23,299.14	405,850.79	47,814.35	56,325.31	460,875.37
Percentage of net debt to total assets.	4.1	12.1	11.1	1.0	1.7

"A"—Continued

Comber	Cookstown	Cottam	Courtright	Creemore	Dashwood	Delaware
P.V.	P.V.	P.V.	367	700	P.V.	P.V.
\$ c. 498.22	\$ c. 70.00 392.95	\$ c. 475.63	S c.	\$ c.	S c.	S c.
8,684.00	10,353.15	12,204.58	7,088.33	7,746.76	4,054.14	5,703.82
5,885.42 3,501.97 537.95	4,531.45 3,315.41 1,097.41	4,867.86 3,142.26 439.86	2,022.18 1,476.70 470.44	3,676.20 4,103.83 358.56	2,400.81 2,495.95 364.52	1,950.84 1,652.71 205.24
1,050.65	1,499.15	448.40	567.06	21.60	291.87	203.81
20,158.21	21,259.52	21,578.59	11,624.71	15,906.95	9,607.29	9,716.42
1,324.39 8,000.00 362.28	1,174.67 11,000.00 522.36	404.60 3,000.00 36.87	8,000.00 79.42	1,534.66 7,000.00 56.44	3,297.05 5,000.00 10.85	2,086.06 2,500.00 6.86
27,449.66	8,743.70	7,521.37	8,828.69	18,418.37	13,357.17 0.32	5,569.24
57,294.54	42,700.25	32,541.43	28,532.82	42,916.42	31,272.68	19.878.58
189.89	766.54	0.49	9.83 720.93		0.41	35. €5
75.00	78.00	145.71	5.00	193.35		15.00
264.89	844.54	146.20	735.76	193.35	0.41	50.65
27,449.66 9,647.64 25.76	10,406.77	7,521.37 6.574.68 37.95	8,828.69 3,689.93 5.24	18,418.37 6,924.19 50.33	13,357.17 4,885.00	5,569.24 1,927.63 27.24
37,123.06	19,150.47	14,134.00	12,523.86	25,392.89	18,242.17	7,524.11
7,700.00	13,500.00	9,000.22	8,138.35	2,823.61	3,400.00	4,000.00
12,206.59	9,205.24	9,261.01	7,134.85	14,506.57	9,630.10	8,303.82
19,906.59	22,705.24	18,261.23	15,273.20	17,330.18	13,030.10	12,303.82
57,294.54	42,700.25	32,541.43	28,532.82	42,916.42	31,272.68	19,878.58
0.9	2.5	0.6	3.8	0.8	0.0	0.4

Balance Sheets of Electrical Departments of

Municipality	Delhi	Deseronto	Dorchester	Drayton	Dresden
Population	2,242	1,215	P.V.	489	1,666
Assets Lands and buildings Substation equipment Distribution system—overhead.	\$ c. 2,472.54 35,609.31	161.18		\$ c.	505.30 523.00
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental	20,375.70 16,232.74 5,173.73	6,899.93		4,455.12	12,177.81
Miscellaneous construction expense Steam or hydraulic plant. Old plant.	7,472.19	1	669.50		
Total plant	115,854.95				
Bank and cash balance. Securities and investments. Accounts receivable. Inventories.	197 . 73 23,500 . 00 55 . 15 5,674 . 55	6,000.00 1,531.88		1,146.49 3,000.00 149.23 26.17	9,500.00
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	15,334.85 0.93	12,963.51	11,999.48		
Total assets	160,618.16	54,970.98	38,280.09	47,756.07	131,711.83
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.		816.53	265.53 137.44 24.22		
Total liabilities	58,885.92	1,164.54	427.19	1,447.63	5,021.98
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves.	15,334.85 16,918.00 97.12	12,963.51 2,166.65	11,999.48 5,730.31 0.05	20,203.88 9,771.41	50,572.46 8,297.80 605.34
Total reserves	32,349.97	15,130.16	17,729.84	29,975.29	59,475.60
SURPLUS Debentures paid Local sinking fund	27,799.07	15,000.00	4,300.00	9,500.00	11,423.24
Operating surplus.	41,583.20	23,676.28	15,823.06	6,833.15	55,791.01
Total surplus	69,382.27	38,676.28	20,123.06	16,333.15	67,214.25
Total liabilities, reserves and surplus.	160,618.16	54,970.98	38,280.09	47,756.07	131,711.83
Percentage of net debt to total assets.	40.5	2.7	1.6	5.3	6.2

"A"—Continued

Drumbo	Dublin	Dundalk	Dundas	Dunnville	Durham	Dutton
P.V.	P.V.	701	5,697	4,063	2,036	818
\$ c.		218.00	19,678.42 24,228.53	3,722.21 39,710.85	210.28 546.02	75.11
2,099.05 2,514.57 344.06	1,560.37	4,275.14	35,048.43 31,887.42 12,237.94 1,154.52	26,751.61 10,111.19	10,051.29	7,114.08 4,202.44 754.38
235.58	787.06		2,843.35		342.79	638.97
				10,717.62		
10,553.91	13,131.65	21,415.50	188,911.24	172,018.94	51,586.59	23,596.57
5,258.31 5,000.00 2.02	2,642.37 1,500.00 137.80	9,000.00		35,000.00 715.62	1,695.29 12,000.00 407.51	894.46 7,500.00 135.37
10,587.41	8,555.52	20,441.46	225,385.44 503.39		47,468.69 89.64	30,582.53
31,401.65	25.967.34	55,442.86	448,832.34	313,395.35	113,247.72	62,708.93
428.93	31.92	77.50	677.95 1,820.08 10,537.37	1,665.07 104.61 1,335.52 2,306.20	2,099.47	181.49 192.36
428.93	44.92	77.50	13,035.40	5,411.40	2,127.47	373.85
10,587.41 7,059.59	8,555.52 7,415.31	20,411.46 8,388.86 1,300.00	225,385.44 86,419.34 179.61	102,642.44 53,622.13	47,468.69 19,245.38	30,582.53 11,721.07 33.23
17,647.00	15,970.83	30,100.32	311,984.39	156,264.57	66,714.07	42,336.83
4,500.00	6,200.00	5,727.27	53,000.00	73,834.93	25,323.97	8,407.49
8,825.72	3,751.59	19,537.77	70,812.55	77,884.45	19,082 21	11,590.76
13,325.72	9,951.59	25,265.04	123,812.55	151,719.38	44,406.18	19,998.25
31,401.65	25,967.34	55,442.86	448,832.34	313,395.35	113,247.72	62,708.93
2.1	0.3	0.2	5.3	2.6	3.2	1.2

Balance Sheets of Electrical Departments of

Municipality	East York	Elmira	Elmvale	Elmwood
Population	Twp. V.A.	2.297	P.V.	P.V.
Assets Lands and buildings Substation equipment. Distribution system—overhead Distribution system—underground.	\$ c. 43,514.75 125,641.44 479,790.30	\$ c. 8,233.32 18,411.70 42,150.24 540.21	\$ c 156.25 2,273.07 13,041.73	
Line transformers Meters Street light equipment, regular Street light equipment, ornamental	168,759.24 216,911.48 69,884.32	34,347.98 20,777.86 2,649.60	6,111.40 5,369.40 726.11	2,084.63 721.69
Miscellaneous construction expense. Steam or hydraulic plant. Old plant			579.92	
Total plant	1,130,700.98	131,053.62	28,257.88	11,581.76
Bank and cash balance	6,739.20 46,336.35 27,654.31	35,500.00 450.87	3,296.54 4,500.00 59.37	1,021.26 3,100.00 608.90
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets.	490,352.64 343.18	120,626.67	22,474.41	6,802.71 10.41
Total assets	1,702,126.66	295,063.60	58,588.20	23,125.04
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	54.928 16	29.60	1,356.89	790.05
Total liabilities	67,914.61	4,484.39	1,356.89	2,085.05
RESERVES For equity in H-E.P.C. systems For depreciation. Other reserves.			7,965.15	6,802.71 4,481.15
Total reserves	712,466.29	-171,152.65	30,443.24	11,283.86
SURPLUS Debentures paid Local sinking fund		33,890.69	7,000.00	6,106.38
Operating surplus		85,535.87	19,788.07	3,649.75
Total surplus	921,745.76	119,426.56	26,788.07	9,756.13
Total liabilities, reserves and surplus	1,702,126.66	295,063.60	58,588.20	23,125.04
Percentage of net debt to total assets	5.6	2.6	3.7	12.7

"A"—Continued

Elora	Embro	Erieau	Erie Beach	Essex	Etobicoke	Exeter
1,158	425	273	30	2.095	Twp. V.A.	1,800
S c. 1,524.54	Ş c.	\$ c.		S c. 11,477.38	\$ c. 39,435.85 8,878.43	\$ c. 9,954.19
19,500.92	11,463.75		3,680.59	47,722.26 442.55	473.778.59	37,302.30
8,977.59 8,239.46 1,513.11	7,580.90 2,837.18 535.73	4,827.27 4,722.42 744.58	932.82 1,247.56 263.49	22,857.16 14,952.86 2,108.73	209,551.66 148,546.55 30,152.45	20,520.37 14,976.82 4,902.87
1,362.35	69.45	379.90	375.03	7,205.06 1,288.12	2.689.44 41,410.95	6.226.88
41,117.97	22,487.01	30,111.60	6,499.49	108,054.12	954,443.92	93,883.43
397.89 17,500.00 56.41 229.70	3,000.00 74.96	1,476.30 1,000.00 77.09		1,737.45 20,000.00 354.50	5,596.83 7,000.00 25,194.83 44,566.68	1.200.45 12,500.00 1.133.89 3,371.20
56,938.13	17,449.26	11,616.36	2,660.34	52,058.04 18.78	409,401.68	68,128.63
116,240.10	45,264.32	44,281.35	10,363.51	182,222.89	1,446,355.68	180,217.60
216.58 343.25			720.12		114,674.48 45,049.62 7,752.00 14,736.27	1,096.57 720.00
559.83	99.48	639.55	915.32	17,447.17	182,212.37	1.816.57
56,938.13 21,216.48		6,166.89	590.32	32,424.59	409,401.68 189,234.87 5,002.06	68.128.63 25.389.77 534.06
78.154.61	25,947.37	17,822.41	3,269.56	84,960.92	603,638.61	94,052.46
13,000.00	7,500.00	6,883.13	3,300.00	13,702.06	251,020.92	20.000.05
24,525.66	11,717.47	18,936.26	2,878.63	66,112.74	409,483.78	64 348 .52
37,525.66	19,217.47	25.819.39	6,178.63	79,814.80	660,504.70	84,348.57
116,240.10	45,264.32	44,281.35	10,363.51	182,222.89	1,446,355 68	180,217.60
0.9	0.4	2.0	10.6	8.3	17.3	1.6

Balance Sheets of Electrical Departments of

Municipality	Fergus	Finch	Flesherton	Fonthill	Forest
Population	2,649	341	389	1,115	1,709
Assets Lands and buildingsSubstation equipment	\$ c. 2,442.52 16,583.00		408.78		6,576.61
Distribution system—overhead Distribution system—underground. Line transformers. Meters. Street light equipment, regular.	29,473.35 17,598.68 6,729.07	8,585.85 3,288.79 2,842.71 504.07		8,574.93	
Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plantOld plant	492.40			656.76	
Total plant	110,376.96	15,359.16	14,644.00	39,019.44	73,024.10
Bank and cash balance Securities and investments Accounts receivable Inventories.	20,000.00 369.84 1,982.79		9,000.00 7.51	1,769.48 2,000.00 146.37	
Sinking fund on local debentures . Equity in H-E.P.C. systems Other assets	105,598.07	7,466.35	9,844.48 33.15		55,152.89
Total assets	238,427.66	26,768.65	35,019.73	54,294.60	164,826.33
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	408.68				
Total liabilities	1.975.19	234.65	114.41	337.75	131.43
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	105,598.07 30,500.93 198.59	7,466.35 4,101.86 2.91	9,844.48 5,863.08	11,359.31 8,054.34	55,152.89 29,386.68 87.59
Total reserves	136,297.59	11,571.12	15,707.56	19,413.65	84,627.16
Surplus Debentures paid. Local sinking fund.	42,000.00	7,000.00	5,830.88	22,500.00	
Operating surplus	58,154.88	7,962.88	13,366.88	12,043.20	56,710.61
Total surplus		14,962.88	19,197.76	34,543.20	80,067.74
Total liabilities, reserves and surplus.	238,427.66	26,768.65	35,019.73	54,294.60	164,826.33
Percentage of net debt to total assets.	1.5	1.2	0.4	0.8	0.0

"A"—Continued

Forest Hill	Galt	Georgetown	Glencoe	Goderich	Grand Valley
14,574	15,000	2,753	764	4,625	628
S c. 39,501.92 80,767.90 224,506.57 2,346.74	\$ c. 243,177.30 162,246.26 311,006.90 4,252.94	\$ c. 5,328.06 9,194.71 54,397.60	\$ c. 3,587.66	\$ c. 30,069 89 36,076 41 79,663 40	\$ c. 36.50
123,847.66 78,381.70 10,711.37 19,101.55	166,155,66 109,775,56 74,878,55	41,406.85 25,465.31 4,832.83	9,723.01 5,530.54 4,114.11	34,022.44 29,094.91 9,159.76	4,240.38 4,706.08 1,067.12
34,201.67	22,457.19	6,412.24	1,742.25	7,176'.76	232.70
				14,622.15	
613,367.08	1,093,950.36	147,037.60	49,636.05	239.885.72	23,483.52
23,606.95 179,000.00 9,464.30 9,876.08	350.00 120,000.00 6,258.63 60,896.51	10,493.55 1,264.82 187.64	2,004.27 15,100.00 389.31 329.66	8,765.40 59,000.00 637.54 1,834.49	2,710.16 11,000.00 87.78
326,272.96	882,012.06 2,184.15	168,937.11 1.47	31.885.72	194.163.29 2.54	18,842.30 61.00
1,161,587.37	2,165,651.71	327.922.19	99,345.01	504,288.98	56,184.76
187,487.74 8,358.89 31,682.01		1,142.89 2,762.02 3,055.61	315.00	12,190.80 586.87 3,912.54	1,092.83
227,528.64	9,760.07	6,960.52	315.00	16,690.21	1,342.71
326,272.96 179,126.95 750.00	474,001.67	34,537.33	31,885.72 17,562.89 351.64	194,163.29 118,086.94 819.63	18,842.30 13,241.11 1,000.00
506,149.91	1,381,517.23	203,474.44	49.800.25	313,069.86	33,083 . 41
175,293.86	518,001.95	20,000.00	20,112.88	83,897.25	11,000.00
252,614.96	256,372.46	97,487.23	29,116.88	90,631.66	10,758.64
427,908.82	774,374.41	117,487.23	49,229.76	174,528.91	21,758.64
1,161,587.37	2,165,651.71	327,922.19	99,345.01	504,288.98	56,184.76
25.5	0.8	4.4	0.5	5.4	3.6

Balance Sheets of Electrical Departments of

Municipality	Granton	Gravenhurst	Grimsby	Guelph
Population	P.V.	2,477	2,107	23,245
Assets Lands and buildings. Substation equipment. Distribution system—overhead. Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental. Miscellaneous construction expense. Steam or hydraulic plant. Old plant.	6,507.96 2,367.13 1,837.00 180.78	10,936.03 41,921.36 1,941.77 17,304.46 17,957.80 4,578.27	42,557.72 27,265.05 20,550.54 2,603.17 1,925.00 849.28	\$ c. 14,820.87 191,246.27 318,483.53 28,847.47 145,171.89 135,133.03 48,801.55
Total plant			95,750.76	900,767.55
Bank and cash balance	3,700.00 22.90	2,471.50 22,000.00 1,156.46	8,000.00	1,102.41 45,000.00 15,853.45 26,062.33
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	12.061.43	54,058.08 1,179.33	11,362.57	1,041,848.01 2,889.23
Total assets	26,790.28	187,346.74	119,424.78	2,033,522.98
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities	304 · 12 37 · 79	1,005.00	1,805.33 3,505.90	
Total liabilities	341.91	1,005.00	5,311.23	37,353.41
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	4,287.06	37,039.34	12,234.91	1,041,848.01 276,835.80 777.26
Total reserves	16,408.49	99,170.33	23,597.48	1,319,461.07
SURPLUS Debentures paid Local sinking fund. Operating surplus.				
Total surplus	10,039.88	87,171.41	90,516.07	676,708.50
Total liabilities, reserves and surplus	26,790.28	187,346.74	119,424.78	2,033,522.98
		0.7		3.8

"A"—Continued

Hagersville	Hamilton †	Hanover	Harriston	Harrow	Hastings	Havelock
1,556	178,686	3,204	1,345	1,304	721	935
\$ c. 864.37 22,477.24	9,447,696.79	\$ c. 3,894.32 9,271.19 56,779.78	\$ c. 395.25 600.00 24,074.89	\$ c. 2,318.16 25,522.66	\$ c.	\$ c. 572.90 20,441.93
14,297.57 12,274.51 1,297.28	959,131.50	31.269.71 22.165.47 4,712.19	12,494.09 10,807.64 1,332.00	16,663.87 10,520.33 970.46	4,958.73 5,788.43 1,304.27	4,153.07 6,702.72 1,883.33
696.75	54,466.29	2,510.78	2,294.06	29.42	669.85	9.50
			1,001.43		1,733.13	
51,907.72	8,413,818.29	130,603.44	52,999.36	56,024.90	33.317.72	33,763.45
5,959.05 34,000.00 337.64 827.76	1,987,000.00 469,557.57	18,872.11 69,358.51 428.78 484.54	2,754.78 11,400.00 570.55 154.40	1,259.70 9,200.00 562.70 364.79	6,000.00 712.48	3.287.02 16,500.00 44.14
117,176.72 0.53		127,160.81	53,658.62 657.70	43,743.07	6.901.48	18,714.99
210,209.42	20,917,304.65	346,908.19	122,195.41	111,155.16	46,931.68	72,309.60
604.43	218,000.00 382,779.30 36.531.91	1,222.90	573.17 13.87	1,116.94 405.00	6,159.48 1,144.01 65.20 473.47	468.81
604.43	637,311.21	1,222.90	652.76	1,521.94	7,842.16	523.81
117,176.72 22,404.93		127,160.81 82,227.55 12,500.00	53,658.62 17,905.57	43.743.07 16,894.99 136.30	6,901.48 8,054.24	18.714.99 15,429.44
139,581.65	12,577,891.22	221,888.36	71,564.19	60,774.36	14.955.72	34,144.43
	3,842,275.19	80,162.29	25,244.86		14,840.52	26,234.18
62,023.34	3,859,827.03	43,634.64	24,733.60	36,858.86	9,293.28	11,407.18
70,023.34	7,702,102.22	123,796.93	49,978.46	48.858.86	24,133.80	37,641.36
210,209.42	20,917,304.65	346,908.19	122,195.41	111,155.16	46,931.68	72,309.60
0.6	5.4	0.5	1.0	2.3	19.6	1.0
÷	Includes 1947	nower adjust	ment and equi	ty in H-E.P.C.	system	

†Includes 1947 power adjustment and equity in H-E.P.C. system.

Balance Sheets of Electrical Departments of

Municipality	Hensall	Hespeler	Highgate	Holstein	Humber- stone
Population	649	2,960	309	P.V.	3,207
ASSETS Lands and buildings Substation equipment Distribution system—overhead	13.174.24	\$ c. 5,275.67 38,946.53 38,145.09	\$ c. 9,271.27		\$ c. 12,454.70 31,655.91
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental	4,909.17 2,859.94	40,171.01 17,239.89 9,246.04		1,475.91 952.52 170.44	19,524.99 13,897.06 1,668.57
Miscellaneous construction expense Steam or hydraulic plantOld plant	612.27		491.60		785.00
Total plant	31,432.72	154,617.06	15,224.52	5,107.31	79,986.23
Bank and cash balance	12,000.00		6,000.00		4,128.06 11,500.00 175.36 2,092.25
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	26,331.42	192,906.58 183.33		4,067.78	
Total assets	69,824.20	387,740.20	35,888.81	15,608.44	134,187.40
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	508.65	625.66			364.31
Total liabilities	533.65	7,203.67	95.00		2,416.14
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	26,331.42 13,436.98	31,844.13	7,982.41		11,416.24
Total reserves	39,768.40	.224,875.84	22,612.77	6,616.52	47,721.74
SURPLUS Debentures paid Local sinking fund					
Operating surplus	17,522.15	83,553.19	8,181.04	-	
Total surplus	29,522.15	155,660.69	13,181.04		
Total liabilities, reserves and surplus	69,824.20	387,740.20		15,608.44	134,187.40
Percentage of net debt to total assets	1.2	3.7	0.5	0.0	2.5

"A"-Continued

Huntsville 2,767	Ingersoll				
2,767	_	Iroquois	Jarvis	Kemptville	Kincardine
	5,953	938	590	1,281	2,373
\$ c. 353.52 647.30 26,515.55	\$ c. 16,650.86 51,338.29 67,593.16	\$ c. 281.20 100.00 9,862.68	\$ c.	\$ c. 4,719.34	\$ c. 6,740.17 2,794.20 54,449.52
19,796.35 17,171.05 9,479.53	50,956.87 39,419.27 5,642.35 4,597.59	3,809.02 5,505.48 1,760.31	6,275.24 3,785.87 931.82	10,391.91 10,138.56 1,090.07	23,887.82 16,096.62 7,825.91
2,390.24	13,485.36	867.56	216.87	876.20	2,644.57
5,156.20		575.00			
81,509.74	249,683.75	22,761.25	22,534.62	49,095.82	114,438.81
3,764.83 7,000.00 3,602.07 7,608.90	74.00 1,038.24 1,614.72	2,646.72 5,000.00 692.00 1,391.40	3,296.76 13,500.00 122.27 120.00	737.10 15,000.00 4,593.80 2,207.07	272.44 22,000.00 838.13
96,670.25 1,651.89	291,980.39 104.12	4,044.14	23,909.35	32,781.35	69,559.74 109.39
201,807.68	544,495.22	36,535.51	63,483.00	104,415.14	207,218.51
2,176.49	14,262.75 1,844.85 7,186.94	336.42	26.80	441.24	105.36
3,211.13	23,294.54	336.42	26.80	1,645.93	1,124.36
96,670.25 22,069.12 309.83	291,980.39 34,639.23 4.360.76	4,044.14 3,107.48 2,000.00	23,909.35 8,197.84	32,781 . 35 16,914 . 31	69,559.74 29,541.36 7,559.28
119,049.20	330,980.38	9,151.62	32,107.19	49,695.66	106,660.38
21,133.54	79,800.00		10,500.00	19,506.62	60,000.00
58,413.81	110,420.30	27,047.47	20,849.01	33,566.93	39,433.77
79,547.35	190,220.30	27,047.47	31,349.01	53,073.55	99,433.77
201,807.68	544,495.22	36,535.51	63,483.00	104,415.14	207,218.51
2.8	7.6	1.0	0.0	2.3	0.9

Balance Sheets of Electrical Departments of

Population. 32,697 2,372 P.V. 37,724					
Assets	Municipality	Kingston	Kingsville	Kirkfield	Kitchener
Lands and buildings	Population	32,697	2,372	P.V.	37,724
Total plant	Lands and buildings. Substation equipment. Distribution system—overhead. Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental. Miscellaneous construction expense. Steam or hydraulic plant.	289,982.61 320,837.98 273,364.03 255,819.60 145,225.01 176,658.53 85,345.49 50,059.51 17,665.40	8,730.87 37,683.73 17,901.18 18,706.28 1,559.61 19,200.00 499.03	5,227.83 757.90 959.33 379.00	\$ c. 306,731.20 495,726.04 521,850.71 136,246.06 306,201.63 301,801.26 79,448.02 118,465.71 45,740.99
Bank and cash balance 32,345.85 3.293.81 2.358.66 25 Securities and investments 405,000.00 32,500.00 3,000.00 100,00 Accounts receivable 137,090.61 319.12 40.79 103,72 Inventories 58,294.55 104,49 Sinking fund on local debentures 269,055.95 65,939.28 4,885.42 2,101,10 Other assets 2,517,128.28 206,333.61 17,843.04 4,774,95 LIABILITIES 3604.00 13,586.09 74.60 Accounts payable 88,941.48 208.28 87,84 Bank overdraft 30,256.36 21,764.75 122,34 Total liabilities 122,801.84 35.559.12 293,32 RESERVES For equity in H-E.P.C. systems 269,055.95 65,939.28 4,885.42 2,101,10 For depreciation 467,588.06 37,316.36 4,747.81 617.08 Other reserves 276,287.67 5,388.66 200.00 6,77 Total reserves 1,012,931.68 108,644.30 9,833.23 2,724.97 SURPLUS Debentures paid	^		104.000.70	7.550.17	
Securities and investments. 405.000.00 32,500.00 3,000.00 100.00 Accounts receivable. 137.090.61 319.12 40.79 103.72 Inventories. 58,294.55 104,49 104,49 Sinking fund on local debentures. 269.055.95 65,939.28 4,885.42 2,101,10 Other assets. 2,517,128.28 206,333.61 17,843.04 4,774,95 LIABILITIES Debenture balance. 3,604.00 13,586.09 74.60 Accounts payable. 88,941.48 208.28 87.84 Bank overdraft. 85.3 21,764.75 122,34 Total liabilities. 122,801.84 35,559.12 293,32 RESERVES For equity in H-E.P.C. systems. 269,055.95 65,939.28 4,885.42 2,101,10 For depreciation. 467,588.06 37,316.36 4,747.81 617.08 Other reserves. 276,287.67 5,388.66 200.00 6,77 Total reserves. 1,012,931.68 108,644.30 9,833.23 2,724.97 Surplus					,
Equity in H-E.P.C. systems. 269,055,95 65,939,28 4,885,42 2,101,10 Total assets. 2,517,128,28 206,333.61 17,843.04 4,774,95 LIABILITIES 3,604.00 13,586.09 74,60 Accounts payable. 88,941.48 208.28 87,84 Bank overdraft. 30,256.36 21,764.75 122,34 Total liabilities. 122,801.84 35,559.12 293,32 RESERVES For equity in H-E.P.C. systems. 269,055.95 65,939.28 4,885.42 2,101,10 For depreciation. 467,588.06 37,316.36 4,747.81 617,08 Other reserves. 276,287.67 5,388.66 200.00 6,77 Total reserves. 1,012,931.68 108,644.30 9,833.23 2,724.97 SURPLUS 308,296.00 19,913.91 6,000.00 662,55 Local sinking fund 1,073,098.76 42,216.28 2,009.81 1,094,10	Securities and investments	405.000.00 137,090.61	32,500.00 319.12	3,000.00 40.79	258.33 100,000.00 103,726.06 104,495.13
LIABILITIES 3,604.00 13,586.09 74,60 Accounts payable. 88,941.48 208.28 87,84 Bank overdraft.	Equity in H-E.P.C. systems		65,939.28 0.70	4,885.42	2,101,108.16 787.38
Debenture balance. 3.604.00 13,586.09 74,60 Accounts payable. 88,941.48 208.28 87,84 Bank overdraft. 30,256.36 21,764.75 122,34 Total liabilities. 122,801.84 35,559.12 293,32 RESERVES For equity in H-E.P.C. systems. 269,055.95 65,939.28 4,885.42 2,101,10 For depreciation. 467,588.06 37,316.36 4,747.81 617.08 Other reserves. 276,287.67 5,388.66 200.00 6,77 Total reserves. 1,012,931.68 108,644.30 9,833.23 2,724.97 SURPLUS Debentures paid. 308,296.00 19,913.91 6,000.00 662,55 Local sinking fund. 1,073,098.76 42,216.28 2,009.81 1,094,10	Total assets	2,517,128.28	206,333.61	17,843.04	4,774,950.59
RESERVES 269,055.95 65,939.28 4,885.42 2,101,10 For equity in H-E.P.C. systems. 269,055.95 65,939.28 4,885.42 2,101,10 For depreciation. 467,588.06 37,316.36 4,747.81 617,08 Other reserves. 276,287.67 5,388.66 200.00 6,77 Total reserves. 1,012,931.68 108,644.30 9,833.23 2,724.97 SURPLUS 308,296.00 19,913.91 6,000.00 662,55 Local sinking fund 1,073,098.76 42,216.28 2,009.81 1,094,10	Debenture balance	88,941.48	208.28		74,600.00 87,842.99 8,537.58 122,342.00
For equity in H-E.P.C. systems 269,055.95 65,939.28 4,885.42 2,101,10 617,08 617,08 0ther reserves. 276,287.67 5,388.66 200.00 6,77 Total reserves. 1,012,931.68 108,644.30 9,833.23 2,724.97 Surplus Debentures paid. 308,296.00 19,913.91 6,000.00 662,55 Local sinking fund. 1,073,098.76 42,216.28 2,009.81 1,094,10	Total liabilities	122,801.84	35,559.12		293,322.59
SURPLUS 308,296.00 19,913.91 6,000.00 662,55 Local sinking fund. 1,073,098.76 42,216.28 2,009.81 1,094,10	For equity in H-E.P.C. systems For depreciation	269,055.95 467,588.06 276,287.67	37.316.36	4,747.81	617,086.82
Debentures paid. 308,296.00 19,913.91 6,000.00 662,55 Local sinking fund. 1,073,098.76 42,216.28 2,009.81 1,094,10	Total reserves	1,012,931.68	108,644.30	9,833.23	2,724,973.18
	Debentures paid				662,550.00
10tal sur plus					1,756,654.83
Total liabilities, reserves and surplus 2,517,128.28 206,333.61 17,843.04 4,774,95	*				
					6.8
Percentage of net debt to total assets 5.5 13.4 0.0 6.8	rercentage of net debt to total assets	5.5	13.4	0.0	0.8

"A"—Continued

Lakefield	Lambeth	Lanark	Lancaster	La Salle	Leamington	Lindsay
1,373	P.V.	705	526	1,300	6,276	7,888
\$ c. 3,137.97	\$ c.	S c.	\$ c.	\$ c. 1,210.68	\$ c. 36,099.64 7,101.97	\$ c. 16,811.78 3,176.56
26,828.02	11,691.71	11,462.98	8,789.65	34,730.25	72,764.64 29,337.91	127,238.35 20,679.60
10,846.52 9,487.02 2,626.34	3,635.87 3,928.04 1,053.80	5,555.92 3,619.89 1,358.88	1,974.75 2,196.94 650.65	10,906.08 7,504.41 1,708.75	40,599.13 41,318.96 3,642.56	57,316.21 48,849.47 16,240.27
4,518.82	300.71		14.95	2,158.65	14,478.49 5,718.59	7,548.37
3,445.25						
60,889.94	20,610.13	21,997.67	13,626.94	58,218.82	251,061.89	297,860.61
7,483.31 21,000.00 325.92	1,000.00		3,227.05 1,500.00 57.53	851.46 20.79	1,254.74 12,500.00 1,584.13 14,852.50	300.00 28,000.00 1,452.99 13,141.27
22,176.88	15,290.10	9,978.66	9,127.55	23,322.45	148,755.44	174,775.22
111,876.05	36,991.43	33,616.45	27,539.07	82,415.37	430,008.70	515,530.09
6,794.29	59.92 626.35 140.00	124.59	577.60 152.86	1,545.29 7,470.91 3,052.58	867.08 18,152.20	9,934.81 1,124.07 5,757.08
7,333.82	826.27	249.59	730.46	12,068.78	19,019.28	16,815.96
22,176.88 20,478.42	15,290.10 6,119.62 18.59	9,978.66 1,639.24	9,127.55 4,223.91	23,322.45 12,963.91 164.06	148,755.44 59,620.54 22,448.82	174,775.22 66,789.09
42,655.30	21,428.31	11,617.90	13,351.46	36,450.42	230,824.80	241,564.31
26,705.71	4,000.00	7,316.57	8,916.82	15,500.00	48,000.00	120,065.19
35,181.22	10,736.85	14,432.39	4,540.33	18,396.17	132,164.62	137,084.63
61,886.93	14,736.85	21,748.96	13,457.15	33,896.17	180,164.62	257,149.82
111,876.05	36,991.43	33,616.45	27,539.07	82,415.37	430,008.70	515,530.09
8.2	3.8	1.1	4.0	20.4	1.7	4.9

Balance Sheets of Electrical Departments of

Municipality		London 80.342	London Twp. V.A.	Long Branch 5,220	Lucan 643
ASSETS Lands and buildingsSubstation equipment		1,145,446.02			\$ c. 375.45
Distribution system—overhead Distribution system—underground.	54,864.68 6,991.08	889,718.07 519.850.36		72,183.20	
Line transformers. Meters. Street light equipment, regular	30,129.76 22,548.85 4,589.64	446,098.48 82,407.64	8,253.30 1,999.16	30,482.31	6,104.06 4,934.22 4,579.47
Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plant	2,416.83	190,108.22	1,348.31	37.15	435.77
Old plant					
Total plant	124,540.12	4,364,580.89	51,255.56	148,744.54	29,693.49
Bank and cash balance	703.71 87.36	1,356,500.00 177,710.13	697.26	18,729.83	
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	127,436.37 93.17	3,803,603.03 140,781.90	35,982.06	53,886.92	27,557.63
Total assets	269,480.19	10,029,994.14	94,326.99	262,366.12	68,289.99
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	25.78	1,548.83 133,452.23 139,198.10 104,406.14	528.79		
Total liabilities	2,242.90	378,605.30	992.79	3,303.90	770.84
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	63.943.62	3,803,603.03 1,937,410.45 763,334.34	16,252.17	35,981.98	27,557.63 11,393.45
Total reserves	191,379.99	6,504,347.82	52,238.05	90,046.60	38,951.08
SURPLUS Debentures paid Local sinking fund	43,189.89	1,580,351.17	19,000.00	40,304.60	11,213.62
Operating surplus	32,667.41	1,566,689.85	22,096.15	128,711.02	17,354.45
Total surplus	75,857.30	3,147,041.02	41,096.15	169,015.62	28,568.07
Total liabilities, reserves and surplus.	269,480.19	10,029,994.14	94,326.99	262,366.12	68,289.99
Percentage of net debt to total assets.	0.5	4.4	1.7	1.6	1.9

"A"—Continued

		1			1	
Lucknow	Lynden	Madoc	Markdale	Markham	Marmora	Martintown
930	P.V.	1,084	776	1,267	993	P.V.
\$ c.	\$ c. 241.18	\$ c. 100.00	\$ c.	\$ c.	S c.	\$ c. 126.15
21,793.99	6,058.56	19,239.91	780.80 12,153.01	22,355.11	14,729.71	2,932.57
12,460.71 7,169.28 3,148.90	4,277.40 3,027.40 636.01	7,245.95 6,878.07 1,577.14	7,247.47 6,043.15 1,390.15	15,711.80 9,779.84 1,160.91	4,305.91 4,767.48 1,193.23	1,308.76 1,356.67 354.94
179.18	193.57			1,568.96	313.63	36.94
44,752.06	14,434.12	35,041.07	27,614.58	50,576.62	25,309.96	6,116.03
7,103.46 16,000.00 372.58	167.59 4,000.00 20.61	5,357.70 8,000.00 74.63	4,514.43 10,155.13 56.49	2,181.98 16,000.00 287.57	3,310.58 8,000.00 847.22 344.35	1,426.65 2,500.00 32.39
33,231.60	19,205.50	13,669.24	16,382.09	31,602.92	9,561.49	3,337.12
101,459.70	37,827.82	62,142.64	58,722.72	100,649.09	47,373.60	13,412.19
2,061.94	29.41	5,613.63	85.47			29.20
2,001.01	22.12	435.84	1,167.00	175.00	260.00	5.00
2,061.94	51.53	6,049.47	1,252.47	175.00	260.00	34.20
33,231.60 8,053.39 6,750.00	19,205.50 5,451.07	13,669.24 1,970.29	16,382.09 11,126.31 1,000.00	31,602.92 9,629.84 3,032.39	9,561.49 8,126.20	3,337.12 2,051.08 81.02
48,034.99	24,656.57	15,639.53	28,508.40	44,265.15	17,687.69	5,469.22
17,614.08	4,495.00	14,000.00	6,370.29	11,373.63	15,091.58	5,346.73
33,748.69	8,624.72	26,453.64	22,591.56	44,835.31	14,334.33	2,562.04
51,362.77	13,119.72	40,453.64	28,961.85	56,208.94	29,425.91	7,908.77
101,459.70	37,827.82	62,142.64	58,722.72	100,649.09	47,373.60	13,412.19
3.0	0.3	12.5	2.9	0.3	0.7	0.3

Balance Sheets of Electrical Departments of

Municipality	Maxville	Meaford	Merlin	Merritton	Midland
Population	811	2,602	P.V.	3,506	6,880
Assets Lands and buildings. Substation equipment. Distribution system—overhead.		\$ c. 1,144.18 4,093.47 40,495.56	\$ c. 3,555.70 10,199.06	\$ c. 6,784.41 84,395.94 48,601.53	\$ c. 19,983.57 85,419.70 105,303.13
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental	2,423.64 3,470.21 2,077.25	15,993.19 16,433.25 4,135.66	4,124.46 3,455.67 627.51	20,852.73 20,669.03 6.344.53	34,686.77 48,953.20 19,322.71
Miscellaneous construction expense Steam or hydraulic plantOld plant.	20.89			4,393.80	
Total plant	20,621.47	84,637.72	22,533.58	192,041.97	315,003.68
Bank and cash balance Securities and investments Accounts receivable Inventories Sinking fund on local debentures	10,100.00 195.62	5,977.94 25,000.00 486.32	2,192.49 11,200.00 6.36 337.57	117,000.00	8,462.47 141,000.00 13,866.61 7,604.37
Equity in H-E.P.C. systems Other assets	14.687.08	51,409.55 31.51	17,189.01	329,768.28 111.25	344,509.35 649.38
Total assets	46,043.23	167,543.04	53,459.01	653,966.43	831,095.86
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	66.22		359.55 110.00		350.97 1,511.66
Total liabilities	196.11	1,277.52	469.55	1,002.60	1,862.63
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves			6,803.11		344,509.35 244,837.41 1,299.25
Total reserves	23,197.33	74,564.28	24,015.52	376,185.24	590,646.01
SURPLUS Debentures paid. Local sinking fund.			l i		111,944.99
Operating surplus				244,592.38	
Total surplus				276,778.59	
Total liabilities, reserves and surplus.	46,043.23	167,543.04	53,459.01	653,966.43	
Percentage of net debt to total assets	0.6	1.1	1.3	0.3	0.4

"A"—Continued

Mildmay	Millbrook	Milton	Milverton	Mimico	Mitchell	Moorefield
743	745	2,151	1,013	9,055	1,548	P.V.
\$ c.	\$ c.	\$ c. 15,905.31 26,619.47 30,467.68	\$ c. 761.88	\$ c. 39,015.08 60,936.13 92,463.58	\$ c. 20,097.84 18,523.41 34,876.82	\$ c.
4,447.36 4,208.65 638.24	3,045.96 2,474.66 595.65	20,129.52 18,683.32 5,734.31	12,830.70 6,801.17 848.75	49,889.73 41,422.89 11,296.88	22,038.41 17,614.06 7,680.22	3,003.69 1,909.58 295.88
1,013.19		5,451.84	1,690.45	4,198.64	3,604.39	349.30
849.00					1,380.00	
20,044.22	13,519.10	122,991.45	37,209.20	299,222.93	125,815.15	10,117.39
1,872.77 10,000.00 96.21	5,890.81 4,000.00 66.23	50.00 28,000.00 684.00 6,201.19	8.24 6,500.00 216.40	2,529.22 45,000.00 3,001.04	70.00 26,700.00 8,724.84 10,745.71	823.50 500.00 21.54
6,796.51	2,467.36	154,077.37 4.80	62,869.78 4.66	223,418.50 1,179.31	70,165.58 97.00	9,622.24
38,809.71	25,943.50	312,008.81	106,808.28	574,351.00	242,318.28	21,084.67
4,728.96 76.11 588.43	95.36	93.67 885.02 608.63	597.36 1,374.94	60.48	4,650.67 4,468.31 317.00	26.36 13.00
5,393.50	293.03	1,587.32	1,972.30	5,274.48	9,435.98	39.36
6,796.51 4,300.97	2,467.36 1,086.03	154,077.37 35,385.59 10,164.30	62,869.78 9,850.59		70,165.58 49,805.33 1,267.05	9,622.24 3,398.69
11,097.48	3,553.39	199,627.26	72,720.37	329,010.08	121,237.96	13,020.93
7,574.54	9,000.00	33,046.41	9,500.00	127,000.00	22,295.22	4,500.00
14,744.19	13,097.08	77,747.82	22,615.61	113,066.44	89,349.12	3,524.38
22,318.73	22,097.08	110,794.23	32,115.61	240,066.44	111,644.34	8,024.38
38,809.71	25,943.50	312,008.81	106,808.28	574,351.00	242,318.28	21,084.67
16.8	1.2	1.0	4.5	1.5	5.5	0.4

Balance Sheets of Electrical Departments of

Municipality	Morris- burg	Mount Brydges	Mount Forest	Napanee	Neustadt
Population	1,511	P.V.	1,797	3,359	435
Assets Lands and buildings Substation equipment Distribution system—overhead Distribution system—underground.	\$ c. 5,682.38 4,457.21 14,300.46	8,810.42	3,726.00 686.75 23,979.09	2,358.27 55,492.41	\$ c.
Line transformers		3,320.25 1,385.36	11,355.08 2,397.89	l i	
Miscellaneous construction expense Steam or hydraulic plant Old plant	394.88		87.10		140.40
Total plant	46,817.39	15,467.36	53,478.49	134,133.80	19,757.69
Bank and cash balance Securities and investments Accounts receivable. Inventories.		797.98	993.77	100.00 12,800.00 16,882.72 11,428.63	5,029.10 11,700.00 37.96
Sinking fund on local debentures. Equity in H-E.P.C. systems Other assets	6,042.61	11,832.66	52,998.72 98.08		9,171.71
Total assets	65,287.79	44,091.81	124,166.28	247,108.61	45,696.46
LIABILITIES Debenture balance	690.16			14,453.71 1,362.92	54.69
Total liabilities	3,619.85	365.74	240.00	15,816.63	213.54
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	6,042.61 3,488.64	11,832.66 6,865.88 97.38	52,998.72 27,925.02 1,500.00	71,746.19 20,807.94 2,500.00	
Total reserves	9,531.25	18,795.92	82,423.74	95,054.13	20,357.86
SURPLUS Debentures paid Local sinking fund	30,535.05	4,220.00	25,351.63	70,000.00	15,504.12
Operating surplus	21,601.64	20,710.15	16,150.91	66,237.85	9,620.94
Total surplus	52,136.69	24,930.15	41,502.54	136,237.85	25,125.06
Total liabilities, reserves and surplus.	65,287.79	44,091.81	124,166.28	247,108.61	45,696.46
Percentage of net debt to total assets.	6.1	1.1	0.3	9.0	0.6

"A"—Continued

Newbury	Newcastle	New	Newmarket	New Toronto	Niagara Falls
265	705	Hamburg 1,456	4,014	8,727	20,530
S c.	\$ c. 107.37	\$ c. 4,203.21	\$ c. 4,000.00	\$ c. 54,658.92	\$ c. 130,705.85
7,224.26	16,070.47	1,319.80 25,866.13	5,000.00 58,450.76	109,009.44	285,594.55 240,275.76
1,944.11	5,686.08	15.825.51	35,918.63	17,198.72 63,678.13	229,853.23
1,728.03 894.16	4,698.88 1,362.18	12,389.97 2,274.20	27,213.37 7,487.53	47,865.70 11,054.45	139,471.67 118,133.33
493.37	1,710.35	1,050.35	1,902.24	10,566.51	26,330.97
***************************************					20,000.37
12,283.93	29,635.33	62,929.17	139,972.53	314,031.87	1,170,365.36
775.98	674.30	50.00	679.15	19,498.96	31.540.54
6,500.00	9,000.00	15,100.00	2,275.68	114,000.00	195,000.00
530.08	368.62	670.39 843.44	128.53	4,113.93 4,361.86	4,025.63 43,917.14
6,609.35	5,240.35	74,662.53	7,940.59	756,692.71	857,376.59
		4.26			120.10
26,699.34	44,918.60	154,259.79	150,996.48	1,212,699.33	2,302,345.36
			3,000.00		16,389.03
31.65		934.24	980.30	526.54	1,541.56
42.84		203.50	220.00	6,733.93	21,464.94
74.49		1,137.74	4,200.30	7,260.47	39,395.53
6,609.35	5,240.35	74,662.53	7,940.59	756,692.71	857,376.59
6,484.16	12,732.25	20,381.28 33.83	41,725.10	97,091.08 356.46	382,713.51 16,477.77
13,093.51	17,972.60	95,077.64	49,665.69	854,140.25	1,256,567.87
9,754.39	14,000.00	17,729.08	2,000.00	8,000.00	673,853.97
3,776.95	12,946.00	40,315.33	95,130.49	343,298.61	332,527.99
13,531.34	26,946.00	58,044.41	97,130.49	351,298.61	1,006,381.96
26,699.34	44,918.60	154,259.79	150,996.48	1,212,699.33	2,302,345.36
0.4	0.0	1.4	2.9	1.6	2.7
			•		

Balance Sheets of Electrical Departments of

					,
Municipality	the-Lake	North York Twp. V.A.	Norwich	Norwood 703	Oil Springs 422
ASSETS Lands and buildingsSubstation equipment	\$ c. 2,320.00 24.212.17	49,386.48	4,660.42	S c.	6,457.31
Distribution system—overhead Distribution system—underground. Line transformers	45,233.71	640,524.11	11,926.99	24.589.23 6.376.50	15,775.25
Meters		156.00 49,198.37	4,685.64	6.765.66 1,837.92	308.24
Miscellaneous construction expense Steam or hydraulic plantOld plant				3,582.30	1,693.12
Total plant	126,051.05	1,286,804.96	41,584.19	46,056.65	39,657.06
Bank and cash balance	996.68 5,000.00 1,532.89 6,113.43	10,000.00 37,558.34	10,000.00 1,959.70	5,085.52 20,500.00 431.26	8,500.00
Equity in H-E.P.C. systems Other assets	51,798.13	342,039.83	55,123.43	9,989.38 551.60	35,813.35
Total assets	191,492.18	1,819,726.16	116,755.17	82,614.41	89,487.41
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	2,327.59	19,764.27		6,437.72 486.24 551.60	86.61
Total liabilities.				7,475.56	
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	51,798.13 25,061.24 701.86	342,039.83 281,071.51	55,123.43 12,846.47	9,989.38	35,813.35 15,307.45
Total reserves	77,561.23	624,633.59	68,529.86	29,291.58	51,206.03
SURPLUS Debentures paidLocal sinking fund	37,011.53	461,869.17	13,756.00		16,721.31
Operating surplus	62,652.64	331,331.53	33,919.78	15,184.99	21,450.42
Total surplus	99,664.17	793,200.70	47,675.78		38,171.73
Total liabilities, reserves and surplus.	191,492.18	1,819,726.16	116,755.17	82,614.41	89,487.41
Percentage of net debt to total assets.	10.2	24.7	0.9	10.3	0.2

"A"—Continued

Omemee	Orangeville	Orono	Oshawa	Ottawa	Otterville
600	2,613	P.V.	27,215	163,403	P.V.
\$ c. 200.00 360.32 18,061.45 	\$ c. 2,585.07 41,879.75 18,129.26 16,897.05 18,079.47	7,574.10 2,123.37 2,718.81 1,285.76	\$ c. 73,875.83 67,336.66 339,124.91 138,714.21 121,789.09 155,120.36 57,881.61	\$ c. 602,055.09 1,490,347.69 978,766.81 321.558.34 468,571.52 341,118.31 132,590.11	9,551.69 5,855.33 4,056.82 1,739.70
1,405.00	1,334.97	631.04	28,871.89	39,975.08	600.71
1,100.00			20,011.00		
33,748.87	98,905.57	14,333.08	982,714.56	4,374,982.95	21,804.25
550.47 8,000.00 14.68	1,049.87 14,000.00 272.12	5,000.00		245,674.35 1,140,000.00 84,427.16 62,124.34 246,700.77	725.25 6,500.00 970.05
3,826.90	71,974.65 284.53		921,000.73 309.66	412,823.15	13,683.44
46,140.92	186,486.74	25,599.32	2,394,249.25	6,566,732.72	43,682.99
2,026.40	722.32	0.72	74,131.02 28,638.75	82,269.20 101,527.52	2.59
2,172.40	865.32	0.72	102,769.77	183,796.72	78.97
3,826.90 14,372.02	71,974.65 32,243.61	2,530.02 988.38 1,000.00		412,823.15 2,141,332.71 731,668.34	13.683 .44 9,144 .62
18,198.92	104,218.26	4,518.40	1,146,589.27	3,285,824.20	22,828.06
12,000.00	25,594.32 55,808.84		302,622.40 842,267.81	. 897,730.80 246,700.77 1,952,680.23	4,500.00 16,274.96
25,769.60	81,403.16	21,080.20	1,144,890.21	3,097,111.80	20.775.96
46,140.92	186,486.74	25,599.32	2,394,249.25	6,566,732.72	43,682.99
5.1	0.7	0.0	7.0	1.6	0.3

Balance Sheets of Electrical Departments of

			1		1
Municipality	Owen Sound	Paisley	Palmerston	Paris	Parkhill
Population		716	1,439	4,717	915
Assets Lands and buildings Substation equipment Distribution system—overhead	39,406.72 158,124.33	1,923.46	1,346.28	13,570.15 50,167.23	
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental Miscellaneous construction expense	83,871.08 86,292.01 33,177.81 14,303.52		6,966.20		6,086.62 7,821.43
Steam or hydraulic plantOld plant					
Total plant	446,927.23	29,172.40	68,884.79	206,623.59	50,502.41
Bank and cash balance	10,052.70	2,725.98 4,500.00 110.22	3,735.54 15,600.00 1,037.68 3,449.45	42,500.00	
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	362,046.69	17,178.98	67,382.82 36.80	174,063.89	29,979.15
Total assets	889,836.37	53,687.58	160,127.08	423,600.59	81,330.70
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	26,497.92 11,528.49 8,812.31			609.03 3,645.07	
Total liabilities	46,838.72	913.94	479.68	4,254.10	3,171.74
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	362,046.69 111,984.93 253.97	17,178.98 8,013.70 1,000.00	67,382.82 21,791.49 319.84		29,979.15 10,355.60 2,700.00
Total reserves	474,285.59	26,192.68	89,494.15	265,066.35	43,034.75
SURPLUS Debentures paid. Local sinking fund. Operating surplus.	107,718.00	13,623.35	27,000.00 43,153.25	92,000.00	14,630.02
Total surplus	368,712.06	26,580.96	70,153.25	154,280.14	35,124.21
Total liabilities. reserves and surplus.	889,836.37	53,687.58	160,127.08	423,600.59	81,330.70
Percentage of net debt to total assets.	8.9	2.5	0.5	1.7	6.2

"A"—Continued

Penetan-	Perth	Peterborough	Petrolia	Picton	Plattsville
guishene 4,006	4,282	32,645	2,682	3,471	P.V.
\$ c. 2,288.05 7,161.13 60,605.06	\$ c. 5,109.34 6,961.44 52,992.13	\$ c. 100,021.02 200,762.65 455,608.82	\$ c. 38,175.65 5,971.75 55,615.67	\$ c. 10,969.73 21,395.79 49,751.26	\$ c. 5,486.63
26,885.97 23,008.33 4,286.07	36,980.75 28,121.17 5,408.88	216,413.42 177,945.46 71,293.46	40,041.78 19,645.62 7,140.28	21,773.35 26,050.89 10,953.03	4,093.52 3,000.44 171.79
1,393.65	6,891.36	19,092.24	8,835.59	4,798.16	562.65
	23,354.70				
125,628.26	165,819.77	1,241,137.07	175,426.34	145,692.21	13,315.03
3,986.61 40,000.00 3,909.67	9,572.72 85,500.00 11,605.95 19,353.20	16,652.68 255,000.00 57,563.82 42,499.07	4,622.60 15,000.00 3,190.67 5,162.79	7,132.83 21,500.00 997.54 12,241.46	1,166.51 9,500.00 103.16
98,367.31 120.85	112,677.57	561,787.67 286.85	152,987.01 160.00	89,224.06	14,612.79
272,012.70	404,529.21	2,174,927.16	356,549.41	276,788.10	38,697.49
	14,953.13	23,000.00 43,793.69	1,519.91	394.49	
977.50	3,134.34	465.00	1,229.12	4,812.05	
977.50	18,087.47	67,258.69	2,749.03	5,206.54	
98,367.31 61,343.40 16,888.55	112,677.57 77,572.88 5,746.44	561,787.67 328,521.95 1,238.71		89,224.06 31,662.93 14,468.91	14,612.79 4,731.17
176,599.26	195,996.89	891,548.33	204,590.59	135,355.90	19,343.96
36,982.95	93,446.87	477,610.67	50,000.00	5,730.32	5,237.00
57,452.99	96,997.98	738,509.47	99,209.79	130,495.34	14,116.53
94,435.94	190,444.85	1,216,120.14	149,209.79	136,225.66	19,353.53
272,012.70	404,529.21	2,174,927.16	356,549.41	276,788.10	38,697.49
0.5	6.2	4.2	1.3	2.7	0.0

Balance Sheets of Electrical Departments of

Municipality	Edward	Port Colborne 7,251	Port Credit 2,325	Port Dalhousie 1,747	Port Dover 2,021
Assets Lands and buildings		\$ c. 30,326.10	\$ c. 675.00	\$ c.	\$ c. 248.75
Substation equipment Distribution system—overhead Distribution system—underground.	28,085.35	92,873.55	48,091.83	31,970.31	46,206.05
Line transformers	10,439.71 8,502.33 4,709.24	33,335.05 5,793.55	17.742.19 5,533.94	15,887.53	16,220.60
Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plant	1,437.98		5,210.46		1,818.40
Old plant Total plant		239,380.39	96,823.47		94,374.01
Bank and cash balance	3,421.12				1,300.89
Securities and investments	21,000.00 2,304.24 2,544.79	115,000.00 1,939.62	2,500.00 794.80	6,000.00	
Sinking fund on local debentures. Equity in H-E.P.C. systems Other assets	104,740.90	156,986.47 80.81	66,712.81	60,737.39 18.76	42,919.66
Total assets	187.185.66	520,972.70	169,426.57	150,246.63	141,880.99
LIABILITIES Debenture balanceAccounts payableBank overdraft.	518.94	5,463.21 5,948.95	458.53 138.36	387.16	
Other liabilities		20,759.25	1,264.07	1,440.67	1,279.00
Total liabilities	891.35	32,171.41	1,860.96	1,827.83	3,765.94
RESERVES For equity in H-F.P.C. systems For depreciation Other reserves	104,740.90 19,197.82 60.14	156,986.47 67,121.16 242.52	66,712.81 26,086.57 190.59	60,737.39 12,428.71 214.16	42,919.66 24,576.85
Total reserves	123,998.86	224,350.15	92,989.97	73,380.26	67,496.61
SURPLUS Debentures paid Local sinking fund	17,000.00	140,536.79	14,041.47	22,500.00	29,000.00
Operating surplus	45,295.45	123,914.35	60,534.17	52,538.54	41,618.54
Total surplus	62,295.45	264,451.14	74,575.64	75,038.54	70,618.54
Total liabilities, reserves and surplus.	187,185.66	520,972.70	169,426.57	150,246.63	141,880.99
Percentage of net debt to total assets.	1.1	4.5	1.8	2.0	3.8

"A"—Continued

Port Elgin	Port Hope	Port McNicoll	Port Perry	Port Rowan	Port Stanley
1.566	5,154	885	1,278	688	940
\$ c. 111.25	\$ c. 11,994.21 3,100.00 64,346.30	\$ c. 369.08	\$ c. 2,564.65 22,828.17	S c.	\$ c. 1,574.60
10,970.65 11,358.81 3,347.92	33,741.90 39,737.23 5,001.19	2,826.70 4,767.82 696.26	6,710.89 6,474.76 1,861.50	6,158.99 3,604.31 1,164.93	18,657.04 15,878.38 2,503.56
2,390.92	8,164.43	597.19	440.61	778.13	5,896.77
4,213.00					
62,736.59	166,085.26	23,538.67	40,880.58	24,635.03	73,743.08
868.25 13,500.00 132.05	2,629.98 35,000.00 395.56 13,849.21	1,000.00	5,876.29 11,000.00 126.74	94.06 4,000.00 38.52	2,798.64 21,000.00 1,274.34
24,579.11 20.00	107,223.22	9,760.08	28,761.28	11,109.19	64,091.15
101,836.00	325,183.23	34,687.30	86,644.89	39,876.80	162,907.21
9,177.46 3,460.89	9,129.85	498.74 1,619.50 263.40		1,000.00 215.00	1,328.02
12,638.35	9,129.85	2,381.64	1,385.78	1,215.00	1,570.10
24,579.11 14,402.63	107,223.22 44,484.77	9,760.08 6,919.80		11,109.19 5,746.34	64,091.15 23,752.10 5,073.18
38,981.74	151,707.99	16,679.88	42,640.47	16,855.53	92,916.43
32,822.54	79,000.00	7,300.00	19,881.66	11,000.00	18,950.00
17,393.37	85,345.39	8,325.78	22,736.98	10,806.27	49,470.68
50,215.91	164,345.39	15,625.78	42,618.64	21,806.27	68,420.68
101,836.00	325,183.23	34,687.30	86,644.89	39,876.80	162,907.21
16.3	4.1	9.5	2.4	8.3	1.6

Balance Sheets of Electrical Departments of

Assets Lands and buildings Substation equipment Distribution system—overhead Distribution system—underground	\$ c. 2,761.54 44,439.38	Preston 6,894 \$ c.	Priceville P.V.	Princeton P.V.	Queenston P.V.
Assets Lands and buildings Substation equipment Distribution system—overhead Distribution system—underground	\$ c. 2,761.54		P.V.	P.V.	P.V.
Lands and buildings. Substation equipment. Distribution system—overhead. Distribution system—underground.	2,761.54	\$ c.			
Distribution system—underground		57,121.70 97,696.91	\$ c. 68.00 6,127.61		\$ c.
	24,344.43 22,892.14 2,302.03	79,039.84 49,909.94 8,458.10	1,251.65 808.60	3,881.23 1,915.23 430.22	4,181.75 2,042.89 498.05
Steam or hydraulic plant					
Total plant	97,945.07	335,842.88	8,573.74	10,827.34	18,143.60
Securities and investments		125.00 43,000.00 7,828.82 16,605.87	340.76 2,500.00 34.00	41.08	112.02
Sinking fund on local debentures. Equity in H-E.P.C. systems. Other assets.	81.205.36	394,180.57	1,460.97	15,117.82	10,684.11
Total assets2	209,042.57	797,583.14	12,909.47	35,830.90	38,435.15
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	3,893.85	9,693.08 14,072.42		200.90	
Total liabilities	4,411.25	29,933.33		200.90	283.71
	63,779.25	394,180.57 165,165.85 427.76	1,460.97 3,996.59		
Total reserves	144,984.61	559,774.18	5,457.56	19,043.72	17,276.64
Local sinking fund	12.170.99 47,475.72	148,429.59 59,446.04	6,166.10	3,550.00	9,276.29
nindra	59,646.71	207,875.63	7,451.91	16,586.28	20,874.80
Total liabilities, reserves and surplus.		797,583.14	12,909.47	35,830.90	38,435.15
Percentage of net debt to total assets.	3.5	7.4	0.0	1.0	1.0

"A"—Continued

Renfrew	Richmond	Richmond	Ridgetown	Ripley	Riverside	Rockwood
5,712	448	Hill 1,507	2,099	416	5,845	P.V.
S c.	\$ c.	S c.	\$ c.	S c.	S c.	\$ c.
9,393.89 30,533.29		600.00	4,124.83		\$ c. 11,371.12	79.00
49,288.78			29,869.56		99,047.07	9,746.36
42,754.03 34,166.87	2,565.78 2,114.49		15,206.07 12,135.10		36,036.79 37,229.07	4,073.65 4,240.77
22,868.20			7,177.18	975.93		776.41
5,388.50			1,431.73 2,385.93		17,169.45	362.22
496,554.65						
690,948.21	12,744.46	46,582.85	73,354.64	22,011.41	220,016.74	19,278.41
6,516.84		1,519.60	50.00		628.78 22.000.00	2,943.90 3,600.00
14,691.27	190.11	8,500.00 278.20	15,000.00 233.73	22.20	2,165.24	87.61
3,185.91			544.72		8,127.97	87.12
2,153.50	5,318.66	33,819.59	65,662.02	12,863.25	127,459.49	16,995.95 13.33
717,495.73	18,253.23	90,700.24	154,845.11	35,163.49	380,398.22	43,006.32
62,772.20	534.81			1.884.81		711.34
3,763.37	54.24 246.98	211.11	2,123.18 54.31		543.49	62.07
425.71	88.87	487.24	2,271.73	189.83	21,296.57	188.72
66,961.28	924.90	698.35	4,449.22	2,074.64	21,840.06	962.13
2,153.50	5,318,66	33,819.59	65,662.02	12,863.25	127.459.49	16,995.95
127,776.21 3,270.67	2,876.66	5,376.42 3,069.37	22,847.99 11,213.45	4,471.15	62,809.90 1,181.13	9,305.26
133,200.38	8,195.32	42,265.38	99,723.46	17,334.40	191,450.52	26.301.21
448,464.53	5,965.19	12,200.00	19,455.99	12,087.13	82,500.00	3,788.66
68,869.54	3,167.82	35,536.51	31,216.44	3,667.32	84,607.64	11,954.32
517,334.07	9,133.01	47,736.51	50,672.43	15,754.45	167,107.64	15,742.98
717,495.73	18,253.23	90,700.24	154,845.11	35,163.49	380,398.22	43,006.32
9.4	7.2	1.2	5.1	9.3	9.3	3.7

Balance Sheets of Electrical Departments of

Municipality	Rodney	Rosseau	Russell	St.	St. Clair
Population	787	176	P.V.	Catharines 35,191	Beach 351
Assets Lands and buildingsSubstation equipmentDistribution system—overhead	13,222.07			\$ c. 31,162.35 200,790.84 323,243.93	
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plant.	6,589.46 5,479.44 3,533.02 799.22	2.314 23 1.317 .86 623 .60 1,067 .16	644.70	242,005 .54 180,285 .78 27,148 .52 29,486 .71 5,674 .57	3,891.31 2,854.85 618.31
Old plant				12,000.00	
Total plant	29,623.21	13,180.29	13,693.99	1,051,798.24	18,796.43
Bank and cash balance. Securities and investments. Accounts receivable. Inventories.	5,200.00 502.63		943.60	463,000.00 57,545.52	1,397.22 3,500.00 267.44
Sinking fund on local debentures. Equity in H-E.P.C. systems Other assets.	20,900.33	6,040.46		1,125,909.92	10,737.24
Total assets	56,464.77	23,790.01	32,234.26	2,729,865.94	34,698.33
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liablities	52.30	68.32	15.00	12,250.00 61,731.60 41,915.24	98.69
Total liabilities		5,661.41	15.00	115,896.84	513.69
Reserves For equity in H-E.P.C. systems For depreciation Other reserves		4,151.60			7,205.10
Total reserves	28,167.50	10,260.80	13,504.27	1,485,288.93	17,977.08
SURPLUS Debentures paid Local sinking fund. Operating surplus.			8,808.12		
Total surplus				1,128,680.17	
Total liabilities, reserves and surplus	56,464.77	23.790.01	32,234.26	2,729,865.94	34,698.33
Percentage of net debt to total assets	0.9	31.3	0.1	5.5	2.1

"A"—Continued

St. George	St. Jacobs	St. Marys	St. Thomas	Sarnia	Scarborough
P.V.	P.V.	3,633	17,835	20,490	Twp. V.A.
S c. 6,643.75	8 c. 8.612.32 7.124.82	\$ c. 19.184.78 33.367.84 76,533.35	\$ c. 79,143.04 163,598.75 132,651.22 78,384.49 93,966.48	\$ c. 148,445.37 221,415.99 251,903.89 93,584.38 121,701.79	\$ c. 22,971.77 18,893.71 418,998.29
4,207.01 1,948.53	4,330.81 452.25	30,412.32 7,137.56	88.549.70 24,182.76 3,693.04	112.877.94 33,053.67 8,271.83	125,294.64 29,643.52
133.35	579.22	12,006.28	14,182.38	55,061.16	20,774.91
17,293.28	21,099.42	226,330.70	678,351.86	1,046.316.02	813,350.36
3,684.42 9,750.00 26.11		25.00 1,149.03 9,883.42	4,338.45 121,000.00 21,420.58 41,156.41	19,869.06 30,000.00 24,519.09 56,835.74	18,010.78 145,000.00 8,487.03
21,431.60	26,335.09	197,895.11 40.44	757,517.61	962.247.77	317,926.62 125.67
52,185.41	58,915.30	435,323.70	1,623,784.91	2,139,787.68	1,302,900.46
73.79		7,113.40 9,301.76 8,814.97 1,379.00	625.78 20,663.33	999.36 22,803.34	23,480.83 15,920.74 81,190.67
463.79		26,609.13	21,289.11	23,802.70	120,592.24
21,431.60 5,255.60		197,895.11 85,468.63 3,201.51	757,517.61 275,792.83 25,396.01	962.247.77 284,777.21 3,453.68	317,926 .62 224,681 .62 59,191 .71
26,687.20	31.946.38	286,565.25	1,058,706.45	1,250,478.66	601,799.95
6,000.00		107,146.98			290,568.27
19,034.42		15,002.34	404,845.28		289,940.00
25,034 . 42		122,149.32	543,789.35		580,508.27
52,185.41		435,323.70		2,139,787.68	1,302.900.46
1.5	0.0	11.2	2.0	1.3	12.2

Balance Sheets of Electrical Departments of

Municipality	Seatorth	Shelburne	Simcoe	Smiths Falls	Smithville
Population	1,782	1,014	6,473	7,717	P.V.
Assets Lands and buildings Substation equipment. Distribution system—overhead Distribution system—underground.	\$ c. 1,836.39 8,930.07 32,416.73	\$ c. 800.00 566.60 17,770.56	\$ c. 11,201.89 42,577.90 72,397.51 1,412.24	\$ c. 10,346.57 4,669.61 107,748.98	11,842.81
Line transformers	19,464.99 13,357.74 5,789.27	12,620.51 9,020.70 2,542.93	59,752.57 45,135.89 22,761.42 1,037.04	52,713.66 45,958.15 21,610.06	5,408.22 5,474.27 1,731.00
Miscellaneous construction expense Steam or hydraulic plant Old plant.	3,047.83		10,075.58	4,164.48	368.90 1,878.98
Total plant	84,843.02	43,522.18	267,279.96	247,211.51	26,704.18
Bank and cash balance. Securities and investments. Accounts receivable. Inventories.	2,051.16 9,000.00 1,452.84 1,485.79	15,500.00			37.70
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	93,187.65	29,662.40	180,155.68		
Total assets	192,020.46	88,983.24	510,834.25	522,120.33	44,115.20
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	95.67		3,414.44 253.20 1,977.50 3,069.68	366.19	
Total liabilities	7,880.34	1,949.88	8,714.82	4,379.69	3,021.24
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	93,187.65 23,665.81 225.78	21,173.69	180,155.68 61,930.91	165,192.34 117,537.42 5,282.38	3,329.18 7,745.81
Total reserves	117,079.24	52,336.09	242,086.59	288,012.14	11,074.99
SURPLUS Debentures paid Local sinking fund	27,779.11	16,991.04	72,020.46	122,787.33	
Operating surplus.	39,281.77	17,706.23	188,012.38		17,927.20
Total surplus	67,060.88	34,697.27	260,032.84	229,728.50	30,018.97
Total liabilities, reserves and surplus.	192,020.46	88,983.24	510,834.25	522,120.33	44,115.20
Percentage of net debt to total assets.	8.0	3.3	2.3	1.2	7.4

"A"—Continued

Southampton	Springfield	Stamford	Stayner	Stirling	Stouffville
1,613	431	Twp. V.A.	1,090	1.061	1,270
\$ c. 25.00 31,287.66	\$ c.	\$ c. 26,407.76 52,962.04 211,567.64	\$ c. 200.00 18,060.18	\$ c. 8,522.88 8,034.64 8,828.76	\$ c
14,365.26 12,334.26 3,863.32	3,285.06 2,992.62 629.47	90,307.47 63,508.30 13,733.61	8,911.03 8,763.06 1,274.84	6,394.30 6,997.65 3,259.98	11,307.1 7,847.9 2,238.1
691.34	866.69	14,466.65	23.00	840.39	1,674.6
		13,743.66			
62,566.84	18,971.23	486,697.13	37,232.11	42,878.60	41,719.7
2,481.07 7,500.00 354.89	1,870.70 5,500.00 144.87	3,021.68 6,000.00 16,536.94 11,320.81	1,970.42 11,000.00 293.92	9,541.17 12,500.00 799.39 1,034.23	1,324.9 6,000.0 63.1
23,243.94	13,355.34	157,125.00 1,256.69	26,453.87	14,953.11	27,563.6
96,146.74	39,842.14	681,958.25	76,950.32	81,706.50	76,671.3
105.92	124.23	16,657.63 2,113.40 20,846.04 8,881.68	210.49 376.78	362.93	161.4 538.2
110.66	129.23	48,498.75	587.27	362.93	699.6
23,243 . 94 13,912 . 29	13,355 . 34 5,414 . 91	157,125.00 123,934.22 3,998.23	26,453.87 18,818.36 41.17	14,953.11 11,506.42	27,563.6 4,791.9 4,350.9
37,156.23	18,770.25	285,057.45	45,313.40	26,459.53	36,706.4
30,522.93	9,500.00	223,620.54	9,557.26	10,000.00	14.673.9
28,356.92	11,442.66	124,781.51	21,492.39	44,884.04	24,591.3
58,879.85	20,942.66	348,402.05	31,049.65	54,884.04	39,265.2
96,146.74	39,842.14	681,958.25	76,950.32	81,706.50	76,671.3
0.1	0.5	9.2	1.2	0.5	1.4

Balance Sheets of Electrical Departments of

Municipality	Stratford	Strathroy	Streetsville	Sunderland	Sutton
Population	17,736	3,139	691	P.V.	993
Assets Lands and buildings Substation equipment Distribution system—overhead Distribution system—underground. Line transformers. Meters. Street light equipment, regular Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plant	26,692.69	\$ c. 9,373.61 30,876.35 55,666.66 33,976.70 20,227.52 6,238.53 2,093.47	1,383 .16 10,641 .55	2,359.70 3,205.65 670.57	
Old plant					
Total plant	824,437.73	158,452.84	51,618.84	12,562.46	52,578.54
Bank and cash balance	58,952.79 283,000.00 13,665.17 18,711.85	201.51 1,030.00	1,000.00 312.89	593.60	1,735.30 5,000.00 434.70
Sinking fund on local debentures. Equity in H-E.P.C. systems. Other assets.	888,118.24	138,484.19	6,756.38	15,114.18	27,498.79
Total assets	2,121,131.63	339,149.89	61,730.39	31,462.28	87,247.33
Liabilities Debenture balance. Accounts payable. Bank overdraft. Other liabilities.			2,809.00		
Total liabilities	57,206.08	6,863.66	3,029.38	2.625.50	725.00
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves.	888,118.24 455,474.87 3,572.10			5,548.73	12,346.42
Total reserves	1,347,165.21	197,344.05	14,812.26	20,722.16	41,491.05
Surplus Debentures paid Local sinking fund Operating surplus	32,955.85				25,325.00
Total surplus	716,760.34	134,942.18	43,888.75	8,114.62	45,031.28
		000 140 00	61 720 20	21 162 28	87,247.33
Total liabilities, reserves and surplus.	2,121,131.63	339,149.89	61,730.39	31,402.20	01,241.00

"A"-Continued

				1		
Swansea 1	ara T	avistock	Tecumseh	Teeswater	Thamesford	Thamesville
7,217	197	1,072	3,035	827	P.V.	794
\$ c. 5,577.66 132.18 93,706.53 15	\$ c.	\$ c. 3,783.53 	\$ c. 1,232.16	\$ c.	\$ c.	\$ c. 681.69
40,213.58	.284 .26 .610 .72 .721 .65	10.298.96 7,964.28 1,152.93	14,823.95 18,135.10	7,150.07 4,809.17 1,495.82	4,420.97 3,783.98 612.03	7,326.85 5,482.67 2,883.05
12,704.99	212.41	1,842.46	4,760.95 2,970.93		623.22	272.45
231,483.75 25	,018.27	40,058.28	88,525.29	31,973.54	18,847.32	33,393.69
55,000.00 1,479.84	989.17 ,000.00 15.10	15.00 11,500.00 39.38 1,692.44	1,146.40 8,000.00 2,418.21 454.07	3,250.83 11,000.00	1,516.59 2,000.00 38.18	569.36 15,500.00 783.94
148,244.50 94.88	,284.67	69,829.58	41,429.73	19,322.22	26,234.26 0.11	26,415.93
436,302.97 42	,307.21 1	23,134.68	141,973.70	65,607.59	48,636.46	76,662.92
41,921.52 956.04 8,438.70 4,916.41	49.96	158.24 1,056.03	446 .68 5,374 .72	1.36	52.72 94.00	2,132.44
56,232.67	49.96	1,214.27	5,821.40	62.36	146.72	2,613.44
	,284.67	69,829.58 16,464.83	41,429.73 24,626.93 5,994.01	19,322.22 14,088.23 1,000.00	26,234 . 26 7,973 . 96	26,415.93 14,870.24 144.39
219,943.40 20	,513.75	86,294.41	72,050.67	34,410.45	34,208.22	41,430.56
	,263.64	6,000.00	26,000.00	21,296.14	5,358.03 8,923.49	11,187.80
					14,281.52	32,618.92
		35,626.00 23,134.68	64,101.63	31,134.78	48,636.46	76,662.92
	0.2	2.3	2.3	0.1	0.7	5.2
13.3	0.4	4.3	4.3	0.1	0.7	0.2

Balance Sheets of Electrical Departments of

Municipality	Thedford	Thornbury	Thorndale	Thornton	Thorold
Population	590	801	P.V.	P.V.	5,569
Assets Lands and buildings Substation equipment Distribution system—overhead.	11.808.32		\$ c.		\$ c. 11,495.62 2,572.33 48,871.28
Distribution system—underground. Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental	7,418.28 3,687.20 1,703.10	8,502.84 6,117.92 1,035.00	2.597.94 2,347.71 222.51	1,764.80 1,180.92 433.25	30,378.99 29,192.87 3,618.22
Miscellaneous construction expense Steam or hydraulic plantOld plant	1,872.36				
Total plant	26,923.04	67,546.29	10,071.82	10,506.44	127,758.33
Bank and cash balance	2,617.39 10,000.00 398.04	25.63		2,500.00	7,262.09 85,800.00 237.95 5,829.13
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	15,118.25		12,849.56	5,117.83	166,079.87 84.00
Total assets	55,056.72	68,221.09	27,565.43	19,063.66	393,051.37
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	272.19		101.10	50.00	99.68
Total liabilities	280.58	8,903.79	571.67	50.00	2,752.18
RESERVES For equity in H-E.P.C. systems For depreciation. Other reserves.	15.118.25 7,165.02	565.14 2,728.76	12,849.56 6,047.37 41.37	5,117.83 7,586.57	47,863.31
Total reserves	22,283.27	3,293.90	18,938.30	12,704.40	213,943.19
SURPLUS Debentures paid Local sinking fund	16,500.00	50,181.38	3,086.48		
Operating surplus	15,992.87	5,842.02	4,968.98	†890.39	171,356.01
Total surplus	32,492.87	56,023.40	8,055.46	6,309.26	176,356.01
Total liabilities, reserves and surplus.	55,056.72	68,221.09	27,565.43	19,063.66	393,051.37
Percentage of net debt to total assets.	0.7	13.2	3.9	0.3	1.2

[†] Deficit.

"A"—Continued

Hydro Municipalities as at December 31, 1947

Tilbury	Tillsonburg	Toronto*	Toronto Twp.	Γottenham	Trafalgar Twp.
2,165	4.624	696,555	V.A.	478	V.A.
\$ c. 11,987.47	\$ c. 4,824.27 21,899.54 61,012.81	\$ c. 5,282,566.98 15,155,395.83 7,232.123,13	269,683.68	358.50	\$ c. 7,511.83 839.61 44,713.86
17,102.45 11,808.41 8,365.25	40,276.59 31,067.73 19,763.25	4,223,574.20 3,968,664.53 3,317,362.89 771,996.90	134,010.83 75,961.81	2,656.57 3,367.55 1,167.14	23,429.34 11,931.30 192.54
1,447.55	7,710.07	2,368,673.39	8,882.78	1,488.40	3,684.61
			619.65	286.45	
72,282.32	186,554.26	42,320,357.85	511,729.91	19,987.43	92,303.09
3,090.91 12,000.00 438.73 10.25	1,333.83 28,500.00 895.99 3,877.75	652,683.64 12,700,000.00 2,097,981.26 726,229.25	26,296.54 8,000.00 3,742.47 14,896.01	217.75 12.46	20.00 6,000.00 1,117.78
81,448.88 57.00	137,131.81	3,867,468.31 31,100,927.95 76,971.45	195,071 .54	16,759.42	18,273.35
169,328.09	358,293.64	93,542,619.71	759,736.47	36,977.06	117,714.22
16.70 532.25	7,347.59 119.50 12,838.99 4,498.33	5,498,500.00 1,048,073.51 181,834.71	35,643.97 20,187.62 8,227.65	2,254.72	2,317.48 2,029.51 7,184.82 243.00
548.95	24,804.41	6,728,408.22	64,059.24	2,541.22	11,774.81
81,448.88 24,410.56 148.60	137,131.81 46,139.42 198.98	31,100,927.95 15,995,877.28 1,156.728,46	195,071.54 191,306.07 209.76	16,759.42 7,949.62	18,273 .35 28,311 .17
106,008.04	183,470.21	48,253,533.69	386,587.37	24,709.04	46,584.52
14,000.00	38,652.41	24,752,138.85 3,867,468.31	98,356.03	12,967.10	26,570.08
48,771.10	111,366.61	9,941,070.64	210,733.83	†3,240.30	32,784.81
62,771.10	150,019.02	38,560,677.80	309,089.86	9,726.80	59,354.89
169,328.09	358,293.64	93,542,619.71	759,736.47	36,977.06	117,714.32
0.6	11.2	4.9	11.3	12.6	11.8
1 D.C.'4					

[†] Deficit. * Includes 1947 Power Adjustment and equity.

Balance Sheets of Electrical Departments of

Population 9,905 Assets \$	c.	1,250		1,490	Harbour 882	2,746	
Assets S					1	2,740	
Lands and buildings 6,054 Substation equipment 49,167 Distribution system—overhead 132,430 Distribution system—underground Line transformers 39,713 Meters 49,453 Street light equipment, regular 11,947 Street light equipment, ornamental 10,549	7.01 0.31 3.84 3.71 7.09 9.81 8.22	22,119. 9,420. 8,110. 2,478.	48 97 39	922.2	7 12,720.67 2 2,798.26 4,536.78 366.32 5 661.30	47. 49,267. 29,293. 17,648. 2,778.	 24 .87 .66 .54
Old plant						4,897	
Total plant	0.24 0.00 3.54	12,000 4,497 1,878	.00	25.0 9,000.0 391.1	380.22	12,167	.09 .00 .43
Equity in H-E.P.C. systems 157,893		17,486			9,822.51	39,036	
Total assets	8.12	77,991	.88	83,423.2	35,146.87	177,928	. 63
LIABILITIES Debenture balance. Accounts payable. 14: Bank over draft. Other liabilities. 5,04:	3.04	98 2,339 345		30.8	3 243.51 9		.71
Total liabilities 5,18	88.14	2,783	.05	714.8	2 243.51	18,324	.99
RESERVES For equity in H-E.P.C. systems 157,89 For depreciation 87,65 Other reserves 26,50	4.28	17,486 3,988 1,911	.75	9,526.2	7,425.11	21,939	
Total reserves	7.36	23,386	. 67	43,389.2	9 17,247.62	61,012	.71
SURPLUS Debentures paid. 164,58 Local sinking fund. 161,05		19,000					
Total surplus	12.62	51,822	. 16	39,319.1	2 17,655.74	98,590	.93
Total liabilities, reserves and surplus. 602,87	78.12	77,991	. 88	83,423.2	3 35,146.87	177,928	.63
Percentage of net debt to total assets. 1.1	1	4.6		1.4	1.0	13.2	

"A"—Continued

Hydro Municipalities as at December 31, 1947

Wallaceburg	Wardsville	Warkworth	Waterdown	Waterford	Waterloo	Watford
6,088	235	P.V.	1,011	1,394	9,848	961
\$ c. 55,939.65 13,009.86 96,590.41	\$ c.	\$ c.	\$ c. 200.00 17,695.91	\$ c. 1,323.44 17,327.52	\$ c. 19,587.15 123,694.61 109,590.11	\$ c. 857.01 18,390.68
72,198.27 38,228.14 13,343.34	2,459.96 2,004.40 662.94	2,010.91 2,474.82 338.08	8,726.93 7,304.65 1,259.47	13,301 . 49 9,260 . 97 3,231 . 62	88,746.25 54,109.51 14,431.25 3,106.80	8,888.62 7,373.26 2,757.32
10,241.55	570.35	609.19	253.03	772.20	10,775.91	2,356.09
		3,618.02			23,880.17	
299,551.22	11,796.48	15,226.18	35,439.99	45,217.24	447,921.76	40,622.98
19,546.47 70,500.00 4,448.52 23,172.39	903.01 4,000.00 869.95	899.01 4,200.00 49.95	2,249.14 9,000.00 272.87 322.00	1,324.95 11,000.00 114.31 432.95	250.00 69,000.00 3,800.41 119.40	4,814.60 14,800.00 462.74 724.29
308,416.85 1,419.61	5,646.94 7.50	6,365.04	32,779.59	49,042.64	420,333.70	37,924.63 9.63
727,055.06	23,223.88	26,740.18	80,063.59	107,132.09	941,425.27	99,358.87
347.81	875.86	4,461.09 0.64 25.20	27.13		9,226.14 7,499.44 3,106.80	126.10
4,096.91	875.86	4,486.93	141.41	223.89	19,832.38	393.20
308,416.85 89,544.06 1,362.28	5,646.94 4,505.13 25.22	4,067.36	32,779.59 11,469.07	49,042.64 15,641.04	420,333.70 202,029.72 735.26	37,924.63 15,606.14 92.53
399,323.19	10,177.29	10,432.40	44,248.66	64,683.68	623,098.68	53,623.30
71,536.58	7,562.40 4,608.33		8,000.00 27,673.52	7,745.53	106,000.00	9,055.77
323,634.96	12,170.73	11,820.85	35,673.52	42,224.52	298,494.21	45,342.37
727,055.06	23,223.88	26,740.18	80,063.59	107,132.09	941,425.27	99,358.87
1.0	5.0	22.0	0.3	0.3	3.2	0.6
]		

Balance Sheets of Electrical Departments of

Municipality	Wanhan	Welland	Wellesley	Wolling	West
	shene		, i	Welling- ton	Lorne
Population	P.V.	15,071	P.V.	980	810
Assets Lands and buildings Substation equipment	\$ c.	\$ c. 77,574.76 117,658.14	\$ c.	\$ c. 200.00 499.80	\$ c 3,861.50
Distribution system—overhead Distribution system—underground.	11,476.86	194,810.72 8,044.90	8,241.05	17,508.56	
Line transformers. Meters. Street light equipment, regular Street light equipment, ornamental	3,734.59 350.05	91,046.05		8,373.49 7,851.14 1,387.97	8,305.95 6,322.34 3,329.18
Miscellaneous construction expense Steam or hydraulic plant		10,192.47	120.33	999.49	405.1
Old plant				2,477.92	
Total plant	19,462.93	691,364.42	16,932.75	39,298.37	37,672.24
Bank and cash balanceSecurities and investmentsAccounts receivableInventories.	799.22		1,275.59 6,000.00	1,710.29 12,000.00 43.47	55.00 6,000.00 239.42 358.72
Sinking fund on local debentures Equity in H-E.P.C. systems Other assets	7.472.08	518,578.52 81.51	23,346.57	16,825.55	36,755.76
Total assets	27,833.80	1,472,584.21	47,554.91	69,877.68	81,081.14
I.IABILITIES Debenture balance	150.00	23,044.26	0.07		500.69 1,911.00 94.00
Total liabilities	750.00	77,064.82	5.07	929.32	2,505.72
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	7,472.08 4,417.14 125.00	233,274.20	23,346.57 5,196.39	16,825.55 11,562.92	36,755.76 9,895.30 65.12
Total reserves	12,014.22	755,498.13	28,542.96	28,388.47	46,716.18
SURPLUS Debentures paid Local sinking fund	3,242.34	275,000.00	7,500.00	16,280.95	8,000.00
Operating surplus.	11,827.24	365,021.26	11,506.88	24,278.94	23,859.24
Total surplus	15,069.58	640,021.26	19,006.88	40,559.89	31,859.24
Total liabilities, reserves and surplus.	27,833.80	1,472,584.21	47,554.91	69,877.68	81,081.14
Percentage of net debt to total assets.	3.7	3.9	0.0	1.7	5.6

"A"—Continued

Hydro Municipalities as at December 31, 1947

Weston	Westport	Wheatley	Whitby	Wiarton	Williams-	Winchester
6,337	672	811	4,501	1,749	burg P.V.	1,000
\$ c. 21,246.27 65,655.63 86,881.32	\$ c.	\$ c. 52.50	\$ c. 15,975.86 34,288.16 73,090.05	\$ c. 333.57 23,980.21	\$ c.	\$ c. 299.85
79,212.39 40,824.79 29,504.87	2,294.52 2,539.44 733.02	10,563.05 7.319.14 9,501.28	24,065.79 27,038.27 13,184.95	13,326.81 10,566.88 3,278.78	2,201.92 2,510.42 813.50	5,955 14 6,981 92 745 75
7,256.95	1,256.04	2,382.26	9,743.67	7,344.29	35.38	184.50
	1,713.00		1,340.13	1,870.35		1,100.00
330,582.22	16,407.01	50,876.49	198,726.88	60.700.89	9,058.34	27,026.57
2,768.35 31,500.00 684.75 1,497.86	766.34 5,000.00	223.29 500.00 241.93	1,985.71 62,000.00 1,301.84 578.55	5,365.91 14,000.00 864.26	2,443.75 23,000.00 380.35	6,026.35 10,500.00 63.96
373,354.24 431.43	8,997.25	22,344.00	85,372.42 31.63	25,335.63	9,526.64	30,480.03
740,818.85	31,170.60	74,185.71	349,997.03	106,266.69	44,409.08	74,096.91
9.06	4,399.63	1,586.82	2,145.85 7,581.63			
991.13	305.52	605.00	1,550.02	187.21	306.43	10.00
1,000.19	4,705.15	2,191.82	11,277.50	18,370.13	306.43	10.00
373,354 . 24 77,027 . 02 365 . 40	8,997.25 3,554.12		85,372.42 40,312.89		9,526.64 4,741.88 327.28	30,480.03 13,164.26
450,746.66	12,551.37	33,693.97	125,685.31	37,561.05	14,595.80	43,644.29
70,032.44	10,600.37	13,000.00			2,750.00	10,306.06
219,039.56	3,313.71	25,299.92	138,567.57	25,928.68	26,756.85	20,136.56
289,072.00	13,914.08		213,034.22		29,506.85	33,442.62
740,818.85	31,170.60		349,997.03		44,409.08	74,096.91
0.3	21.2	4.2	4.3	22.7	0.9	0.0

Balance Sheets of Electrical Departments of

Municipality	Windermere	Windsor	Wingham	Woodbridge
Population	118	117,965	2,204	1,212
Assets Lands and buildings Substation equipment Distribution system—overhead Distribution system—underground Line transformers Meters Street light equipment, regular Street light equipment, ornamental Miscellaneous construction expense Steam or hydraulic plant Old plant	9,954.48 4,531.83 1,468.45 247.26 525.65	498,316.45 1,567,360.77 1,450,477.15 303,798.02 653,050.31 639,011.53 109,940.43 1,021,495.33 203,769.37	23,999.97 20,322.96 11,227.49 6,829.11 14,711.99	20,647.20 10,248.82 7,432.63 624.03
Total plant				
Bank and cash balance. Securities and investments. Accounts receivable. Inventories. Sinking fund on local debentures. Equity in H-E.P.C. systems. Other assets.	724.50 3,600.00 534.55	1,075.00 1,471,208.02 168,570.29 320,141.48 92,349.74 4,709,684.52	61,878.60	3,169.81 13,000.00 603.44 51,037.31
Total assets	25,801.57	13,376,689.07	256,914.26	106,827.14
LIABILITIES Debenture balance. Accounts payable. Bank overdraft. Other liabilities.	258.02	212,069.71 148,655.77 87,797.41 1,147,464.91	10,493.74 114.45 705.15	2,929.12
Total liabilities	3,924.40	1,595,987.80	11,313.34	3,656.69
RESERVES For equity in H-E.P.C. systems. For depreciation. Other reserves.	5.534 23	2,019,819.94	61,878.60 46,601.24	15,285.43
Total reserves	9,749.08	7,284,334.88	108,479.84	66,322.74
SURPLUS Debentures paid. Local sinking fund. Operating surplus.		92,349.74	85,611.76 51,509.32	8,499.97 28,347.74
Total surplus	12,128.09	4,496,366.39	137,121.08	36,847.71
Total liabilities, reserves and surplus	25,801.57	13,376,689.07	256,914.26	106,827.14
Percentage of net debt to total assets.	18.2	6.4	5.8	6.6

"A"—Continued

Hydro Municipalities as at December 31, 1947

Woodstock	Woodville	Wyoming	York Twp.	Z urich	SOUTHERN ONTARIO
13,148	385	637	V.A.	P.V.	SYSTEM SUMMARY
\$ c. 66,515.59 131,025.74 162,574.73	\$ c.	\$ c. 50.00	\$ c. 81,213.25 489,451.23 896,276.03	S c.	\$ c. 11,409,205.89 27,569,316.75 27,725,350.98
95,101.04 89,721.71 25,425.33	2,182.54 2,498.65 548.71	2,819.03 4,084.90 548.49	465,161.61 405,022.85 116,384.04	2,844.27 3,638.74 621.57	7,400,874.88 15,167,071.89 12,549,835.03 3,513,003.65
15,532.98	251.91	831.52	91,793.15	326.19	1,536,957.94 4,116,373.03 755,973.37 587,479.45
585,897.12	9,128.31	20,769.04	2,545,302.16	15,251.09	112,331,442.86
78,000.00 2,376.09 2,507.02	946.70 5,000.00 123.50	1,637.56 2,600.00 70.60	260.00 300,000.00 75,340.62 68,748.23	2,294.69 9,500.00 66.81	2,743,840.23 26,579,213.60 4,173,092.37 2,952,156.25
638,933.96 264.59	14,642.25	12,431.80 7.50	1,194,468.79	20,043.41	4,239,474.67 81,857,204.76 441,708.62
1,307,978.78	29,840.76	37,516.50	4,184,119.80	47,156.00	235,318,133.36
3,197.78 13,359.57 9,662.03	636.42 15.00	378.57 88.89	27,747.28 186,156.40 15,793.87 40,500.29	137.37	7,654,792.02 2,873,237.95 555,642.41 2,527,182.25
26,219.38	651.42	467.46	270,197.84	147.37	13,610,854.63
638,933.96 230,925.52 65,749.19	14,642.25 4,224.98 560.56	12,431.80 6,706.39 32.63	1,194,468.79 860,807.48 15,684.96	20,043.41 8,756.89	81,857,204.76 38,504,656.75 5,549,691.68
935,608.67	19,427.79	19,170.82	2,070,961.23	28,800.30	125,911,553.19
127,385.63	5,500.00	9,700.00	461,627.37	5,591.61	48,760,006.08 4,239,474.67
218,765.10	4,261.55	8,178.22	1,381,333.36	12,616.72	42,796,244.79
346,150.73	9,761.55	17,878.22	1,842,960.73	18,208.33	95,795,725.54
1,307,978.78	29,840.76	37,516.50	4,184,119.80	47,156.00	235,318,133.36
3.9	4.3	1.9	9.0	0.5	5.3

Balance Sheets of Electrical Departments of

THUNDER BAY SYSTEM

				THUNDER
Municipality	Fort William	Nipigon Twp.	Port Arthur	BAY SYSTEM
Population	30,590	V.A.	25,867	SUMMARY
Assets Lands and buildings Substation equipment. Distribution system—overhead Distribution system—underground	\$ c. 106,996.48 182,048.55 287,324.35		\$ c. 471,917.16 311,881.37 562,858.13	\$ c. 579,128.67 493,929.92 873,099.23
Line transformers. Meters. Street light equipment, regular. Street light equipment, ornamental.	133,659.76 128,187.64 56,013.79	7,393.60 6,392.43 4,192.26	153,806.21 152,154.79 85,909.95	294,859.57 286,734.86 146,116.00
Miscellaneous construction expense	37,251.67		46,410.95 325,003.44	85,671.62 325,003.44
Total plant	931,482.24	43,119.07	2,109,942.00	3,084,543.31
Bank and cash balance. Securities and investments. Accounts receivable. Inventories. Sinking fund on local debentures. Equity in H-E.P.C. systems. Other assets.	11,308.35 270,300.00 40,940.35 58,927.07 148,111.46 1,306,452.57 186.41	11,000.00 169.06 13,898.32	718,974 81 97,753 70 59,499 82 3,396,541 16 99,300 35	11,783.07 1,000,274.81 138,863.11 118,426.89 148,111.46 4,716,892.05 99,486.76
Total assets	2,767,708.45	68,661.17	6,482,011.84	9,318,381.46
LIABILITIES Debenture balance	41,065.66	54.40	54,234.64 1,579.31	250,000.00 95,354.70 1,579.31 42,781.06
Total liabilities	333,552.48	348.64	55,813.95	389,715.07
RESERVES For equity in H-E.P.C. systems For depreciation Other reserves	1,306,452.57 253,172.46 31,585.78			
Total reserves	1,591,210.81	21,916.94	4,402,237.35	6,015,365.10
SURPLUS Debentures paid Local sinking fund Operating surplus	148,111.46			148,111.46
Total surplus	842,945.16	46,395.59	2,023,960.54	2,913,301.29
Total liabilities, reserves and surplus	2,767,708.45	68,661.17	6,482,011.84	9,318,381.46
Percentage of net debt to total assets	14.1	0.6	1.8	5.4

"A"—Concluded

Hydro Municipalities as at December 31, 1947

NORTHERN ONTARIO DISTRICTS

North Bay	Sioux Lookout	Sudbury	NORTHERN ONTARIO DISTRICTS	ALL SYSTEMS GRAND
16,185	1,976	35,996	SUMMARY	SUMMARY
\$ c. 61,160.76 100,854.06 174,809.62	\$ c.	\$ c. 170,802.60 256,271.76 432,938.07	\$ c. 232,413.36 366,856.14 632,350.88	\$ c. 12,220,747.92 28,430,102.81 29,230,801.09 7,400.874.88
68,360.76 97,376.44 33,339.01	6,450.76 7,740.28 1,794.15	154,248.00 163,587.48 132,190.53	236,618.30 275,617.88 168,514.75	15,698,549.76 13,112,187.77 3,827,634.40 1,536,957.94
24,994.55	475.59	15,323.01	40,793.15	4,242,837.80
				1,080,976.81 587,479.45
560,895.20	27,399.75	1,325,361.45	1,953,164.46	117,369,150.63
10,000.00 24,754.94	1,907.74 3,567.88	125,000.00 40,714.28 49,299.74	3,710.58 142,500.00 69,321.00 69,796.43	2,759,333.88 27,721,988.41 4,381,276.48 3,140,379.57 4,387,586.13
146.57	139.20	2,246.99	2,532.76	86,574,096.81 543,728.14
616,293.40	33,014.57	1,542,622.46	2,241,025.23	246,877,540.05
1,408.68 49,615.08 35,923.93	227.72 2,726.68	42,498.12 57,787.18 6,629.11 33,962.13	42,498.12 59,713.47 56,244.19 73,007.74	7,947,290 .14 3,028,306 .12 613,465 .91 2,642,971 .05
86,947.69	2,954.40	140,876.54	231,463.52	14,232,033.22
			508,260.74 73,872.17 582,132.91	86,574,096.81 40,146,511.52 5,788,442.87 132,509,051.20
228,157.68		424,840.41	671,998.09	50,208,313.28 4,387,586.13
25,315.68	27,712.66	682,913.68	755,430.71	45,540,556.22
253,473.36	27,712.66	1,107,754.09	1,427,428.80	100,136,455.63
616,293.40	33,014.57	1,542,622.46	2,241,025.23	246,877,540.05
14.1	9.0	9.1	10.3	5.4
	\$ c. 61,160.76 100,854.06 174.809.62 68.360.76 97,376.44 33,339.01 24,994.55 560,895.20 10,000.00 24,754.94 20,496.69 146.57 616,293.40 1,408.68 49,615.08 35,923.93 86,947.69 272,431.97 3,440.38 275,872.35 228,157.68 253,473.36 616,293.40	\$ c. \$ c. 61,160,76 100,854,06 174,809,62 10,938.97 68,360,76 97,376.44 7,740.28 33,339.01 1,794.15 24,994.55 475.59 560,895.20 27,399.75 1,907.74 10,000.00 24,754.94 20,496.69 146.57 139.20 616,293.40 33,014.57 1,408.68 49,615.08 35,923.93 2,726.68 86,947.69 2,954.40 272,431.97 3,440.38 128.20 275,872.35 2,347.51 228,157.68 25,315.68 27,712.66 616,293.40 33,014.57	\$ c. \$ c. 170,802.60 100,854.06 174,809.62 10,938.97 432,938.07 68,360.76 97,376.44 7,740.28 163,587.48 33,339.01 1,794.15 132,190.53 24,994.55 475.59 15,323.01 560,895.20 27,399.75 1,325,361.45 1,907.74 10,000.00 24,754.94 20,496.69 49,299.74 146.57 139.20 2,246.99 616,293.40 33,014.57 1,542,622.46 272,431.97 3,440.38 128.20 275,872.35 228,157.68 27,712.66 682,913.68 253,473.36 27,712.66 682,913.68 253,473.36 27,712.66 682,913.68 253,473.36 27,712.66 682,913.68 253,473.36 27,712.66 682,913.68 253,473.36 27,712.66 1,107,754.09 616,293.40 33,014.57 1,542,622.46	S c. 61.160.76 S c. 170.802.60 S c. 232,413.36 100.854.06 10.938.97 432,938.07 632,350.88 68.360.76 6.450.76 154,248.00 236,618.30 97,376.44 7,740.28 163,587.48 275,617.88 33,339.01 1,794.15 132,190.53 168,514.75 24,994.55 475.59 15,323.01 40,793.15 560.895.20 27,399.75 1,325,361.45 1,953,164.46 10,000.00 1,907.74 3,710.58 10,000.00 1,907.74 125,000.00 142,500.00 24,754.94 3,567.88 40,714.28 69,321.00 20,496.69 49,299.74 69,796.43 146.57 139.20 2,246.99 2,532.76 616,293.40 33,014.57 1,542,622.46 2,241,025.23 1,408.68 227.72 57,787.18 59,713.47 49,615.08 6,629.11 56,244.19 35,923.93 2,726.68 33,962.13 73,007.74 86,947.69 2,954.40 140,876.54

Detailed Operating Reports of Electrical Departments of

SOUTHERN ONTARIO SYSTEM

Municipality	Acton	Agincourt	Ailsa Craig	Alexandria	Alliston
Population	1,940	P.V.	470	2,069	1,700
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c
Domestic service Commercial light service Commercial power service Municipal power Street lighting	19,519.91 8,924.42 36,949.70 813.33 2,135.40	1,871.31	1,314.05 1,810.76	8,451.98 6,399.05 892.69	10,326.5 8,380.1 906.3
Merchandise	543.27	462.35	302.55	1,042.50	419.9
Total earnings	68,886.03	13,550.40	7,720.69	30,330.98	38,114.5
Expenses					
Cost of power supplied by H-E.P.C Substation operation Substation maintenance		7,166.41	5,312.42		
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and main-		190.23 95.14 22.74	9.75	2,008.94 277.40 385.20	3,141.2 115.9 131.20 306.4
tenance. Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance. Interest.	1,412.77 975.10 522.55	686.16 109.30	456.28 123.65	300.79 1,277.23 1,196.19 130.95 395.88	1,453.8 1,109.6 190.3 128.6
Sinking fund and principal payments on debentures		• • • • • • • • • • • • • • • • • • • •			2,300.8
Depreciation	2,074.00	707.00	429.00	1,332.00	2,103.00
Other reserves					• • • • • • • • •
Total operating costs and fixed charges	65,727.52	9,111.88	6,9,70.13	22,229.27	31,374.2
Net surplus	3,158.51	4,438.52	750.56	8,101.71	6,740.34
Net loss			• • • • • • • • •		
Number of Consumers					
Domestic service	620 125 20	184 32 5	164 33 4	510 125 18	478 129 21
Total	765	221	201	653	628

"В"

Hydro Municipalities for Year Ended December 31, 1947

Almonte	Alvinston	Amherstburg	Ancaster	Apple Hill	Arkona	Arnprior
2,243	643	2,951	Twp. V.A.	P.V.	389	4,153
0 -	· ·		Ф		6	¢ -
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
21,069.50 8,944.15	4,467.84 2,909.23	30,101.04 12,766.52	17,166.27 5,857.46	1,705.57 1,017.00	3,791.67 1,954.30	25,682.46 14,899.15
14,964.38 1,136.95	1,488.85 263.23	12,271.33	739.24 432.14	323.20	286.10	23,127.18 2,448.06
2,803.50 995.82	1,268.05	2,623.96 198.58	1,166.50	478.50	1,112.00	3,142.15
6,754.58	330.00	1,280.27		135.00	127.62	
56,668.88	10,727.20	59,241.70	25,511.77	3,659.27	7,271.69	71,969.53
17,363.90 6,738.06		40,549.66	14,355.49	1,586.43	3,970.23	40,151.76
494.93						************
1,627.15 165.54		3,799.00 248.20	2,445.43 341.31	183.65	267.81 30.87	2,324.05 373.45
628.94 68.09	27.05		693.95 72.76	64.01	21.70	650.56 159.40
499.61			246.60		242.42	499.31
2,040.24	437.34	7.98 1,028.80	1.921.21	319.60	311.20	2,606.00
1,897.85 1,378.19	265.56	1,386.67	1,123.80 292.89	106.29	234.22 10.25	2,797.44 461.97
711.92 1,798.25		343.09	1,083.12 449.34			683.56
3,409.43			1,036.96			3,257.90
3,954.00		2,051.00	1,692.00	170.00	336.00	2,025.00
				2 400 40	5 404 50	55,000,40
42,776.10		· · · · · · · · · · · · · · · · · · ·	25,754.86		5,424.70	55,990.40
13,892.78	2,524.45	6,344.53		1,169.79	1,846.99	15,979.13
			243.09			
718			431	78 26	133 37	993 161
122 25					2	27
865	293	996	487	106	172	1,181

Detailed Operating Reports of Electrical Departments of

36 11 11					
Municipality	Arthur	Athens	Aurora	Aylmer	Ayr
Population	1,153	718	3,016	2,441	731
EARNINGS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service. Commercial light service Commercial power service. Municipal power. Street lighting. Merchandise.	7,533.87 6,400.57 1,380.81 430.92 1,747.40		30,659.39 11,457.50 21,531.18 1,951.20 4,645.24	21,149.82 16,236.61 16,208.02 1,149.24 3,554.00	
Miscellaneous Total earnings	272.61 17,766.18	283.10	360.00 70,604.51	996.94	105.00
Total earnings	17,700.10	10,933.14	70,004.31	33,234.03	10,333.03
EXPENSES					
Cost of power supplied by H-E.P.C Substation operation					9,626.32
Substation maintenance. Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and maintenance.	1,396.55	10.40	2,496.80 277.54 933.69 2,085.65	3,703.83 27.90 405.97 298.77 533.50	1,041.30 5.00 50.90 54.85 245.30
Promotion of business	1,067.06 55.18	152.10	1,307.84 1,844.74 1,759.10 222.38	1,417.06 1,604.84 434.66 374.60 104.52	54.63
Depreciation	998.00	440.00	1,905.00	3,073.00	540.00
Other reserves					
Total operating costs and fixed charges	14,840.09	9,086.98	55,931.07	48,865.89	12,936.20
Net surplus	2,926.09	1,866.16	14,673.44	10,428.74	3,617.45
Net loss					
Number of Consumers Domestic service	272 90 7	220 52 2	861 131 20	830 178 23	243 48 9
	369	274	1,012	1,031	300

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Baden	Barrie	Bath	Beachville	Beamsville	Beaverton	Beeton
P.V.	10,103	344	P.V.	1,360	842	516
\$ c.	\$ c.	\$ c'	\$ c.	\$ c.	\$ c.	\$ c.
5,265.08	104,227.12	3,675.68	4,773.12	14,828.35	9,196.22	4,315.19
2,663.83 10,264.23	61,003.57 51,865.01	906.39	659.27 20,623.23	6,382.29 3,154.99	4,203.62 1,406.09	2,884.18 425.88
738.00	2,541.22 7,519.01	407.94	517.00	2,129.19	1,582.85	1,389.50
26.87 220.98	2,414.45		549.50	487.08	46.94 296.00	353.63
19,178.99	229,570.38	4,990.01	27,122.12	26,981.90	16,731.72	9,368.38
15,695.55	127,221.11	2,780.69	21,635.24	15 753 16	10,766.22	5,684.60
13,055.35	1,843.65 241.90		21,000.24	13,733.10		
176.24	11,065.12	346.69	182.41	1.409.92	612.59	297.63
24.15	859.04 3,931.39	2.00	94.84 117.22	11.50 1,129.47	147.05 191.57	81.69
12.30			236.48		353.66	
172.97	4,425.92 198.43		133.11		342.24	214.31
420.80 193.77	6,634.42 4,097.18	106.01	394.73 235.10	431.18		233.71 153.83
18.86	2,445.77 1,787.88		5.63	15.78	43.05	
		172.44		• • • • • • • • • • • •		91.14
655.00	13,311.72	455.16 216.00	594.00	1,343.00	1,082.00	885.05 547.00
033.00	24.16		334.00	1,545.00	1,002.00	347.00
	24.10					
17,369.64	181,692.57	4,335.52	23,628.76	21,976.83	15,092.00	8,188.96
1,809.35	47,877.81	654.49	3,493.36	5,005.07	1,639.72	1,179.42
171	2,787		173			159
33	465 70		26 4		66	39 5
207	3,322	98	203	550	440	203

Detailed Operating Reports of Electrical Departments of

Municipality	Belle River	Belleville	Blenheim	Bloomfield	Blyth
Population	1,063	15,982	2,035	633	701
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise Miscellaneous	4,283.83 229.57 1,659.48 1,493.84	127,413 .83 78,233 .79 56,181 .49 4,738 .49 11,331 .13 5,821 .98 3,532 .63	13,088.07 10,077.31 1,971.12 3,267.51 859.49	4,286.66 2,659.06 1,606.85 	4,824 . 18 2,740 . 46 1,037 . 01 1,382 . 64
Total earnings	16,096.53	287,253.34	42,283.75	9,742.57	10,304.03
Expenses					
Cost of power supplied by H-E.P.C Substation operation					
maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and main-	295.54 305.60 46.00	404.18 2,569.81	43.04 1,692.30	311.36	973.44 43.50 167.56 7.50
tenance. Promotion of business Billing and collecting General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance.	1,081.96 816.35 53.34	662.29 5,999.24 6,848.95 4,026.96 1,906.30	14.25 2,210.47 2,451.67 8.35	364.32 154.43 1.93	
Interest			162.06	63.99 517.26	3.28
Depreciation	1,323.00	12,961.00	3,129.00	449.00	470.00
Other reserves			29.66	• • • • • • • • • •	
Total operating costs and fixed charges		237,877.87	36,649.66	8,306.44	8,067.85
Net surplus	1,173.24	49,375.47	5,634.09	1,436.13	2,236.18
Net loss					
Number of Consumers					
Domestic service	62	685		44	197 56 5
Total	435	5.146	804	243	258

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Bobcay-	Bolton	Bothwell	Bowmanville	Bradford	Braeside	Brampton
geon 1,039	716	695	3,996	1,098	424	6,152
.\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
9,492.79 7,191.21 1,503.46	6,692.51 3,352.68 3,710.38	3,363.95 2,688.94 1,147.71	41,086.26 15,229.81 69,609.05	10,160.85 8,829.46 8,087.26	2,176.12 407.19 6,054.19	60,772.74 26,434.64 24,576.26
2,100.00	124.62 1,263.12	135.96 1,412.49	4,073.20	681.21 1,404.00	420.00	3,178.51 7,033.63
106.47	387.50	510.00	3,210.48 4,322.69	257.58	16.17	54.78 1,730.67
20,393.93	15,530.81	9,259.05	137,531.49	29,420.36	9,073.67	123,781.23
2,779.19	9,083.52	6,408.44	91,429.98	17,210.92	6,583.06	87,312.73
4,058.44			133.48			162.11
978.07 103.95 176.68	1,120.34 77.28 243.53	151.95 39.05	5,834.62 463.81 1,497.34 263.72	1,693.09 249.74 383.15 1.91	62.11 37.67 119.07	2,620.68 415.48 534.74 710.95
405.06	121.23	171.56		197.17	48.93	
805.36 371.94 271.02	435.89 370.98 37.03	365.61 401.73 1.95	727.69 3,496.97 4,865.81 1,806.16	707.96 579.51 193.50	301.52 242.97	2,660.89 2,124.83 330.27
1,802.60			779.41	371.01 193.92	224.55	765.61
2,987.33				1,529.13	217.92	
2,695.00	561.00	525.00	3,849.00	998.00	147.00	4,762.00
•••••					• • • • • • • • • • • • • • • • • • • •	
17,434.64	12,050.80	8,065.29	115,695.81	24,309.01	7,984.80	103,768.07
2,959.29	3,480.01	1,193.76	21,835.68	5,111.35	1,088.87	20,013.16
425 76 6	207 49 14	204 61 10	187	322 82 16	100 8 2	1,784 311 61
507	270	275	1,461	420	110	2,156

Detailed Operating Reports of Electrical Departments of

Municipality	Brantford	Brantford Twp,	Brechin	Bridgeport	Brigden
Population	34,810	V.A.	P.V.	P.V.	P.V.
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service	216,615.89 121,515.74 346,254.22 10,773.42	10,584.17 9,175.00	1,963.62 1,031.55 781.34	6,468.37 2,001.46 2,745.22	2,551.74 2,054.30 2,887.11
Municipal power	34,842.49	7,765.83			,
Miscellaneous	9,889.25		15.00		
Total earnings	739,891.01	90,591.21	4,267.51	12,345.47	8,600.85
Expenses					
Cost of power supplied by H-E.P.C Substation operation Substation maintenance	549,616.32 10,831.10 1,939.31	56.960.48 241.14		7,734.76	
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses.	10,125.89 1,999.99 9,935.94 14,753.98	3,222.03 650.21 1,635.25 777.33	434.17 4.20 70.00	1.80 9.00	8.61
Street lighting, operation and maintenance. Promotion of business	6,403.74 208.00	1,765.95			54.17
Billing and collecting	10,329.62 14,891.08 4,089.20	3,184.84 3,844.33 1,428.00	283.89 41.52	597.85 32.68 8.58	163.32 3.42
Truck operation and maintenance Interest		2,255.26 2,646.93 2,195.90	118.16		
Depreciation		,			
Other reserves		0,000.00	124.00	400.00	330.00
Total operating costs and					
fixed charges	664,793.65	87,490.65	3,421.56	10,424.20	7,098.33
Net surplus	75,097.36	3,100.56	845.95	1,921.27	1,502.52
Net loss					
Number of Consumers					
Domestic service	9,089 1,462 256	103		25	45
Total	10,807	2,215	91	241	185

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

-					-	
Brighton	Brockville	Brussels	Burford	Burgessville	Burlington	Caledonia
1,766	11.038	762	P.V.	P.V.	4,560	1,450
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
13,471.39 6,340.14 4,963.04	36,297.16 129,303.96	6,411.24 3,606.66 3,552.25	6,792.11 3,023.08 2,314.44	878.90	24,094.95 19,405.09	8,992.70 7,135.92 3,015.64
2,028.12	8,384.35 8,826.00	1,296.00	716.96	312.00	854.09 2,777.19	2,283.04
759.29	4,696.53	436.25	169.98	84 . 00	228.41	94.79
27,561.98	269,647.91	15,302.40	13,016.57	5,281.65	101.107.83	21,522.09
15,608.81	207,039.60 8,945.76 248.86		9,637.52	3,876.48	50,085.56	13,255.29
2.010.20	2.976.34		1 991 50	150.55	4.010.00	1 110 50
2,019.28 123.32 259.46 3.14	424.55 2,731.48	590.20 31.19 262.40	162.40		4,910.03 193.72 1,671.74 1,190.04	1.113.70 352.06 673.52 178.57
331.95	1,200.95	221.24	249.61	52.61	807.21	451.58
926.83 2,123.94 281.01	4,187.48 6,535.38 1,878.85	798.25 33.33	729.14 345.99 22.29	186.28	2,993.33 1,926.17 27.59	4.18 1,168.05 1,507.22 350.70
532.54 193.33		• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	3.50	4,679.54	562.53 68.50
1,779.14			• • • • • • • • • • • • • • • • • • • •		6,012.00	
1,216.00	7,041.00	648.00	740.00	245.00	4,497.00	1,313.00
25,398.75	244,445.14	12,681.47	13,138.26	4,584.32	78,993.93	20,998.90
2,163.23	25,202.77	2,620.93		697.33	22,113.90	523.19
		• • • • • • • • • • • • • • • • • • • •	121.69			
614 115 10	3,339 433 79	273 67 8	47	19	1,416 182 22	480 107 10
739	3,851	348	311	85	1,620	597

STATEMENT

Detailed Operating Reports of Electrical Departments of

Municipality	Campbell ville	1-	Canning	g-	Cardina	1	Carleton Place	Cayug	ga
Population	P.V.		806		1,678		4,239	649	
EARNINGS	\$	c.	\$	c.	\$	c.	\$ c.	\$	c.
Domestic service. Commercial light service. Commercial power service. Municipal power.	597.8 367.7	39	6,992 3,398 3,786	62	11,256. 3,263. 416.	43	28,771.98 14,290.88 31,208.37	5,966 6,673	.29
Street lighting	400.0	00	1,312	50	1,226.	00	1,518.43 4,989.28		.52
Miscellaneous	142.3	37	210.	42	210.	00	2,758.13	156	.00
Total earnings	3,351.2	23	15,699.	93	16,373.	04	83,537.07	19,960	.36
EXPENSES									
Cost of power supplied by H-E.P.C Substation operation	1				10,538.	82	52,368.66 74.42	9,071	
Substation maintenance		• •				• •	• • • • • • • • • •		• • •
maintenance Line transformer maintenance	130.2	27	810. 76.		1,144. 39.		3,835.04 431.08		
Meter maintenance			48.	60	171.	56	797.47	297	.81
Street lighting, operation and maintenance.			133.		230.		699.33		
Promotion of business			11.	27					
Billing and collecting. General office, salaries and expenses. Undistributed expenses	116.4)7	608. 459.	46	651. 201.	72	2,318.79 4,915.29	556	.61
Undistributed expenses	0.6	66	99.	38	53.	97	702.72 856.26	313	
Interest					188.	40	319.67	5	.88
on debentures					990.	24	2,586.29		
Depreciation	123.0	00	744.	00	675.	00	3,497.00	720	.00
Other reserves		·		• •	• • • • • • • •		· · · · · · · · · · · · · · · · · · ·	• • • • • •	
Total operating costs and fixed charges	3,291.6	8	12,218.	86	14,885.	73	73,893.54	13,295	.78
Net surplus	59.5	55	3,481.	07	1,487.	31	9,643.53	6,664	.58
Net loss				• •	• • • • • • • • • • • • • • • • • • • •				
Number of Consumers									
Domestic service. Commercial light service. Power service.	1	1	_	79 72 12		08 53 3	1,173 210 20	:	200 72 10
Total	7	2	3	63	4	74	1,403		282
									_

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Chatham	Chatsworth	Chesley	Chesterville	Chippawa	Clifford	Clinton
18,380	362	1,591	1,123	1,339	461	2,050
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
124,122.30 135,458.33 119,729.94	3,201.17 1,884.11	12,160.79 6,107.59 8,451.33	6,728.14 5,463.09 3,930.86	9,434.97 2,955.30 356.21	3,686.66 2,708.54 722.08	17,887.07 10,077.90 4,813.54
8,266.87 23,594.66 8,893.48	559.00	924.21 2,415.93	1,194.90	993.72 2,651.14	980.00	1,650.73 2,798.74 968.62
4,643.55	50.94	403.26	560.00	294.99	144.21	1,153.93
424,709.13	5,695.22	30,463.11	17,876.99	16,686.33	8,241.49	39,350.53
225,426.65 10,286.26	4,168.33	19,539.41	11,916.47	9,210.24	6,038.90	25,664.21
11,248.99						595.09
17,638.81 4,176.21 6,008.63	191.39	1,345.19 23.26 518.27	1,400.11 30.50 56.43		115.31	2,106.37 214.85 22.56
5,645.26		314.02	67.68	271.03	12.87	235.63
7,116.36 6,734.03	90.25	329.33	132.52	872.59	120.84	828.41
15,045.77 21,717.20 7,801.22 5,514.43	328.35 22.08	849.64 848.45 74.37 109.98	747.10 518.42 46.24	1,073.37 1,179.55 215.29 480.15	304.44 114.20 22.58	1,376.30 2,713.04 169.87 681.96
3,073.70					198.50	
11,780.60					358.67	
26,533.00	260.00	1,208.00	527.00	1,195.00	304.00	1,692.00
1,000.00						
386,747.12	5,120.40	25,159.92	15,442.47	16,354.89	7,608.31	36,300.29
37,962.01	574.82	5,303.19	2,434.52	331.44	633.18	3,050.24
4,945 943 142	123 33	490 89 24	273 71 4		141 39 2	640 140 18
6,030	156	603	348	464	182	798

Detailed Operating Reports of Electrical Departments of

Mucicipality	Cobden	Cobourg	Colborne	Coldwater	Colling-	
Population	629	5,419	908	583	wood 7,027	
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ (
Domestic service. Commercial light service. Commercial power service. Municipal power. Street lighting. Merchandise. Miscellaneous. Total earnings.		28,332.62	9,741 .25 6,156 .32 965 .84 234 .98 1,524 .00 1,460 .28 178 .74	933.00	42,060.0 21,684.1 40,519.4 1,734.8 4,005.0 1,843.9	
EXPENSES						
Cost of power supplied by H-E.P.C Substation operation Substation maintenance		67,451.90	9,284.03	6,157.91	73.803 . 1 639 . 1	
Distribution system, operation and maintenance Line transformer maintenance Meter maintenance Consumers' premises expenses Street lighting, operation and main-	606.80 80.94 101.87	4,094.89 690.34 1,397.65 491.04	2,338.92 157.37 284.38 1,126.84	569.92 33.50 170.70 40.15	7,692.4 558.2 1,208.7 27.5	
tenance	524.85 114.34	5,593.15 4,574.02 1,335.85 994.05	239.51 2.51 1,184.93 1,050.20 148.01 435.33 294.17	646.59 193.66 50.57	2,611.7 1,427.2 389.0 650.0	
Sinking fund and principal payments on debentures.	162.99		869.74			
Depreciation	278.00	6,490.00	635.00	647.00	4,312.0	
Other reserves						
Total operating costs and fixed charges	9,632.70	101,895.04	18,050.94	8,683.53	93,913.8	
Net surplus	2,426.30	18,438.61	2,210.47	3,789.38	17,933.5	
Net loss						
Number of Consumers						
Oomestic service Commercial light service Power service	198 61 5	266	299 77 6	164 50 4	1,75 29 6	
Total	264	1,869	382	218	2,11	

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

	1					
Comber	Cookstown	Cottam	Courtright	Creemore		Delaware
P.V.	P.V.	P.V.	367	700	P.V.	P.V.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
2,660.54 2,898.19 3,387.28	3,289.69 2,042.39 1,480.21		2,207.07 876.24	4,943.61 2,663.68 1,392.04	3,124.52 1,498.45 1,556.16	2,972.09 1,090.50
773.00	855.00	540.50	909.95 645.00	768.00	505.98	288.00
342.39	330.48	135.00	227.34	206.88	150.47	84.73
10,061.40	7,997.77	7,173.77	4,865.60	9,974.21	6,835.58	4,435.32
		-				
6,251.99	3,964.31	3,761.84	2,849.64	6,152.21	4,232.00	2,680.86
674.53			143.44		271.13	6.85
92.43 3.21		10.00	64.95 3.50		190.95 66.92	9.92 153.89
240.65	87.26	72.00	25.62	153.54	128.18	25.00
540.02 383.26 2.00	77.64	112.54	291.35 28.46 6.03	97.73		173.74 88.81
	45.68	5	13.76	5		
	681.83	3				
463.00	504.00	397.00	209.00	391.00	231.00	255.00
8,651.09	6,495.6	2 5,684.58	3,635.7	7,704.25	5,578.46	3,394.07
1,410.3	1,502.1	5 1,489.19	1,229.8	2,269.96	1,257.12	1,041.25
13 5	1 3	30	2	3 5		17
19	7 18	30 184	1 13	255	2 140	95

Detailed Operating Reports of Electrical Departments of

Municipality	Delhi	Deseronto	Dorchester	Drayton	Dresden	
Population	2,242	1,215	P.V.	489	1,666	
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c	
Domestic service. Commercial light service. Commercial power service. Municipal power. Street lighting. Merchandise. Miscellaneous.	18,172.42 16,770.63 7,270.49 3,432.30 1,315.44 1,109.69	12,186.87 5,137.31 2,805.23 1,259.86 1,709.00 1,324.97 179.25		4,795.30 3,811.74 1,451.85 960.00	9,892.1' 9,909.8' 11,506.4' 738.6 2,312.3(935.7' 327.5(
Total earnings	48,070.97	24,602.49	6,910.60	11,197.27	35,622.7	
Expenses						
Cost of power supplied by H-E.P.C Substation operation			3,950.77			
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and main-	2,187.55 83.98 321.80 528.08	85.47 177.72		976.24 327.08 324.50 58.94	1,680.3 114.0 691.8 172.1	
tenance. Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance. Interest. Sinking fund and principal payments on debentures.	498.01 19.50 1,969.43 2,142.96 857.48 1,007.35 2,350.77	926.79 1,752.33 273.76 554.15	379.86 149.32	125.35 48.40	360.1 16.4 1,365.2 1,199.7 140.3 1,108.0 6.7	
Depreciation	2,092.00	685.00	561.00	534.00	1,314.0	
Other reserves						
Total operating costs and fixed charges		17,285.65	5,659.37	10,777.28	28,318.1	
Net surplus	8,862.43	7,316.84	1,251.23	419.99	7,304.6	
Net loss						
Number of Consumers						
Domestic service	704 190 13	60	31	180 69 6	53 14 1	
Total	907	501	191	255	69	

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Drumbo	Dublin	Dundalk	Dundas	Dunnville	Durham	Dutton
P.V.	P.V.	701	5,697	4,063	2,036	818
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
3,345.28 1,817.07 752.42	2,082.20 1,689.47 1,760.15	5,389.54 4,550.17 3,391.48	32,345.49 22,273.67 53,170.43	17,578.27 18,109.10 22,571.62	10,743.29 6,549.17 5,959.54	3,962.51 3,099.41 4,356.03
611.00	550.00	1,199.00	754.45 5,895.64	2,436.96 3,977.60	746.08 1,650.90	1,033.44
169.44	45.00	315.00	810.49	1,347.91	499.21	284.73
6,695.21	6,126.82	14,845.19	115,250.17	66,021.46	26,148.19	12,736.12
3,803.88	3,455.60	7,513.61	84,678.91 659.63	45,215.06 575.28	16,089.97	8,406.70
762.96	217.44	1,111.77	7,932.81	4,715.81	2,960.73	622.89
5.05 6.27	8.60		583.50 2,277.24 1,467.48	288.38 2,207.34	142.00 301.11 869.90	16.53
104.01	104.05	213.32	3,571.12	850.43 16.55	414.05	256.26
423.89 69.29 1.32	411.61		2,191.83 2,770.18 791.13 1,041.61	1,772.76 1,829.09	1,323.81 924.50 151.81 252.84	1,023.60 277.34 34.75
				762.46		
308.00	329.00	497.00	4,388.00	3,178.00	1,132.00	564.00
5,510.49	4,529.48	10,400.50	112,353.44	62,174.90	24,562.72	11,202.07
1,184.72	1,597.34	4,444.69	2,896.73	3,846.56	1,585.47	1,534.05
100 34	32	79	212	272	499 117 19	244 70 12
135	100	319	1,857	1,444	635	326

Detailed Operating Reports of Electrical Departments of

Municipality	East York	Elmira	Elmvale	Elmwood
Population	Twp. V.A.	2,297	P.V.	P.V.
EARNINGS	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise	371,890.34 39,986.41 54,717.82 5,085.80 30,668.09	20,348.88 13,800.16 31,731.11 3,245.85 2,038.17	4,872.44 2,918.74 3,489.64 286.15 708.00	1,620.69 1,088.70 2,793.86
Miscellaneous	494.19	1,856.20	276.96	91.36
Total earnings	502,842.65	73,020.37	12,551.93	6,187.61
Expenses				
Cost of power supplied by H-E.P.C Substation operation	289.971.63	45,772.50	8,217.29	4,445.68
Substation maintenance	3,116.39	365.08		
maintenance	16,171.99 3,046.18	3,631.19 226.11	997.23	125.48
Meter maintenance	7,889.34 8,480.96	460.86		
tenance	5,654.38	399.57 4.00	244.38	37.18
Billing and collecting. General office, salaries and expenses Undistributed expenses Truck operation and maintenance. Interest. Sinking fund and principal payments on debentures.	23.043.14 20.047.91 626.63 843.35	1,466.33 1,997.55 552.98 815.14	558.51 234.62	
Depreciation	28.697.00	2,708.00	588.00	260.00
Other reserves				
Total operating costs and fixed charges	407,588.90	59,278.60	11,337.81	5,457.66
Net surplus	95,253.75	13,741.77	1,214.12	729.95
Net loss			.	
Number of Consumers				
Domestic service	13,355 488 65	140	210 56 7	
Total	13,908	815	273	113

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Elora	Embro	Erieau	Erie Beach	Essex	Etobicoke Twp.	Exeter
1,158	425	273	30	2,095	V.A.	1,800
\$ c.	\$ c.	\$ c.	\$ c.	S c.	S c.	\$ c.
10,533 . 20 5,552 . 19 6,205 . 68		6,161.48 2,294.56 5,004.86	1,708.56 327.54	8.523.66	51,090.07 95,009.73	20.687.59 12.980.17 5.716.66 737.44
1,708.68 26.17	648.00	486.80		2,572.01	17,733.19	2,848.58
590.53	110.00	30.00	35.95	1.162.38	1,585.25	794.35 718.47
24,616.45	9,431.80	13.977.70	2,207.05	36,774.65	506,965.55	44.483.26
16,786.68	5,806.40	7,608.75	1,172.71	19.788.07		27,919.98
1,900.51 10.00 86.18 54.28	150.95	205.56 244.46		188.50	4.247.90	48.28 1,532.55
353.60	194.96	101.08	75.75	423.44	1,497.83	879.76
1,091.64 923.60 294.07	164.33 1.89	722.57	180.51 198.68 0.44	2.050.02 497.97	23,680.58 14,141.09	
257.95		• • • • • • • • • • • • •	10.15		3,302.31	
				1,008.75	4,390.58	
1,065.00	462.00	824.00	164.00	3.127.00	23,747.00	2,537.00
22,823.51	7,685.14	10,594.12	2,019.14	32,464.49	427,376.93	40,301.58
1,792.94	1,746.66	3,383.58	187.91	4,310.16	79,588.62	4,181.68
374 71 6		20	5		504	611 146 19
451	175	258	99	766	9,069	776

STATEMENT

Detailed Operating Reports of Electrical Departments of

Municipality	Fergus	Finch	Flesherton	Fonthill	Forest
Population	2,649	341	389	1,115	1,709
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise Miscellaneous. Total earnings	24,480.00 10,498.17 23,146.60 636.27 2,699.51 600.00	3,624.80 2,698.70 1,069.39 507.00 196.50 8,096.39	3,035,91 2,373,12 984,18 631,00 270,00 7,294,21	9,014.07 2,480.12 645.51 178.08 1,531.16 	17,981.94 10,470.28 5,852.36 1,324.07 2,529.73 130.32 1,077.00
Expenses					
Cost of power supplied by H-E.P.C. Substation operation. Substation maintenance. Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and maintenance. Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance. Interest. Sinking fund and principal payments on debentures. Depreciation. Other reserves.	4,184.51 262.80 606.77 31.00 783.08 17.89 1,325.57 1,447.92 179.75 290.46 45.85 917.06 3,347.00	289.82 20.52 85.78 93.40 262.86 122.02 37.77 585.74	447.86 41.48 3.68 242.84 494.84	1,252.60 92.05 374.70 261.21 140.82 832.68 599.42 10.94	4,151.48 79.94 474.18 585.29 506.09 1,166.56 2,237.63 205.22 222.45
Total operating costs and fixed charges		6,634.37	6,036.36	11,410.20	32,650.30
Net surplus	3,876.96	1,462.02	1,257.85	2,501.37	6,715.40
Net loss.					
Number of Consumers Domestic service	790 121 20	32	145 47 2	21 5	552 150 21 723
Total	931	168	194	366	123

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Forest Hill	Galt	Georgetown	Glencoe	Goderich	Grand Valley
14,574	15,000	2,753	764	4,625	628
S c.	S c.	S c.	S c.	S c.	\$ c.
237,442.05 37,968.18 5,775.41	130,569.35 78,139.29 184,546.83	30,933.31 12,528.97 50.721.29	5,253.58 5,907.13 2,616.64	43,209.98 22,965.59 20,261.80	4,353.21 2,874.14 2,831.52
434.81 10,398.25	4,344.51 18,587.00 10,939.39	603.88 3,001.60	1,232.62 2,265.48	3,064.84 4,848.09 518.36	932.00
7,409.29	5,308.62	779.51	1,184.71	1,962.58	
299,427.99	432,434.99	98,568.56	18,450.16	96,831.24	11,323.67
181,767.79 287.62	308,176.07 7,215.69 2,879.10			57,421.60 3,294.31	
9,319.61 187.50 3,839.13 10,509.92	7,680.28 693.05 4,397.50 2,988.72	3,663.72 556.66 770.70	1,142.01 52.41 153.73 94.31	4,127.14 782.99 1,125.59 427.20	219.08
1,229.38		792.20	346.97	678.48	122.33
6,737.81 8,422.54 808.28 4,367.70 7,951.83	8,460.91 1,956.28	3,058.48 1,951.38 472.45 2,240.46	830 52 933 97 66 63 175 75	4,030.55 2,805.76 404.65 662.32 764.96	832.35 6.97
18,158.36				2,216.99	
10,509.00	24,078.00	3,843.00	980.00	5,515.00	618.00
	296.72				
264,096.47	392,187.28	87,794.15	14,852.01	84.257.54	10,276.82
35,331.52	40,247.71	10,774.41	3,598.15	12,573.70	1,046.85
3,993 314 35	584	140		1,473 273 30	58
4,342	5,347	1,041	326	1,776	268

Detailed Operating Reports of Electrical Departments of

Municipality	Granton	Gravenhurst	Grimsby	Guelph
Population	P.V.	2,477	2,107	23,245
Earnings	\$ c.	\$ c.	\$ c.	\$ c
Domestic service. Commercial light service. Commercial power service. Municipal power. Street lighting	2,516.11 1,444.49 214.93	17,250.07 11,522.42 19,708.61 874.88 2,229.08	21,143.21 15,947.30 12,074.73 2,426.31 3,626.99	151,544 . 26 71,848 . 08 171,103 . 81 18,609 . 07 21,916 . 49
Merchandise. Miscellaneous.	156.21	904.91	27.36 733.31	1,971.79 3,612.55
Total earnings	4,701.74	52,489.97	55,979.21	440,606.03
Expenses				
Cost of power supplied by H-E.P.C	2,826.58	33,778.67	26,343.44	325,778.9
Substation operationSubstation maintenanceDistribution system, operation and		186.36		6,241.3
maintenanceLine transformer maintenance	94.96 21.87	116.90 327.37	3,708.63 1.92 908.39 352.28	12,753.0 900.3 5,214.7 696.2
Street lighting, operation and maintenance	61.87	150.61	520.91	5,543.6 296.2
Billing and collecting	473.98 96.54	319.54 669.14	37.12	9,965.8 14,839.1 2,846.2
InterestSinking fund and principal payments on debentures			68.56	
Depreciation	241.00	2,185.00	2,260.00	27,336.0
Other reserves				
Total operating costs and fixed charges		45,550.77	39,011.90	412,411.7
Net surplus	705.06	6,939.20	16,967.31	28,194.3
Net loss				
Number of Consumers				
Domestic service	30	125	146	78
Total	121	924	876	7,10

"B"—Continued Hydro Municipalities for Year Ended December 31, 1947

Hagersville	Hamilton	Hanover	Harriston	Harrow	Hastings	Havelock
1.556	178.686	3,204	1,345	1,304	721	935
S c.	S c.	\$ c.	\$ c.	S c.	\$ c.	S c.
8,916.18 23,404.81	1,058,553.00 646,178.75 2,978,659.98	28,660.72 11,597.34 27,178.43	10,574.10 8,072.07 10.062.45	8,624.45 5,390.45	6,222.35 4,458.89 204.98	6,219.97 3,518.42 2,253.62
2,244.00	130,616.75 14,425.70	278.14 2,211.23 2,338.67	411.91 1,609.00 38.92	1,474.56 71.13	1,617.99,	1,569.00
908.66	l—— <u> </u>		359.28			
44,757.16	5,064,548.60	72,264.53	31,127.73	31.993.59	12,716.59	14,076.01
30,121.74	*3,568,052.69 98,494.02 15,493.46	40,260.19	19,788.04	22,972 74	6.021 .48	8,092 . 13
4,525.55 336.73 539.88 7.18	11,788.70 44,927.09	5,506.93 478.31 620.67	1,943.75 1.99 215.94 188.23	58.41 150.73	1,027.54 95.02 259.29	1,516.11 466.97
423.53		320.06	77.04		478.41	432.77
1,065.89 1,059.03 431.52	83,253.90 30,909.20	1,926.16 1,677.49 473.17	102.38	132.31	771.41 193.26	
260 . 88 34 . 10		1,228.68	591.56 66.72		412.73	
	189,500.00		545.87		1,344.54	
1,136.00	201,822.34	3,682.00	1,013.00	1,651.00	902.00	817.00
39,942.03	4,502,197.48	56,173.66	26,253 . 10	28,625.61	11,505.68	12,540.68
4,815.13	562,351.12	16.090.87	4,874.63	3,367.98	1,210.91	1,535.33
	1					
449 130 21	5,928		398 109 16	105	284 57 3	316 63 3
600	52,774	1,125	523	494	344	382

^{*} Includes 1947 Adjustment.

Detailed Operating Reports of Electrical Departments of

Municipality	Hensall	Hespeler	Highgate	Holstein	Humber-
Population	649	2,960	309	P.V.	stone 3,207
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$
Domestic service		72,225.37 1.265.07	2,110.34 1,124.33 1,948.02 578.04	1,265.86 503.30 575.27	14,333.2 6,587.7 7,222.6
Street lighting		3,655.33 2,120.21	248.20		626.8
Total earnings	14,886.30	112,722.31	6,008.93	2,576.93	30,560.3
Expenses					
Cost of power supplied by H-E.P.C., Substation operation. Substation maintenance. Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and maintenance. Promotion of business. Billing and collecting.	490.83 6.10 178.88 228.04 455.92	5,435.04 82.04 842.50 245.98 357.58 4.13 1,407.41	113.92 182.90 84.46	53.65	3,564.3 294.1 1,313.5 445.4
General office, salaries and expenses Undistributed expenses Truck operation and maintenance Interest Sinking fund and principal payments on debentures	46.95		6.20	272.80	914. 82.: 215.0
Depreciation	664.00	4,139.00	369.00	124.00	1,956.
Other reserves					
Total operating costs and fixed charges		97,739.17	5,183.05	1,702.65	27,378.4
Net surplus	3,497.99	14,983.14	825.88	874.28	3,181.9
Net loss					
Number of Consumers					
Domestic service	60	101	30	15	8
Total	310	1,028	148	85	9

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Huntsville	Ingersoll	Iroquois	Jarvis	Kemptville	Kincardine
2,767	5,953	938	590	1,281	2,373
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c
22,199.92 18,599.30 15,640.84 1,390.05 2,860.00	42,246.66 24,782.19 49,751.02 2,509.69 4,910.22 95.84 1,084.00	9,596.01 4,271.08 878.96 695.20 1,145.16 785.57 150.00	3,336.75 2,884.51 3,826.02 858.00	11,468 40 7,681 82 5,637 73 1,786 00 294 92 766 20	19,164, 34 11,745, 41 17,263, 09 1,425, 67 4,628, 13
61,087.71	125,379.62	17,521.98	11,313.12	27,635.07	55,006.27
40,550.09	90,004.04 1,291.01	9,022.14	6,881.43	16,191.99	32,114.36 559.64
3,323.10 146.93 764.55 13.84	4,418.10 518.99 2,623.94 1,309.78	1,635.09 26.55 323.75	230 .89 13 .10	2,250.47 120.59 434.87 36.80	1,561.29 160.61 412.56 712.79
1,023.57	1,171.75 4.90	377.15	34.98	265.15	603.08
1,618.59 2,670.18 587.72 680.16	3,863 44 5,259 20 1,589 48 2,113 02 181 03	859.81 1,393.45 130.19 495.53 1.02	803 63 96 63 59 85	1,350,24 790,31 168,73 428,76 67,76	1,373.74 1,171.51 230.90 953.70
1,334.00	6,103.00	519.00	448.00	1,004.00	2,036.00
52,712.73	120,451.68	14,783.68	8,568.51	23,109.67	41,890.18
8,374.98	4,927.94	2,738.30	2,744.61	4,525.40	13,116.09
	· · · · · · · · · · · · · · · · · · ·				
813 139 20	1,940 260 51	337 68 5		425 82 5	810 140 24
972	2,251	410	216	512	974

Detailed Operating Reports of Electrical Departments of

		•		
Municipality	Kingston	Kingsville	Kirkfield	Kitchener
Population	32,697	2,372	P.V.	37,724
EARNINGS	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service. Commercial light service Commercial power service. Municipal power Street lighting. Merchandise	253,813.77 152,546.74 165,083.85 16,620.44 23,018.15	18,217 .04 13,505 .00 5,405 .79 966 .10 2,845 .56	1,089.49 1,375.22 432.00	291,368.62 166,527.82 529,264.25 43,637.54 35,959.01
Miscellaneous	9,716.36	1,699.61	90.00	7,727.34
Total earnings	620,799.31	42,639.10	2,986.71	1,074,484.58
Expenses				
Cost of power supplied by H-E.P.C Substation operation Substation maintenance	407,536.77 11,827.29 2,036.38		1,287.34	753,160.57 11,778.23 7,628.62
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and main-	17,485.26 2,196.05 6,408.81 3,004.91	599.87		27,477.45 2,315.85 10,931.47 3,018.21
tenance. Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses Truck operation and maintenance. Interest. Sinking fund and principal payments	7,148.53 946.29 17,694.63 27,991.63 13,307.53 8,141.87 658.80	541.35	226.69	595.37
on debentures	3,445.00	1,526.96		23,400.00
Depreciation	28,374.00	1,924.00	215.00	61,754.00
Other reserves	3,051.00			
Total operating costs and fixed charges		38,863.69	2,029.94	960,026.76
Net surplus	59,544.56	3,775.41	956.77	114,457.82
Net loss.				
Number of Consumers				
Domestic service. Commercial light service. Power service.	1,119	182		
Total	10,273	900	61	11,15

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Lakefield	Lambeth	Lanark	Lancaster	La Salle	Leamington	Lindsay
1,373	P.V.	705	526	1,300	6,276	7,888
			0	0 -	6	
\$ c.	\$ c.	8 c.	\$ c.	\$ c.	\$ c.	\$ c.
10,453 .46 7,293 .55	4,776.97 1,375.77	4,804.66 3,494.07	2,293.58 1,647.01	13,266.07 2,388.52	36,260.34 26,477.18	66,388.00 45,763.86
7,180.05	590.79 339.96	1,315.16		876.45	32,451.35 2.234.29	43,387.81 3,035.59
1,841.00	763.00	689.00	512.00	804.00 10.00	7,952.80	6,825.29 196.68
697.50	59.65		45.42	150.57	1,998.89	2,330.11
27,465.56	7,906.14	10,302.89	4,498.01	17,495.61	107,374.85	167,927.34
12,891.68	5,389.90	6,003.01	2,469.12	11,639.00	73,458.97 458.28	110,316.42
1,330.78	286.72	353.63	169.66		2,988.95 692.55	2,724.07 501.56
266.44	4.00 41.98	16.50 56.40	6.00	116.50 176.20	854.30	1,533.96
	13.06			357/.07	5.20	2,522.00
397.64	66.29	120.99	30.54	125.77	1,538.13 49.85	893.75
975.32 1:283.51	381.42 84.97	357.19 149.03	236.63 193.13		4,077.28	5,924.44 9.020.10
123.55	1.58	145.00		30.98	904.66	4,138.76
198.76 571.25					2,713.87	2,356.26 1,010.42
1,994.11						9,461.72
1,094.00	418.00	481.00	423.00	1,613.00	6,379.00	7,916.00
· · · · · · · · · · · · · · · · · · ·						
21,127.04	6,687.92	7,537.75	3,528.08	16,676.60	99,341.44	158,319.46
6,338.52	1,218.22	2,765.14	969.93	819.01	8.033.41	9,607.88
432 80						2,405 389
12				3		77
524	192	245	166	352	2,308	2,871

Detailed Operating Reports of Electrical Departments of

Municipality	Listowel	London	London Twp.	Long Branch	Lucan
Population	2,854	80,342	V.A.	5,220	643
Earnings	S c.	\$ c.	\$ c.	\$ c.	8 c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise Miscellaneous	23,912.79 17,220.60 20,664.64 1,118.80 4,840.72 76.79 826.80	279,227.20 521,059.73 96,424.68 53,645.81 23,136.16	1,323.45	47,595 .30 11,443 .46 25,639 .91 2,285 .08 6,129 .89	1,475.39
Total earnings	68,661.14	1,696,756.77	26,275.46	94,750.91	12,960.91
EXPENSES					
Cost of power supplied by H-E.P.C Substation operation	774.15 2.932.73 223.59 774.63 422.85	22,342.81 5,636.96 34,529.11 53,710.34	1,144 .11 66 .90 705 .42 771 .56		550.38 30.34 614.74
tenance Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance Interest Sinking fund and principal payments on debentures.	1,095.93 1,656.66 2,086.55 254.23 622.92 7.24	1,599.63 34,680.88 57,473.29 4,506.02	1.865.23 544.67 5.48 30.02		
Depreciation	3,008.00	95,597.28	939.00	4,163.00	639.00
Other reserves		115,204.25			
Total operating costs and fixed charges	65.025.68	1,556,749.84	23,273.42	71,179.68	10,792.82
Net surplus	3,635.46	140,006.93	3,002.04	23,571.23	2,168.09
Net loss					
Number of Consumers					
Domestic service	900 168 30	2,538	18	1,848 172 19	207 56 5
Total	1,098	24,934	569	2,039	268

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Lucknow	Lynden	Madoc	Markdale	Markham	Marmora	Martintown
930	P.V.	1,084	776	1,267	993	P.V.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	S c.	\$ c.
7,112.03 4,055.21 16,287.21 517.09	3,647.23 893.99 1,074.56	7,582.43 5,753.09 2,556.13	5,127.63 3,850.10 2,455.67 180.14	11,932.14 5,217.18 3,742.10 365.73	6,448.12 3,167.68 533.98	1,482.74 1,550.74 131.50
1,483.33	480.00	1,550.57	959.00	1,537.50	1,298.00 391.08	176.00
304.87	141 03	276.83	442.78	468.00	249 52	78.28
29,759.74	6,236.81	17,719.05	13,015.32	23,262.65	12,088.38	3,419.26
16,546.47	4,286.66	11,032.22	7,120.91	12,316.08	6,095.88	2,079.50
1,275.99	179.29	1,443 .27 111 .37	650.85	1,519.59 84.31	1,341.90	206.08
262.88	96.15 117.75	138.67	129.55 419.97	131.25	184.88	12.84
109.94	76.17	409.77	548.79	147.55	292.70	50.00
1,841.31	268.53 264.00		1,028.36 44.92	1,230.62 175.90 44.69		288.37 64.08
1,220.00	283.00	695.00	635.00	1,296.00	815.00	134.00
21,256.59	5,571.55	15,230.50	10,578.35	16,945.99	10,524.23	2,834.87
8,503.15	665.26	2,488.55	2,436.97	6.316.66	1,564.15	584.39
				<u> </u>		
340 103 11	108 14 3	347 99 6	238 76 9	380 77 11	279 44 1	68 29 1
454	125	452	323	468	324	98

Detailed Operating Reports of Electrical Departments of

Municipality	Maxville	Meaford	Merlin	Merritton	Midland
Population					Wildiand
	811	2,602	P.V.	3,506	6,880
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise Miscellaneous		12.819.49 15,184.56 1,057.87 3,528.70	2,604 .88 2,491 .33 1,828 .93 798 .00	6,329.03 215,212.91 2,822.34	47,240 . 52 25,201 . 76 78,329 . 56 2,728 . 36 6,445 . 41 3,597 . 08 3,215 . 27
Total earnings	8,597.46	53,508.35	8,323.11	254,400.20	166,757.96
Expenses					
Cost of power supplied by H-E.P.C Substation operation. Substation maintenance. Distribution system operation and			4,483.32	211,173.69 421.91	101,717.17 3,114.94 351.02
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance Consumers' premises expenses. Street lighting, operation and main-	422.00 34.30 121.30 9.40	503.46 419.75	1,202.72 23.92 173.63 335.49	354.31 887.13	
tenance. Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance.	75.78 20.87	1,215 62 1,160 25 474 95 377 15	609.65 493.40 1.64	393.64 1,475.29	2,157.00 1,765.84 975.73
Interest					
Depreciation	446.00	2,491.00	401.00	5,373.00	10,180.00
Other reserves					
Total operating costs and fixed charges	6,756.42	41,790.01	7,778.43	232,156.44	132,007.43
Net surplus	1,841.04	11,718.34	544.68	22,243.76	34,750.53
Net loss					
Number of Consumers					
Domestic service	47			72	1,826 232 66
Total	243	1,041	205	1,129	2,124

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Mildmay	Millbrook	Milton	Milverton	Mimico	Mitchell	Moorefield
743	745	2,151	1,013	9,055	1,548	P.V.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	S c.	\$ c.
5,475.90 3,862.90 2,564.75 114.09	6,371.42 2,779.05 1,700.48	18,152.99 9,267.68 32,666.96	7,271.31 5,917.28 6,029.14 375.20	81,011.16 17,801.62 15,119.55 7,600.30	17,886.11 9,335.73 7,321.73 1,177.84	1,630 . 44 1,824 . 40
675.34	787.08	2,350.29 519.28	1,053.00	8,645.95 4,308.54	2,762.75 5,586.69 1,528.45	350.00
349.50	119.78	1,652.91				15.00
13,042.48	11,757.81	64,610.11	20,840.93	134,487.12	45,599.30	5,749.08
6,553.71	4,839.13		14,990.17	80,883.68	23,827.63	4,098.89
		240.00		407.03	941.99	· · · · · · · · · · · · · · · · · · ·
701.87	863.62 210.00	4,095.61 26.65	1,523.07 286.39	10.876.31 273.32	2,435.27 335.90	235.54
195.11 182.94	267.98		220.00	1,382.39 1,665.83	501.72	28.85
240.30		381.07	201 . 12	2,272.57	376.03	65.49
663.94	706.90 649.37 2.29	1,474.20		3,430.94 4,328.06 2,046.18 969.29	1,373.78 1,865.76 1,233.76 875.35	
769.82						
498.00	296.00	2,085.00	1,099.00	5,608.00	2,682.00	204.00
10,080.65	8,113.94	57,858.94	20,391.98	114,143.60	37,118.58	4,896.24
2,961.83	3,643.87	6,751.17	448.95	20,343.52	8,480.72	852.84
211 63 5	70	124	94	189		
279	275	766	392	2,702	733	108

Detailed Operating Reports of Electrical Departments of

Municipality	Morris- burg	Mount Brydges	Mount Forest	Napanee	Neustadt
Population	1,511	P.V.	1,797	3,359	435
Earnings	S c.	\$ c.	S c.	\$ c.	\$ c.
Domestic service	13,524.61 9,661.75 4,601.72 1,003.52 2,482.24	3,259.32 1,335.29 1,254.54	14,037 .45 11,411 .84 7,435 .53 1,040 .66 2,275 .92	33,726.95 26,516.71 14,805.26 120.00 4,107.29 597.84	2,807.48 1,438.66 777.13
Miscellaneous	374.63	407.45	479.42		391.00
Total earnings	31,648.47	7,063.60	36,680.82	81,121.48	6,077.27
Expenses					
Cost of power supplied by H-E.P.C Substation operation	13,872.31 1,225.04	3,926.13	25,225.15		2,137.4-
Substation maintenance Distribution system, operation and					
maintenance	2,517.70 240.30 324.48	144.35 34.29 4.53 7.05		3,847.90 302.83 1,219.29 1,446.63	62.6
Street lighting, operation and maintenance	575.60	37.09	482.31	1,107.84	70.58
Promotion of business. Billing and collecting General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance Interest. Sinking fund and principal payments	107.49	515.87 63.49 1.43		11.75 2,938.67 8,286.64 4,344.55 1,300.72	590.73 31.55
on debentures	1,048.63				
Depreciation	1,022.00	350.00	1,380.00	3,307.00	555.0
Other reserves					
Total operating costs and fixed charges	24,153.91	5,084.23	31,165.57	71,799.57	3,558.1
Net surplus	7,494.56	1,979.37	5,515.25	9,321.91	2,519.12
Net loss					
Number of Consumers					
Domestic service	139	46	145	232	28
Total	627	232	701	1,239	16

"B"—Continued

Newbury	Newcastle	New	Newmarket	New Toronto	Niagara Falls
265	705	Hamburg 1,456	4,014	8,727	20,530
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1,727.94 1.133.28	6,856.11 2,584.69	12,870.71 6,717.23	38,474.35 22.062.04	57,989.01 24,472.06	134,032.73 92,402.30
248.15	4,560.68	9,262.83	24,144.69 2,375.77	246,995.64 12,623.43	111,243.13 15,653.96
720.00	976.33	2,229.00 219.70	6,042.00 55.53	7,522.04	26,757.68
196.13	270.00	553.47		7,080.44	5,658.51
4,025.50	15,247.81	31,852.94	93,154.38	356,682.62	385,748.31
2,021.48	8,487.26	20,359.44 272.25	59,348.88 1.056.15		223,026.05 13,943.44
			1,000.10		10,343.44
549.44 5.00	1,334.44 176.70	1,964.45 889.84			15,203 . 14 2,172 . 47
2.38	273.81 125.76	541.71 235.69	633.91	1,508.15	8,607.99 4,099.13
69.14	240.00	655.61	1,318.21		4,668.08
132.65	623.76	1,026.09		5,401.29	13,578.94
98.99 6.79	279.85 166.67	1,281.69 392.78	151.90	2,007.55	18,895.60 7,343.82
	529.80	247.86 4.00	337.26 186.70	2,225.21	2,318.83 1,067.01
			1,000.00		4,951.18
307.00	628.00	2,062.00	2,580.00	5,507.00	22,179.00
3,192.87	12,866.05	29,933.41	75,046.71	349,004.02	342,054.68
832.63	2,381.76	1,919.53	18,107.67	7,678.60	43,693.63
90 20	249 40	412 115	1,215 236	2,202 258	5,367 832
1	8	13	38	46	124
111	297	540	1,489	2,506	6,323
-					

Detailed Operating Reports of Electrical Departments of

Municipality	the-Lake	- North York Twp. V.A.	Norwich	Norwood 703	Oil Springs 422
EARNINGS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service	24,545.49 8,473.93 2,878.36 802.50	45,636.06 81,244.97	12,460.39 6,769.55 1,817.19 515.77	6,917.50 4,398.96 3,152.67	
Street lighting	4,014.35 1,865.60 26.92		2,228.35 1,717.02 371.24	1,524.00	
Total earnings	42,607.15	501,715.26	25,879.51	16,608.13	11,449.60
Expenses					
Cost of power supplied by H-E.P.C Substation operation Substation maintenance	20,199.79 162.13			6,723.63	-, -
Distribution system, operation and maintenance	2,062.63 323.09	36,724.11 5,273.40	3,809.34 53.87		105.31
Meter maintenance. Consumers' premises expenses. Street lighting, operation and maintenance.	534.94 171.54 943.40	2,255.06	348.54 472.45 339.51	708.73	5.47
Promotion of business Billing and collecting General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance Interest	19.75 1,369.84 1,302.71 1,030.76 446.59 584.41	16,970.93 12,972.88 11,643.60	1,131.01 1,286.91 209.64 68.02 12.62	696.76 256.95	597.48
Sinking fund and principal payments on debentures	2,625.25	24,478.26		1,904.63	
Depreciation	3,322.00	32,461.00	773.00	961.00	798.00
Other reserves					
Total operating costs and fixed charges	35,098.83	513,374.67	23,455.89	13,319.92	8,201.69
Net surplus	7,508.32		2,423.62	3,288.21	3,247.91
Net loss	<u> </u>	11,659.41			
Number of Consumers					
Domestic service	696 102 14	624	419 89 10	70	
Total	812	10,319	518	321	192

"B"—Continued

Otterville	Ottawa		Oshawa		Orono		le	rangevill	mee	Ome
P.V.	163,403		27,215		P.V.			2,613	0	60
\$	\$ c.	c.	\$	c.	\$		c.	\$	\$ c.	
4,117.1 2,560.7 605.1 72.0 923.0	753,815.59 351,189.12 71,658.89 33,456.72 84,223.51	.60 .13 .29	282,760 102,641 394,744 10,916 13,352	.01	6,402 2,788 274		.05 .87 .49	23,621 16,864 6,995 940 2,641	706.98 021.41 461.04 986.04	1, 5,
195.0	18,343.57		26,489		150			1,008	194.35	
8,473.1	1,312,687.40	. 45	830,905	.35	10,665	ļ		52,072	369.82	12,
4,908.6	723,613.96	.46	533,413	. 13	4,383		.07	33.777	618.92	7.
	39,904.20 658.50	.06	2,230							
455.2 153.5 .2 37.6	37,014.59 1,319.42 16,301.23 4,956.43	.31	26,615 549 8,248 9,052	.55	673 52 18		5.92	666	997.78 76.46 220.67 22.40	
357.0 348.7 6.9	38,574.18 3,830.86 59,981.92 34,521.91 25,162.77 5,946.47	.14 .66 .32 .13	2,569 1,304 14,456 18,730 11,786 442	.44 .85 .41	150 550 499 38		3.76 7.29 2.95	393 1,798 737 172 495	158.85 674.10 130.58 70.11	· · · · · ·
	5,030.41									
474.0	139,517.00	00	22.222	00	300)	8.00	2,118	728.00	
	35,777.31									
6,831.3	1,186,083.39	.24	651,621	.82	6,666		7.10	41,687	697.87	10.
1,641.8	126,604.01		179,284		3,998	-		10,384	671.95	
17	16,317 1,603 215	374 797 128		199 44 2		2	803 192 32		198 26 8	
25	18,135	299	8.	245		7	,027	1.	232	

Detailed Operating Reports of Electrical Departments of

Municipality	0				
	Owen Sound	Paisley	Palmerston	Paris	Parkhill
Population	14,014	716	1,439	4,717	915
Earnings	\$ c.	\$ c.	S c.	\$ c.	S c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise Miscellaneous	106,030 .64 69,099 .80 105,713 .33 1,362 .51 11,359 .82 2,855 .19 2,520 .79	5,571.47 3,264.98 2,047.75 1,346.00	13,852.70 7,293.31 8,465.33 1,496.82 2,641.85 134.14 503.84	32,754 20 13,205 37 26,362 53 967 61 5,677 50	8,516.66 5,318.03 2,699.93 578.82 1,782.24
Total earnings	298,942.08	12,389.00	34,387.99	80,580.21	19,048.67
Expenses				1	
Cost of power supplied by H-E.P.C Substation operation. Substation maintenance.	196,025.20 5,655.12		21,219.77	714.55	10,912.55
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and main-	1,408.77 3,875.16	1.014 17	1,058.28 207.17 613.74 346.26	3,473 . 19 463 . 21 1,436 . 35 263 . 66	827.74 42.90 246.88 265.34
tenance. Promotion of business. Billing and collecting General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance.	12.311.24 10.954.28 1.612.56	988.54 51.93	790.09 29.60 1,197.86 854.03 129.96 213.72	2,058.45 2,535.18 1,854.71 914.17 818.43	265.60 1,276.65 247.71 25.73 72.90
Interest	i i				
Depreciation	8,846.00	526.00	1,279.00	4,744.00	1,355.00
Other reserves					
Total operating costs and fixed charges	251,364.58	9,868.23	27,939.48	71,588.00	15,539.00
Net surplus	47,577.50	2,520.77	6,448.51	8,992.21	3,509.67
Net loss					
Number of Consumers					
Domestic service	4,185 614 123		433 107 19	1,240 199 28	358 95 12
Total	4,922	294	559	1,467	465

"B' —Continued

Hydro Municipalities for Year Ended December 31, 1947

Penetan- guishene	Perth	Peterborough	Petrolia	Picton	Plattsville
4,006	4.282	32,645	2,682	3,471	P.V.
\$ c.	s c.	\$ c.	S c.	S c.	S c.
18,598.01 12,115.87 24,223.36 2,121.37	37,243.49 22,141.58 18,812.21 1,069.90	245,477 . 10 113,512 . 60 289,160 . 56 7,679 . 95	16,996.19 12,211.35 28,863.78	32,279.54 22,841.64 9,391.42 2,539.89	3,828.72 2,519.30 3,451.04
2,444 . 10	3,319.00 7,799.98	26,072 01	3,186.00	3,997.29 1,256.04	408.00
1,340.23	3,092.03	11,609.47	1,374.44	1,140.85	285.00
60,842.94	93,478.19	693,511.69	62,631.76	73,446.67	10,492.06
34,706.02	50,796.97	442,826.15	30,365.25	50,532.71	8,142.43
334.89	325.63	10,517.95 1,325.11	181.69		
5,330.81 179.48 561.16 798.28	2,799.26 412.49 916.08 23.48	20,469.43 1,769.25 11,196.79 11,627.80	1,694,43 268,34 1,652,02 1,225,90	1,687.11 325.24 718.82 110.80	174.85 6.85
388.39	498.24	5,950.70 264.87	1,243.64 471.91	425.03	35.01
1,988.85 1,474.59 415.40 496.51	2,710 15 4,385.93 387.48 1,159.52 1,112.62	15,976.50 9,869.10 13,201.71 5,918.70 1,351.72	1,831.92 3,148.60 447.00 869.95	2.603.72 3.306.24 488.23 606.05	287.26 81.11 6.97
• • • • • • • • • • • • •	4,163.53	5,341.02			
2,951.00	3,610.00	34,454.00	3,127.00	1,926.00	274.00
		300.00	· · · · · · · · · · · · · · · · · · ·		
49,625.38	73,300.38	592,360.80	46,527.65	62,729.95	9,008.48
11,217.56	20,177.81	101,150.89	16,104.11	10,716.72	1,483.58
910 123	1,200 208	1,103	860 186	1,254 258	126 22
	35	196	60	40	2
1,052	1,443	9,582	1,106	1,552	150

Detailed Operating Reports of Electrical Departments of

Municipality	Point Edward	Port Colborne	Port Credit	Port Dalhousie	Port Dover
Population	1,395	7,251	2,325	1,747	2,021
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service		25,510.60	24,761.48 9,510.10	27,912.64 7,564.69	14,087 . 64 9,671 . 63
Commercial power service	1.931.18	19,763.17 7,007.84 9,108.98	5,726.37 1,025.17 3,048.48	8,187.07	6,203.66 3,285.93
Merchandise	1,707.44 1,013.12	1	631.87	801.25	165.50
Tôtal earnings	70,639.71	100,329.21	44,703.47	46,092.65	33,414.36
Expenses					
Cost of power supplied by H-E.P.C Substation operation		54,982.13	29,005.69	28,620.77	19,931.59
Substation maintenance Distribution system, operation and		0.001.05			
maintenance	429.35 84.24 129.55	8,861.95 2,201.02 6,281.01	1,367.20 324.52 357.68	5,000.28 226.80 780.32	2,767.60 109.23 499.82
Consumers' premises expenses Street lighting, operation and main-		1,211.67	1,288.87	145.87	20.40
Promotion of business. Billing and collecting.	136.50	4,319.44	549.89 1,628.19	520.63	266.70 7.25 906.55
General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance.		2,827.49 2,027.76 1,880.18	797.47 271.30 841.45	1,624.33 337.77 855.11	1,348.91 181.18 532.44
Interest		355.67	44.76		7.26
on debentures		1,650.40			
Depreciation		4,015.00	2,704.00	1,838.00	2,656.00
Other reserves					
Total operating costs and fixed charges	59,722.84	95,325.79	39,617.71	41,622.88	29,234.93
Net surplus	10,916.87	5,003.42	5,085.76	4,469.77	4,179.43
Net loss					
Number of Consumers					
Domestic service	392 56 13	1,762 258 27	711 100 15	758 79 14	875 168 19
Total	461	2,047	826	851	1,062

"B"—Continued Hydro Municipalities for Year Ended December 31, 1947

Port Stanley	Port Rowan	Port Perry	Port McNicoll	Port Hope	Port Elgin
940	688	1,278	885	5,154	1,566
\$ c	S c.	\$ c.	S c.	\$ c.	\$ c.
19,764 . 54 8,000 . 88 4,403 . 49	3,976.27 3,962.87	13,579.94 6,938.13 3,161.16	5,360.73 1,364.25	45,280.93 21,359.52 52,382.68	17,311.13 9,864.70 3,733.53
620.97 2,675.16	1,078.00	407.10 1,845.00	1,022.50	1,872.10 4,354.85	825.85 2,917.12
711.30	151.31	330.00		2.03 1,954.42	323.96
36,176.30	9,168.45	26,261.33,	7,747.48	127,206.53	34,976.29
22 040 20	7 170 10	14 594 70	0.000.00	00.477.07	00.510.00
23,940.39	5,159.12	14,534.72	3,829.29	86,475.07	20,713.36
2,760.23 183.90 352.3	317.45 53.54 48.23	1,141.68 58.80 275.79 71.63	657.80 78.45 27.84	4,567.57 412.21 1,125.38 1,444.00	1,556.13 189.22 170.53 255.61
322.17	111.36	210.36	188.65	1.475.07	325.17
1,123.83 1,115.63 493.33 269.3-	320.27 80.63 14.90	711 .29 733 .20 56 .24 178 .93	663.75 378.34 76.41	9.35 3,364.21 5,238.91 1,715.78 1,744.59	847.82 341.68 78.93 275.97 597.50
	904.75		22.00		2,772.70
1,348.00	409.00	862.00	418.00	4,557.00	1,617.00
31,909.16	7.503.37	18,834.64	6,340.58	112,233.97	29,741.62
4,267.14	1,665.08	7,426.69	1,406.90	14.972.56	5,234.67
948 133 13	249 62	420 92 13	261 26	1,590 279 44	590 144 8
1,09-	311	525	287	1,913	742

Detailed Operating Reports of Electrical Departments of

	1	1			
Municipality	Prescott	Preston	Priceville	Princeton	Queenston
Population	3,248	6,894	P.V.	P.V.	P.V.
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service	28,271.93 15,741.77 11.041.84	50,718.26 26,221.87 64,804.71	889.87 270.33 325.95	3,404.82 1,178.48 3,540.38	3,528.70 2,317.43
Municipal power Street lighting Merchandise.		1,094.01 7,042.18	34.00	468.00	576.00
Miscellaneous	476.63	2,081.01	75.00	210.00	225.00
Total earnings	61,073.34	151,962.04	1,595.15	8,801.68	6,647.13
Expenses					
Cost of power supplied by H-E.P.C Substation operation Substation maintenance	36,064.83 1,980.27	107.442.05 5,212.58	819.00		3,770.10
Distribution system, operation and maintenance	4,518.36 190.67 686.51 542.69	432.10 1,599.55		77.88 6.00 1.50 22.76	
Consumers' premises expenses. Street lighting, operation and maintenance	901.12	1,443 . 19			
Promotion of business	1,924.16 3,589.38 534.02	3,410,47 1,149,85	219.72	233.23 98.50 1.81	268.10 , 341.95 6.31
Truck operation and maintenance Interest Sinking fund and principal payments		504.68			13.78 103.99
on debentures Depreciation					
Other reserves					
Total operating costs and fixed charges	54,111.77	138,749.74	1,513.24	7,592.12	5,531.66
Net surplus	6,961.57	13,212.30	81.91	1,209.56	1,115.47
Net loss					
Number of Consumers					
Domestic service			48 10 2	105 21 4	19
Total	1,048	2,118	60	130	104

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Renfrew	Richmond	Richmond	Ridgetown	Ripley	Riverside	Rockwood
5,712	448	Hill 1,507	2,099	416	5,845	P.V.
	2	0	C	S c.	S c.	0 -
\$ c.	\$ c.	\$ c.	\$ c.			S c.
36,542.95 21,974.86	3.650.77 2,003.23	16,408.08 5,405.73	11,137.99 10,633.96	4,021.50 2,202.52	56,488.34 10,261.54	5,524.76 1,918.17
48,547.17		1,908.63 422.31	7,534.84 1,300.41	1,654.44	4,873 . 44 3.866 . 85	71.35
4,899.98	397.50	1,577.83	3,476.96 71.74	1,192.00	4.756.21 1.672.82	825.75 8.39
8,669.40			1,947.31		1,289.66	112.54
120,634.36	6,051.50	26,073.28	36,103.21	9,070.46	83,208.86	8,460.96
26,036.67	3,925.67	17,958.46	20,448.83	5,949.73		5,003.47
23,844.80 2,879.16					75.73	
3.412.52			4,055.91			267.53
763.38 1,128.27	12.90	62.98 30.30	139.80 722.47	119.20		139.75 47.25
		56.01	166.45		3,793.17	0.75
1,228.77	14.85		994.41 36.72		134.24	80.87
4,300.97 6,687.65			1,990.14 1,511.08		2,446.15 3,685.85	748.06
4,479.29 1,097.94			174.41 1,091.43		862.67 1,482.19	8.43
3,355.76		5		164.90	26.37	43.42
15,795.01	504.36	5		863.16		157.18
10,987.00	356.00	1,036.00	1,325.00	652.00	3,615.00	450.00
			2,000.00)		
105,997.19	5,512.90	21,719.19	34,656.6	9,146.6	73,043.00	6,946.71
14,637.1	7 538.60	4.354.09	1,446.50	3	10,165.86	1,514.25
				. 76.18	3	
1,50						
24 6	5 2: 1	10			2 15	
1,80	7 12	7 585	82	5 18	7 1,965	227

Detailed Operating Reports of Electrical Departments of

Population	Municipality	Rodney	Rosseau	Russell	St.	St. Clair
Domestic service	Population	787	176	P.V.	Catharines 35,191	
Commercial light service 3,328, 28 1,092, 36 2,651, 01 126,935, 13 2,361, 22 196, 41 Commercial power service 2,509, 98 437, 33 445,155, 75 196, 41 186, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 60 188, 72 188, 72 188, 72 188, 72 188, 72 188, 72 188, 72 189, 72 189, 72 189, 72 199, 73 198, 82 19	EARNINGS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Street lighting	Commercial light service	3,328.28	1,092.36	2,651.01	126,935.13	2,361.22
Miscellaneous	Street lighting		940.02	848.00	28,966.58	168.00
Expenses Cost of power supplied by H-E.P.C. 7,273.90 2,086.52 4,513.03 628,609.53 4,300.54 Substation operation. 10,819.22 11,819.22 11		189.08	82.50	197.50	16,462.11	248.23
Cost of power supplied by H-E.P.C 7,273.90 2,086.52 4,513.03 628,609.53 4,300.54	Total earnings	11,859.76	4,692.45	8,115.49	837,727.21	7,141.27
Substation operation 10,819.22 Substation maintenance 10,00 Distribution system, operation and maintenance 10.00 Line transformer maintenance 10.00 Meter maintenance 38.74 23.87 Consumers' premises expenses 2.49 42.10 2,119.19 Street lighting, operation and maintenance 193.93 87.88 119.60 4,600.08 17.60 Promotion of business 193.93 87.88 119.60 4,600.08 17.60 Pormotion of business 193.93 87.88 119.60 4,600.08 17.60 Pormotion of business 11,031.01 102.76 167.19 13.903.29 555.20 Undistributed expenses 356.54 102.76 167.19 10,580.32 1.41 <	Expenses					
Distribution system, operation and maintenance	Substation operation					
Street lighting, operation and maintenance. 193.93 87.88 119.60 4,600.08 17.60 Promotion of business. 700.44 700.00 700.00 700.00 700.55 700.00<	Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance	679.98 10.00 38.74	185.71	333.42	2,399.62 11,337.93	200.99 174.95 248.97
Billing and collecting	Street lighting, operation and maintenance	193.93			4,600.08	17.60
Interest 379.42 700.00 Sinking fund and principal payments on debentures 753.98 3,500.00 Depreciation 800.00 243.00 269.00 19,997.00 386.00 Other reserves 4,000.00 4,000.00 4,000.00 4,000.00 10,311.16 4,219.47 6,010.54 768,845.44 6,364.33 Net surplus 1,548.60 472.98 2,104.95 68,881.77 776.94 Number of Consumers 290 71 129 9,406 131 Commercial light service 72 12 35 1,230 14	Billing and collecting	711.07 556.54 44.51	372.00 102.76	542.33 167.19	23,417.55 13,903.29 10,580.32 3,572.18	395.92 555.20 1.41
Depreciation 800.00 243.00 269.00 19,997.00 386.00 Other reserves 4,000.00 4,000.00 Total operating costs and fixed charges 10,311.16 4,219.47 6,010.54 768,845.44 6,364.33 Net surplus 1,548.60 472.98 2,104.95 68,881.77 776.94 Net loss Number of Consumers 290 71 129 9,406 131 Commercial light service 72 12 35 1,230 14	Interest Sinking fund and principal payments					
Other reserves						
fixed charges 10,311.16 4,219.47 6,010.54 768,845.44 6,364.33 Net surplus 1,548.60 472.98 2,104.95 68,881.77 776.94 Number of Consumers 290 71 129 9,406 131 Commercial light service 72 12 35 1,230 14	•				·	
Net loss.		10,311.16	4,219.47	6,010.54	768,845.44	6,364.33
Number of Consumers 290 71 129 9,406 131 Commercial light service 72 12 35 1,230 14	Net surplus	1,548.60	472.98	2,104.95	68,881.77	776.94
Domestic service 290 71 129 9,406 131 Commercial light service 72 12 35 1,230 14	Net loss					
Commercial light service	Number of Consumers					
	Commercial light service	72	12	35	1,230	14
Total	Total	370	84	164	10,867	146

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

St. George	St. Jacobs	St. Marys	St. Thomas	Sarnia	Scarborough
P.V.	P.V.	3,633	3,633 17,835		Twp. V.A.
\$ c.	\$ c.	8 c.	S c.	\$ c.	S c.
4,054.24 2,747.21	5,099.28 2.923.66	39,706.17 17,669.75	162,836.60 72,220.34	154,119.16 86,739.08	185,738.40 39,339.99
3,990.56	4,699.71	24,656.00 2,915.45	89,702.55 5,413.34	93,104.05 5,812.41	38,251.43 15,177.14
556.38	430.00	4,988.75 21.00	15,442.12	21,138.88 12,901.27	13,539.60
282.44	300.00	300.00	5,872.56	27,432.53	3,745.48
11,630.83	13,452.65	90,257.12	351,487.51	401,247.38	295,792.04
6,512.61	9,524.51	59.268.90	221,289,16	223,761.95	177,854.86
		3,528.44	13,786.56 1,636.95	12,517.73 2,843.02	828.28
195.73	267.43	3,992.59	12,178.69	10.140.22	11,458.89
78.53		489.52	1,234.78	1,090.40	2.013.45
70.61	83.10	1,781.49 3,045.18	6,555.44 19,137.77	9,210.03 14,053.50	3,820.19 5,684.75
211.68	34.34	1,207.47	2,499.04	8,586.57	3,759.98
722.74	827.11	43.20 1,735.15	751.17 11,346.29	429.37 13,609.64	10,878.90
326.17 19.63	45.68 23.26	2,770.12 1,415.48	15,041.31	21,161.70 9,545.03	8,224.08 3,095.27
		1,278.94		4,327.16	4,740.10
200.00	704.00	1,571.80		99.770.00	22 920 00
309.00	594.00	4,767.00	14,160.25	28,779.00	22,839.00
*					
8,446.70	11,399.43	87,654.84	319,617.41	360,055.32	255,197.75
3,184.13	2,053.22	2,602.28	31,870.10	41,192.06	40,594.29
185	142	1,169	4,920	5.880	7,837
42 4		197	615	716	529 66
231	186	1,404	5,625	6,703	8,432

Detailed Operating Reports of Electrical Departments of

Municipality	Seaforth	Shelburne	Simcoe	Smiths Falls	Smithville
Population	1,782	1,014	6,473	7,717	P.V.
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service Commercial light service Commercial power service Municipal power Street lighting Mosbadica	16,447.50 11,503.64 17,985.72 791.93 2,039.00	7,938.52 5,577.26 4,671.79 301.74 882.00	33,479.47 40,081.07 34,799.31 2,988.93 6,616.53	66,717.24 27,803.49 34,058.49 484.62 8,265.61	4,238.64 3,942.09 9,862.87 1,325.27
Merchandise	492.52	448.80	4,137.27	3,318.69	379.25
Total earnings	49,260.31	19,820.11	122,102.58	140,648.14	19,748.12
Expenses					
Cost of power supplied by H-E.P.C Substation operation	17.81	11,023.71	78,442.75 225.33	87,286.10 289.36 1,911.15	
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance Consumers' premises expenses	5,244.66 278.06 153.51 699.41	325.55	607.58 3,085.02	5,872.78 252.58 1,457.92 826.13	26.37 218.87
Street lighting, operation and maintenance Promotion of business Billing and collecting General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance Interest Sinking fund and principal payments	441.55 670.30 1,698.79 2,278.89 491.44 1,044.76 331.52	985.27 167.76	1,767.61 9.50 3,759.47 3,967.74 2,796.26 2,001.92 300.96	1,180.71	
on debentures			2,130.05		895.81
Depreciation	2,574.00	1.008.00	7,153.00	5,687.00	480.00
Other reserves					
Total operating costs and fixed charges	46,815.26	16.013.00	113,338.34	118,580.44	17,868.47
Net surplus	2,445.04	3,807.11	8,764.24	22,067.70	1,879.65
Net loss				<u> </u>	
Number of Consumers					
Domestic service Commercial light service Power service	576 121 19	82	1.803 405 63	319	63
Total	716	433	2,271	2,721	270

"B' —Continued

Southampton	Springfield	Stamford	Stayner	Stirling	Stouffville
1,613	431	Twp. V.A.	1,090	1,061	1,270
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
14,321.28 7,355.41	2,820.71 1,133.24	89,586.92 21,509.48	8,449.12 5,270.08	8,737.66 4.913.71	10,600.21 6,421.61
9,152.53 1,112.96	1,863.31	24,618.21 2,647.55	2,926.07 84.56	1,987.45 267.75	3,673.83
2,633.68	611.50	9,060.00 3,954.53	1,542.00	1,747.08 195.54	1,430.00
249.44	177.49	1,545.07	351.46	458.79	349.54
34,825.30	6,606.25	152,921.76	18,623.29	18,307.98	22,475.19
20.470.16	2 774 42	79 270 07	10 120 57	0.409.01	10 000 00
20,470.16	3,774.43	72,379.07 976.74	10,139.57	9,408.91 251.10	16,208.22
2,070.50 46.68	135.12 36.48	15,095.88 240.36	1,176.89	1,370.20 33.55	875.89 19.91
358.21 809.47	1.20 3.00	3,993 90 3,007,51	126.34 34.43	365.21 4.99	335.73 562.61
436.09	52.71	1.649.77	288.87	228.98	183.38
1,114.30	362.79	10.83 5,589.80	1,013.86	779.37	1.095.08
860.95 94.11	212.34 1.31	6,424.17 3,037.24	527.43 35.57	1,506.69 157.91	496.38 66.53
626.56 108.97	22.40	3,753.14 1,285.70		370.95	
2,178.49	356.83	8,759.47			
1,760.00	543.00	12,769.00	925.00	1,258.00	978.00
1,700.00	343.00	12,703.00	323,00	1,238.00	318.00
30,934.49	5,501.61	138,972.58	14,267.96	15,735.86	20,821.73
3,890.81	1,104.64	13,949.18	4,355.33	2,572.12	1,653.46
644	121	2,942	333	305	458
98 12	26 5	194 28	106 19	84 15	98 10
754	152	3,164	458		566

Detailed Operating Reports of Electrical Departments of

Municipality	Stratford	Strathroy	Streetsville	Sunderland	Sutton
Population	17,736	3,139	691	P.V.	993
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service	171,535.61 72,146.46 65,914.25 10,982.05	31,782.88 16,508.02 16,616.75 1,840.01	7,770.35 3,664.57 10,754.92	4,319.92 2,178.49 1,374.98	11,514.39 6,353.79 2,501.75
Municipal power Street lighting Merchandise Miscellaneous	17,277 .38 4,830 .48 12,593 .45	4,533.32	1,665.50 664.91		2,039.75
Total earnings					22,656.04
Expenses					
Cost of power supplied by H-E.P.C Substation operation. Substation maintenance	204,692.60 8,485.74 2,325.70	42,757.68 1,146.27	15,398.68 1,791.39	6,016.63	16,361.10
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses	14,955.29 226.26 4,421.99 4,357.62	3,201.12 529.62 1,030.25 208.40	2,078.41 207.26 226.65	8.80 22.50	116.11 127.75
Street lighting, operation and maintenance Promotion of business. Billing and collecting General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance Interest. Sinking fund and principal payments	3,129.64 2,266.19 10,579.29 10,758.08 4,444.09 2,833.88 2,650.00	1,444.53 218.13 1,069.09 3,293.60 975.60 438.04 376.99	1,200.61 462.10 114.43 217.64	495.64 111.73	758.90 252.47
on debentures	900.00	,		351.00	919.00
Depreciation Other reserves	20,040.00	3,193.00	1,204.00	331.00	313.00
Total operating costs and fixed charges	297,762.37	61,141.77	23,258.39	7,694.48	19,455.16
Net surplus	57,607.31	11,089.21	1,261.86	921.43	3,200.88
Net loss.					
Number of Consumers					
Domestic service	4,777 649 133		55	163 43 3	502 94 9
Total	5,559	1,122	289	209	605

"B"—Continued

Swansea	Tara	Tavistock	Tecumseh	Teeswater	Thamesford	Thamesville
7,217	497	1,072	3,035	827	P.V.	794
\$ c.	\$ c.	\$ c.	\$ c.	S c.	\$ c.	S c
75,088.33 12,187.97 26,671.94 2,142.82	3,749.24 1,901.63 1,746.40	5,951.38 9,375.96 451.98	7,019.46 1,672.75 409.76	3,744.37 1,799.44 180.00	2,113.27 2,934.20	4,001.36 2,717.22 176.83
5,727.00	909.50	1,317.60 26.24 345.00	1,745.91 45.41 665.46	962 .00 374 .45	131.01	
		27,743.59			11,491.81	
90,816.28	5,234 . 45	20,402.81	16,900.71	7,569.18	9,364.82	8,715.89
18.83		15.67				
2,768.51 862.56 1,016.01		273.38 35.55	198.64 1.301.54			24.11 196.81
3,370.92		350.05				
424 . 89	111.02	194.92	13 65		69.33	190.25
4,322.76 2,549.33 4,782.27	16.15	20.12	168.74	887.36	302.15 95.65 6.35	338.7- 404.38 18.39
587 . 58 1,971 . 40		7.20				• • • • • • • • • • • • • • • • • • • •
,						
4,164.00	605.50	863.00	2,476.00	760.00	406.00	738.00
121,865.42	7,033.96	25,377.25	28,337.33	10,111.89	10,606.94	11,801.26
1,602.28	1,577.80	2,366.34	1,661.93	2,502.64	884.87	1,727.36
						γ
2,190 110 19	39	316 99 10	84	64	43	85
2,319	220	425	883	314	208	368

STATEMENT Detailed Operating Reports of Electrical Departments of

Municipality	Thedford	Thornbury	Thorndale	Thornton	Thorold
Population	590	590 801		P.V.	5,569
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service	4,242.10 3,392.01 2,222.56	3,695.79 3,546.45	2,708.75 954.12 2,245.26	1,584.91 579.20 379.33	58,538.92
Municipal power Street lighting Merchandise	1,225.00		384.00		
Miscellaneous	332.79		84.76	75.00	2,718.27
Total earnings	11,414.46	16,333 . 15	6,376.89	2,643.44	102,755.51
Expenses					
Cost of power supplied by H-E.P.C Substation operation Substation maintenance		4,351.51	4,650.67		76,336.14 4,751.69
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance Consumers' premises expenses.	291.53 65.90 4.50		178.89 4.05 33.27		142.13
Street lighting, operation and maintenance	126 87	174 . 86	56.95	74.31	1,153.90
Promotion of business	386.47 246.16 6.18		212.18 63.23	173.49	2,432.46 1,157.52 343.94 253.96
Interest Sinking fund and principal payments on debentures		303.63			
Depreciation	748.00	854.00	271.00	323.00	2,583.00
Other reserves					
Total operating costs and fixed charges	8,451.69	14,916.03	5,470.24	2,673 . 18	92,577.68
Net surplus	2,962.77	1,417.12	906.65		10,177.83
Net loss				29.74	
Number of Consumers					
Domestic service	185 59 2	278 68 15	88 22 3	71 14 2	1,471 174 29
Total	246	361	113	87	1,674

"B"-Continued Hydro Municipalities for Year Ended December 31, 1947

Tilbury 2,165	Tillsonburg 4.624	Toronto 696,555	Toronto Twp. V.A.	Tottenham 478	Trafalgar Twp. V.A.
\$ c.	S c.	S c.	\$ c.	\$ c.	S c.
10,373.35 9,221.32 17,535.21 225.00 2,166.41	27,169.86 28,576.79 23,503.44 1,949.64 5,161.51	4,674,687.27 3.394,068.99 5,275,125.45 1,461,757.34 488,457.47	139.601.62 32,498.99 40,721.62 7,297.24	4,527.96 2,013.61 1,574.92 275.88 952.58	30,222.85 4,692.18 2,968.55
1,361 16	1,588.10. 872.82	52,497 .53 544,480 .01			1,219.96
40,882.45	88,822.16	15,891,074.06	223,725.22	9,344 95	42,263.22
31,929.32	54,072.52 1,479.11	*8,728,847.84 302,557.91 365,107.09	133,389.45	7,059.92	23,244 .94
1,860 . 40 45 . 50 505 . 04 5 . 00	4,141.95 703.63 1,646.63 939.82	516,386.11 80,727.87 133,643.63 359,999.39	9,524.81 2,450.78 2,746.59 381.79	159.00	5,117.82 325.29 375.10 290.85
432.73 3.00 948.30, 1.337.64 253.35 369.32	945.34 3,102.72 3,629.59 1,105.17 754.77 347.55	164,786,28 176,361,23 562,444,62 493,863,96 512,246,70	1,368.72 10,276.96 12,605.29 508.12	131.84 491.34 112.32 29.21 82.20 11.42	1,923,20 476,67 681,54 1,821,82 195,86
	424.92	472,962.14	1,688.68	557.58	1,068.94
1,358.00	4,996.00	1,219,806.42 †1,300,000.00	10,190.00	454.00	1,564.00
39,047.60	78,289.72	15,688,043.74	185,131.19	9,756.96	37,090.03
1,834.85	10,532.44	203,030.32	38,594.03		5,173.19
		· · · · · · · · · · · · · · · · · · ·		412.01	
632 140 17	1,343 311 43	156,033 24,637 5,618	3,914 271 56	173 48 9	661 62 13
789	1,697	186,288	4,241	230	736

^{*}Includes 1947 cost adjustment. †Provision for non revenue improvements to plant.

Detailed Operating Reports of Electrical Departments of

	1					
Municipality	Trenton	Tweed	Uxbridge	Victoria Harbour	Walkertor	
Population	9,905	1,250	1,490	882	2,746	
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c	
Domestic service Commercial light service Commercial power service Municipal power Street lighting Merchandise Miscellaneous	50,252.72 25,511.52 87,679.05 5,819.03 10,286.67 254.87 3,459.42	10,468.97 6,607.09 6,099.12 483.42 1,923.54 921.73 365.44	13,988.35 6,789.89 3,757.75 502.69 1,946.87 79.87 270.00	4,677.61 1,267.52 220.36 107.06 645.50	25,763 .6 16,696 .3 13,027 .1 495 .4 3,024 .1	
Total earnings	183,263.28	26,869.31	27,335.42	7,027.10	59,606.6	
Expenses						
Cost of power supplied by H-E.P.C Substation operation Substation maintenance	78.40			3,938.82		
Distribution system, operation and maintenance Line transformer maintenance. Meter maintenance. Consumers' premises expenses. Street lighting, operation and main-	4,338.07 556.81 4,309.39 1,092.75	1,514.69 185.20 8.38	1,399.09 135.13 415.96 476.57	138.18	1,418.8 314.3 483.8 132.6	
tenance. Promotion of business. Bi'ling and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance. Interest. Sinking fund and principal payments on debentures.	992.73 5,644.44 6,355.02 2,139.59 1,859.15	852.90 437.75 11.19	789.19 5.47 2.74	832.41 458.45 78.99	432.1 94.1 2,552.9 1,727.4 235.5 582.9 1,094.3	
Depreciation				419.00		
Other reserves						
Total operating costs and fixed charges	158,451.20	18,590.65	21,463.50	6,696.84	45,554.6	
Net surplus	24,812.08	8,278.66	5,871.92	330.26	14,052.0	
Net loss.		· · • • · · · · · · · ·				
Number of Consumers						
Domestic service Commercial light service Power service	304		104	34	80 16 2	
Total	2,400	471	595	333	98	

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Wallaceburg	Wardsville	Warkworth	Waterdown	Waterford	Waterloo	Watford
6,088	235	P.V.	1,011	1,394	9,848	961
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
36,760.54 23,486.98 154,779.16 4,436.08 5,481.75	2,162.97 1,778.57 45.64 666.00	3,272.31 1,784.38 166.10 651.00	7,810.76 2,660.53 1,790.08 104.93 1,141.00	4,339.41 5,033.26 337.84	79,863.47 32,058.86 87,445.94 6,211.31 8,132.71	10,393 .40 5,889 .60 4,945 .37 381 .64 1,614 .39
5,211.34 3,327.76	120.00	137.80	286.02	490.51	3,442.61	749.28
233,483.61	4,773.18		13,793.32		217,154.90	23,973.68
166,232.52 608.44	2,764.43	3,468.19	8,976.46	14,269.71	174,617.51 2,106.04 1,372.70	14,551 . 13
7,167.07 599.57 1,884.26	387.87 14.88 3.50 2.55	274.40	1,122.44 252.46 114.95	214.03	8,952.88 1,785.28 1,846.39 1,464.87	1,964.12 175.29 380.50 474.05
1,340.13 154.47 3,041.76 5,392.20 1,873.13 3,150.55	115.37 121.26 8.55	41.25 247.75 71.52 6.61	192.01 915.32 125.57 43.45	716.67	2,687.09 330.34 4,654.93 3,298.35 482.68 1,928.94	169.74 20.40 862.06 845.32 280.18 423.75
	8.55	297.75 501.39			218.22	
8,714.00	245.00		688.00	886.00	9,899.00	832.00
200,158.10	3,730.22	5,297.05	12,430.66	19,446.80	215,645.22	20,978.54
33,325.51	1,042.96	714.54	1,362.66	1,719.39	1,509.68	2,995.14
<u> </u>				,		
1,710 295 60	75 23 1	162 37 1	291 39 10	82	2,586 222 84	324 83 9
2,065	99	200	340	545	2,958	416

Detailed Operating Reports of Electrical Departments of

Municipality	Waubau- shene P.V.	Welland 15.071	Wellesley P.V.	Welling- ton 980	West Lorne 810
Earnings	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic service	4,908.38 1,098.50 934.08		1,466.75	8,788 . 27 3,918 . 93 5,570 . 15	5,178.75 5,142.16 11,655.61
Municipal power	544.75	3,109.91 14,738.07		1,114.98	1,165.33
Miscellaneous		11,048.46	187.48	360.00	336.32
Total earnings	7,658.19	332,122.67	8,584.57	19,752 33	23,478.17
Expenses					
Cost of power supplied by H-E.P.C Substation operation	4,505.79	246,668.82 10,525.76	5,401.92		17,070.86
Substation maintenance		3,137.45			
Distribution system, operation and maintenance		6,372.56		905.25	416.5
Line transformer maintenance Meter maintenance		380.71 10,135.19		63.80 217.50	
Consumers' premises expenses		4,898.54		137.76	
Street lighting, operation and main-	9C E1	2,879.46		137.70	277.2
Promotion of business. Billing and collecting. General office, salaries and expenses.	379.85 242.70	35.19 8,221.06 11,429.07	321.30	635.16 381.99	
Undistributed expenses		3,980.97	21.53	305.37	
Truck operation and maintenance Interest					
Sinking fund and principal payments on debentures					
Depreciation			536.00	706.00	608.00
Other reserves					
Total operating costs and fixed charges		323,967.61	7,263.53	14,434.92	20,131.73
Net surplus	1,570.85	8,155.06	1,321.04	5,317.41	3,346.4
Net loss					
Number of Consumers					
Domestic service		508	52		
Total	289	3,935	208	460	343

"B"—Continued

Weston	Westport	Wheatley	Whitby	Wiarton		Winchester
6,337	672	811	4,501	1,749	burg P.V.	1,000
\$ c.	\$ c.	S c.	S c.			\$ c.
67,711.21 20,364.90			40,675 .41 18,353 .63	10,849.14 9.748.49	2,247 .53 2,381 .76	8,873.67 6,080.31
78,713.85 50.12		4,248.29 582.06	22,638.42 2,306.84	0,410.33		4,903.26
7,940.74	1,120 08	2,400.00	5,091.20	2,275.84	347.20	944.00
1,001.57	205.95	35.00	2,154.67	544.58	697.50	459.87
175,782.39	10,365.80	18,467.67	91,220.17	31,965.48	5,673.99	21,261 . 11
195 519 70	F CO1+17	11 747 62	46 407 26	17 026 27	2 121 70	14,457.83
	5,901.17	11,747.63		17,936.37	3,121.79	
			862.01		000 40	CAE 71
10,129 . 10 782 . 77		91.70	5,959.51 945.07	152.40	202.43	
920.91 883.75	47.69	127.54 140.01	1.365.51 1,243.70		26.89 67.15	80.56 94.76
1,453.45	134.86	581.50	2,022.21		100.32	112.46
2,605.61	678.44	681.94	69.90 2,884.03	757.31	430.60	853.70
3,857.51 678.70	641.69 32.86	576 . 87 51 . 18	4,413.41 1,592.14		175.87	366.06
911.48	294 80		1,298.11 154.98	280.57		
	960.39		505.83			
8.910.00		1,324.00			222.00	619.00
0,310.00	334.00	1,024.00	1,521.00	1,002.00	333.00	
157.561.03	9.695.39	16,425.69	74,650.77	27,351.28	4,347.05	17,230.08
18,221.36	670.41	2,041.98	16,569.40	4,614.20	1,326.94	4,031.03
1.015	15.	0.00	1 100	FOC	96	316
1,815 211	56		189	120	39	93
38					0	
2,064	230	359	1,386	647	135	414

STATEMENT

Detailed Operating Reports of Electrical Departments of

Municipality	Windermere	Windsor	Wingham	Woodbridge
Population	118	117,965	2,204	1,212
EARNINGS Domestic service	\$ c.	\$ c.	\$ c.	\$ c.
Commercial light service Commercial power service Municipal power Street lighting	990.27 1,339.84	488,048.37 818,999.32 20,845.93 115,598.28	14,992.26 24,514.44 472.58 3,613.33	3,437.56 13,380.83 1,835.69 1,086.00
Merchandise. Miscellaneous.	108.00	33,827.88	4,051.29	
Total earnings	5,212.74	2,326,138.60	68,137.60	31,108.60
Expenses				
Cost of power supplied by H-E.P.C Substation operation Substation maintenance Distribution system, operation and		1,470,971.28 56,573.60 23,466.07		23,635.05
Distribution system, operation and maintenance. Line transformer maintenance. Meter maintenance Consumers' premises expenses	127.76	51,177.24 14,645.17 36,088.49 82,540.00	3,022.73 78.02 746.24 592.05	98.00 223.23
tenance	23.26	45,087.45	557.15	
Promotion of business. Billing and collecting. General office, salaries and expenses Undistributed expenses. Truck operation and maintenance	167.59 108.23 6.66	64,341.47 18,887.17 20,454.58	1,857.39 1,585.26 388.77 868.94	5.90
Interest		13,899.26 23,794.09		87.48
Depreciation	315.00	176,190.00		
Other reserves				
Total operating costs and fixed charges		2,182,389.37	50,489.82	26,810.66
Net surplus	306.93	143,749.23	17,647.78	4,297.94
Net loss				
Number of Consumers				
Domestic service	12	3,579	153	56
Total	88	31,740	817	412
		1		'

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1947

Woodstock	Woodville	Wyoming	York Twp.	Zurich	SOUTHERN ONTARIO SYSTEM
13,148	385	637	V.A.	P.V.	SUMMARY
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
105,052.48 69,210.40	2,901.80 1.175.81	3,257.67 2,050.80	569,882.43 101,025.13	4,812.72 3,848.55	17,206,335.48 9,323,936.62
107,465.50	640.51	2,353.96	187,248.67	3,040.33	17,130,745.38
5,069.38 9,213.30	745.99	688.50	6,648.72 50,952.75	693.00	2,139,358.18 1,960,574.29
2.800.42	170.04	110.75	12,962.05	285.00	230,137.83 1,211,899.92
298,811.48	5,634 . 15	8,461.68	928,719.75		49.202.987.70
290,011.40	5,054.15	0,401.00	320,113.10	3,003.21	45,202,301.10
217,554.14	4,666.63	5,647.78	558,783.78	6,002.65	30,330,908.74
4,601.95			4,728.86 708.92		795,285.42 469,219.15
6.831.40	469.15	563.35	21,324.83		1.563,116.32
451.88		52.83	11,220.06	2.70	211,995.04
7,963.32 6,451.42	48.75	46.45	17,029.08 44,620.25		572,711.68 805,647.46
3,669.64	71.82	229.05	10,945.54	160.10	
3,192.37 7,510.88	489.92	284.20	50,705.32	407.22	228,300.63 1.547,242.82
6,718.51 2,940.32	107.08	172.59 7.64	39,448.83		1,449,580.04
2,623.90					189,167.87
		7.19	2,158.85	17.21	
			19,073.33	372.79	966,138.30
12,295.00	211.00	397.00	47,812.40	396.00	2,896,900.91
					1,461,683.10
282,804.73	6,070.57	7,408.08	828,560.05	8,293.20	45,223,447.78
16,006.75		1,053.60	100,159.70	1,346.07	3,979,539.92
	436.42				
					505 500
3,704 525		185		49	83,530
118		3			
4,347	158	235	25,343	217	694,603

Detailed Operating Reports of Electrical Departments of

THUNDER BAY SYSTEM

Municipality	Fort William	Nipigon Twp.	Port Arthur	THUNDER BAY SYSTEM		
Population	30,590	V.A.	25,867	SUMMARY		
Earnings	\$ c.	\$ c.	\$ c.	\$ c.		
Domestic service. Commercial light service. Commercial power service. Municipal power Street lighting. Merchandise.	300,866.30 122,691.78 88,726.99 22,596.73 21,381.91	8,893.31 7,009.48 491.00 595.58 841.00	195,562.45 112,332.94 274,539.80 35,292.69 28,148.82	505,322.06 242,034.20 363,757.79 58,485.00 50,371.73		
Miscellaneous.	7.871.02	611.47	30,788.70	39,271.19		
Total earnings	564,134.73	18,441.84	676,665.40	1,259,241.97		
Expenses						
Cost of power supplied by H-E.P.C Substation operation Substation maintenance Distribution system, operation and	2,501.99		462,110.14 35,162.82 3,260.47	818,272.70 45,033.57 5,762.46		
maintenance. Line transformer maintenance. Meter maintenance. Consumers' premises expenses	11,442.60 2,199.44 7,494.42 8,630.68	81.58	18,067.79 1,762.40 10,747.33	30,715.52 4,043.42 18,357.88 8,630.68		
Street lighting, operation and maintenance. Promotion of business. Billing and collecting. General office, salaries and expenses. Undistributed expenses. Truck operation and maintenance. Interest.	7,839.83 437.50 25,480.38 15,103.56	698.84 578.23 126.58 227.69	4,360.87 2,165.14 19,412.43 19,903.66 17,826.90 3,920.49	45,591.65 35,585.45 17,953.48		
Sinking fund and principal payments on debentures	5 -51 01	,		5,254.84		
Depreciation	25,355.00	1,013.00	34,200.95	60,568.95		
Other reserves	1,000.00		3,000.00	4,000.00		
Total operating costs and fixed charges		13,344.38	635,901.39	1,131,486.69		
Net surplus	81,893.81	5,097.46	40,764.01	127,755.28		
Net loss						
Number of Consumers						
Domestic service	. 1,243	73	1,015	2,331		
Total	9,762	407	8,410	18,579		

"B"—Concluded

NORTHERN ONTARIO DISTRICTS

				NORTHERN	ALL
Capreol	North Bay	Sioux Lookout	Sudbury	ONTARIO DISTRICTS	SYSTEMS GRAND
1,700	16,185	1,976	35,996	SUMMARY	SUMMARY
8 c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
15,077.49	127,092.46	20,512.48	298,234.57	460,917.00	18,172,574.54
4,533.32 8,519.84	71,400.14 60,008.75	14,816.39 2,297.84	162,322.44 48,195.62	253,072.29 119,022.05	9,819,043.11 17,613,525.22
677.68	6,461.40		11,830,45	18,969.53	2,216,812.71
1,573.50	12,733.82 2,980.11	1,875.00	30,087.52	46,269.84 2,980.11	2,057,215.86 233,117.94
217.50	7,547.66	318.65	8,230.46	16,314.27	1,267,485.38
30.599.33	288,224.34	39,820.36	558,901.06	917,545.09	51,379,774.76
20.295.15	198,907.79		361,200.23	610,946.88	31,760,128.32
	3,970.59		11,675.83 855.45	15,646.42 855.45	855,965.41 475,837.06
0.004.50					
2,664.59	8,809.73 2,323.35		21,459.27 688.33	34,249.93 3,125.54	1,628,081.77 219,164.00
650.49	3,718.08	266.88	12,053.37	16,688.82	607,758.38 822,675.89
	4,188.54		4,209.21	8,397.75	
1,015.40	3,078.42	359.20 570.30		13,614.18 585.30	547,556.40 231,488.57
1,585.54	13,070.06	3.307.34	32.982.81	50,945.75	1,643,780.22
1,174.33 181.14	11,814.92 5,661.32	1,701.00 233.29	21,833 . 19 8,972 . 17	36,523.44 15,047.92	1,521,688.93 840,075.97
304.15	3,679.55 426.74	613.26	5,084.28	9,681.24 3,543.15	202,997.29 423,041.93
			3,116.41		
• • • • • • • • • • • • •	9,000.00		12,399.97	21,399.97	992,793.11
1,162.00	13,200.00	580.00	30,466.00	45,408.00	3,002,877.86
			13,307.70	13,307.70	1,478,990.80
29,032.79	281,849.09	39,605.18	549,480.38	899,967.44	47,254,901.91
1.566.54	6,375.25	215.18	9,420.68	17,577.65	4,124,872.85
463	3,809			14,007	625,705
60	712 97	113		2,076 244	87,937 15,867
525	4,618				729,509

STATEMENT "C"

Street Lighting Installations in Municipalities Served by The Hydro-Electric Power Commission of Ontario

Note: These statistics were last published in the 1941 Annual Report. In subsequent years due to restrictions and economies effected by municipal co-operative action, the general standard of street lighting was lowered and publication of the statistics available would have served no useful purpose. In most municipalities improvements are now being made.

STATEMENT "D"

(pages 320 to 337)

Statistics relating to the Supply of Electrical Energy to Consumers in Ontario Urban Municipalities Served by

The Hydro-Electric Power Commission for the year 1947

STATEMENT "E"

(pages 338 to 355)

Cost of Power to Municipalities and Rates to Consumers for
Domestic Service—Commercial Light Service—Power Service
in Ontario Urban Municipalities Served by
The Hydro-Electric Power Commission
for the year 1947

STATEMENT "D"

Statistics Relating to the Supply of Electrical Energy to Consumers in Urban Municipalities Served by The Hydro-Electric Power Commission

Regarding the results of Hydro operation from the standpoint of the consumers, the following tabulation gives much useful and interesting information. For each main class of service in each urban municipal utility receiving power at cost from the Commission, Statement "D" lists the revenue, the consumption and the number of consumers, together with unit average costs and consumptions and other pertinent data.

The policy and practice of the Commission has been, and is, to make as widespread and beneficial a distribution of electrical energy as possible, and to extend to every community that can economically be reached by transmission lines, the benefit of electrical service. Even where, in certain localities, by reason of the distance from a source of supply or on account of the small quantity of power required by the municipality, the cost per horsepower to the municipality—and, consequently, the cost of service to the consumer—must unavoidably be higher than in more favourably situated communities, service has not been withheld when the consumers were able and willing to pay the cost.

The accompanying diagram summarizes graphically certain data of Statement "D" respecting the average cost to the consumer. It will be observed that the total amount of energy sold in municipalities where circumstances necessitate rates which result in the higher average costs to the consumer is relatively insignificant. With respect to power service, it should be noted that the statistics of Statement "D", and of the diagram, cover mainly retail power service supplied to the smaller industrial consumers. The average amount of power taken by the industrial consumers served by the municipalities is about 45 horsepower. The Commission serves certain large power consumers direct on behalf of the systems of municipalities.

It should be kept in mind that the revenues reported in Statement "D", and used for purposes of calculating the net unit costs to the consumer, are the total revenues contributed by the consumers, and provide, in addition to the cost of power, sums specifically applicable to the retirement of capital, and also operating surplus which is in part applied to retirement of capital or extension of plant and is in part returned in cash to the consumers.

It should also be noted that average costs per kilowatt-hour or per horse-power if employed indiscriminately as a criterion by means of which to compare the rates or prices for electrical service in various municipalities, will give misleading results. The average cost per kilowatt-hour, as given in Statement "D" for respective classes of service in each municipality, are statistical results obtained by dividing the respective revenues by the aggregate kilowatt-hours sold. As such, the data reflect the combined influence of a number of factors, of which the rates or prices to consumers are but one factor. Owing to the varying influence of factors other than the rates, it is seldom found that in any two municipalities the average cost per kilowatt-hour to the consumers, even of the same classification, is in proportion to the respective rates for service. Instances even occur where for a class of consumers in one municipality, the average costs per kilowatt-hour are substantially lower than for the same class in another municipality, even though the rates are higher.

COST OF ELECTRICAL SERVICE TO CONSUMERS IN MUNICIPALITIES SERVED BY THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

DOMESTIC SERVICE

1.5 CENTS OR LESS

98.0
PER CENT

THE AREAS OF THE CIRCLES REPRESENT PROPORTIONATELY THE TOTAL KILOWATT-HOURS SOLD FOR DOMESTIC SERVICE IN MUNICIPALITIES WHERE THE AVERAGE CHARGE TO CONSUMERS INCLUSIVE OF ALL CHARGES IS, PER KILOWATT-HOUR:

1.6 TO 2.9 CENTS

3.0 CENTS

OR MORE

1.9 PER CENT

0.1 PER CENT

 $(\)$

0

COMMERCIAL LIGHT SERVICE



THE AREAS OF THE CIRCLES REPRESENT PROPORTIONATELY THE TOTAL KILOWATT-HOURS SOLD FOR COMMERCIAL LIGHT SERVICE IN MUNICIPALITIES WHERE THE AVERAGE CHARGE TO CONSUMERS INCLUSIVE OF ALL CHARGES IS, PER KILOWATT-HOUR:

2.0 TO 3.9 CENTS

4.0 CENTS

OR MORE

2.7 PER CENT

0.1

PER CENT

POWER SERVICE SUPPLIED BY MUNICIPALITIES

THE AREAS OF THE CIRCLES REPRESENT PROPORTIONATELY THE AGGREGATE HORSEPOWER SOLD FOR POWER SERVICE IN MUNICIPALITIES WHERE THE AVERAGE CHARGE TO CONSUMERS INCLUSIVE OF ALL CHARGES IS, PER HORSEPOWER PER YEAR:





\$30 OR MORE

0.2 PER CENT

0

With respect to domestic service, for example, instances may be observed where two municipalities have identical prices or rates for domestic service, but the average cost per kilowatt-hour to the consumer varies by as much as 50 per cent or more. Such variations are due principally to differences in the extent of utilization of the service for the operation of electric ranges, water heaters and other appliances, an indication of which is afforded by the statistics of average monthly consumption.

In the case of power service, average unit costs are still less reliable as an indication of the relative rates for service in different municipalities. In the case of hydro-electric power supplied to industries at cost, the rate schedules incorporate charges both for demand and for energy consumption, and thus, although the quantity of power taken by a consumer—that is, the demand as measured in horsepower—is the most important factor affecting costs and revenues, it is not the only one. The number of hours the power is used in the month or year—which, in conjunction with the power, determines the energy consumption, as measured in kilowatt-hours—also affects the costs and revenues. Consequently, in two municipalities charging the same rates for power service, the average cost per horsepower to the consumer will vary in accordance with the consumers' average number of hours use of the power per month. A greater average energy consumption per horsepower increases the average cost per horsepower and decreases the average cost per kilowatt-hour to the consumer, and *vice versa*.*

*In view of the fact that the data of Statement "D" have been misinterpreted in the making of certain comparisons as to the cost of electricity in various territories, it is desirable to add a word of caution respecting their significance. Essentially, the average cost or revenue per kilowatt-hour is not a criterion of rates even with similar forms of rate schedules and for the same class of service. Particularly is this true when revenues and consumptions of all classes of service and of all kinds of rate schedules, are indiscriminately lumped together in order to deduce a so-called "average cost or rate per kilowatt-hour" for all services.

In one community rates for each class of service, and the cost to every consumer in each class for any given service and consumption, may be substantially higher than in another community, and yet there may be in the former community a lower "average revenue per kilowatt-hour."

Example.—Assume sales of electrical energy by two electric utilities, A and B, in each case 10,000,000 kilowatt-hours.

Class of service		CASE A es and lower r kilowatt-he		CASE B Lower rates and higher revenues per kilowatt-hour				
	Energy sales	Rate per kw-hr.	Revenue	Energy sales	Rate per kw-hr.	Revenue		
Residence	kw-hr. 1,000,000 9,000,000	cents 4 1	\$ 40,000 90,000	kw-hr. 3,000,000 7,000,000	cents 3 0.75	\$ 90,000 52,500		
Total	10,000,000		130,000	10,000,000		142,500		
Average revenue	1.3 ce	ents per kw-	hr.	1.425 cents per kw-hr.				

It will be observed that in Case A the rates both for residence and for power service are 33 per cent higher than in Case B, but the average revenue per kilowatt-hour is nearly 9 per cent less.

In this instance, the explanation lies in the *relative quantities* of energy sold to each class. Service to large power consumers entails a smaller capital investment in distribution lines and equipment and lower operating costs per kilowatt-hour delivered, than does service to domestic and to commercial light consumers, and even where the rates for all classes of service are low, produces a smaller average revenue per kilowatt-hour. Consequently, if one electrical utility as compared with another sells a larger proportion of its energy for power purposes, its "average revenue per kilowatt-hour" may easily be lower than that of the other utility even though its rates for every class of service are substantially higher.

Although the derived statistics of Statement "D" are valueless as a means of comparing the *rates* in one municipality with those in another, they nevertheless fulfil a function in affording a general measure of the *economy of service* to consumers in the co-operating Ontario municipalities—an economy that has resulted primarily from the low rates themselves, and secondarily from the extensive use of the service that has been made possible by the low rates.

Actual bills rendered to typical consumers for similar service under closely comparable circumstances constitute the best basis for making comparisons. In researches respecting rates to consumers therefore the actual rates schedules of Statement "E" should be employed and not statistics of average revenues per kilowatt-hour, as these are valueless for rate comparisons—and particularly so when all classifications of service are combined.

In any consideration of the relative economies of electrical service in the various municipalities—whether based on the actual rates for service as set forth in Statement "E", or on the derived statistics resulting from the rates and other factors as presented in Statement "D"—full account should be taken respectively of the influence upon costs of such factors as the size of the municipality, the distance from the source of power, the features of the power developments, the sizes and concentrations of adjacent markets for electricity, and the sizes and characters of the loads supplied under the various classifications by the local electrical utility to the consumers.

In Statement "D" account has been taken of the sizes of municipalities by grouping them according to whether they are (i) cities—over 10,000 population; (ii) surburban areas densely populated; (iii) towns of 2,000 to 10,000 population; or (iv) small towns less than 2,000 population, villages, and suburban areas in townships. The populations are also given, and the situation of any municipality with respect to transmission lines and power supplies may be ascertained by consulting the maps at the end of the Report.

A feature of the electrical service in Ontario municipalities served by The Hydro-Electric Power Commission is the strikingly large average annual consumption per domestic consumer. All of the 113 cities and towns and suburban areas with populations of 2,000 or more—in which over 85 per cent of the domestic consumers of the undertaking are served—have an average annual consumption per domestic consumer in excess of 1,000 kilowatt-hours; of these, 99 have an average annual consumption per domestic consumer in excess of 1,500 kilowatt-hours, 85 in excess of 2,000 kilowatt-hours, and 34 in excess of 3,000 kilowatt-hours. In addition 165 smaller urban municipalities have an average annual consumption per domestic consumer exceeding 1,000 kilowatt-hours, including 52 in excess of 2,000 kilowatt-hours.

The high average consumption for domestic service results essentially from the policy of the undertaking in providing service "at cost"; the rate schedules designed according to this principle automatically encourage liberal use of the service. Under the standard rate schedules employed by Ontario municipalities, follow-up rates of 0.8 to 1.2 cents (less 10 per cent) are in common use, and as a rule even where the higher initial rates per kilowatthour obtain, it is only necessary for the domestic consumer to reach a monthly charge of from \$2.00 to \$3.00 to obtain the benefit of a follow-up rate of 1.8 cents net or less. The cost of electric cooking is thus within reach of most of the domestic consumers in Ontario. Low flat rates are also available for continuous electric water heaters.

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group I—CITIES

				Domestic service						
. Municipality	System	Popula- tion	Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.		
Belleville Brantford Chatham Fort William Galt	S.O. S.O. S.O. T.B. S.O.	15,982 34,810 18,380 30,590 15,000	216,615.89 124,122.30 300,866.30	16,838,497 24,348,251 8,962,304 55,264,107	4,342 9,089 4,945 8,379	kw-hr. 323 223 151 550	\$ c. 2.44 1.96 2.09	cents 0.76 0.88 1.38 0.54 1.00		
Guelph. Hamilton Kingston Kitchener London	S.O. S.O. S.O. S.O.	23,245 178,686 32,697 37,724 80,342	1,058,553.00 253,813.77 291,368.62	16,061,757 111,550,924 33,369,317 30,612,912 73,654,876	6,156 45,670 8,962 9,660 21,930	204 310 264	2.51	0.94 0.95 0.76 0.95 0.89		
Niagara Falls North Bay Oshawa Ottawa Owen Sound	N.O.P. S.O.	20,530 16,185 27,215 163,403 14,014	127,092.46 282,760.91		3,809 7,374 16,317	260 263 479	2.78 3.20	0.77 1.07 1.21 0.80 1.10		
Peterborough. Port Arthur. St. Catharines. St. Thomas. Sarnia.	S.O. T.B. S.O. S.O. S.O.	32,645 25,867 35,191 17,835 20,490	195,562.45 220,207.64 162,836.60	17,998,011	8,283 7,257 9,406 4,920 5,880	316 225 305	1.95 2.76	0.87 0.71 0.87 0.90 1.22		
Stratford Sudbury. Toronto. Toronto D.C. & 60 cycle* Welland.	S.O.	17,736 35,996 696,555 15,071	171,535.61 298,234.57 4,666,403.35 8,283.92 59,637.31	15,949,034 23,802,206 485,624,069 291,830 6,522,245		278 217 260 184 163	2.72	1.07 1.25 0.96 2.84 0.91		
· Windsor	S.O. S.O.	117,965 13,148	798,669.52 105,052.48	74,478,320 10,985,862	27,603 3,704		2.41 2.36	1.07 0.95		

GROUP II-VOTED AREAS adjacent to

Brantford Township	S.O.	6,800	63,076.21	5,462,913	2,098	217	2.51	1.16
East York Township	S.O.	51,000	371,890.34	31,708,848	13,355	198	2.32	1.17
Etobicoke Township	S.O.	27,638	332,324.13	33,879,934	8,484	333	3.26	0.98
London Township	S.O.	1,900	20,261.60	1,692,235	547	258	3.09	1.20
North York Township	S.O.	35,000	333,471.99	33,500,150	9,601	291	2.89	1.00
*					i	1	-	
Scarborough Township	S.O.	29,000	185,738.40	16,007,403	7,837	170	1.98	1.16
Stamford Township	S.O.	11,778	89,586,92	10,936,510	2,942	310	2.54	0.82
Toronto Township	S.O.	12,000	139,601.62	11,781,803	3,914	251	2.97	1.18
York Township	S.O.	82,753	569,882.43	55,184,851	23,837	193	1.99	1.03

^{*}This—with the exception of a relatively small D.C. power load—is a special service not created by The Hydro-Electric Power Commission but acquired through the purchase of a privately-owned company. It does not include street railway power.

"D"

in Ontario Municipalities Served by the Commission and for Power Service during the year 1947

Population, 10,000 or more

	Commercial Light service					Powe			
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers
\$ c. 78,233.79 121,515.74 135,458.33 122,691.78 78,139.29	12,085,894 9,548,061 13,473,910	1,462 943 1,243	kw-hr. 900 689 844 903	\$ c. 9.52 6.92 11.97	cents 1.06 1.00 1.42 0.91	357,027.64 127,996.81 111,323.72	119 256 142 140	3,915.3 22,106.1 6,928.2 7,075.4 10,926.9	5.146 10,807 6,030 9,762 5,347
71,848.08 646,178.75 152,546.74 166,527.82 279,227.20	62,892,392 14,442,052 12,543,885	5,928 1,119 1,172	884 1,075 892	9.08 11.36 11.84	1.03 1.05	3,077,221.45 181,704.29 572,901.79	1,176 192 321	11,651.2 168,258.7 10,601.9 29,056.2 36,272.0	7,100 52,774 10,273 11,153 24,934
92,402.30 71,400.14 102,641.60 351,189.12 69,099.80	5,254,185 6,051,679 26,345,685	712 797 1,603	1,370	8.36 10.73 18.26	1.36 1.70 1.33	66,470.15 405,660.42 105,115.63	97 128 215	6,179.8	6,323 4,618 8,299 18,135 4,922
113,512.60 112,332.94 126,935.13 72,220.34 86,739.08	10,854,832 12,158,442 6,528.340	1,015 1,230 615	891 824 885	8.60	1.03 1.04 1.10	309,832.49 445,155.75 95,115.89	138 231 90	16,330.0 21,592.5 27,232.0 5,804.2 4,816.0	8,410 10,867 5,625
72,146.46 162,322.44 3,346,299.38 47,769.61 49,280.46	9,758,000 276,918,080 1,348,030	$ \begin{array}{c c} 1,191 \\ 24,379 \\ 258 \end{array} $	683 946 435	9.26 11.36 11.44 15.43 8.08	1.66 1.21 3.54	60,026.07 †5,304,450.47 275,010.50	142 4,940 676	4,469.0 2,788.3 255,576.0 10,633.0 11,897.7	10,455 185,220
488,048.37 69,210.40				11.36 10.99				47,161.1 7,324.0	

cities and which are predominantely urban.

10.574.17	694,437	103	562 8.56 1.5	2 9,175.00	14	442.6	2,215
39,986,41	3,028,390	488	517 6.83 1.3	2 59,803.62	65	2,974.9	13,908
51.090.07	3,762,735	504	622 8.45 1.3	6 104,232.91	81	5,475.8	9,069
2,790.08	173,391	18	803 12.92 1.6	1,712.33	4	79.8	569
45,636.06	2,872,841	624	384 6.09 1.5	9 106,500.81	94	5,713.5	10,319
10,000.00	_,,,,,,,,						
39,339.99	2,588,595	529	408 6.20 1.5	2 53,428.57	66	2,608.4	8,432
21,509.48	1,468,489	194	631 9.24 1.4	6 27,265.76	28	1,650.1	3,164
32,498.99	2,244,915	271	690 9.99 1.4	5 40.721.62	56	2,000.0	4,241
101,025,13	7,461,701	1.264		6 193,897.39	242	10,586.9	25,343
101,020.10	1,101,101	1,201					

NOTE—The above groups comprising 26 cities and 9 suburban areas adjacent to the larger cities, utilize about 80 per cent of the power distributed by the Commission to Ontario municipalities.

[†]Does not include street railway power.

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group III-TOWNS

	1	1 1	Group III—TOWNS						
			Domestic service						
Municipality	System	Popula- tion	Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	
Alexandria Almonte Amherstburg Arnprior Aurora	S.O. S.O. S.O. S.O.	2,069 2,243 2,951 4,153 3,016	\$ c. 11,566.76 21,069.50 30,101.04 25,682.46 30,659.39	668,646 1,919,391 2,856,442 2,072,882	510 718 813 993 861	kw-hr. 109 223 292 174 273	2.16	cents 1.73 1.10 1.05 1.24 1.09	
AylmerBarrieBlenheimBowmanville.Brampton.	S.O. S.O. S.O. S.O.	2,441 10,103 2,035 *3,996 6,152	21,149.82 104,227.12 12,019.72 41,086.26 60,772.74		830 2,787 620 1,247 1,784	202 319 118 225 288	2.12 3.12 1.61 2.75 2.83	1.05 0.98 1.36 1.22 0.98	
Brockville	S.O. S.O. S.O. S.O. S.O.	11,038 4,560 4,239 2,050 5,419	82,139.91 53,748.10 28,771.98 17.887.07 51,119.58	1,730,348	3,339 1,416 1,173 640 1,545	222 241 174 225 218	2.05 3.16 2.04 2.33 2.76	0.92 1.31 1.17 1.04 1.26	
Collingwood Delhi Dundas Dunnville Durham	S.O. S.O. S.O. S.O.	7.027 2,242 6,000 4,063 2,036	42,060.04 18,172.42 32,345.49 17,578.27 10,743.29	3,320,945 1,170,016 2,738,255 1,451,624 739,155	1,759 704 1,600 1,142 499	157 138 143 106 123	1.99 2.15 1.68 1.28 1.79	1.27 1.55 1.18 1.21 1.45	
Elmira Essex Fergus Forest Hill Georgetown	S.O. S.O. S.O. S.O.	2,297 2,095 2,649 14,574 2,753	20,348.88 11,172.73 24,480.00 237,442.05 30,933.31	1,847,407 798,350 2,019,320 24,160,179 2,521,695	644 608 790 3,993 873	239 109 213 504 241	2.63 1.53 2.58 4.96 2.95	1.10 1.40 1.21 0.98 1.22	
Goderich Gravenhurst Grimsby Hanover Hespeler	S.O. S.O. S.O. S.O.	*4,625 *2,477 2,107 3,204 2,960	43,209,98 17,250,07 21,143,21 28,660,72 23,036,60	3,470,024 1,901,726 1,808,615 2,227,776 1,911,120	1,473 780 711 944 892	196 203 212 197 178	2.44 1.84 2.48 2.53 2.15	1.24 0.91 1.17 1.29 1.21	
Humberstone Huntsville Ingersoll Kincardine Kingsville	S.O. S.O. S.O. S.O.	3,207 *2,767 5,953 *2,373 *2,372	14,333.29 22,199.92 42,246.66 19,164.34 18,217.04	1,017,370 2,201,998 3,787,518 1,168,491 1,338,502	811 813 1,940 810 692	104 226 163 120 161	1.47 2.28 1.81 1.97 2.19	1.41 1.01 1.11 1.64 1.36	
Leamington Lindsay Listowel Long Branch Meaford	S.O. S.O. S.O. S.O. S.O.	*6,276 7,888 2,854 5,220 2,602	36,260.34 66,388.00 23,912.79 47,595.30 20,043.51	3,064,972 6,102,635 2,082,166 4,708,251 1,359,526	1,922 2,405 900 1,848 831	133 211 193 212 136	1.57 2.30 2.21 2.15 2.01	1.18 1.09 1.14 1.01 1.47	
Merriton Midland Milton Mimico Napanee	S.O. S.O. S.O. S.O. S.O.	3,506 *6,880 2,151 9,055 3,359	23,657.76 47,240.52 18,152.99 81,011.16 33,726.95	2,154,101 3,892,211 1,451,830 8,222,660 2 937,698	1,037 1,826 623 2,478 979	173 178 194 276 250	1.90 2.16 2.43 2.72 2.87	1.10 1.21 1.25 0.99 1.15	

^{*}Does not include Summer population.

"D"—Continued

in Ontario Municipalities Served by the Commission and for Power Service during the year 1947

population 2,000 or more

	Commercial L	ight ser	vice			Powe			
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers
\$ c. 8,451.98 8,944.15 12,766.52 14,899.15 11,457.50	kw-hr. 419,187 504,597 1,042,162 888,166 855,147	125 122 164 161 131	kw-hr. 279 345 529 460 544	\$ c. 5.63 6.11 6.48 7.71	cents 2.02 1.77 1.22 1.68 1.34	\$ c. 7,291.03 16,101.33 12,271.33 25,575.24 23,482.38	18 25 19 27	245.1 790.7 592.5 1,398.0 1,148.4	6 8 9 1,1 1,0
16,236.61 61,003.57 13,088.07 15,229.81 26,434.64	1,371,856 4,400,208 907,329 863,752 1,917,242	465 165 187	789	10.93 6.61 6.79	1.39 1.44 1.76	54,406.23 12,048.43 69,609.05	70 19 27	1,057.6 2,840.3 592.4 2,973.6 1,678.3	1,0 3,3 8 1,4 2,1
36,297.16 24,094.95 14,290.88 10,077.90 28,332.62	1,425,803 802,167 634,918	210 140	652 318 378	11.03 5.67 6.00	1.70 1.78 1.59	20,259.18 32,726.80 6,464.27	22 20 20 18	346.8	3,8 1,6 1,4 7 2,0
21,684.17 16,770.63 22,273.67 18,109.10 6,549.17	810,450 1,608,621 1,450,847	190 212 272	355 632 444	7.36 8.76 5.55	2.07 1.38 1.25	7,270.49 53,924.88 25,008.58	9 13 3 45 3 30	323.0 3,405.9 1,431.8	2,3 1,8 1,4
13,800.16 11,975.69 10,498.17 37,968.18 12,528.97	975,963 713,016 2,647,994	140 121 314	581 491 703	7.13 7.23 10.08	1.23 1.47 1.43	9,891.84 23,782.87 6,210.22	1 18 7 20 2 35	483.2 1,181.2 312.3	4,: 1,0
22,965.59 11,522.42 15,947.30 11,597.34 10,419.73	1,162,930 1,017,767 713,281	125 146 153	5 775 5 583 8 388	7.68 1 9.10 3 6.32	0.99 1.57 1.63	20,583.49 14,501.09 27,456.5	9 19 4 19 7 28	1,135.0 533.3 1,318.7	1, 1, 1,
6,587.79 18,599.30 24,782.19 11,745.41 13,505.00	1,328,460 1,774,303 537,858	139 260 3 140	796 569 320	6 11.15 9 7.94 0 6.99	1.40 1.40 2.18	17,030.89 52,260.7 18,688.7	9 20 1 51 6 24	1,092.8 2,981.9 728.4	2,
26,477.18 45,763.86 17,220.60 11,443.46 12,819.49	2,805,693 1,137,651 874,653	389 1 168 3 172	60: 564 2 424	9.80 4 8.54 4 5.54	1.63 1.51 1.31	46,423.40 21,783.4 27,924.90	0 77 4 30 9 19	2,646.8 1,115.7 1,591.2	2,8
6,329.03 25,201.76 9,267.68 17,801.62 26,516.7	1,690,920 607,273 1,357,023	0 · 232 5 · 124 2 · 189	60′ 4 408 9 598	7 9.03 8 6.23	1.49 3 1.53 5 1.31	81,057.9 32,666.9 22,719.8	2 66 6 19 5 35	4,924.8 1,419.1 1,110.0	2,

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group III-TOWNS

	1			Domesi	tic service	oup 11	1—10	
Municipality	System	Popula-		Domes	Number			ber
		tion	Revenue	Consumption	of con- sumers	Average monthly consumption	Average monthly bill	Net cost p kw-hr.
Newmarket New Toronto Orangeville Paris Penetanguishene	S.O. S.O. S.O. S.O.	4,014 8,727 2,613 4,717 4,006	\$ c. 38,474.35 57,989.01 23,621.97 32,754.20 18,598.01	kw-hr. 4,593,660 5,843,384 1,706,800 2,987,580 1,361,113	1,215 2,202 803 1,240 910	kw-hr. 315 221 177 201 125	\$ c. 2.64 2.19 2.45 2.20	cents 0.84 0.99 1.38 1.09 1.37
Perth	S.O. S.O. S.O. S.O.	4,282 2,682 3,471 7,251 2,325	37,243.49 16,996.19 32,279.54 35,079.17 24,761.48	2,968,921 1,062,013 3,169,040 2,513,030 2,777,327	1,200 860 1,254 1,762 711	206 103 211 119 326	1.65 2.15 1.66	1.25 1.60 1.02 1.39 0.89
Port Dover Port Hope Prescott Preston Renfrew	S.O. S.O. S.O. S.O. S.O.	*2,021 5,154 3,248 7,000 5,712	14,087.64 45,280.93 28,271.93 50,718.26 36,542.95	2,324,622 4,731,357	875 1,590 851 1,817 1,501	98 228 228 217 141	2.37 2.77 2.33	
Ridgetown. Riverside. St. Marys. Simcoe. Smiths Falls.	S.O. S.O. S.O. S.O. S.O.	2,099 5,845 3,633 6,473 7,717	11,137.99 56,488.34 39,706.17 33,479.47 66,717.24	4,410,651 3,254,770 2,969,420	648 1,860 1,169 1,803 2,360		2.53 2.83 1.55	1.27 1.28 1.22 1.13 1.03
Strathroy. Swansea 'Tecumseh Thorold Tilbury.	S.O. S.O. S.O.	3,139 7,217 *3,035 5,569 2,165		8,514,826 1,114,060 2,588,737	794 1,471		2.86 1.94 1.39	0.88
Tillsonburg. Trenton Walkerton Wallaceburg Waterloo	S.O. S.O. S.O.	4,624 9,905 2,746 6,088 9,848	36,760.54	6,758,174 1,633,555 2,500,398	2,037 801 1,710	276 170 122	2.06 2.68 1.79	0.74 1.58 1.47
Weston. Whitby. Wingham.	S.O.	6,337 4,501 2,204	67,711.21 40,675.41 20,493.70	3,609,271	1,163	259	2.91	1.13
				TOWNS (16	ss than			ation)
Acton. Agincourt. Ailsa Craig. Alliston. Alvinston.	S.O. S.O. S.O.	1,940 P.V. 470 1,700 643	7,937.53 3,617.33 16,016.38	683,025 254,210 1,073,181	184 164 478	309 129 187	3.59 1.84 2.79	1.2 1.4 1.5
Ancaster Township Apple Hill Arkona Arthur Athens.	S.O. S.O. S.O.	P.V. 389 1,153 718	3,791.67 7,533.87	57,610 182,538 351,700	78 133 272	62 114 108	1.82 2.38 2.31	$\begin{array}{c} 3.0 \\ 2.1 \\ 2.1 \end{array}$

^{*}Does not include Summer population.

"D"-Continued

in Ontario Municipalities Served by the Commission and for Power Service during the year 1947

population 2,000 or more—Continued

	Commercial L	ight ser	vice	-		Powe	r service		
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers
\$ c. 22,062.04 24,472.06 16,864.05 13,205.37 12,115.87	1,262,920 2,422,507	258	kw-hr. 446 782 436 430 539	\$ c. 7.79 7.90 7.32 5.53	cents 1.75 1.01 1.68 1.29 1.52	\$ c. 26,520.46 259,619.07 7,936.36 27,330.14 26,344.73	38 46 32 28	1,259.2 13,081.0 526.7 1,711.5 1,186.2	1,489 2,506 1,027 1,467 1,052
22,141.58 12,211.35 22,841.64 25,510.60 9,510.10	695,010 1,891,285 1,686,363		311 611 545	8.87 5.47 7.38 8.24 7.92	1.49 1.76 1.21 1.51 1.36	19,882.11 28,863.78 11,931.31 26,771.01 6,751.54	40 27	1,136.1 1,101.3 765.4 1,391.5 328.2	1,443 1,106 1,552 2,047 826
9,671.63 21,359.52 15,741.77 26,221.87 21,974.86	1,463,170 958,100 1,891,430	279 169 242	437 472 651	4.80 6.38 7.76 9.03 7.47	1.40 1.46 1.64 1.39 1.60	6,203.66 54,254.78 12,459.08 65,898.72 48,547.17	44 28 59	409.3 2,776.6 715.9 4,001.2 2,277.6	1,913 1,048 2,118
10,633.96 10,261.54 17,669.75 40,081.07 27,803.49	721,418 1,029,578 3,749,540	90 197	668 436 772	5.79 9.50 7.47 8.25 7.26	1.54 1.42 1.71 1.07 1.27	8,835.25 8,740.29 27,571.45 37,788.24 34,543.11	15 38	547.8 415.0 1,263.5 2,060.3 1,850.5	825 1,965 1,404 2,271 2,721
16,508.02 12.187.97 7,019.46 10,655.65 9,221.32	861,094 418,862 1,211,359	110 84 174	652 416 580	5.10	1.45 1.42 1.67 0.90 1.41	18,456.76 28,814.76 2,082.51 60,795.19 17,760.21	19 5 29	1,381.3 1,407.5 111.4 3,113.0 1,146.9	2,319 883 1,674
28,576.79 25,511.52 16,696.37 23,486.98 32,058.86	904,172 1,692,907	304 160 295	471 478	8.70	1.27 1.02 1.85 1.39 1.08	25,453.08 93,498.08 13,522.56 159,215.24 93,657.25	59 20 60	510.8 6,955.3	2,400 981 2,065
20,364.90 18,353.63 14,992.26	1,267,016	189		8.04 8.09 8.17	1.10 1.45 2.05	24,945.26	34	1,149.1	1,386
VILLAGES A	ND CERTAIN		JRBAN	ARE	AS				
8,924.42 2,445.21 1,314.05 10,326.59 2,909.23	108,228 57,919 494,640	32 33 129	561 282 146 320 178	5.95 6.37 3.32 6.67 4.18	2.3 2.3 2.1	37,763.03 1,871.31 1,810.76 9,286.47 1,752.08	5 4 21	1,713.5 112.4 78.9 426.2 64.9	221 201 628
5,857.46 1,017.00 1,954.30 6,400.57 2,801.43	42,867 72,814 267,587	47 26 37 90 52	137 164	10.39 3.26 4.40 5.93 4.49	2.2 2.4 2.7 2.4 2.6	1,171.38 323.20 286.10 1,911.73 969.43	2 2 7	79.7 19.6 8.8 104.2 38.3	172 369

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group IV-SMALL TOWNS (less than 2,000 population)'

		Group I	Domestic service							
Municipality	System	Popula- tion	Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.		
Ayr. Baden. Bath. Beachville. Beamsville.	S.O. S.O. S.O. S.O. S.O.	731 P.V. *344 P.V. 1,360	\$ c. 7,177.59 5,265.08 3,675.68 4,773.12 14,828.35	535,095 435,390 122,710 361,776	243 171 83 173 453	kw-hr. 184 212 123 174 312	\$ c. 2.45 2.57 3.69 2.30 2.73	1.3		
Beaverton Beeton Belle River Bloomfield Blyth	S.O. S.O. S.O. S.O.	*842 516 1,063 633 701	9,196.22 4,315.19 8,304.76 4,286.66 4,824.18	609,903 206,840 472,888 308,865 274,940	365 159 368 192 197	108	1.88 1.86	2.1		
Bobcaygeon. Bolton Bothwell Bradford Braeside	S.O. S.O. S.O. S.O. S.O.	*1,039 716 695 1,098 424	9,492.79 6,692.51 3,363.95 10,160.85 2,176.12	351,825 764,265 245,935 601,610 104,144	425 207 204 322 100	69 308 100 156 87	1.37	2.7 0.9 1.4 1.7 2.1		
Brechin Bridgeport Brigden Brighton Brussels	S.O. S.O. S.O. S.O. S.O.	P.V. P.V. P.V. 1,766 762	1,963.62 6,468.37 2,551.74 13,471.39 6,411.24	78,891 457,894 124,790 989,202 346,215	66 212 135 614 273	100 180 77 134 106		2.5 1.4 2.0 1.4 1.9		
Burford Burgessville. Caledonia. Campbellville. Cannington.	S.O. S.O. S.O. S.O. S.O.	P.V. P.V. 1,450 P.V. 806	6,792.11 2,182.18 8,992.70 1,843.20 6,992.38	647,087 112,232 619,726 128,820 406,946	260 63 480 60 279	148 108 179	2.18 2.89 1.56 2.56 2.09	1.0 1.9 1.5 1.4 1.7		
Capreol	N.O.P S.O. S.O. S.O. S.O.	1,700 1,678 649 362 1,591	15,077.49 11,256.88 5,596.37 3,201.17 12,160.79	263,240 199,260	463 408 200 123 490	177 110 135	2.71 2.30 2.33 2.17 2.07	1.6 1.3 2.1 1.6 1.2		
Chesterville. Chippawa Clifford. Cobden. Colborne	S.O. S.O. S.O. S.O.	1,123 1,339 461 629 908	6,728.14 9,434.97 3,686.66 3,969.19 9,741.25	566,190 1,067,658 211,462 252,564 608,596	273 413 141 198 299	173 215 125 106 170	2.05 1.90 2.18 1.67 2.71	1.2 0.9 1.7 1.6 1.6		
Coldwater Comber Cookstown Cottam Courtright	S.O. S.O. S.O. S.O. S.O.	583 P.V. P.V. P.V. 367	4,841.03 2,660.54 3,289.69 3,406.19 2,207.07	331,305 137,710 142,324 192,610 101,148	164 139 138 149 107	86	1.60 1.99	1.5 1.9 2.3 1.8 2.2		
Creemore Dashwood Delaware Deseronto Dorchester	S.O. S.O. S.O. S.O. S.O.	700 P.V. P.V. 1,215 P.V.	4,943.61 3,124.52 2,972.09 12,186.87 3,698.22	276,190 176,362 231,980 646,730 263,626	194 112 78 428 158	126	2.12 2.32 3.18 2.37 1.95	1.8 1.8 1.3 1.9 1.4		

^{*}Does not include Summer population.

"D"-Continued

in Ontario Municipalities Served by the Commission and for Power Service during the year 1947

VILLAGES AND CERTAIN SUBURBAN AREAS

	Commercial I	light se	rvice			Powe			
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers
\$ c. 3,480.78 2,663.83 906.39		15	kw-hr. 294 456 171	\$ c. 6.04 6.73 5.04	2.1 1.5 2.9	\$ c. 4,598.28 10,264.23	9		98
659.27 6,382.29	36,599 526,528			2.11 6.04	1.8	20,623.23 3,154.99	4 9	818.0 197.3	203 550
4,203.62 2,884.18 4,283.83 2,659.06 2,740.46	250,663 119,960 305,415 134,836 141,921	39 62	316 256 411 255 211	5.31 6.16 5.76 5.04 4.08	1.7 2.4 1.4 2.0 1.9	1,406.09 425.88 1,889.05 1,606.85 1,037.01	9 5 7 5	101.3 24.0 61.3 77.8 60.2	440 203 435 243 258
7,191.21 3,352.68 2,688.94 8,829.46 407.19	227,192 142,496 194,123 414,500 13,089		249 242 265 421 136	7.89 5.70 3.67 8.97 4.24	3.2 2.4 1.4 2.1 3.1	1,503.46 3,835.00 1,283.67 8,768.47 6,054.19	6 14 10 16 2	53.5 170.7 119.3 391.6 262.0	507 270 275 420 110
1,031.55 2,001.46 2,054.30 6,340.14 3,606.66	39,169 114,786 93,340 381,496 183,045	24 25 45 115 67	136 383 173 276 228	3.58 6.67 3.80 4.59 4.48	2.6 1.7 2.2 1.7 2.0	781.34 2,745.22 2,887.11 4,963.04 3,552.25	1 4 5 10 8	30.0 127.3 103.2 280.9 129.7	96 241 185 739 348
3,023.08 878.90 7,135.92 597.89 3,398.62	208,350 36,434 537,275 33,239 135,855	47 19 107 11 72	369 160 418 252 157	5.36 3.85 5.56 4.53 3.93	1.5 2.4 1.3 1.8 2.5	2,314.44 1,824.57 3,015.64 367.77 3,786.01	4 3 10 1 12	150.4 80.1 153.0 8.6 195.2	311 85 597 72 363
4,533.32 3,263.43 5,966.29 1,884.11 6,107.59	245,970 191,800 251,420 99,730 434,707	60 63 72 33 89	342 254 291 252 407	6.30 4.32 6.88 4.76 5.72	1.8 1.7 2.4 1.9 1.4	9,197.52 416.73 6,673.18 9,375.54	2 3 10 24	291.7 19.0 283.7 480.8	525 474 282 156 603
5,463.09 2,955.30 2,708.54 3,578.12 6,156.32	320,615 246,280 125,505 144,594 309,569	71 48 39 61 77	376 428 268 198 334	6.41 5.13 5.79 4.89 6.63	1.7 1.2 2.2 2.5 2.0	3,930.86 1,349,93 722.08 3,771.19 1,200.82	4 3 2 5 6	173.2 59.2 22.3 125.2 55.4	348 464 182 264 382
2,667.33 2,898.19 2,042.39 2,004.93 876.24	115,350 137,734 60,335 101,104 45,055	50 51 38 30 23	192 225 132 281 163	4.45 4.74 4.47 5.57 3.17	2.3 2.1 3.4 2.0 1.9	3,924 .60 3,387 .28 1,480 .21 1,087 .15 909 .95	4 7 4 5 1	163.2 165.0 70.9 56.7 12.5	218 197 180 184 131
2,663.68 1,498.45 1,090.50 5,137.31 1,297.87	145,106 72,708 49,951 224,210 55,720	55 25 17 60 31	220 242 245 311 150	4.04 4.99 5.35 7.14 3.49	1.8 2.1 2.2 2.3 2.3	1,392.04 1,556.16 4,065.09 940.55	3 3 13 2	88.8 76.5 164.9 44.8	252 140 95 501 191

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group IV-SMALL TOWNS (less than 2,000 population),

				Domes	tic servic		9,000	
Municipality	System	Popula- tion	Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
Drayton. Dresden. Drumbo. Dublin. Dundalk.	S.O. S.O. S.O. S.O.	489 1,666 P.V. P.V. 701	\$ c. 4,795.30 9,892.17 3,345.28 2,082.20 5,389.54	204,261 470,205 194,025 107,381	180 536 100 66 232	kw-hr. 95 73 162 136	\$ c. 2.22 1.54 2.79 2.63	cents 2.3 2.1 1.7 1.9 1.6
Dutton. Elmvale. Elmwood. Elora. Embro.	S.O. S.O. S.O. S.O. S.O.	818 P.V. P.V. 1,158 425	3,962.51 4,872.44 1,620.69 10,533.20 5,072.49	726,968	244 210 89 374 139	151 67 162	1.93 1.52 2.34	1.3 1.3 2.3 1.4 1.6
Erieau Erie Beach Exeter Finch Flesherton	S.O. S.O. S.O. S.O.	*273 *30 1,800 341 389	6,161.48 1,708.56 20,687.59 3,624.80 3,035.91	38,394 1,772,417	234 94 611 134 145	34 242 96		1.8 4.5 1.2 2.3 1.8
Fonthill. Forest. Glencoe. Grand Valley. Granton.	S.O. S.O. S.O. S.O. S.O.	1,115 1,709 764 628 P.V.	9,014.07 17,981.94 5,243.58 4,353.21 2,516.11	613,772 1,426,465 269,666 248,040 145,347	340 552 231 202 90	215 97 102	2.71 1.89 1.80	1.5 1.3 1.9 1.8 1.7
Hagersville Harriston Harrow Hastings Havelock	S.O. S.O. S.O. S.O. S.O.	1,556 1,345 1,304 *721 935	9,283.51 10,574.10 16,155.75 6,222.35 6,219.97		449 398 381 284 316	154 280 83	2.21 3.53 1.83	1.5 1.4 1.3 2.2 1.8
Hensall Highgate Holstein Iroquois Jarvis	S.O. S.O. S.O. S.O. S.O.	649 309 P.V. 938 590	6,200.70 2,110.34 1,265.86 9,596.01 3,336.75	99,570 60,370 708,479	233 112 68 337 166	74 74 175	2.37	1.6 2.1 2.1 1.3 1.9
Kemptville Kirkfield Lakefield Lambeth Lanark	S.O. S.O. S.O. S.O. S.O.	1,281 P.V. 1,373 P.V. 705	11,468.40 1,089.49 10,453.46 4,776.97 4,804.66	34,190 734,840 418,665	425 41 432 160 198	69 142 218	2.01	1.5 3.2 1.4 1.1 2.2
Lancaster La Salle Lucan Lucknow Lynden	S.O. S.O. S.O. S.O. S.O.	526 1,300 643 930 P.V.	2,293.58 13,266.07 6,256.02 7,112.03 3,647.23	114,015 799,647 493,655 376,100 281,680	133 334 207 340 108	199 199 92	1.44 3.31 2.52 1.74 2.81	2.0 1.7 1.3 1.9 1.3
Madoc Markdale Markham Marmora Martintown	S.O. S.O. S.O. S.O. S.O.	1,084 776 1,267 993 P.V.	7,582.43 5,127.63 11,932.14 6,448.12 1,482.74	823,533 305,310	347 238 380 279 68	181 91	1.80 2.62 1.93	1.5 1.2 1.4 2.1 1.6

^{*}Does not include Summer population.

"D"-Continued

in Ontario Municipalities Served by the Commission and for Power Service during the year 1947

VILLAGES AND CERTAIN SUBURBAN AREAS

	Commercial Light service						r service	;	
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per , kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers
\$ c. 3,811.74 9,909.87 1,817.07 1,689.47 4,550.17	kw-hr. 126,995 500,565 70,167 68,940 207,009	142 34 32	kw-hr. 153 294 172 180 218	\$ c. 4.60 5.82 4.45 4.40 4.80	cents 3.0 2.0 2.6 2.5 2.2	\$ c. 1,451.85 12,245.17 752.42 1,760.15 3,391.48	6 18 1 2 8	59.0 569.7 36.7 76.5 197.9	255 696 135 100 319
3,099.41 2,918.74 1,088.70 5,552.19 1,300.02	302,448	56 22 71	251 290 150 355 157	3.69 4.34 4.12 6.52 3.28	1.5 1.5 2.7 1.8 2.1	4,356.03 3,489.64 2,793.86 6,205.68 2,301.29	12 7 2 6 3	233.0 159.6 97.2 338.1 90.4	326 273 113 451 175
2,294.56 327.54 12,980.17 2,698.70 2,373.12	7,375 820,156	146	482 123 468 198 185	9.56 5.46 7.41 7.03 4.21	2.0 4.4 1.6 3.6 2.3	5,004.86 6,454.10 1,069.39 984.18	 19 2 2	165.4 429.3 33.3 43.7	258 99 776 168 194
2,480.12 10,470.28 5,907.13 2,874.14 1,444.49		150 83 58	248 356 297 197 207	5.04 5.82 5.93 4.13 4.01	2.0 1.6 2.0 2.1 1.9	823.59 7,176.43 3,849.26 2,831.52 214.93	5 21 12 8 1	43.5 348.7 160.3 134.8 10.0	386 723 326 268 121
8,916.18 8,072.07 8,624.45 4,458.89 3,518.42	451,219 453,059 246,917	109 105 57	354 345 360 214 180	5.72 6.17 6.84 6.51 4.65	1.6 1.8 1.9 3.0 2.6	23,404.81 10,474.36 5,390.45 204.98 2,253.62	21 16 8 3 3	1,421.0 457.9 263.6 15.2 82.3	600 523 494 344 382
3,488.61 1,124.33 503.30 4,271.08 2,884.51	26,290 247,782	30 15 68	191 131 146 303 309	4.85 3.12 2.80 5.24 5.23	2.5 2.4 1.9 1.7 1.7	3,813.99 1,948.02 575.27 1,574.16 3,826.02	17 6 2 5 4	206.8 92.6 23.9 64.2 143.8	310 148 85 410 216
7,681.82 1,375.22 7,293.55 1,375.77 3,494.07	40,876 437,346 92,969	20 80 27	405 170 456 287 282	7.81 5.73 7.60 4.25 6.47	1.9 3.4 1.7 1.5 2.3	5,637.73 7,180.05 930.75 1,315.16	5 12 5 2	232.3 383.0 72.0 35.0	512 61 524 192 245
1,647.01 2,388.52 3,409.40 4,055.21 893.99	107,439 167,343 145,674	15 56 103	249	4.16 13.27 5.07 3.28 5.32	2.1 2.2 2.0 2.8 2.3	876.45 1,475.39 16,804.30 1,074.56	3 5 11 3	34.1 72.6 549.5 74.1	166 352 268 454 125
5,753.09 3,850.10 5,217.18 3,167.68 1,550.74	246,437 321,836 167,670	76 77 0 44	348 318	5.65	2.0 1.6 1.6 1.9 2.6	2,556.13 2,635.81 4,107.83 533.08 131.50	6 9 11 1	105.7 165.3 199.2 39.5 5.0	452 323 468 324 98

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group IV-SMALL TOWNS (less than 2,000 population),

			{	Domest	ic servic	e		
Municipality	System	Popula- tion	Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
Maxville Merlin Mildmay Millbrook Milverton	S.O. S.O. S.O. S.O. S.O.	811 P.V. 743 745 1,013	\$ c. 4,339.48 2,604.88 5,475.90 6,371.42 7,271.31	kw-hr. 249,730 144,690 384,290 300,703 547,655	196 140 211 200 286	kw-hr. 106 86 152	\$ c. 1.85 1.80 2.16 2.65 2.12	1.8
Mitchell Moorefield Morrisburg Mt. Brydges Mt. Forest	S.O. S.O. S.O. S.O. S.O.	1,548 P.V. *1,511 P.V. 1,797	17,886.11 1,929.24 13,524.61 3,259.32 14,037.45	1,473,586 102,130 885,594 236,828 914,020	568 79 465 181 538	216 108 159 109 142	2.62 2.04 2.42 1.50 2.17	1.2 1.9 1.5 1.5
Neustadt Newbury Newcastle New Hmburg Niagara-on-the-Lake	S.O. S.O. S.O. S.O. S.O.	435 265 *705 1,456 1,781	2,807.48 1,727.94 6,856.11 12,870.71 24,545.49	131,142 67,283 474,282 1,144,191 2,516,068	136 90 249 412 696	80 62 159 231 301	1.72 1.60 2.29 2.60 2.94	2.1 2.6 1.4 1.1 1.0
Nipigon Township Norwich Norwood Oil Springs Omemee	T.B. S.O. S.O. S.O. S.O.	V.A. 1,307 703 422 600	8,893.31 12,460.39 6,917.50 2,903.81 4,706.98	624,605 1,145,258 385,860 201,650 250,847	329 419 247 117 198	158 228 130 144 105	2.25 2.48 2.33 2.07 1.98	1.4 1.1 1.8 1.4 1.9
Orono Otterville Paisley Palmerston Parkhill	S.O. S.O. S.O. S.O.	P.V. P.V. 716 1,439 915	6,402.45 4,117.19 5,571.47 13,852.70 8,516.66	303,020 297,480 252,240 1,147,458 602,065	199 174 227 433 358	127 142 90 221 140	2.68 1.97 2.04 2.67 1.98	2.1 1.4 2.2 1.2 1.4
Plattsville Point Edward Port Dalhousie Port Elgin Port McNicoll	S.O. S.O. S.O. S.O. S.O.	P.V. 1,395 *1,747 *1,566 *885	3,828.72 9,442.13 27,912.64 17,311.13 5,360.73	127,132 516,104 2,859,519 1,037,417 241,849	126 392 758 590 261	84 110 314 147 77	2.53 2.00 3.07 2.45 1.71	3.0 1.8 1.0 1.7 2.2
Port Perry Port Rowan Port Stanley Priceville Princeton	S.O. S.O. S.O. S.O.	1,278 688 *940 P.V. P.V.	13,579.94 3,976.27 19,764.54 889.87 3,404.82	700,639 197,370 1,525,658 32,520 234,670	420 249 948 48 105	139 66 134 56 186	2.69 1.33 1.74 1.54 2.70	1.9 2.0 1.3 2.7 1.5
Queenston ´. Richmond	S.O. S.O. S.O. S.O.	P.V. 448 1,507 416 P.V.	3,528.70 3,650.77 16,408.08 4,021.50 5,524.76	387,346 206,850 1,753,726 159,676 391,920	85 105 485 135 189	380 164 301 99 173	3.46 2.90 2.82 2.48 2.44	0.9 1.8 0.9 2.5 1.4
Rodney Rosseau Russell St. Clair Beach St. George	S.O. S.O. S.O. S.O. S.O.	787 *176 P.V. *351 P.V.	4,700.34 2,140.24 4,418.98 4,167.41 4,054.24	294,956 59,122 199,973 256,350 290,010	290 71 129 131 185	85 69 129 163 131	1.35 2.51 2.85 2.65 1.83	1.6 3.6 2.2 1.6 1.4

^{*}Does not include Summer population.

"D"-Continued

in Ontario Municipalities Served by the Commission and for Power Service during the year 1947

VILLAGES AND CERTAIN SUBURBAN AREAS

	Commercial Light service						Power service			
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers	
\$ c. 2,933.02 2,491.33 3,862.90 2,779.05 5,917.28	2 135,089 119,642 156,631 70,025	62 63 70	kw-hr. 240 161 207 83 259	\$ c. 5.20 3.35 5.11 3.31 5.25	2.2 2.1 2.5 4.0 2.0	\$ c. 1,828.93 2,678.84 1,700.48 6,404.34	3 5 5	68.0	243 205 279 275 392	
9,335.73 1,630 44 9,661.75 1,335.29	76,860 487,179 68,317	28 139 46	349 229 292 124 369	5.72 4.85 5.79 2.42 6.56	1.6 2.1 2.0 2.0 1.8	8,499.57 1,824.40 5,605.24 1,254.54 8,476.19	1 23 5	54.2 280.6 65.6	733 108 627 232 701	
1,438.66 1,133.28 2,584.69 6,717.23 8,473.93	50,489 150,819 336,591	20 40 115	200 210 314 244 475	4.28 4.72 5.38 4.87 6.92	2.1 2.2 1.7 2.0 1.5	777.13 248 15 4,560.68 9,262.83 3,680.86	1 8 13	17.3 173.7 440.0	167 111 297 540 812	
7,009.48 6,769.55 4,398.96 1,830.15 1,021.41	346,546 152,520 87.555	89 70 42	540 324 182 174 174	8.00 6.34 5.24 3.63 3.27	1.5 2.0 2.9 2.1 1.9	1,086 . 58 2,332 . 96 3,152 . 67 5,438 . 24 5,461 . 04	10 4 33	161.3 134.6 165.7	407 518 321 192 232	
2,788.01 2,560.78 3,264.98 7,293.31 5,318.03	3 121,423 3 136,338 389,325	70 57 107	190 145 199 303 208	4.77	2.8 2.1 2.4 1.9 2.2	274.89 677.19 2,047.75 9,962.15 3,278.75	9 10 19	53.5 87.4 632.4	245 253 294 559 465	
2,519.30 5,134.33 7,564.69 9,864.70 1,364.23	3 217,526 587,784 458,588	56 79 144	378 324 620 265 182	7.64 7.98	2.5 2.4 1.3 2.2 2.4	3,451.04 51,411.51 8,187.07 4,559.38	13 14	1,931.5 564.6	150 461 851 742 287	
6,938.13 3,962.87 8,000.88 270.33 1,178.48	7 207,144 8 447,188 7,350	62 133 10	285 278 280 61 173	5.33 5.01 2.52	2.2 1.9 1.8 3.7 2.7	3,568.26 5,024.42 325.95 3,540.38	13	295.8	525 311 1,094 60 130	
2,317.43 2,003.23 5,405.73 2,202.52 1,918.13	86,242 369,299 61,476	22 84 5 5 5	327 366 102	5.36 3.67	1.4 2.3 1.5 3.6 1.9	2,330.94 1,654.44 71.35	. 2		104 127 585 187 227	
3,328.28 1,092.36 2,651.0 2,361.22 2,747.2	40,323 1 97,528 2 119,710	3 12 3 35 1 14	232 713	7.59 6.31 14.05	1.9 2.7 2.7 2.0 1.7	2,509.98 437.33 196.41 3,990.56	1	18.5	370 84 164 146 231	

STATEMENT

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group IV-SMALL TOWNS (less than 2,000 population),

	1	Group	IV—SMALL		tic service		opula	tion),
Municipality	System	Popula- tion	Revenue	Consumption	Number of con- sumers	ion	Average monthly bill	Net cost per kw-hr.
St. Jacobs Seaforth Shelburne Sioux Lookout Smithville	S.O. S.O. S.O. N.O.P. S.O.	P.V. 1,782 1,014 1,976 P.V.	7,938.52 20,512.48	1,380,290 496,850 714,306	576 337 613	kw-hr. 275 200 123 97	\$ c. 2.99 2.38 1.96 2.79	1.1 1.2 1.6 2.9
Southampton Springfield Stayner Stirling Stouff ville	S.O. S.O. S.O. S.O. S.O.	*1,613 431 1,090 1,061 1,270	2,820.71 8,449.12 8,737.66	158,496 496,015	121 333 305	109 124 217	1.85 1.94 2.11 2.39 1.93	1.8 1.7 1.1
Streetsville. Sunderland. Sutton. Tara. Tavistock.	S.O. S.O. S.O. S.O.	691 P.V. *993 497 1,072	7,770.35 4,319.92 11,514.39 3,749.24 10,275.43	237,992 680,470 239,460	227 163 502 175 316	122 113 114	2.85 2.21 1.91 1.79 2.71	1.7
Teeswater. Thamesford. Thamesville. Thedford Thornbury.	S.O. S.O. S.O. S.O. S.O.	827 P.V. 794 590 801	5,554.27 5,649.33 4,747.99 4,242.10 6,718.39	320,707 502,540 344,452 203,750 341,800	245 160 273 185 278	262 105 92	1.89 2.94 1.45 1.91 2.01	1.7 1.1 1.4 2.1 2.0
Thorndale Thornton Tottenham Trafalgar Township Tweed	S.O. S.O. S.O. S.O. S.O.	P.V. P.V. 478	2,708.75 1,584.91 4,527.96 33,222.85 10,468.97	149,995 58,210 249,960 1,802,420 613,110	88 71 173 661 366	142 68 120 227 140	2.57 1.86 2.18 4.19 2.38	1.8 2.7 1.8 1.8 1.7
Uxbridge Victoria Harbour Wardsville Warkworth Waterdown	S.O. S.O. S.O. S.O. S.O.	1,490 *882 226 P.V. 1,011	13,988.35 4,677.61 2:126.97 3,272.31 7,810.76	901,560 248,080 98,973 153,037 805,960	478 297 75 162 291	157 70 110 79 231	2.44 1.31 2.40 1.68 2.24	1.6 1.9 2.2 2.1 1.0
Waterford. Watford. Waubaushene. Wellesley. Wellington.	S.O. S.O. S.O. S.O. S.O.	1,394 961 P.V. P.V. *980	9,447.17 10,393.40 4,908.38 3,523.26 8,788.27	761,941 720,100 248,490 226,130 585,732	448 324 260 149 370	142 185 80 126 132	1.76 2.67 1.57 1.97 1.98	1.2 1.4 2.0 1.6 1.5
West Lorne. Westport. Wheatley. Wiarton. Williamsburg.	S.O. S.O. S.O. S.O. S.O.	810 672 811 1,749 P.V.	5,178.75 5,195.39 4,874.03 10,849.14 2,247.53	372,703 242,910 295,370 707,130 219,805	265 174 263 506 96	117 116 94 116 191	1.63 2.49 1.54 1.79 1.95	1.4 2.1 1.7 1.5 1.0
Winchester Windermere Woodbridge Woodville Wyoming	S.O. S.O. S.O. S.O. S.O.	1,000 *118 1,212 385 637	8,873.67 2,449.63 10,976.02 2,901.80 3,257.67	700,408 75,706 1,042,956 139,046 156,792	316 74 345 129 185	185 85 252 90 71	2.34 2.76 2.65 1.87 1.47	1.3 3.2 1.1 2.1 2.1
Zurich	S.O.	P.V.	4,812.72	263,981	168	131	2.39	1.8

^{*}Does not include Summer population.

"D'"—Concluded in Ontario Municipalities Served by the Commission and for Power Service during the year 1947 VILLAGES AND CERTAIN SUBURBAN AREAS

	Commercia! I	ight ser	vice		1	Power			
Revenue	Consumption	Number of con- sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con- sumers	Average monthly horse- power	Total number of con- sumers
S c. 2,923.66 11,503.64 5,577.26 14,816.39 3,942.09	kw-hr. 162,005 606,240 334,445 399,984 194,396	121 82 113	kw-hr. 386 418 340	\$ c. 6.96 7.92	cents 1.8 1.9 1.7 3.7 2.0	\$ c. 4,699.71 18,777.65 4,973.53 2,297.84 9,862.87	9 19 14 3	292.4	186 716 433 729 270
7,355.41 1,133.24 5,270.08 4,913.71 6,421.61	317,179 39,509 244,236 279,976 415,035	26 106 84	270 127 192 278 353	3.63 4.14 4.87	2.3 2.9 2.2 1.8 1.5	10,265.49 1,863.31 3,010.63 2,255.20 3,673.83	5 19 15	210.5 151.3 210.8	754 152 458 404 566
3,664.57 2,178.49 6,353.79 1,901.63 5,951.38	390,690 105,018	43 94 39	294 203 346 224 252	5.63 4.06 5.01	1.9 2.1 1.6 1.8 2.0	10,754.92 1,374.98 2,501.75 1,746.40 9,827.94	3 9 6	103.4 68.7	289 209 605 220 425
3,744.37 2,113.27 4,001.36 3,392.01 3,695.79	122,611 - 274,468 137,358	43 85 8 59	214 238 269 194 178	3.92 4.79	2.3 1.7 1.5 2.5 2.5	1,979.44 2,934.20 2,894.05 2,222.56 4,133.97	5 7 3	130.3 156.7 73.9	314 208 365 247 361
954.12 579.20 2,013.61 4,692.18 6,607.09	26,101 95,824 189,143	14 48 62	141 155 166 254 242	3.50 6.31	2.6 2.2 2.1 2.5 2.6	2,245.26 379.33 1,850.80 2,968.55 6,582.54	2 9 13	10.9 67.1 136.0	87 230 736
6,789.89 1,267.52 1,778.57 1,784.38 2,660.53	70,540 82,220 74,594	34 23 37	298 168	3.11 6.44 4.01	2.4	4,260.44 327.42 45.64 166.10 1,895.01	2 1 1	11.7 3.0 6.4	333 99 200
4,339.41 5,889.60 1,098.50 2,620.66 3,918.93	327,982 66,160 159,920	2 83 0 26 0 52	329 212 256	5.91 3.52 4.20	1.7	5,371.10 5,327.01 1,106.56 1,466.75 5,570.15	$\begin{bmatrix} & & 9 \\ 3 & & 7 \\ 5 & & 12 \end{bmatrix}$	212.4 28.0 77.8	416 289 208
5,142.16 3,844.38 6,328.29 9,748.49 2,381.76	139,880 259,130 520,012	56 0 85 2 120	208 254 361	5.72 6.20 6.77	2.7 2.4 1.9	11,655.61 4,830.35 8,547.43	10	234.0	230 359
6,080.31 990.27 3,437.56 1,175.81 2,050.80	34,763 214,37' 40,79	3 12 7 56 5 27	241 319 126	6.88 5.12 3.63	2.8 1.6 2.9	4,903.26 1,339.84 15,216.52 640.51 2,353.96	$\begin{bmatrix} 1 & 2 \\ 2 & 11 \\ 1 & 2 \end{bmatrix}$	50.4 836.3 41.1	88 412 158
3,848.55	143,35	7 49	244	6.55	2.7				217

STATEMENT "E"

Cost of Power to Municipalities and Rates to Consumers for
Domestic Service—Commercial Light Service—Power Service
in Ontario Urban Municipalities Served by
The Hydro-Electric Power Commission
for the year 1947

In Statement "E" are presented the rate schedules applicable to consumers for domestic service, for commercial light service and for power service in each of the co-operating municipalities receiving service at cost through The Hydro-Electric Power Commission.* The cost per horsepower of the power supplied at wholesale by the Commission to the municipality, an important factor in determining rates to consumers, is also stated.

Cost of Power to Municipalities

The figures in the first column represent the total cost for the year of the power supplied by the Commission to the municipality, divided by the number of horsepower supplied. Details respecting these costs are given in the "Cost of Power" tables relating to the systems, as presented in Section IX, and an explanation of the items making up the cost of power is given in the introduction to that Section.

Rates to Consumers

The Power Commission Act stipulates that "The rates chargeable by any municipal corporation generating or receiving and distributing electrical power or energy shall at all times be subject to the approval and control of the Commission". In accordance with the Act and in pursuance of its fundamental principle of providing service at cost, the Commission requires that accurate cost records be kept in each municipality, and exercises a continuous supervision over the rates charged to consumers.

At the commencement of its operations, the Commission introduced scientifically-designed rate schedules for each of the three main classes into which electrical service is usually divided, namely: residential or domestic service, commercial light service, and power service, and the schedules in use during the past year are presented in the tables of this statement.

^{*}Except townships served as parts of rural power districts, for which consult Section IV. $\dagger R.S.O.$ 1937, Ch. 62, Sec. 89.

Domestic Service: Domestic rates apply to electrical service in residences, for all household purposes, including lighting, cooking and the operation of all domestic appliances.

During the past few years most of the urban municipal utilities have further simplified the domestic rate structure by abolishing the service charge, and making a suitable adjustment in the first consumption rate. Where the service charge is retained at 33 and 66 cents gross per month the charge of 33 cents per month per service is made when the permanently installed appliance load is under 2,000 watts, and the charge of 66 cents per month when 2,000 watts or more.

Commercial Light Service: Electrical energy used in stores, offices, churches, schools, public halls and institutions, hotels, public boarding-houses, and in all other premises for commercial purposes, including sign and display lighting, is billed at commercial lighting rates.

Water-Heater Service: For all consumers using continuous electric water heaters, low flat rates are available consisting of a fixed charge per month dependent on the capacity of the heating element and the cost of power to the municipal utility. Such heaters are so connected that the electrical energy they consume is not metered. In addition, booster water-heating equipment can be used to furnish extra requirements beyond the capacity of the continuous heater; current for the booster heater is measured and charged for at the regular rates.

Power Service: The rate schedules given for power service in Statement "E" are those governing the supply of power at retail by each of the local municipal utilities. The Commission serves direct, certain large power consumers under special contracts, on behalf of the systems of municipalities.

The rates for power service, as given in the tables, are the rates for 24-hour unrestricted power at secondary distribution voltage. For service at primary distribution voltage the rates are usually five per cent lower than those stated. In municipalities where load conditions and other circumstances permit, lower rates are available for "restricted power", discounts additional to those listed in the table being applicable.

The service charge relates to the connected load or to the maximum demand, as measured by a 10-minute average peak, where a demand meter is installed. The prompt payment discount of 10 per cent on the total monthly bill is given for settlement within 10 days.

Under the tabulation of rates for power service there is a column headed "Basis of rate 130 hours' monthly use of demand." This column shows approximately the net annual amount payable for a demand of one horse-power, assuming a monthly use of 130 hours, which includes 30 hours' use each month at the third energy rate. Broadly, the figures in this column serve to indicate approximately the relative cost of power service in the different municipalities listed.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

		1		Domest	ic service		
Municipality c—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to munici- pality on a horse- power basis	Service charge per month*	Number of kw-hrs. per month	Per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
Acton. Agincourt. Ailsa Craig. Alexandria. Alliston. T	\$ c. 23.12 23.76 26.60 28.55 25.70	cents	60 60 60 60 55	cents 2.3 3.0 2.5 3.0 3.5	cents 1.0 1.0 0.9 1.0 1.0	\$ c. 0.83 0.83 0.83 1.11 1.11	10 10 10 10 10 10
Almonte	22.96 34.88 25.31 24.73 27.64		60 60 60 60 60	2.5 3.5 2.5 3.4 4.0	1.0 1.0 0.9 1.0 1.0	0.83 0.83 0.83 0.83 1.39	10 10 10 10 10
Arkona	39.00 21.03 36.18 30.60	33–66	60 60 45 50	4.0 2.8 4.5 4.5	1.0 0.8 1.2 1.5 x1.6	1.11 0.83 1.11 1.11 †1.67	10 10 10 10
Atikokan	22. 13 24.49 26.09 22.61	33–66	60 60 60 60 60 50	3.5 \ 2.6 2.2 2.7 2.4 3.7	0.75 1.0 0.8 1.0 0.9 1.2	0.83 0.83 1.11 0.83 1.66	10 10 10 10 10 10
BarrieT BathBeachvilleBeamsville.	19.78 38.98 23.49 21.40	56	60 60 60 60	2.4 4.8 2.8 2.2 3.5	0.8 1.5 0.9 0.8 x1.6 0.75	0.83 2.22 0.83 0.83 †1.67 †2.25	10 10 10 10 10
Beaverton Beeton Belle River Belleville CBlenheim T	24.26 34.53 27.54 18.86 25.27		60 45 60 55 60	2.8 4.0 3.0 1.8 2.3	1.0 1.2 0.9 0.6 0.8	1.11 1.39 1.11 0.83 0.83	10 10 10 10 10
Bloomfield Blyth Bobcaygeon Bolton Bothwell T	28.58 30.99 38.99 25.55 28.83		60 60 60 60 60	2.5 2.9 4.0 2.9 2.2	0.9 1.0 1.25 1.0 0.75	0.83 1.11 1.11 0.83 0.83	10 10 10 10 10
Bowmanville. T Bradford. Braeside. Brampton. T Brantford. C	22.70 25.82 22.27 21.00 20.92		60 45 50 60 60	2.8 4.2 4.0 2.1 1.8	0.9 1.0 1.3 0.9 0.8	0.83 1.39 0.83 0.83 0.83	10 10 10 10 10

^{*}Where domestic service charge has not been abolished the charge is 33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when 2,000 watts or more. †2 wire service. †3 wire service. x2-wire service next 80 kw-hrs, 3-wire service next 180 kw-hrs.

"Е"

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

	Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	1	Mini- mum gross monthly bill	Prompt pay-ment discount	hours' monthly	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompt pay- ment discount	
cents 5.0 5.0 5.0 5.0 5.0	cents 1.8 2.6 2.0 2.6 3.2	0.5 0.6 0.6 0.8 0.9	\$ c. 0.83 0.83 0.83 1.11 1.11	10 10 10 10 10 10	\$ c. 18.00 20.00 22.00 35.00 27.00	\$ c. 1.00 1.00 1.00 1.00 1.00	cents 1.9 1.6 1.9 3.5 2.3	cents 1.2 1.0 1.3 2.3 1.5	cents 0.33 0.33 0.33 0.33 0.33	\$ c.	25 10 10	10 10 10 10 10 10	
5.0 5.0 5.0 5.0 5.0	2.3 3.0 2.0 2.9 3.5	1.0 0.9 0.5 0.7 1.0	0.83 0.83 0.83 0.83 1.39	10 10 10 10 10	20.00 38.00 20.00 24.00 30.00	1.00 1.00 1.00 1.00 1.00	1.6 4.0 1.6 2.3 2.8	1.0 2.6 1.0 1.5 1.8	0.33 0.33 0.33 0.33 0.33		10 10 10	10 10 10 10 10	
5.0 5.0 5.0 5.0	3.5 2.5 4.0 4.5	0.8 0.6 1.0 1.0	1.11 0.83 1.11 1.11 †1.67	10 10 10 10	40.00 18.00 35.00 40.00	1.00 1.00 1.00 1.00	4.3 1.9 3.5 4.3	2.8 1.2 2.3 2.8	0.33 0.33 0.33 0.33		25	10 10 10 10	
5.0	3.5	1.0	‡2.25	10	30.00	1.00	2.8	1.8	0.33			10	
5.0 5.0 5.0 5.0 5.0	1.6 1.8 2.2 2.0 3.7	0.4 0.4 0.7 0.6 0.8	1.11 0.83 1.11 0.83 1.66	10 10 10 10 10	20.00 19.00 28.00 19.00 20.00	1.00 1.00 1.00 1.00 1.00	1.6 2.0 2.5 2.0 1.6	1.0 1.4 1.6 1.4 1.0	0.33 0.33 0.33 0.33 0.33		10 25 25 10	10 10 10 10 10	
5.0 5.0 5.0 5.0	2.0 5.0 2.4 1.8	0.6 1.0 0.5 0.5	0.83 2.22 0.83 0.83 †1.67	10 10 10 10	18.00 35.00 19.00 18.00	1.00 1.00 1.00 1.00	1.9 3.5 2.0 1.9	1.2 2.3 1.4 1.2	0.33 0.33 0.33 0.33		25 25 25 25	10 10 10 10	
5.0	3.5	1.0	‡2.25	10	30.00	1.00	2.8	1.8	0.33			10	
5.0 5.0 5.0 4.5 5.0	2.0 3.5 2.5 1.5 1.8	0.8 1.0 0.5 0.3 0.5	1.11 1.39 1.11 0.83 0.83	10 10 10 10 10	24.00 30.00 28.00 14.00 22.00	1.00 1.00 1.00 1.00 1.00	2.3 2.8 2.5 1.1 1.9	1.5 1.8 1.6 0.7 1.3	0.33 0.33 0.33 0.33 0.33		10 25 10	10 10 10 10 10	
5.0 5.0 5.0 5.0 5.0	2.3 2.4 5.0 2.5 1.7	0.7 0.8 1.0 0.8 0.3	0.83 1.11 1.11 0.83 0.83	10 10 10 10 10	30.00 30.00 35.00 22.00 22.00	1.00 1.00 1.00 1.00 1.00	2.8 2.8 3.5 1.9 1.9	1.8 1.8 2.3 1.3 1.3	0.33 0.33 0.33 0.33 0.33		10 10	10 10 10 10 10	
5.0 5.0 5.0 5.0 25.0	2.3 3.7 4.0 1.7 1.5	0.6 1.0 1.0 0.5 0.35	0.83 1.39 0.83 0.83 0.83	10 10 10 10 10	20.00 25.00 25.00 16.00 15.00	1.00 1.00 1.00 1.00 1.00	1.6 2.0 2.0 1.5 1.3	1.0 1.3 1.3 0.9 0.8	0.33 0.33 0.33 0.33 0.33		10 25 25 25	10 10 10 10 10	

^{† 2-}wire service. ‡ 3-wire service. z Minimum 500 watts.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

	Annual cost to		1 No.	Domesti	c service		
Municipality	the Commission on the works to serve electrical energy to munici- pality on a horse-	Service	First	rate	All	Minimum	Prompt
c—City t—Town (pop. 2,000 or more)	pality on a horse- power basis	charge per month	Number of kw-hrs. per month	Per kw-hr. per month	additional per kw-hr.	gross monthly bill	payment discount
Brantford Twp Brechin	\$ c. 21.41 29.91 24.68 32.30 22.83	cents	60 45 60 60 60	cents 2.6 5.5 3.0 3.0 3.5	cents 0.9 1.2 0.9 0.9	\$ c. 1.11 1.67 0.83 1.11 0.83	% 10 10 10 10 10
Brockville T Brussels. Burford. Burgessville. Burlington T	20.97 28.84 23.77 29.14 21.72		60 60 60 60	1.8 3.2 2.3 4.0	0.7 1.0 0.8 1.0 Special	0.83 1.11 0.83 1.11	10 10 10 10
Burlington Beach or Hamilton Beach Caledonia	23.65		60 60	3.5 2.0	1.1 0.8 *1.6	0.83 0.83 †1.67	10 10
Callander	31.86	56	40 60 60	3.5 { 2.8 3.2	0.75 1.0 1.0	‡2.25 1.11 1.11	10 10 10
Capreol. T Cardinal. Carleton Place. T Cayuga. Chatham. C	23.39 20.49 28.48 22.01		50 55 55 60 60	3.6 2.5 2.5 3.5 2.8	1.0 1.0 0.9 1.0 0.8	1.39 1.11 0.83 1.39 0.83	10 10 10 10 10
Chatsworth. Chesley. T Chesterville. Chippawa Clifford.	26.11 22.72 23.78 18.38 33.85		50 55 55 60 55	3.0 2.5 2.3 2.0 3.3	1.0 0.8 0.9 0.8 1.1	1.39 1.11 0.83 0.83 1.11	10 10 10 10 10
Clinton. T Cobden. Cobourg. T Colborne. Coldwater.	24.56 33.27 23.16 24.01 23.24	33-66	60 40 60 60 55	2.2 2.8 2.9 3.8 2.5	0.7 1.0 1.0 1.0	0.83 1.11 0.83 0.83 1.11	10 10 10 10 10
Collingwood T Comber	21.98 28.35 24.71		55 60 45	2.3 2.9 4.3	0.9 0.8 1.0 *1.6	0.83 0.83 1.39 †1.67	10 10 10
Townsite	28.61	56	40 60	3.5 { 3.0	0.75 1.0	‡2.25 0.83	10 10
Courtright	35.25 26.68 28.62 24.07 24.84		60 50 60 60 60	3.0 3.1 3.5 3.4 3.2	1.1 1.0 1.0 1.0 1.0	1.11 1.39 0.83 0.83 0.83	10 10 10 10 10

^{* 2-}wire service next 80 kw-hrs, 3-wire service next 180 kw-hrs, † 2-wire service. ‡ 3-wire service.

"E"-Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

C	Commercial Light service							Power	service			
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt fay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompt pay- ment discount
5.0 5.0 5.0 5.0 5.0	cents 2.2 4.8 2.7 2.5 3.0	cents 0.5 0.8 0.6 0.7 0.7	\$ c. 1.11 1.67 0.83 1.11 0.83	10 10 10 10 10	\$ c. 18.00 34.00 20.00 34.00 21.00	\$ c. 1.00 1.00 1.00 1.00 1.00	cents 1.9 3.4 1.6 3.4 1.8	cents 1.2 2.2 1.0 2.2 1.1	cents 0.33 0.33 0.33 0.33 0.33	\$ c.	25 10 10	10 10 10 10 10 10
4.5 5.0 5.0 5.0	1.6 2.7 1.8 3.5	0.3 0.8 0.6 0.8	0.83 1.11 0.83 1.11 Special	10 10 10 10	15.00 30.00 18.00 31.00	1.00 1.00 1.00 1.00	1.3 2.8 1.9 2.9	0.8 1.8 1.2 1.9	0.33 0.33 0.33 0.33	Special	25 25	10 10 10 10
5.0 5.0	3.2 1.6	0.7 0.5	0.83	10 10	27.00 18.00	1.00	2.3	1.5 1.2	0.33 0.33		25	10 10
5.0 5.0 5.0	3.5 2.5 2.8	1.0 0.8 0.9	†1.67 ‡2.25 1.11 1.11	10 10 10	30.00 35.00 26.00	1.00 1.00 1.00	2.8 3.5 2.2	1.8 2.3 1.4	0.33 0.33 0.33			10 10 10
5.0 5.0 5.0 5.0 5.0	3.2 2.0 2.0 3.0 2.2	0.8 0.8 0.7 0.8 0.6	1.39 1.11 0.83 1.39 0.83	10 10 10 10 10	31.00 25.00 18.00 30.00 18.00	1.00 1.00 1.00 1.00 1.00	2.9 2.0 1.9 2.8 1.9	1.9 1.3 1.2 1.8 1.2	0.33 0.33 0.33 0.33 0.33		25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.5 2.0 2.0 1.6 3.5	0.9 0.7 0.9 0.5 1.0	1.39 1.11 0.83 0.83 1.11	10 10 10 10 10	30.00 20.00 22.00 18.00 32.00	1.00 1.00 1.00 1.00 1.00	2.8 1.6 1.9 1.9 3.1	1.8 1.0 1.3 1.2 2.0	0.33 0.33 0.33 0.33 0.33		10 10 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.9 2.5 2.4 3.0 2.5	0.6 1.0 0.8 1.0 1.0	0.83 1.11 0.83 0.83 1.11	10 10 10 10 10	22.00 35.00 20.00 30.00 28.00	1.00 1.00 1.00 1.00 1.00	1.9 3.5 1.6 2.8 2.5	1.3 2.3 1.0 1.8 1.6	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10
5.0 5.0 5.0	1.8 2.5 3.8	0.8 0.6 1.0	0.83 0.83 1.39	10 10 10	18.00 26.00 25.00	1.00 1.00 1.00	1.9 2.2 2.0	1.2 1.4 1.3	0.33 0.33 0.33		25	10 10 10
5.0 5.0	3.5 2.6	1.0	†1.67 ‡2.25 0.83	10 10	30.00 27.00	1.00	2.8 2.3	1.8	0.33 0.33			10 10
5.0 5.0 5.0 5.0 5.0	3.2 2.6 3.0 3.0 2.6	1.0 0.9 0.8 0.8 0.8	1.11 1.39 0.83 0.83 0.83	10 10 10 10 10	40.00 21.00 30.00 30.00 25.00	1.00 1.00 1.00 1.00 1.00	4.3 1.8 2.8 2.8 2.0	2.8 1.1 1.8 1.8 1.3	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10 10

^{† 2-}wire service. ‡ 3-wire service.

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

	Annual cost to			Domesti	c service		
Municipality c—City T—Town (pop. 2,000 or more)	the Commission on the works to serve electrical energy to munici- pality on a horse- power basis	Service charge per month	Number of kw-hrs. per month	Per kw-hr. per month	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
Deseronto T Dorchester Drayton T Dresden T	\$ c. 29.01 25.22 35.51 27.54 27.07	cents	60 60 55 60 60	cents 3.9 2.6 4.0 2.5 3.5	cents 1.0 1.0 1.3 0.8 1.0	\$ c. 0.83 0.83 1.11 0.83 1.11	10 10 10 10 10 10
Dublin Dundalk Dundas T Dunnville T Durham T	33.29 24.97 20.42 21.62 24.66		60 60 60 60 55	3.5 2.7 2.2 1.8 2.5	1.1 1.0 0.8 0.7 1.0	1.11 1.11 0.83 0.83 0.83	10 10 10 10 10
Dutton. East York Twp Elmira Elmvale Elmwood.	26.44 20.50 21.79 24.63 26.31		60 60 60 60 50	2.0 2.3 2.6 2.6 3.5	0.8 1.0 0.8 1.0 0.9	0.83 0.83 0.83 0.83 1.11	10 10 10 10 10
Elora Embro Erieau Erie Beach Erin	25.17 25.49 30.38 37.02		60 60 60 60 40	2.8 3.3 3.7 4.5 5.0	1.0 1.1 1.0 1.2 1.5	1.11 0.83 1.11 1.39 1.39	10 10 10 10 10
Essex T Etobicoke Twp. Exeter. Fergus Finch.	25.11 20.99 24.42 23.07 26.57		60 60 60 60 45	2.3 2.5 2.6 2.6 3.0	0.8 1.0 0.9 0.9 1.2	0.83 0.83 0.83 1.11 1.39	10 10 10 10 10
Flesherton Fonthill Forest Forest Hill Fort William C	25.67 22.02 30.18 20.20 18.51		60 60 60 60 60	2.8 2.8 3.0 2.5 1.7	1.0 1.0 0.9 1.1 0.6	1.11 0.83 0.83 0.83 0.83	10 10 10 10 10
Frankford	21.03		60 60 45 . 60	4.5 2.5 5.5 2.5	1.2 0.7 1.2 0.9	0.83 0.83 1.67 0.83	10 10 10 10
Geraldton Townsite			60	3.7	1.2	1.11	10
Glencoe	33.05 26.21 29.69 29.90		60 60 60 60 60	3.0 2.9 2.7 2.8 3.3	0.9 1.0 0.9 1.0 1.0	1.11 0.83 0.83 1.11 0.83	10 10 10 10 10

"E"-Continued

Domestic Service-Commercial Light Service-Power Service Served by The Hydro-Electric Power Commission

C	ommerc	ial Ligh	nt servi	ce				Power	service			
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt pay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompt pay- ment discount
cents 5.0 5.0 5.0 5.0 5.0	cents 3.5 2.1 3.4 2.0 3.0	cents 0.9 0.8 0.7 0.5 0.8	\$ c. 0.83 0.83 1.11 0.83 1.11	% 10 10 10 10 10	\$ c. 28.00 24.00 30.00 22.00 25.00	\$ c. 1.00 1.00 1.00 1.00 1.00	cents 2.5 2.3 2.8 1.9 2.0	cents 1.6 1.5 1.8 1.3	cents 0.33 0.33 0.33 0.33 0.33	\$ c.	% 10 10	% 10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	3.0 2.3 1.8 1.5 2.1	0.8 0.8 0.5 0.4 0.8	1.11 1.11 0.83 0.83 0.83	10 10 10 10 10	34.00 20.00 16.00 16.00 24.00	1.00 1.00 1.00 1.00 1.00	3.4 1.6 1.5 1.5 2.3	2.2 1.0 0.9 0.9 1.5	0.33 0.33 0.33 0.33 0.33		10 25 25 25 10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.7 1.8 2.3 2.2 3.0	0.3 0.5 0.5 0.8 0.8	0.83 0.83 0.83 0.83 1.11	10 10 10 10 10	18.00 18.00 20.00 26.00 30.00	1.00 1.00 1.00 1.00 1.00	1.9 1.9 1.6 2.2 2.8	1.2 1.2 1.0 1.4 1.8	0.33 0.33 0.33 0.33 0.33		25 25 10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.4 2.7 3.5 4.0 4.0	0.6 0.7 0.9 1.0 1.0	1.11 0.83 1.11 1.39 1.39	10 10 10 10 10	20.00 32.00 38.00 45.00 36.00	1.00 1.00 1.00 1.00 1.00	1.6 3.1 4.0 4.9 3.7	1.0 2.0 2.6 3.3 2.4	0.33 0.33 0.33 0.33 0.33	2.22	10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.8 1.9 2.1 2.2 2.8	0.5 0.5 0.4 0.4 1.0	0.83 0.83 0.83 1.11 1.39	10 10 10 10 10	18.00 18.00 19.00 19.00 35.00	1.00 1.00 1.00 1.00 1.00	1.9 1.9 2.0 2.0 3.5	1.2 1.2 1.4 1.4 2.3	0.33 0.33 0.33 0.33 0.33		25 25 25 25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.3 2.3 2.5 2.0 1.5	0.8 0.6 0.6 0.6 0.3	1.11 0.83 0.83 0.83 0.83	10 10 10 10 10	23.00 24.00 29.00 18.00 15.00	1.00 1.00 1.00 1.00 1.00	2.1 2.3 2.6 1.9 1.3	1.4 1.5 1.7 1.2 0.8	0.33 0.33 0.33 0.33 0.33		10 10 25 25	10 10 10 10 10
5.0 5.0 5.0 5.0	3.5 2.1 4.8 2.0	1.0 0.4 0.8 0.5	0.83 0.83 1.67 0.83 †1.67	10 10 10 10	20.00 16.00 34.00 18.00	1.00 1.00 1.00 1.00	1.6 1.5 3.4 1.9	1.0 0.9 2.2 1.2	0.33 0.33 0.33 0.33		10 25 25	10 10 10 10
5.0	3.5	1.0	‡2.25	10	30.00	1.00	2.8	1.8	0.33			10
5.0 5.0 5.0 5.0 5.0	2.6 2.3 2.3 2.4 2.6	0.8 0.6 0.5 0.8 1.0	1.11 0.83 0.83 1.11 0.83	10 10 10 10 10	31.00 21.00 22.00 22.00 27.00	1.00 1.00 1.00 1.00 1.00	2.9 1.8 1.9 1.9 2.3	1.9 1.1 1.3 1.3 1.5	0.33 0.33 0.33 0.33 0.33		10 10 10	10 10 10 10 10

^{† 2-}wire service. ‡ 3-wire service.

STATEMENT Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

				Domesti	c service		
Municipality c—City r—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to munici- pality on a horse- power basis	Service charge per month	Number of kw-hrs. per month	Per kw-hr. per month	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
Gravenhurst. T Grimsby T Guelph C Hagersville Hamilton C	\$ c. 20.72 22.26 21.08 24.04 19.93	cents	60 60 60 60 60	cents 1.8 2.8 1.8 2.3 2.0	cents 0.7 1.0 0.8 0.9 0.7	\$ c. 0.83 0.83 0.83 0.83 0.83	7% 10 10 10 10 10 10
Hanover. T Harriston T Harrow T Hastings Havelock	20.67 28.42 26.74 25.14 27.27		60 55 60 45 60	2.4 3.0 3.2 4.2 2.8	1.0 1.0 1.0 1.0 1.0	0.83 0.83 0.83 1.11 0.83	10 10 10 10 10
Hensall	28.71 21.03 28.20	56	60 60 60 60	3.2 4.0 2.7 3.2 3.5 {	1.0 1.2 0.8 0.9 *1.6 0.75	0.83 1.67 0.83 0.83 †1.67 ‡2.25	10 10 10 10
Holstein	38.98		60	3.0	1.0	1.11	10
Hudson Townsite Humberstone Huntsville Ingersoll T	21.42 22.97 21.84	56	40 60 60 60	3.5 { 2.2 2.0 2.3	*1.6 0.75 0.8 0.9 0.8	†1.67 ‡2.25 0.83 0.83 0.83	10 10 10 10
Iroquois	20.75 30.46		60 60	2.5 2.8	1.0	0.83 0.83	10 10
Kearns Townsite Kemptville Kincardinet	24.51 25.12	56	40 55 50	$\begin{array}{c} 3.5 \ 3.2 \ 3.1 \end{array}$	*1.6 0.75 1.0 1.0	†1.67 ‡2.25 0.83 1.11	10 10 10
King Kirkland Townsite Kingston C Kingsville Kirkfield Kitchener C	19.34 26.07 38.97 20.56	56	40 50 60 50 60	$3.5 \ 1.8 \ 2.6 \ 5.0 \ 2.0$	*1.6 0.75 0.6 0.9 1.2 0.9	†1.67 ‡2.25 0.83 0.83 1.66 0.83	10 10 10 10 10
Lakefield Lambeth Lanark Lancaster La Salle T	22.40 25.00 33.58 33.77 27.77		55 60 50 60 60	2.8 2.6 3.8 3.0 3.6	1.0 0.8 1.2 1.0 1.1	0.83 0.83 0.83 0.83 1.11	10 10 10 10 10
Leamington T Leaside T Lindsay T Listowel T London C	26.08 23.77 24.99 20.91		60 50 60 60 60	2.0 1.8 2.3 2.3 2.2	0.8 1.0 0.8 0.9 0.75	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10
London Twp. Long Branch Lucan Lucknow Lynden * 2-wire service ne	23.00 21.23 24.63 27.23 24.81 xt 80 kw-hrs,	3-wire se	60 60 60 55 60 rvice next	2.9 2.2 2.9 2.7 3.0 180 kw-h	1.0 0.8 0.9 1.0 1.0	1.11 0.83 0.83 1.39 0.83	10 10 10 10 10

^{† 2-}wire service. ‡ 3-wire service.

"E"—Continued Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

C	ommer	cial Ligi	ht servi	ce				Power	service			
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt pay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompi pay- ment discoun
5.0 5.0 5.0 5.0 5.0 25.0	cents 1.5 2.3 1.6 1.8 1.5	0.4 0.7 0.3 0.6 0.35	\$ c. 0.83 0.83 0.83 0.83 0.83	10 10 10 10 10 10	\$ c. 16.00 23.00 14.00 17.00 14.50	\$ c. 1.00 1.00 1.00 1.00 a1.00	cents 1.5 2.1 1.1 1.7 0.9	cents 0.9 1.4 0.7 1.1 0.56	cents 0.33 0.33 0.33 0.33 0.25	\$ c.	25 10 25 25 25	10 10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.0 2.6 2.6 3.6 2.3	0.7 0.7 0.7 1.0 0.8	0.83 0.83 0.83 1.11 0.83	10 10 10 10 10	20.00 25.00 23.00 37.00 30.00	1.00 1.00 1.00 1.00 1.00	1.6 2.0 2.1 3.8 2.8	1.0 1.3 1.4 2.5 1.8	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10
5.0 5.0 5.0 5.0	2.7 3.5 2.2 2.8	0.9 1.0 0.5 0.7	0.83 1.67 0.83 0.83 †1.67	10 10 10 10	24.00 45.00 18.00 29.00	1.00 1.00 1.00 1.00	2.3 4.9 1.9 2.6	1.5 3.3 1.2 1.7	0.33 0.33 0.33 0.33		10	10 10 10 10
5.0	3.5	1.0	‡2.25	10	30.00	1.00	2.8	1.8	0.33			10
5.0 5.0 5.0 5.0 5.0	2.5 3.5 1.7 1.8 1.8	0.8 1.0 0.5 0.7 0.4	1.11 †1.67 ‡2.25 0.83 0.83 0.83	10 10 10 10 10	35.00 30.00 18.00 18.00 16.00	1.00 1.00 1.00 1.00 1.00	3.5 2.8 1.9 1.9 1.5	1.8 1.2 1.2 0.9	0.33 0.33 0.33 0.33 0.33		25 25 25 25	10 10 10 10 10
5.0 5.0	2.0 2.3	0.8	0.83 0.83 †1.67	10 10	23.00 24.00	1.00	2.1 2.3	1.4	0.33		10 10	10 10
5.0 5.0 5.0	3.5 2.7 2.6	1.0 1.0 0.8	‡2.25 0.83 1.11	10 10 10	30.00 25.00 26.00	1.00 1.00 1.00	2.8 2.0 2.2	1.8 1.3 1.4	0.33 0.33 0.33			10 10 10
5.0 5.0 5.0 5.0 5.0	3.5 1.5 1.9 4.5 1.8	1.0 0.3 0.5 1.0 0.6	†1.67 ‡2.25 0.83 0.83 1.66 0.83	10 10 10 10 10	30.00 15.00 21.00 40.00 18.00	1.00 1.00 1.00 1.00 1.00	2.8 1.3 1.8 4.3 1.9	1.8 0.8 1.1 2.8 1.2	0.33 0.33 0.33 0.33 0.33		25 10 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.4 2.1 3.3 2.5 3.2	0.8 0.5 1.0 1.0 0.9	0.83 0.83 0.83 0.83 1.11	10 10 10 10 10	22.00 24.00 38.00 35.00 25.00	1.00 1.00 1.00 1.00 1.00	1.9 2.3 4.0 3.5 2.0	1.3 1.5 2.6 2.3 1.3	0.33 0.33 0.33 0.33 0.33		10 10	10 10 10 10 10
5.0 z5.0 5.0 5.0 5.0	1.7 1.9 1.9 2.0 1.7	0.4 0.35 0.6 0.5 0.3	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10	18.00 18.50 17.00 19.00 14.00	1.00 a1.00 1.00 1.00 1.00	1.9 1.5 1.7 2.0 1.1	1.2 0,9 1.1 1.4 0.7	0.33 0.25 0.33 0.33 0.33		25 25 25 25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.5 1.8 2.4 2.2 2.5	0.6 0.5 0.5 0.8 0.8	1.11 0.83 0.83 1.39 0.83	10 10 10 10 10 10	21.00 18.00 22.00 30.00 23.00	1.00 1.00 1.00 1.00 1.00	1.8 1.9 1.9 2.8 2.1	1.1 1.2 1.3 1.8 1.4	0.33 0.33 0.33 0.33 0.33		10 25 10 10	10 10 10 10 10

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

	1			Domesti	c service		
Municipality c—City r—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to munici- pality on a horse- power basis	Service charge per month	Number of kw-hrs. per month	Per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
MacTier Madoc Markdale Markham Marmora	\$ c 26.71 23.18 23.61 26.77	cents	50 60 60 60 60	cents 4.7 2.8 2.0 2.8 3.6	cents 1.6 1.0 1.0 1.0	\$ c. 1.66 0.83 0.83 0.83 0.83	% 10 10 10 10 10
Martintown	23.76		50	3.0	1.0	1.11	10
Matachewan Townsite Maxville MeafordT Merlin	27.69 24.77 27.15		50 55 60 60	4.5 3.1 2.6 2.8	1.0 1.0 1.0 0.9	1.11 0.83 0.83 0.83	10 10 10 10
Merritton T Midland T Mildmay Millbrook Milton T	18.90 20.37 36.04 29.65 22.10		60 60 50 60 60	2.2 2.3 2.8 4.6 2.8	0.9 0.8 1.0 1.0 0.9	0.83 0.83 1.39 0.83 0.83	10 10 10 10 10
Milverton T Minico T Mitchell T Moorefield	26.09 20.44 23.64 35.06		60 60 60 60	2.5 2.2 2.8 3.2 {	1.0 0.9 1.0 1.0 *1.6	0.83 0.83 0.83 1.39 †1.67	10 10 10 10
Mooretown Townsite.		56	40	3.5	0.75	‡2.25	10
Morrisburg	21.63 25.81 27.70 22.23 25.64		60 60 60 60 60	3.0 2.4 2.8 2.8 3.0	1.0 0.8 1.0 0.9 1.0	0.83 0.83 0.83 0.83 1.39	10 10 10 10 10
Newburg. Newbury. Newcastle. New Hamburg. Newmarket. T	30.11 22.82 24.72 22.53		60 60 60 60 60	5.0 4.0 3.0 2.7 2.4	1.5 1.0 0.9 0.9 0.8	1.39 1.11 1.11 0.83 0.83	10 10 10 10 10
New Toronto T Niagara Falls C Niagara-on-the-Lake T Nipigon Twp	21.99 16.86 19.81 20.83	56	60 60 60 60	2.2 1.7 2.4 2.8	0.8 0.6 1.0 1.0 *1.6	0.83 0.83 0.83 1.11 †1.67 ‡2.25	10 10 10 10 10
North Bay	21.22 23.56 22.33 30.96	56	60 60 60 50 60	3.5 \\ 2.3 \\ 2.5 \\ 2.5 \\ 2.6 \\ 80 \text{lynchronic}	0.75 0.9 0.1 0.8 1.0 0.9	0.83 0.83 0.83 1.11 1.11	10 10 10 10 10 10

^{* 2-}wire service next 80 kw-hrs, 3-wire service next 180 kw-hrs. † 2-wire service. ‡ 3-wire service.

"E"—Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

C	ommero	cial Ligh	nt servi	ce				Power	service			
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt pay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompt pay- ment discount
5.0 5.0 5.0 5.0 5.0	cents 4.4 2.5 1.8 2.4 3.2	1.0 0.8 0.8 0.6 0.9	\$ c. 1.66 0.83 0.83 0.83 0.83	10 10 10 10 10 10	\$ c. 40.00 33.00 21.00 21.00 32.00	\$ c. 1.00 1.00 1.00 1.00	cents 4.3 3.2 1.8 1.8 3.1	2.8 2.1 1.1 1.1 2.0	cents 0.33 0.33 0.33 0.33 0.33	\$ c.	10 10	70 10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	3.0 3.5 2.8 2.2 2.3	1.0 1.0 1.0 0.8 0.6	1.66 †1.67 ‡2.25 0.83 0.83 0.83	10 10 10 10 10	30.00 30.00 45.00 24.00 27.00	1.00 1.00 1.00 1.00 1.00	2.8 2.8 4.9 2.3 2.3	1.8 1.8 3.3 1.5 1.5	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.6 1.8 2.4 4.2 2.3	0.5 0.7 0.8 1.0 0.5	0.83 0.83 1.39 0.83 0.83	10 10 10 10 10	15.00 17.00 30.00 35.00 21.00	1.00 1.00 1.00 1.00 1.00	1.3 1.7 2.8 3.5 1.8	0.8 1.1 1.8 2.3 1.1	0.33 0.33 0.33 0.33 0.33		25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.2 1.9 2.3 2.8 3.5	0.7 0.5 0.6 0.9	0.83 0.83 0.83 1.39 †1.67 ‡2.25	10 10 10 10 10	19.00 19.00 21.00 35.00	1.00 1.00 1.00 1.00	2.0 2.0 1.8 3.5 2.8	1.4 1.4 1.1 2.3	0.33 0.33 0.33 0.33		25 25 10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.7 1.8 2.3 2.4 2.5	0.8 0.5 0.8 0.7 0.8	0.83 0.83 0.83 0.83 1.39	10 10 10 10 10 10	23.00 20.00 26.00 19.00 30.00	1.00 1.00 1.00 1.00 1.00	2.1 1.6 2.2 2.0 2.8	1.4 1.0 1.4 1.4 1.8	0.33 0.33 0.33 0.33 0.33		25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	4.5 3.5 2.5 2.2 2.2	1.5 0.9 0.8 0.6 0.7	1.39 1.11 1.11 0.83 0.83	10 10 10 10 10	45.00 35.00 25.00 20.00 22.00	1.00 1.00 1.00 1.00 1.00	4.9 3.5 2.0 1.6 1.9	3.3 2.3 1.3 1.0 1.3	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.6 1.5 2.0 2.4 3.5	0.4 0.35 0.5 0.8	0.83 0.83 0.83 1.11 †1.67 ‡2.25	10 10 10 10 10	16.00 14.00 18.00 21.00	1.00 1.00 1.00 1.00	1.5 1.1 1.9 1.8	0.9 0.7 1.2 1.1	0.33 0.33 0.33 0.33		10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.8 2.3 2.1 3.3 2.4	0.8 0.6 0.5 0.8 0.6	0.83 0.83 0.83 1.11 1.11	10 10 10 10 10 10	22.00 18.00 18.00 25.00 27.00	1.00 1.00 1.00 1.00 1.00 1.00	1.9 1.9 1.9 2.0 2.3	1.3 1.2 1.2 1.3 1.5	0.33 0.33 0.33 0.33 0.33 0.33		10 25 25	10 10 10 10 10 10

^{† 2-}wire service. ‡ 3-wire service.

¹³⁻H.E.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

Municipality	Annual cost to			Domesti	c service		
Municipality	the Commission on the works to serve electrical energy to munici-	Service	First	rate	A11	Minimum	Prompt
c—City r—Town (pop. 2,000 or more)	pality on a horse- power basis	charge per month	Number of kw-hrs. per month	Per kw-hr. per month	additional per kw-hr.	gross monthly bill	payment discount
OmemeeOrangevilleT OronoOshawaC	\$ c. 23.56 24.78 25.16 22.12	cents	60 55 60 60 60	cents 3.3 2.8 4.5 3.0 2.0 \	cents 1.0 1.0 1.0 1.0	\$ c. 0.83 1.11 1.11 0.83	10 10 10 10 10
Ottawac	17.85	33–66	\ 60	1.0 \$	0.5	0.83	10
Otterville Owen Sound C Paisley Palmerston Paris T	26.13 21.98 27.14 27.03 21.15		60 60 50 60 60	2.6 2.1 4.0 2.6 2.2	0.9 0.8 1.0 1.0 0.9	0.83 0.83 1.39 1.11 0.83	10 10 10 10 10
ParkhillT PenetanguisheneT PerthT PeterboroughC PetroliaT	29.89 21.80 21.05 19.65 28.16		60 60 55 60 60	3.0 2.4 2.8 2.0 2.7	1.0 0.9 1.0 0.9 0.8	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10
Picton T Plattsville Point Edward Port Arthur C Port Carling	23.63 28.90 28.43 18.46	33–66	60 60 60 50 45	2.0 3.0 3.0 1.7 4.7	0.8 1.0 1.0 0.6 1.5	0.83 0.83 0.83 0.83 1.66	10 10 10 10 10
Port Colborne. T Port Credit. Port Dalhousie. Port Dover. Port Elgin.	21.42 21.68 21.19 25.64 27.90	33–66	60 60 60 60 40	2.5 2.1 2.4 2.2 2.5	0.8 0.9 1.0 0.8 1.2	0.83 0.83 0.83 0.83 1.11	10 10 10 10 10
Port HopeT Port McNicoll Port Perry Port Rowan Port Stanley	22.72 22.88 26.40 31.56 27.43		60 60 50 60 60	2.2 3.3 4.0 3.0 2.6	0.9 1.0 1.2 1.0 0.9	0.83 0.83 1.11 0.83 0.83	10 10 10 10 10
Powassan T Prescott T Preston T Priceville Princeton	21.76 20.83 30.86 30.61	56	40 60 60 60 60	3.5 2.5 2.5 3.5 3.0	*1.6 0.75 1.1 0.8 1.0 1.0	†1.67 ‡2.25 0.83 0.83 1.39 1.39	10 10 10 10 10
Queenston	19.82		60	2.3	0.9	0.83	10
Ramore-Matheson		56	40	3.5	0.75	‡2.25 †1.67	10
Red Lake Townsite Renfrew T Richmond	24.09 32.50	56	40 45 40	3.5 3.5 4.3	0.75 1.0 1.2	‡2.25 0.83 1.67	10 10 10

^{* 2-}wire service next 80 kw-hrs, 3-wire service next 180 kw-hrs, † 2-wire service.

"E"—Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

C	ommero	cial Ligi	ht servi	ce				Power	service			
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt pay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompt pay- ment discount
cents 5.0 5.0 5.0 5.0	cents 2.8 2.0 4.0 2.5	cents 0.8 0.8 0.8 0.7	\$ c. 0.83 1.11 1.11 0.83	10 10 10 10 10	\$ c. 30.00 18.00 35.00 21.00	\$ c. 1.00 1.00 1.00 1.00	2.8 1.9 3.5 1.8	cents 1.8 1.2 2.3 1.1	cents 0.33 0.33 0.33 0.33	\$ c.	25 10 15 &	10 10 10 10 10
5.0	2.1	0.5	0.83	10	18.00	1.00	1.8	1.2	0.15		10	10
5.0 5.0 5.0 5.0 5.0	2.2 1.8 3.5 2.2 1 7	0.5 0.7 0.8 0.8 0.4	0.83 0.83 1.39 1.11 0.83	10 10 10 10 10	22.00 17.00 35.00 21.00 15.00	1.00 1.00 1.00 1.00 1.00	1.9 1.7 3.5 1.8 1.3	1.3 1.1 2.3 1.1 0.8	0.33 0.33 0.33 0.33 0.33		10 25 10 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.5 2.1 2.0 1.8 2.1	0.8 0.7 0.6 0.7 0.5	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10	29.00 20.00 17.00 16.00 23.00	1.00 1.00 1.00 1.00 1.00	2.6 1.6 1.7 1.5 2.1	1.7 1.0 1.1 0.9 1.4	0.33 0.33 0.33 0.33 0.33		10 25 25 25 10	10 10 10 10 10 10
5.0 5.0 5.0 4.5 5.0	1.7 2.5 2.4 1.5 4.5	0.5 0.8 0.6 0.3 0.8	0.83 0.83 0.83 0.83 1.66	10 10 10 10 10	18.00 26.00 24.00 15.00 32.00	1.00 1.00 1.00 1.00 1.00	1.9 2.2 2.3 1.3 3.1	1.2 1.4 1.5 0.8 2.0	0.33 0.33 0.33 0.33 0.33	2.00	25 10 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.2 1.8 1.9 1.7 2.5	0.5 0.5 0.6 0.6 0.8	0.83 0.83 0.83 0.83 1.11	10 10 10 10 10	18.00 19.00 16.00 18.00 26.00	1.00 1.00 1.00 1.00 1.00	1.9 2.0 1.5 1.9 2.2	1.2 1.4 0.9 1.2 1.4	0.33 0.33 0.33 0.33 0.33		25 25 25 25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.9 2.8 3.2 2.5 2.2	0.6 0.8 1.0 0.8 0.5	0.83 0.83 1.11 0.83 0.83	10 10 10 10 10	18.00 30.00 28.00 28.00 24.00	1.00 1.00 1.00 1.00 1.00	1.9 2.8 2.5 2.5 2.3	1.2 1.8 1.6 1.6 1.5	0.33 0.33 0.33 0.33 0.33		25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	3.5 2.2 2.0 3.0 2.7	1.0 1.0 0.5 1.0 0.8	†1.67 ‡2.25 0.83 0.83 1.39 1.39	10 10 10 10 10	30.00 19.00 16.00 30.00 24.00	1.00 1.00 1.00 1.00 1.00	2.8 2.0 1.5 2.8 2.3	1.8 1.4 0.9 1.8 1.5	0.33 0.33 0.33 0.33 0.33		25 25	10 10 10 10 10
5.0	1.8	0.7	0.83	10	22.00	1.00	1.9	1.3	0.33		10	10
5.0	3.5	1.0	†1.67 ‡2.25 †1.67	10	30.00	1.00	2.8	1.8	0.33			10
5.0 5.0 5.0	3.5 2.0 4.0	1.0 0.5 1.0	†2.25 0.83 1.67	10 10 10	30.00 21.00 35.00	1.00 1.00 1.00	2.8 1.8 3.5	1.8 1.1 2.3	0.33 0.33 0.33		10	10 10 10

^{† 2-}wire service. ‡ 3-wire service.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

	Arrayal aget to				c service		
Municipality	Annual cost to the Commission on the works to serve electrical energy to munici-	Service charge	First	rate	All additional	Minimum gross	Prompt
c—City T—Town (pop. 2,000 or more)	pality on a horse- power basis	per month	Number of kw-hrs. per month	Per kw-hr. per month	per kw-hr.	monthly bill	payment discount
Richmond Hill. Ridgetown. T Ripley. Riverside. T Rockwood.	\$ c. 22.27 24.94 34.07 25.06 25.05	cents	60 60 55 60 60	cents 2.2 2.0 4.8 2.8 2.8	cents 0.8 0.8 1.0 0.9 1.0	\$ c. 0.83 0.83 1.67 0.83 0.83	% 10 10 10 10 10
Rodney Rosseau Russell St. Catharines C St. Clair Beach	30.59 39.00 28.32 18.86 28.10		60 60 55 60 60	2.4 4.0 4.6 1.8 3.5	0.8 2.0 1.2 0.8 1.0	0.83 2.22 1.39 0.83 1.11	10 10 10 10 10
St. George. St. Jacobs. St. Marys. St. Thomas. C Sarnia. C	27.26 22.31 24.91 22.23 25.70		60 60 60 60 60	2.5 2.4 3.0 2.4 2.5	0.9 0.9 1.0 0.8 0.8	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10
Scarborough Twp Seaforth Shelburne Simcoe Sioux Lookout T	21.69 23.90 24.98 22.02		60 60 60 60 60	2.3 2.6 2.7 2.0 4.0	0.9 1.0 1.0 0.7 1.5	0.83 0.83 1.11 0.83 2.00	10 10 10 10 10
Smiths Falls. T Smithville. Southampton T Springfield. Stamford Twp.	19.94 23.50 27.34 29.99 16.90		60 60 40 60 60	2.5 3.0 3.2 3.4 2.3	0.8 0.9 1.0 0.9 0.8	0.83 0.83 1.11 0.83 0.83	10 10 10 10 10
Stayner T Stirling Stoney Creek Stouffville Stratford C	23.66 19.49 22.36 24.17 22.19		55 60 60 60 60	3.0 2.3 3.5 2.1 2.6	1.0 0.9 1.1 0.8 0.9	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10
Strathroy. T Streetsville. Sudbury. C Sunderland. Sutton.	22.70 23.47 29.40 29.14		60 60 60 60 60	2.6 2.8 2.4 3.5 2.7	0.8 1.0 1.0 1.0	0.83 0.83 0.83 1.11 1.11	10 10 10 10 10
Swansea. Tara. Tavistock. Tecumseh. T Teeswater.	23.57 27.27 24.27 26.46 27.09		60 55 60 60 60	2.1 2.6 2.5 3.0 3.0	0.9 1.0 0.9 0.9 1.0	0.83 1.11 0.83 0.83 1.11	10 10 10 10 10
Thamesford Thamesville Thedford Thornbury Thorndale	24.98 25.96 37.16 29.73 29.58		60 60 60 60 60	2.7 2.1 3.6 3.5 3.8	0.9 0.8 1.0 1.0	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10

"E"-Continued Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service				Power service								
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	Allad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt pay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. per month	Local discount	Prompo pay- ment discoun
5.0 5.0 5.0 5.0 5.0 5.0	cents 1.8 1.6 4.3 2.3 2.3	cents 0.4 0.4 0.8 0.5 0.7	\$ c. 0.83 0.83 1.67 0.83 0.83	% 10 10 10 10 10	\$ c. 18.00 17.00 30.00 22.00 25.00	\$ c. 1.00 1.00 1.00 1.00 1.00	cents 1.9 1.7 2.8 1.9 2.0	cents 1.2 1.1 1.8 1.3 1.3	cents 0.33 0.33 0.33 0.33 0.33	\$ c.	25 25 10	10 10 10 10 10 10
5.0 5.0 5.0 25.0 5.0	2.1 4.0 4.3 1.5 3.2	0.5 2.0 1.0 ½ 0.9	0.83 2.22 1.39 a0.83 1.11	10 10 10 10 10	24.00 40.00 50.00 14.00 30.00	1.00 1.00 1.00 1.00 1.00	2.3 4.3 5.7 1.1 2.8	1.5 2.8 3.8 0.7 1.8	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.0 2.0 2.5 1.7 1.9	0.6 0.6 0.7 0.3 0.4	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10	22.00 18.00 20.00 15.00 19.00	1.00 1.00 1.00 1.00 1.00	1.9 1.9 1.6 1.3 2.0	1.3 1.2 1.0 0.8 1.4	0.33 0.33 0.33 0.33 0.33		10 25 10 25 25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.8 2.1 2.3 1.6 3.5	0.5 0.7 0.9 0.4 2.0	0.83 0.83 1.11 0.83 b1.00	10 10 10 10 10	19.00 20.00 20.00 17.00 30.00	1.00 1.00 1.00 1.00 1.00	2.0 1.6 1.6 1.7 2.8	1.4 1.0 1.0 1.1 1.8	0.33 0.33 0.33 0.33 0.33		25 10 10 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.0 2.5 2.8 2.9 2.0	0.3 0.7 0.8 0.8 0.5	0.83 0.83 1.11 0.83 0.83	10 10 10 10 10	17.00 25.00 25.00 30.00 15.00	1.00 1.00 1.00 1.00 1.00	1.7 2.0 2.0 2.8 1.3	1.1 1.3 1.3 1.8 0.8	0.33 0.33 0.33 0.33 0.33		25 25 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.3 1.8 3.2 1.8 2.0	0.9 0.8 0.7 0.5 0.4	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10	21.00 17.00 27.00 20.00 18.00	1.00 1.00 1.00 1.00 1.00	1.8 1.7 2.3 1.6 1.9	1.1 1.1 1.5 1.0 1.2	0.33 0.33 0.33 0.33 0.33		10 25 10 25	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.0 2.3 2.4 3.0 2.4	0.5 0.5 0.8 0.8 0.7	0.83 0.83 0.83 1.11 1.11	10 10 10 10 10	19.00 20.00 24.00 33.00 28.00	1.00 1.00 1.00 1.00 1.00	2.0 1.6 2.3 3.2 2.5	1.4 1.0 1.5 2.1 1.6	0.33 0.33 0.33 0.33 0.33		25 10 10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	1.7 2.2 2.0 2.5 2.6	0.5 0.8 0.5 0.5 0.8	0.83 1.11 0.83 0.83 1.11	10 10 10 10 10	18.00 30.00 20.00 23.00 34.00	1.00 1.00 1.00 1.00 1.00	1.9 2.8 1.6 2.1 3.4	1.2 1.8 1.0 1.4 2.2	0.33 0.33 0.33 0.33 0.33		25 10 10	10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.1 1.7 3.2 3.0 3.2	0.6 0.4 0.7 0.8 0.9	0.83 0.83 0.83 0.83 0.83	10 10 10 10 10	21.00 20.00 28.00 20.00 32.00	1.00 1.00 1.00 1.00 1.00	1.8 1.6 2.5 1.6 3.1	1.1 1.0 1.6 1.0 2.0	0.33 0.33 0.33 0.33 0.33		10 10 10	10 10 10 10 10

a \$0.83 or \$0.83 per kw. b Per 100 watts-Min, \$2.00 Max, \$5.00. z Minimum 500 watts.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1947, in Urban Municipalities

	Annual cost to	Domestic service						
Municipality	the Commission on the works to serve electrical energy to munici-	Service	First	rate	Ali	Minimum	Prompt	
c—City t—Town (pop. 2,000 or more)	pality on a horse- power basis	charge per month	Number of kw-hrs. per month	Per kw-hr. per month	additional per kw-hr.	gross monthly bill	payment discount	
Thornton. Thorold. T Tilbury. T Tillsonburg. T Toronto. C	\$ c. 31.38 19.31 24.60 22.49 20.12	cents	60 60 60 60 50	cents 3.8 1.8 2.0 2.2 1.8	cents 1.0 0.7 0.75 0.75 1.0	\$ c. 1.39 0.83 0.83 0.83 0.83	10 10 10 10 10 10	
Toronto Twp Tottenham Trafalgar Twp Trenton Tweed	21.76 36.19 23.66 18.47 30.24	a 28	60 50 60 60 50	2.7 3.5 3.5 1.8 3.8	1.0 1.0 1.5 0.6 1.0	1.11 1.39 *0.83 0.83 0.83	10 10 10 10 10	
Uxbridge T Victoria Harbour Walkerton. T Wallaceburg T Wardsville	27.33 26.99 20.92 23.49 31.21		60 60 50 60 60	3.1 2.4 3.2 2.6 3.6	1.0 0.9 1.1 0.8 0.9	1.11 1.11 1.11 0.83 1.11	10 10 10 10 10	
Warkworth. Waterdown. Waterford. Waterloo. Watford.	29.57 22.95 22.74 20.76 29.37		50 60 60 60 60	3.5 2.2 2.1 1.8 3.0	1.2 0.8 0.8 0.7 1.0	1.11 0.83 0.83 0.83 0.83	10 10 10 10 10	
Waubaushene	22.19 18.76 26.05 23.55 27.44		55 60 60 60 60	3.0 1.7 2.8 2.7 2.4	1.0 0.6 1.0 1.0	1.11 0.83 0.83 0.83 0.83	10 10 10 10 10	
Weston T Westport. Wheatley. Whitby T Wiarton T	20.36 33.83 31.97 21.61 29.53		60 50 60 60 50	2.0 4.0 2.5 2.5 2.8	0.8 1.0 0.8 0.9 0.9	0.83 1.94 0.83 0.83 1.11	10 10 10 10 10	
Williamsburg Winchester Windermere Windsor C Wingham T	22.50 22.74 34.75 22.99 25.69		60 60 60 60 50	2.0 2.3 4.0 2.6 3.2	0.8 1.0 1.5 0.7 1.1	0.83 0.83 2.22 0.83 1.11	10 10 10 10 10	
Woodbridge	22.63 21.07 28.97 30.59 20.06		60 60 50 60 60	2.4 2.3 3.8 3.0 2.0	0.8 0.75 1.0 0.9 0.8	0.83 0.83 1.11 0.83 0.83	10 10 10 10 10	
Zurich* Under 10 kw 83	32.14		60	3.6	1.0	0.83	10	

^{*} Under 10 kw, 83 cents; over 10 kw \$2.22 in former Area No. 1. Under 10 kw, \$1.11; over 10 kw \$2.22 in former Area No. 2.

"E"-Concluded

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service							Power s	service				
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum gross monthly bill	Prompt pay- ment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All ad- ditional per kw-hr.	Mini- mum per h.p. . per month	Local discount	Prompt pay- ment discount
cents 5.0 5.0 5.0 5.0 5.0 †5.0	cents 3.3 1.3 1.6 1.7 1.9	cents 1.0 0.35 0.4 0.4 0.35	\$ c. 1.39 0.83 0.83 0.83 0.83	10 10 10 10 10 10	\$ c. 30.00 14.00 16.00 17.00 18.50	\$ c. 1.00 1.00 1.00 1.00 1.00 \$1.00 bD.C.	cents 2.8 1.1 1.5 1.7 1.5 3.2	cents 1.8 0.7 0.9 1.1 0.9 1.2	cents 0.33 0.33 0.33 0.33 0.25 0.6	\$ c.	% 25 25 25 25	10 10 10 10 10 10
5.0 5.0 5.0 5.0 5.0	2.2 3.0 2.8 1.6 3.3	0.6 1.0 0.7 0.3 1.0	1.11 1.39 0.83 0.83 0.83	10 10 10 10 10	20.00 30.00 26.00 17.00 29.00	1.00 1.00 1.00 1.00 1.00	1.6 2.8 2.2 1.7 2.6	1.0 1.8 1.4 1.1 1.7	0.33 0.33 0.33 0.33 0.33		10	10 10 10 10 10
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5.0	3.1	0.8	0.83	10	30.00	1.00	2.8	1.8	0.33			10

† Minimum 500 watts. ‡ \$1.00 per kw per month. b D.C.—Service charge \$1.50 per kw per month for first 7½ kw plus \$1.05 per kw for all additional demand.

APPENDIX I

ACTS

CHAPTER 78

An Act to amend The Power Commission Act.

Assented to April 3rd, 1947.

Session Prorogued October 30th, 1947.

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

Rev. Stat., c. 62, s. 2, re-enacted. 1. Section 2 of *The Power Commission Act* is repealed and the following substituted therefor:

Constitution of Commission. 2 The Commission shall, for the purposes herein mentioned, continue to be a body corporate and shall consist of not more than nine persons appointed by the Lieutenant-Governor in Council.

Commencement of Act. 2. This Act shall come into force on a day to be named by the Lieutenant-Governor by his Proclamation.

Short title,

3. This Act may be cited as The Power Commission Amendment Act, 1947.

CHAPTER 79

An Act to amend The Power Commission Act.

Assented to October 30th, 1947.

Session Prorogued October 30th, 1947.

I IS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

- 1. Section 58 of The Power Commission Act, as amended by Rev. Stat., c, 62, s, 58, section 7 of The Power Commission Amendment Act, 1943, is amended. further amended by adding at the commencement thereof the words, figures and letter "Except as provided in section 58a", so that the said section shall now read as follows:
 - 58 Except as provided in section 58a, where the Commission Effect of approval has heretofore entered or shall hereafter enter into an of agree that the commission of agree that the commission is a section of a sect agreement for the supplying of electrical power or energy Lieutenantby or to the Commission or for any other work or service in Council. to be done or supplied by or to the Commission, and such agreement has been or shall hereafter be submitted to and approved by the Lieutenant-Governor in Council, such agreement shall thereupon be valid and binding upon the parties thereto and shall not be open to question upon any grounds whatsoever, anything in this Act or in any other Act to the contrary notwithstanding.
- 2. The Power Commission Act is amended by adding thereto Rev. Stat., c. 62, the following section: amended.
 - 58a.—(1) Notwithstanding anything in this Act or in any State of emergency. general or special Act or in any contract heretofore or hereafter entered into by the Commission or by any municipal corporation for which the Commission supplies electrical power, pursuant to section 71, where at any time the Commission is of opinion that a state of emergency exists by reason of damage to or destruction, failure or breakdown of any of its works, wastage of power, power demand in excess of its power resources or other matters restricting its ability to deliver power, and the Commission so declares, the Commission may, during the state of emergency,-
 - (a) allocate and distribute its available power amongst the customers under such contracts and interrupt or decrease delivery of power under any contract during the continuance of the emergency; and

(b) with the approval of the Lieutenant-Governor in Council, regulate, restrict, prohibit and control the generation, transformation, transmission, distribution, supply and use of electrical power supplied by it,

in order to effect what is in its opinion the most economical, efficient and equitable use and distribution of such electrical power.

No breach of contract.

(2) Nothing done under subsection 1 shall be deemed a breach of contract by the Commission or any municipal corporation or entitle any person to rescind any contract or release any guarantor from the performance of his obligations.

Rev. Stat., c. 62, s. 97, re-enacted.

3. Section 97 of *The Power Commission Act* is repealed and the following substituted therefor:

Orders of Commission, penalty for disobeying. 97 A municipal corporation or municipal commission and any company or individual neglecting or refusing to obey and carry out any order, regulation, prohibition or direction of the Commission or of a member thereof made under section 86, or any order, regulation, prohibition or direction of the Commission made under sections 58a, 87, 89, 90, 92, 93, 94 and 96, in addition to any other liability, shall forfeit to His Majesty for the use of Ontario, the sum of \$100 for every day during which such neglect or refusal shall continue.

Commencement of Act. 4. This Act shall come into force on the day upon which it receives the Royal Assent.

Short title.

5. This Act may be cited as The Power Commission Amendment Act, 1947 (No. 2).

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