

federal register

WEDNESDAY, MARCH 19, 1975

WASHINGTON, D.C.

Volume 40 ■ Number 54

PART II



FEDERAL POWER COMMISSION

■

CURRENT AIR POLLUTION STANDARDS

**Proposed Electric Utility Questionnaire
on Plans and Costs**

FEDERAL POWER COMMISSION

[18 CFR Ch. I]

[Docket No. RM75-18]

PLANS AND COSTS FOR MEETING CURRENT AIR POLLUTION STANDARDS

Proposed Electric Utility Questionnaire

FEBRUARY 21, 1975.

Take notice that, pursuant to 5 U.S.C. 553 and sections 202, 301, 304(a), 309 and 311 of the Federal Power Act, the Federal Power Commission proposes to enact FPC Form No. 67A, a questionnaire to be filed annually by appropriate utilities in order to create a comprehensive source of information and body of data on the existence, operation and cost of pollution control equipment for the removal of particulate matter and sulfur oxides at utility plants, and on the probable cost of alternative methods for meeting National Ambient Air Quality Standards.

Declining supplies of natural gas available for electric utility boiler use, electric utility industry inability to develop nuclear power plant capacity in accordance with previously published schedules, and our national need to decrease our dependence upon foreign oil imports have led to increased industry reliance upon coal as a fuel source to meet de-

mands. Inadequate supplies of low-sulfur coal have resulted in increased electric utility industry consumption and utilization of coal with higher sulfur content, necessitating the implementation of particular matter and sulfur oxide emission control and removal plans and hardware by electric utilities in order to comply with National Ambient Air Quality Standards and State Implementation Plans on a timely basis.

Review of data responses gathered from various diverse sources suggests that the existing information at hand on the existence, operation and cost of such equipment and planning is fragmentary, incomprehensive and incomplete, thereby underscoring the need for development of a comprehensive source of information and body of data to examine future utility emission control plans and costs. In addition to the Commission, the Environmental Protection Agency, the Federal Energy Administration, and other Federal, State and local government agencies will have full access to information submitted in response to FPC Form 67 A, encompassing all steam-electric plans of at least 25 megawatts capacity which burn coal and oil, and are presently in operation or will commence operation before January 1, 1981. Completed forms are to be submit-

ted in sextuplet to the Commission before May 1, 1975.

Any interested person may submit to the Federal Power Commission, Washington, D.C. 20426, not later than April 1, 1975, data, views, comments or suggestions in writing concerning all or part of the rulemaking proposed herein. Written submittals will be placed in the Commission's public files and will be available for public inspection at the Commission's Office of Public Information, 825 North Capitol Street NE., Room 1000, Washington, D.C. 20426, during regular business hours. The Commission will consider all such written submittals before acting on the matters herein proposed. An original and 14 conformed copies should be filed with the Secretary of the Commission. Submittals to the Commission should indicate the name, title, mailing address and telephone number of the person to whom communications concerning the proposal should be addressed, and whether the person filing them requests a conference with the staff of the Federal Power Commission to discuss the proposed rulemaking. The staff, in its discretion, may grant or deny requests for conference.

By the Commission.

KENNETH F. PLUMB,
Secretary.

Approved by GAO
No.
Expires

SYSTEM NAME _____ PLANT NAME _____ COMPANY/PLANT CODE _____
(Use same Company/Plant Code used for filing FPC Forms 67 and 423)

STEAM-ELECTRIC AIR QUALITY CONTROL DATA
FOR MEETING CURRENT STANDARDS



REPORT TO THE FEDERAL POWER COMMISSION
ON OR BEFORE MAY 1, 1975

Person to whom any communication concerning this report should be addressed.	
NAME AND TITLE	TELEPHONE NUMBER & AREA CODE
ADDRESS	

FPC Form 67A
(1-75)

PROPOSED RULES

TABLE OF CONTENTS

	<i>Page</i>
General Instructions.....	1
Schedule 1—Boiler Data for Existing Fossil-Fueled Boilers.....	2
Schedule 2—Boiler Data for New Fossil-Fueled Boilers.....	3
Schedule 3—SO ₂ Emission Standards Applicable at Plant.....	4
Section A—Data for Existing Coal-Fired Boilers.....	4
Section B—Data for Existing Oil-Fired Boilers.....	5
Section C—Data for New Boilers.....	6
Schedule 4—Stack Gas Scrubbers to Remove Sulfur Oxides.....	7
Section A—Scrubbers Operated Prior to April 1, 1975.....	7
Section B—Scrubber Retrofit at Existing Capacity.....	8
Section C—Scrubber Installation at New Generating Capacity (Not Retrofit).....	9
Schedule 5—Stack Gas Equipment for Particulate Control (Existing Capacity).....	10
Schedule 6—Present and Planned Monitoring System, Installation.....	11
Section A—Data on Installations for Monitoring Stack Emissions—Particulates.....	11
Section B—Data on Installations for Monitoring Stack Emissions—Oxides of Sulfur.....	11
Section C—Planned Installation of Equipment for Monitoring Stack Emissions.....	11
Section D—Data on Installations for Monitoring Ambient Air Quality—Particulates and SO ₂	11
Schedule 7—Ambient Air Quality Data in Vicinity of Plant.....	12
Schedule 8—Plant Data—Future Fuel Requirements.....	13
Scrubber Description.....	14
Footnotes.....	15

COMPANY/PLANT CODE
 STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

I N S T R U C T I O N S

- (1) Complete all applicable sections
- (2) An original and five conformed copies of this report form properly filled out and attested to shall be filed with the Federal Power Commission on or before May 1 of each year for each plant presently operated by an electric utility and for each plant which will commence operation before January 1, 1981 with a coal-fired or oil-fired steam-electric generating capacity of 25 megawatts or greater.
- (3) The original and five conformed copies of this report should be sent to Secretary, Federal Power Commission, Washington, D. C. 20426. Retain an additional copy of the completed form for your files.
- (4) All entries shall be legible and the form should be suitable for reproduction.
- (5) Use footnotes to give more complete information, where necessary.
- (6) If more than one sheet is required for any page, label the sheets Sheet 1, Sheet 2, Sheet 3, etc. respectively.
- (7) Estimated or calculated data should be reported when actual data are not available, provided that all such data are noted. Estimates should be identified by the letters "Est" following the entry; calculations should be identified by the letters "Cal". Estimates and calculated numbers should be based on actual operating conditions during the year. If other conditions are assumed for any estimates or calculations, they should be specified in a footnote.
- (8) Inconsistencies within this form and with other FPC forms should be explained.
- (9) Insert the word "none" where it is a true and complete answer to any inquiry. Insert the words "not applicable" in those sections or parts of sections which do not apply.
- (10) All accounting words and phrases are to be interpreted in accordance with the Uniform System of Accounts for Public Utilities and Licensees prescribed by the Federal Power Commission. To the extent possible, costs and expenses should be reported in accordance with the above-mentioned Uniform System of Accounts.
- (11) No deviation from these instructions should be undertaken without the approval of the Federal Power Commission.

STEAM-ELECTRIC PLANT QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY NAME		PLANT NAME		COMPANY/PLANT CODE (As reported on FPC 67)				
CURRENT PLANT CAPACITY - Mw		RESPONDING COMPANY OFFICIAL'S NAME				AREA CODE & TELE. NO.		
SCHEDULE 1 - BOILER DATA FOR EXISTING FOSSIL-FUELED BOILERS								
LINE NO.	REPORT FOR EACH EXISTING BOILER AT THIS PLANT; USE SECOND SHEET IF NEEDED.	BOILER (a)	BOILER (b)	BOILER (c)	BOILER (d)	BOILER (e)	BOILER (f)	FOOTNOTE ON PAGE (g)
1	Boiler number *							
2	Served by stack number *							
3	Associated turbo-generating capacity-Mw							
4	Year boiler placed in service							
5	Planned retirement date, year							
6	Boiler manufacturer (Use codes listed below)** DESIGN FUEL CONSUMPTION AT 100% RATING:							
7	Coal - tons/hour							
8	Oil - barrels/hour							
9	Gas - 1000 cubic feet/hour							
10	Primary fuel in use on April 1, 1975 (Code "C"=coal, "O"=oil, or "G"=gas)							
11	Wet (w) or dry (D) bottom							
12	Type of firing (Code as listed below)***							
13	Total hours boiler operated during the year 1974							
14	Average boiler capacity factor during the year 1974, percent							

* As reported on FPC Form 67.

** Boiler manufacturers
 B & W = Babcock & Wilcox Co.
 CE = Combustion Engineering, Inc.
 ERIE = Erie City Iron Works
 FW = Foster Wheeler Corp.
 RILEY = Riley Stoker Corp.
 VOGT = Henry Vogt Machina Corp. Inc.
 OTHE = Other (Specify in footnote)

*** Type of firings (Where applicable use more than one code)

PCFR = Pulverized coals front firing
 PCOP = Pulverized coals opposed firing
 PCTA = Pulverized coals tangential firing
 CYCL = Cyclone
 SPRE = Spreader stoker
 OSTO = Other stoker
 FLUT = Fluidized bed

RFRO = Residual oils front firing
 ROPP = Residual oils opposed firing
 RTAN = Residual oils tangential firing
 GFRO = Gas front firing
 GOPP = Gas opposed firing
 GTAN = Gas tangential firing
 OTHE = Other (Specify in footnote)

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE:

SCHEDULE 2 - BOILER DATA FOR NEW FOSSIL-FUELED BOILERS

REPORT FOR ALL NEW BOILERS EXPECTED TO COMMENCE OPERATION BETWEEN APRIL 1, 1975 AND DECEMBER 31, 1980. USE SECOND SHEET IF NEEDED	BOILER (a)	BOILER (b)	BOILER (c)	BOILER (d)	BOILER (e)	BOILER (f)	FOOTNOTE ON PAGE (g)
1 Boiler number							
2 To be served by stack number *							
3 Planned associated turbo-gen. capacity - Mw							
4 Year boiler to be placed in service							
DESIGN FUEL CONSUMPTION AT 100% RATINGS							
5 Coal - tone/hour							
6 Oil - barrels/hour							
7 Gas - 1000 cubic feet/hour							
8 Other (Specify in footnote) Primary fuel to be used (Code #C=coal, #O=oil, or #G=gas)							
9							
10 Wet (W) or Dry (D) bottom							
11 Type of firing **							
12 Boiler manufacturer **							

* If new stack use a number not previously reported, otherwise enter same appropriate stack number reported in Schedule 1.

** Use same codes listed under Schedule 1.

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

SCHEDULE 3 - SOx EMISSION STANDARDS APPLICABLE AT PLANT (Use more than one sheet if needed)
SECTION A - DATA FOR EXISTING COAL-FIRED BOILERS

COMPANY/PLANT CODE

LINE NO.	Federal				State		Local	
1	Cite statute which governs coal sulfur standard at this plant:							
2	Check (x) the governmental body responsible for the statutes: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local							
3	Check (x) one: The governing statute limits <input type="checkbox"/> sulfur content of the coal, percent by weight <input type="checkbox"/> weight of sulfur per unit of heat content in the coal, Lbs. \$ per million Btu <input type="checkbox"/> weight content of sulfur oxides per unit of heat input, Lbs. SOx per million Btu							
4	Give the maximum sulfur content permitted in fuel by the statute cited on line 1 above for each year; use the unit checked on line 3 above: (a) 1975 (b) 1976 (c) 1977 (d) 1978 (e) 1979 (f) 1980							
For the years noted in lines 5 through 10, enter the appropriate code as listed below for each existing boiler. Meet - If the permitted sulfur content entered on line 4 will be met with the quality of coal you are currently burning. If the permitted content will NOT be met with the coal you are currently burning, indicate the approved strategy to be used to meet the statutory requirements; use the following codes: SGGW - Wet stack gas scrubbing (Specify in footnote) SGSD - Dry stack gas scrubbing (Specify in footnote) SLSC - Switch to lower sulfur coal SLSO - Switch to low sulfur oil WASH - Coal washing BLND - Coal blending REFI - Retire unit VARI - Variance already obtained INCS - Intermittent control strategy OTHF - Other (Specify in footnote)								
YEAR	BOILER NO. (a)	BOILER NO. (b)	BOILER NO. (c)	BOILER NO. (d)	BOILER NO. (e)	BOILER NO. (f)	FOOTNOTE ON PAGE (a)	
5	1975							
6	1976							
7	1977							
8	1978							
9	1979							
10	1980							

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

SCHEDULE 3 - SOX EMISSION STANDARDS APPLICABLE AT PLANT (Use more than one sheet if needed)
SECTION B - DATA FOR EXISTING OIL-FIRED BOILERS

1	Cite statute which governs oil sulfur standard at this plant	Federal	State	Local
2	Check (x) the governmental body responsible for the statutes Check (x) ones: The governing statute limits <input type="checkbox"/> sulfur content of the oil, percent by weight <input type="checkbox"/> weight of sulfur per unit of heat content in the oil, Lbs. 8 per million Btu <input type="checkbox"/> weight content of sulfur oxides per unit of heat input, Lbs. 50x per million Btu			
3	Give the maximum sulfur content permitted in fuel by the statute cited on line 1 above for each year; use the unit checked on line 3 above (a) 1975 (b) 1976 (c) 1977 (d) 1978 (e) 1979 (f) 1980			
4	For the years noted in lines 5 through 10, enter the appropriate code as listed below for each existing boiler. Meet - If the permitted sulfur content entered on line 4 will be met with the quality of oil you are currently burning. If the permitted content will NOT be met with the oil you are currently burning, indicate the approved strategy to be used to meet the statutory requirements; use the following codes: SGSW - Wet stack gas scrubbing (Sp. if in footnote) SGSD - Dry stack gas scrubbing (Specify in footnote) SLSO - Switch to low sulfur oil RETI - Retire unit			

YEAR	BOILER NO. (a)	Boiler No. (b)	Boiler No. (c)	Boiler No. (d)	Boiler No. (e)	Boiler No. (f)	FOOTNOTE ON PAGE (g)
5	1975						
6	1976						
7	1977						
8	1978						
9	1979						
10	1980						

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

SCHEDULE 3 - SO_x EMISSION STANDARDS APPLICABLE AT PLANT (Use more than one sheet if needed)
SECTION C - DATA FOR NEW BOILERS

ITEM	ITEM (a)	BOILER (b)	BOILER (c)	BOILER (d)	BOILER (e)	BOILER (f)	FOOTNOTE ON PAGE (g)
1	Boiler number						
2	Is boiler subject to the new source performance standard?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	If the answer to line 2 is no, check the governmental body code which will govern sulfur standard for the boiler. Check (X) one. (F = Federal, S = State, L = Local)	<input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> L	<input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> L	<input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> L	<input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> L	<input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/> L	
4	Will the governing statute limit: <input type="checkbox"/> Sulfur content of fuel, percent by weight <input type="checkbox"/> Weight of sulfur per unit of heat content, Lbs. S/million Btu <input type="checkbox"/> Wt. content of sulfur dioxide per unit of heat input, Lbs. SO _x /million Btu						
5	Enter the units which apply to the standard checked in line 4:						
6	Report the sulfur standard which will affect future boilers in units checked in line 4 above: (a) 1975 (b) 1976 (c) 1977 (d) 1978 (e) 1979 (f) 1980						
7	For the years noted in lines 7 through 12, enter the appropriate code as listed below for each new boiler. MEET - If the permitted sulfur content entered on line 6 will be met with the quality of fuel to be burned. If the permitted content will NOT be met with the fuel to be burned, indicate the approved strategy to be used to meet statutory requirements; use the following codes: SCSW - Wet stack gas scrubbing (Specify in footnote) SCSO - Dry stack gas scrubbing (Specify in footnote) SLSO - Switch to lower sulfur coal SLSO - Switch to low sulfur oil WASH - Coal washing BLND - Coal blending RETI - Retire unit VARI - Variance already obtained INCS - Intermittent control strategy OTHE - Other (Specify in footnote)						
8	1975						
9	1976						
10	1977						
11	1978						
12	1979						
	1980						

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

ITEM NO.	ITEM (a)	SECTION A - SCRUBBERS WHICH WERE OPERATED ANY TIME PRIOR TO APRIL 1, 1975 (Use more than one sheet if needed)					FOOTNOTE ON PAGE (g)
		STACK (b)	STACK (c)	STACK (d)	STACK (e)	STACK (f)	
1	Stack no. (Constant with no. entered on page 2)						
2	Gas flow through stack at 100 percent load, standard cubic feet per minute						
3	Average gas flow through scrubber, standard cubic feet per minute						
4	Percent of gas flow diverted to the scrubber						
5	Type of scrubber (Describe on page 14)						
6	Scrubber manufacturer						
7	Month and Year placed in operation (numeric)						
8	Design scrubber efficiency, percent of sulfur oxide removal	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Is particulate matter removed before stack gas enters scrubber?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Describe scrubber operation and performance on page 14; include in your description information on: Number of hours scrubber operated Was test discontinued by design or because of equipment failure Longest number of hours scrubber operated continuously	Time required to restore operation and as a ratio of useful operation Describe nature of problems, if any; etc., etc.					
11	On the basis of your experience, is there potential for this scrubber to become commercial?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	19
12	Estimate year when scrubber may be ready for full scale commercial installation	19	19	19	19	19	
13	If the use of scrubbers is your strategy for meeting sulfur standards, is this the scrubber you will use?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Have you initiated discussions with scrubber manufacturer for the installation of full scale commercial scrubbers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	If the answer to question 14 is yes, give the year when the scrubber will be in operation	19	19	19	19	19	

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

SCHEDULE 4 - STACK GAS SCRUBBERS TO REMOVE SULFUR OXIDES (Continued)
SECTION B - SCRUBBER RETROFIT AT EXISTING CAPACITY (Use more than one sheet if needed)

ITEM	STACK	STACK	STACK	STACK	STACK	STACK	FOOTNOTE ON PAGE
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(a)
1	Stack number (Consistent with no. on page 2)						
Based on information available to you either through personal experience or through discussions with scrubber manufacturers, indicate the following:							
2	Type of scrubber considered (Explain in footnote)						
ESTIMATED UNIT COST AT TIME OF INSTALLATION							
3	Basic scrubber unit, \$ per Kilowatt*						
4	Cost of installation, \$ per Kilowatt						
5	Cost of space, \$ per Kilowatt						
6	Cost of sludge treatment plant, if any, \$ per Kilowatt (Also answer questions 10 and 11)						
7	Cost of capacity lost in the operation of scrubber, sludge plant, etc. \$ per Kilowatt (Answer also questions 12 and 13)						
8	Other capital costs, \$ per Kilowatt (Specify in footnote)						
9	Total of lines 3 through 8, \$ per Kilowatt						
10	Estimate tons of sludge produced per 1,000 tons of coal burned***						
11	Estimate tons of sludge produced per 1,000 Bbls of oil burned***						
12	Estimate percent capacity loss						
13	Estimate percent increase in fuel required for generation in order to operate scrubber and other related facilities****						
Estimate scrubber and sludge disposal operating costs and maintenance costs (Other than capital charge).							
OPERATING COSTS							
14	Labor, mills per Kilowatt-hour						
15	Energy, mills per Kilowatt-hour						
MAINTENANCE COSTS							
16	Maintenance, mills per Kilowatt-hour						
17	Other (Explain in footnote), mills per Kilowatt-hour						
18	Total lines 14 through 17, mills per Kilowatt-hour						
Estimate cost of sludge containment to avoid water pollution							
19	Capital costs, \$ per Kilowatt						
20	O & M costs, mills per Kilowatt-hour						

* Indicate in a footnote if ITEM 4 is included with ITEM 3.
** Try to answer ITEM 9 even if you are missing component costs.
*** Report in the appropriate line depending on principal boiler fuel.
**** Include fuel for flue gas reheat.

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

LINE NO.	ITEM (a)	COST (b)	FOOTNOTES ON PAGE (c)
<p>SCHEDULE 4 - STACK GAS SCRUBBERS TO REMOVE SULFUR OXIDES (Continued)</p> <p>SECTION C - SCRUBBER INSTALLATION AT NEW GENERATING CAPACITY (Not retrofit)</p> <p>Based on personal experience, engineering studies, or discussions with scrubber manufacturers, estimate and report the following for new capacity, in terms of annualized costs (consider a ten year period 1980 to 1990)</p>			
1	Cost of scrubber and installation, \$ per Kilowatt		
2	Cost of space for scrubber, sludge treatment plant and eludge pond, \$ per Kilowatt		
3	Cost of generating capacity needed to support scrubber and eludge disposal, \$ per Kilowatt		
4	Other capital costs (Describe in footnote), \$ per Kilowatt		
5	Total capital costs, items on lines 1 through 4, \$ per Kilowatt *		
6	Operating and maintenance costs, mills per Kilowatt-hours		
7	Labor		
8	Energy		
9	Maintenance		
9	Other (Explain)		
10	Total		

* Report line 5 even if you do not have the details for lines 1 through 4.

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

SCHEDULE 5 - STACK GAS EQUIPMENT FOR PARTICULATE CONTROL (Existing Capacity)
TO BE ANSWERED BY COAL-FIRED PLANTS AND BY OIL-FIRED PLANTS WHICH MAY BE REQUIRED TO CONVERT TO COAL.
(Use additional sheets if needed)

COMPANY/PLANT CODE

ITEM (a)	STACK (b)	STACK (c)	STACK (d)	STACK (e)	STACK (f)	FOOTNOTE ON PAGE (g)
1 Stack number (consistent with number on page 2)						
2 Type of precipitator now on line (Use code) ¹						
3 Manufacturer (Use code) ²						
4 Year installed						
5 Design collection efficiency, %						
6 Actual operating efficiency, %						
7 Cite statute which governs particulate standards			Federal	State	Local	
8 Check (x) the governmental body responsible for statute cited on line 7 above						
9 State units in which governing standard is expressed						
10 Report particulate standard which applies to this plant in the units shown on line 9 above for the years listed below: (a) 1975 (b) 1976 (c) 1977 (d) 1978 (e) 1979 (f) 1980						
For each stack and each year listed in lines 11 through 16 indicate the proper code as listed below:						
11 1975						
12 1976						
13 1977						
14 1978						
15 1979						
16 1980						
INDICATE THE CAPITAL REQUIREMENTS AND O & M COSTS ASSOCIATED WITH MEETING PARTICULATE STANDARDS						
Capital requirements						
17 Equipment and installation, \$ per Kilowatt						
18 Cost of space, \$ per Kilowatt						
19 Other (Specify), \$ per Kilowatt						
20 Total lines 17 through 19, \$ per Kilowatt O & M Costs (incremental only)						
21 Labor, mille per kilowatt-hour						
22 Energy, mille per Kilowatt-hour						
23 Materials, mille per Kilowatt-hour						
24 Other (Specify), mille per Kilowatt-hour						
25 Total lines 21 through 24, mille per Kilowatt-hour						

¹ M = Mechanical
² E = Electrostatic
 C = Combination
 S = Scrubber

¹ M = American Air Filter Co., Inc.
² E = American Standard, Inc.
 C = Baker Pollution Control Corp.
 S = Ball Engineering Co., Inc.
 E = The Electrostatic Precipitator Co., Inc.
 M = Filter Manufacturing Co., Inc.
 C = Fuller Co., Inc.
 S = Kirk & Blum Manufacturing Co.
 E = Koppers Co., Inc.
 M = Precipitator Pollution Control, Inc.

SEE MET - If the governing standard shown on line 10 will be met with existing equipment, indicate approved strategy to be used to meet governing standards. See MET - If collection only used - Not scrubber with simultaneous removal of the SO₂ and electrostatic precipitator to meeting mechanical grade. Upgrade existing electrostatic precipitator. MET - No change. Upgrade existing electrostatic precipitator. MET - Other (Specify in comments)

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

SCHEDULE 6 - PRESENT AND PLANNED MONITORING SYSTEM INSTALLATIONS

SECTION A - Data on Installations for Monitoring Stack Emissions - PARTICULATES

LINE NO.	ITEM (a)	STACK (b)		STACK (c)		STACK (d)		STACK (e)		STACK (f)	
		YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1	Stack Number										
2	Is the stack equipped with particulate emission monitors?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
3	Is equipment approved by EPA?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
4	Are particulate emissions monitored continuously?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
5	If emissions are monitored intermittently, indicate frequency:	EVERY	HRS.	EVERY	HRS.	EVERY	HRS.	EVERY	HRS.	EVERY	HRS.
6	Total installation cost of particulate monitoring systems (in thousands of dollars)	§	§	§	§	§	§	§	§	§	§
7	Annual operating and maintenance costs of system (in thousands of dollars)	§	§	§	§	§	§	§	§	§	§

SECTION B - Data on Installations for Monitoring Stack Emissions - OXIDES OF SULFUR

1	Is the stack equipped with sulfur oxide emission monitors?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
2	Is the equipment approved by EPA?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
3	Are sulfur oxide emissions monitored continuously?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
4	If emissions are monitored intermittently, indicate frequency:	EVERY	HRS.	EVERY	HRS.	EVERY	HRS.	EVERY	HRS.	EVERY	HRS.
5	Total installation cost of sulfur oxide monitoring system (in thousands of dollars)	§	§	§	§	§	§	§	§	§	§
6	Annual operating and maintenance costs of system (in thousands of dollars)	§	§	§	§	§	§	§	§	§	§

SECTION C - Planned Installation of Equipment for Monitoring Stack Emissions

1	If the answer to line 1, SECTION A, is no, are you planning to install stack equipment for monitoring particulate emissions?	YES	NO	YES	NO	19
2	If yes, give the year when the monitoring system will be in place:	YES	NO	YES	NO	
3	If the answer to line 1, SECTION B is no, are you planning to install stack equipment for monitoring sulfur oxide emissions?	YES	NO	YES	NO	19
4	If yes, give the year when the monitoring system will be in place:	YES	NO	YES	NO	

SECTION D - Data on Installations for Monitoring Ambient Air Quality - PARTICULATES and SOx

1	Is there presently a system at the plant for monitoring ambient air quality for particulates in vicinity of plant?	YES	NO	YES	NO
2	Is there presently a system at the plant for monitoring ambient air quality for sulfur oxides in vicinity of plant?	YES	NO	YES	NO
3	Is equipment approved by the EPA?	YES	NO	YES	NO
4	Number of monitoring stations in vicinity of plant:	NUMBER:	YES	NO	
5	Is ambient air quality monitored continuously?	EVERY	YES	NO	
6	If ambient air quality is monitored intermittently, indicate frequency:	§	EVERY	HRS.	
7	Total installation cost of ambient air quality monitoring system (a) (in thousands of dollars)	§	§	§	
8	Annual operating and maintenance costs of ambient air quality monitoring system (a) (in thousands of dollars)	§	§	§	
9	If there is no ambient air monitoring system in operation are you planning one in the future?	YES	NO	YES	NO
10	If there is one planned give the year when the system will be in place:	YES	NO	YES	NO

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

SCHEDULE 7 - AMBIENT AIR QUALITY DATA IN VICINITY OF PLANT			
ITEM	ITEM (a)	SULFUR OXIDES - mg/m ³ (b)	PARTICULATE MATTER - mg/m ³ (c)
1	Within the area of influence of plant emissions report annual average ambient air quality for:		
2	Within the area of influence of plant emissions report highest 24-hr average ambient air quality:		
3	Within the area of influence of plant emissions report highest 3-hr average ambient air quality:		
4	How many times did the 24-hour and 3-hour averages for sulfur oxides exceed the level of 365 micrograms per cubic meter (0.14PPM) in 1974:		
5	How many times did the 24-hour and 3-hour averages for sulfur oxides exceed the level of 1300 micrograms per cubic meter (0.5PPM) in 1974:		
6	Are the governing emissions standards which apply to this plant more stringent than necessary to maintain National Ambient Air Standards?		
SULFUR OXIDES			
7	Are they more stringent than primary standards for:	Yes	No
8	Are they more stringent than secondary standards for:	Yes	No
9	Did the state or local gov't. set ambient air quality standards for plant vicinity that are more stringent than the national standards?	Yes	No
10	Are they more stringent than primary standards for:	Yes	No
11	Are they more stringent than secondary standards for:	Yes	No
SULFUR OXIDES - mg/m ³			
12	If there is a yes in lines 10 or 11 state the primary standard (state or local)		
13	If there is a yes in lines 10 or 11 state the secondary standard (state or local)		
PARTICULATE MATTER			
7	Are they more stringent than primary standards for:	Yes	No
8	Are they more stringent than secondary standards for:	Yes	No
9	Did the state or local gov't. set ambient air quality standards for plant vicinity that are more stringent than the national standards?	Yes	No
10	Are they more stringent than primary standards for:	Yes	No
11	Are they more stringent than secondary standards for:	Yes	No
PARTICULATE MATTER - mg/m ³			
12	If there is a yes in lines 10 or 11 state the primary standard (state or local)		
13	If there is a yes in lines 10 or 11 state the secondary standard (state or local)		

PROPOSED RULES

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE		SCHEDULE 8 - PLANT DATA ON THE POTENTIAL FOR MEETING NATIONAL AMBIENT AIR QUALITY STANDARDS BY INTERMITTENT CONTROL METHODS					
ITEM (a)	PARTICULATE MATTER (b)			SULFUR OXIDES (c)			
	Yes	No		Yes	No		
01	Is the plant currently meeting primary standards?						
02	Is the plant currently meeting secondary standards?						
INDICATE IF THE PLANT CAN MEET NATIONAL AMBIENT AIR QUALITY STANDARDS FOR SULFUR DIOXIDES WITHOUT THE USE OF A CONTINUOUS EMISSION REDUCTION STRATEGY							
03	Yes	No		Yes	No		
04	Yes	No		Yes	No		
INDICATE THE METHODS THAT COULD BE EMPLOYED DURING POOR METEOROLOGICAL CONDITIONS:							
05	Primary standards						
06	Secondary standards						
IF THE ANSWER TO QUESTION 03 IS YES, OR IF BOTH QUESTIONS 03 AND 04 ARE ANSWERED YES, INDICATE THE METHODS THAT COULD BE EMPLOYED DURING POOR METEOROLOGICAL CONDITIONS:							
07	FOR MEETING SDx PRIMARY STANDARDS			FOR MEETING SOx SECONDARY STANDARDS			
08	Yes	No		Yes	No		
09	Yes	No		Yes	No		
10	Yes	No		Yes	No		
IF USE OF CLEAN FUELS IS INVOLVED IN THE INTERMITTENT SULFUR DIOXIDES CONTROL STRATEGY, ESTIMATE THE QUANTITY OF "CLEAN" FUEL WHICH THE PLANT IS LIKELY TO REQUIRE ANNUALLY TO MEET EITHER OF THE STANDARDS							
11	Use of clean fuels:						
12	Switching electrical loads						
13	Other (Explain in footnote)						
14	Coal (in 1000 tons)						
15	Average sulfur level of coal in lbs. of sulfur per million Btu						
16	Oil (in 1000 barrels)						
17	Average sulfur level in oil in lbs. of sulfur per million Btu						
18	Estimate annual cost of intermittent control strategies (Annualized capital plus operating costs) in \$1000						
PRIMARY STANDARDS							
SECONDARY STANDARDS							

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

SCRUBBER DESCRIPTION (Use additional sheets as needed)

--

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

FOOTNOTES (Use additional sheets as needed)

FOOTNOTE TEXT

FOOTNOTES FOR:

PAGE SHEET LINE COLUMN

Sheet _____ of _____

Page 15

STEAM-ELECTRIC PLANT AIR QUALITY CONTROL DATA FOR MEETING CURRENT STANDARDS

COMPANY/PLANT CODE

FOOTNOTES (Use additional sheets as needed)

FOOTNOTE TEXT

FOOTNOTES FOR:

PAGE SHEET LINE COLUMN

Sheet ___ of ___

Page 16

[FR Doc. 75-6998 Filed 3-18-75; 8:45 am]

FEDERAL REGISTER, VOL. 40, NO. 54—WEDNESDAY, MARCH 19, 1975

