federal register

MONDAY, JANUARY 29, 1979
PART III

DEPARTMENT OF ENERGY

Economic Regulatory Administration

POWERPLANT AND INDUSTRIAL FUEL USE ACT (EXISTING FACILITIES)

Proposed Implementation Rules; Hearings

[6450-01-M]

DEPARTMENT OF ENERGY

Economic Regulatory Administration

[10 CFR PARTS 504, 506, and 507]

[Docket No. ERA-R-78-19]

HEARINGS ON PROPOSED RULES TO IMPLEMENT THE POWERPLANT AND INDUSTRIAL FUEL USE ACT OF 1978.

AGENCY: Economic Regulatory Administration, Department of Energy.

ACTION: Notice of Public Hearings on New and Existing Facilities.

SUMMARY: The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) hereby announces a series of public hearings on its proposed rules for implementation of the Powerplant and Industrial Fuel Use Act of 1978 (FUA). Public Law 95-620 concerning existing facilities. These public hearings are being combined with those concerning new facilities, notice of which was previously published in the January 18, 1979 FEDERAL REGISTER (44 FR 3721). Procedures governing the conduct of these hearings are presented with this Notice. Proposed rules concerning existing facilities are being published concurrently with this Notice. Notice of public hearings on the Draft Environmental Impact Statement concerning implementation of FUA was published in the January 9, 1979 FEDERAL REGISTER (44 FR 2004).

DATES: Public hearings will be held on February 7, 1979, and if required, on February 8, 1979, in Boston, Massachusetts; February 14, 1979, and if required, February 15, 1979 in Salt Lake City, Utah; February 21, 1979, and if required, February 22, 1979 in Tampa, Florida; and March 1, 1979, and if required, March 2, 1979 in Lexington, Kentucky. All hearings will begin at 9:30 a.m. Written comments on existing facilities are due by March 26, 1979, 4:30. p.m. and on new facilities by March 2, 1979, 4:30 p.m. Requests to speak are due by 4:30 p.m. on the following dates: February 5, 1979 for the Boston hearing; February 7, 1979 for the Salt Lake City hearing; February 14, 1979 for the Tampa hearing and February 21, 1979 for the Lexington hearing.

ADDRESSES: Send all written comments to: Department of Energy, Public Hearing Management, Room 2313, 2000 M Street, N.W., Washington, D.C. 20461, Docket No. ERA-R-78-19. Where possible, comments on separate issues should be clearly identified to allow efficient review and consideration.

City	Hearing Date	Location	Requests To Speak
Boston, Mass	Feb. 7	Shawmut Bank Bldg., Conf. Rm. 8th Fl., 1 Federal Street, Boston, Mass.	Dept. of Energy, 150 Causeway Street, Room 700, Boston, Mass., (617) 223-5257
Salt Lake City, Utah	Feb. 14	Salt Palace, 100 S.W. Temple, Room 128, Salt Lake City, Utah.	Dept. of Energy, 1075 S. Yokon Street, P.O. Box 26247, Belmar Branch, Lakewood, Colorado, (303) 234-2420
Tampa, Fla	Feb. 21	Sheraton Tampa Motor Hotel, Ballroom, 500 E. Cass Street, Tampa, Fla.	Dept. of Energy, 1655 Peachtree, St. N, Atlanta, Ga. (404) 257-2051
Lexington, Ky	Mar. 1	Hyatt Regency, Washington Room, 400 W. Pine Street, Lexington, Kentucky.	Dept. of Energy, 1655 Peachtree, St. N, Atlanta, Ga., (404) 257-2051

FOR FURTHER INFORMATION CONTACT:

William L. Webb (Office of Public Information), Economic Regulatory Administration, Department of Energy, Room B-110, 2000 M Street, N.W., Washington, D. C. 20461, (202) 634-2170.

John L. Gurney (Regulations and Emergency Planning), Economic Regulatory Administration, Department of Energy, Room 2130, 2000 M Steeet, N.W., Washington, D. C. 20462, (202) 632-6690.

Robert Davies (Fuels Regulation-Program Office), Economic Regulatory Administration, Department of Energy, Room 7202, 2000 M Street, N.W., Washington, D. C. 20261, (202) 254-3910.

James H. Heffernan (Office of General Counsel), Department of Energy, Room 6144, 12th & Pennsylvania Avenue, N.W., Washington, D. C. 20461, (202) 633-9296.

SUPPLEMENTARY INFORMATION: On November 9, 1978, FUA issued proposed rules for implementation of FUA pertaining to new facilities (November 17, 1978, 43 FR 53974). Concurrently with this Notice ERA is issuing proposed rules for implementation of FUA pertaining to existing facilities. Because of the interrelationship and similarity of the two subjects, ERA has decided to hold one group of public hearings for both new and existing facilities.

FUA prohibits or restricts the use of petroleum and natural gas by existing electric powerplants and allows ERA to issue rules and orders prohibiting or restricing the use of petroleum and natural gas by certain existing electric powerplants and major fuel burning installations. The proposed rules establish procedures and criteria by which users may petition for exemption from the prohibitions of the Act. The rules also establish a requirement for a Fuels Decision Report which must be submitted as part of any petition for exemption.

PUBLIC HEARINGS:

1. *Procedure for Request to Make Oral Presentation.*

The times and places for the hearings are indicated in the "Dates" and "Addresses" sections of this Notice. If necessary to present all testimony, a hearing will be continued to 9:30 a.m. of the next business day following the first day of the hearing.

Interested persons who would like to participate in any hearing should contact the appropriate Regional Office of DOE as listed above in the "ADDRESSES" section of this Notice. A request to participate in any hearing shall be in writing and signed by the person making the request. Please provide a phone number where we may contact you through the day before the hearing.

Participants should bring 50 copies of their testimony and each exhibit to be presented to ERA with them on the day of the hearing. We will notify each person selected to be heard before 4:30 p.m., February 6, 1979 for the Boston hearing; February 12, 1979 for the Salt Lake City hearing; February 14, 1979 for the Tampa hearing; and February 23, 1979 for the Lexington hearing.

2. *Conduct of the Hearings.* We reserve the right to select the persons to be heard at the hearings, to schedule their respective presentations, and to establish the procedures governing the conduct of the hearings. The length of each presentation may be limited, based on the number of persons requesting to be heard.

An ERA official will be designated to preside at each of the hearings. These will not be judicial-type hearings. Questions may be asked only by those conducting the hearing. At the conclusion of all initial oral statements, each person who has made an oral statement will be given the opportunity to make a rebuttal statement. The rebuttal statements will be given in the order in which the initial statements were made and will be subject to time limitations.

You may submit questions to be asked of any person making a statement at either of the hearings to the addresses indicated above for requests to speak before 4:30 p.m. of the day before the hearing. If you wish to have a question asked at a hearing, you may submit the question, in writing to the presiding officer. The ERA

or, if the question is submitted at a hearing, the presiding officer will determine whether the question is relevant, and whether the time limitations permit it to be presented for answer. The question will be asked of the witness by the presiding officer.

Any further procedural rules needed for the proper conduct of a hearing will be announced by the presiding officer.

Transcripts of the hearings will be made and the entire record of each of the hearings, including the transcripts, will be retained by the ERA and made available for inspection at the DOE Freedom of Information Office, Room GA-152, James Forrestal Building, 1000 Independence Avenue, S.W., Washington, D.C., between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. You may purchase a copy of the transcript of a hearing from the reporter.

(Department of Energy Organization Act, Pub. L. 95-91); Powerplant and Industrial Fuel Use Act, Pub. L. 95-620)

Issued in Washington, D.C., January 23, 1979.

HAZEL R. ROLLINS,
Deputy Administrator,
Economic Regulatory Administration.

[FR Doc. 79-2855 Filed 1-24-79; 10:21 am]

[6450-01-M]

[10 CFR Parts 500, 501, 502, 503, 504, 505, 506 and 507]

[Docket No. ERA-R-78-19]

POWERPLANT AND INDUSTRIAL FUEL USE ACT (EXISTING FACILITIES)

Proposed Implementation Rules

AGENCY: Economic Regulatory Administration, Department of Energy.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) is proposing rules to implement certain provisions of the Powerplant and Industrial Fuel Use Act of 1978 (FUA) which prohibit or restrict the use of petroleum and natural gas by certain existing electric powerplants and allows ERA to issue rules and orders prohibiting or restricting the use of petroleum and natural gas by certain existing electric powerplants and major fuel burning installations. FUA will become generally effective on May 8, 1979, one hundred and eighty days after the date of enactment, but DOE may adopt regulations to implement FUA at any time. These proposed rules establish procedures and criteria by which ERA will issue rules and orders prohibiting or restricting the use of petroleum and natural gas, and by which users may petition for exemption from the prohibitions of the Act and from prohibitory rules and orders issued by ERA. Further, these proposed rules solicit additional comment on certain issues, and amend certain rules contained in the Notice of Proposed Rulemaking published in the FEDERAL REGISTER on November 17, 1978 (43 FR 53974).

DATES: Comments by March 26, 1979, 4:30 p.m.; Hearing dates: To be announced.

ADDRESSES: All comments to: Public Hearing Management, Docket No. ERA-R-78-19 Department of Energy, Room 2313, 2000 M Street, N.W., Washington, D.C. 20461. Hearing locations: To be announced.

FOR FURTHER INFORMATION CONTACT:

William L. Webb (Office of Public Information), Economic Regulatory Administration, Department of Energy, Room B-110, 2000 M Street NW., Washington, D.C. 20461, 202-634-2170.

Stephen M. Stern (Regulations and Emergency Planning), Economic Regulatory Administration, Department of Energy, Room 2130, 2000 M Street NW., Washington, D.C. 20461, 202-632-6621.

Robert Davies (Fuels Regulation—Program Office), Economic Regulatory Administration, Department of Energy, Room 7202, 2000 M Street NW., Washington, D.C. 20461, 202-254-3910.

James Heffernan (Office of General Counsel), Department of Energy, Room 6144, 12th and Pennsylvania Avenue NW., Washington, D.C. 20461, 202-633-9296.

SUPPLEMENTARY INFORMATION:

I. BACKGROUND

(See prior FEDERAL REGISTER Notice, 43 FR 53974, November 17, 1978)

II. COVERAGE OF FUA

The prohibitions and exemptions provided for in FUA apply to four major categories of users: new powerplants, new installations, existing powerplants, and existing installations. ERA will therefore organize its rules to include in four separate Parts all applicable rules relating to the prohibitions and exemptions for each user category. Additionally, Part 500 sets forth General Policy and Definitions; Part 501 (Administrative Procedures and Sanctions) sets forth various procedural provisions; Part 502 (Fuels Decision Report) identifies certain requirements which must be included in petitions for exemption; Part 507 (Fuel Classification and Reporting Requirements) sets forth definitions of and reporting requirements for "petroleum" and "nautral gas"; and Part 508 (Special Rule for Temporary Public Interest Exemption) identifies near-term measures to encourage the use of natural gas in place of petroleum.

FUA addresses the major user categories as follows:

A. NEW POWERPLANTS (PART 503)

See Notice of Proposed Rulemaking published in the FEDERAL REGISTER November 17, 1978 (43 FR 53974).

B. EXISTING ELECTRIC POWERPLANTS (PART 504)

(1) Existing electric powerplants, which used an alternate fuel as a primary energy source at any time during calendar year 1977, may not use petroleum as a primary energy source in excess of that amount used during 1977 unless a permit to increase such use has been obtained from ERA.

(2) An existing powerplant may not use natural gas as a primary energy source unless the powerplant used natural gas as a primary energy source at any time during calendar year 1977. In such an instance, the powerplant shall not increase its proportional use of natural gas above the average yearly proportion of natural gas used during the calendar years 1974 through 1976 or during the first two years of its operation, if it began operations on or after January 1, 1974. In addition, an existing powerplant is prohibited from using natural gas as a primary energy source on or after January 1, 1990 unless a System Compliance Plan has been approved or an exemption granted by ERA.

ERA published, on January 5, 1979, (44 FR 1694) a proposed rule (Part 508) which provides for a special temporary public interest exemption to the statutory prohibitions against increased natural gas use by existing powerplants.

(3) We may also prohibit, by rule or order, an existing powerplant from using natural gas and/or petroleum as a primary energy source provided that we find that the powerplant has or had the technical capability to use an alternate fuel as a primary energy source, that it could have such capability without substantial physical modification or substantial reduction in its rated capacity, and that it is financially feasible to use an alternate fuel. In instances where we find that the use of a mixture of petroleum or natural gas and an alternate fuel as a primary energy source is technically and financially feasible, we are also authorized to prohibit a powerplant from using amounts of petroleum or natural gas in excess of the minimum percentage needed to maintain reliability of operation and fuel efficiency in such mixture.

(4) As in the case of a new powerplant, we may grant a temporary or permanent exemption from the prohibitions, whether imposed by statute, rule, or order, if you demonstrate that certain physical, economic, environmental or legal factors preclude compliance as indicated in Part 504 of these proposed rules.

C. NEW INSTALLATIONS (PART 505)

See Notice of Proposed Rulemaking published in the FEDERAL REGISTER November 17, 1978 (43 FR 53974).

D. EXISTING INSTALLATIONS (PART 506)

(1) We may prohibit, by rule or order, an existing installation from using petroleum or natural gas as a primary energy source provided that we find that the installation has or had the technical capability of using an alternate fuel as a primary energy source, that it could have such capability without substantial physical modification or substantial reduction in its rated capacity, and that it is financially feasible to use an alternate fuel. In instances where we find that the use of a mixture of petroleum or natural gas and an alternate fuel is technically and financially feasible, we are also authorized to prohibit an installation from using amounts of petroleum or natural gas in excess of the minimum percentage needed to maintain reliability of operation and fuel efficiency in such mixture.

(2) As in the case of a new installation, we may grant a temporary or permanent exemption from the prohibition, whether imposed by rule or order, if you demonstrate that certain physical, economic, environmental or legal factors preclude compliance as indicated in Part 506 of these rules.

III. OTHER RELATED ACTIONS

A. FORMS

We will publish proposed forms in the FEDERAL REGISTER and solicit public comments at a later date for new facility exemptions and requirements. We may also publish proposed forms and solicit public comments at a later date for existing facility exemptions and requirements.

B. GUIDELINES

From time to time, ERA may develop, as necessary, formal guidelines in support of regulations promulgated under FUA, and may publish them in the FEDERAL REGISTER for public review and comment.

C. DETERMINATION OF POWERPLANT DESIGN CAPACITY

Pursuant to Section 103(a)(18)(D) of the Act, the Federal Energy Regulatory Commission has issued proposed rules under which a powerplant's design capacity may be determined. These proposed rules were issued December 29, 1978 (Docket No. RM79-10).

The proposed rules establish guidelines for determining the design capacity of the four different types of generating units: steam-electric generators, combustion turbines, combined cycle units and internal combustion engines. For your convenience, a copy of the proposed rule is attached as an appendix to these proposed rules.

IV. SPECIFIC COMMENTS REQUESTED

We have issued these proposed rules to focus public attention and discussion on the provisions of FUA relating to existing facilities, and to expedite implementation of this program. In some instances, we have proposed alternatives for your consideration. In all cases, we solicit your comments on any issue before we reach a final decision on these regulations, not only on the specific issues, but on the alternate proposals we enumerate below as well.

The Notice of Proposed Rulemaking published in the FEDERAL REGISTER November 17, 1978 (43 FR 53974) relating to new facilities contained Parts 500, 501, 502, 503, and 505 of the proposed rules to implement the Powerplant and Industrial Fuel Use Act. Part 500 (Policy and Definitions), Part 501 (Administrative Procedures and Sanctions), and Part 502 (Fuels Decision Report) apply to these proposed rules as well as those published on November 17, 1978. We recommend that you review the November 17, 1978, notice concurrently with this one. This preamble addresses certain issues for existing facilities, new facilities, and both new and existing facilities.

A. EXISTING FACILITIES

1. *Use of Natural Gas by Existing Powerplants and Installations* (Parts 500 and 508). We propose to amend § 500.1 (General Policy) appearing in the FEDERAL REGISTER November 17, 1978, (43 FR 53981) to add a statement on the use of natural gas (including propane) by certain existing electric powerplants and installations.

We favor the use of renewable energy sources, coal, uranium and other alternate fuels wherever possible. To the extent that the near-term choice for certain existing facilities is limited to petroleum or natural gas, we generally prefer the use of natural gas and propane over middle distillates, kerosene-base jet fuels and imported residual fuel oils.

We propose to reflect this policy in implementing Title III and Section 401, Title IV, of the Act with respect to installations and powerplants.

We have published, on January 5, 1979, (44 FR 1694), a proposed rule (Part 508) which provides a special temporary public interest exemption to the statutory ban on increased natural gas use by existing powerplants.

Under Section 401 of the Act, we have the discretion to prohibit the use of natural gas in existing (non-MFBI) petroleum-capable boilers used for space heating. To avoid stimulating increased use of petroleum, we do not plan to prohibit the use of natural gas in these boilers.

These policies further the national strategic objective to reduce our de-

pendence on foreign oil supplies as well as encouraging more vigorous interfuel competition between oil and gas and reducing our overall level of oil imports. We will monitor the continued availability of natural gas and propane and amend these policies as changing circumstances may require.

2. *Pre-Order Conference* (§ 501.33). We will generally convene a conference pursuant to § 501.33 prior to issuance of a proposed prohibition order to an existing facility. Such a conference, which shall be convened at the discretion of ERA, would primarily for the exchange of views and information to assist ERA in determining whether a prohibition order proceeding should be initiated.

3. *Fuels Decision Report* (Part 502). We are proposing that only petitioners for exemptions from the statutory prohibitions on existing powerplants and from final prohibition orders for existing powerplants and installations be required to submit a Fuels Decision Report as part of their petition for exemption. Petitioners requesting exemptions from proposed prohibition orders would not be required to submit a Fuels Decision Report, but would be required to satisfy all applicable evidentiary requirements for the exemption requested in their written submission to ERA. The proposed regulations pertaining to the Fuels Decision Report (Part 502) appear in the FEDERAL REGISTER Notice of November 17, 1978 (43 FR 53974).

4. *Coverage of Prohibitions* (Parts 504 and 506). Parts 504 and 506, as proposed, cover statutory prohibitions against the increased use of petroleum by existing powerplants (Section 405 of the Act), prohibitions against and restrictions upon the use of natural gas by existing powerplants (Section 301 of the Act), and prohibitions against the use of petroleum or natural gas by order to existing powerplants and installations issued on a case-by-case basis (Section 303(a) of the Act). These proposed regulations do not address prohibitions applicable to categories of facilities (Section 303(b) of the Act) which may be adopted by subsequent rules.

5. *Increased Petroleum Use in Existing Powerplants* (§ 504.1). Under the authority provided in Section 405 of the Act, we propose to prohibit the increased use of petroleum in any existing powerplant which used an alternate fuel as a primary energy source during calendar year 1977, unless we grant a permit.

A permit for increased use shall not be granted unless you demonstrate all of the following: (i) the unavailability of alternate fuel (including electricity) and natural gas (including propane), (ii) certification by the Administrator of EPA, or an appropriate State agency, that without the permission to use petroleum rather than an alternate fuel (including electricity) and natural gas (including propane) the powerplant will be unable to comply with requirements of the Clean Air Act, (iii) a good faith effort to minimize the quantity and the duration of the need for increased use of petroleum, and (iv) certification by the appropriate State regulatory authority that the increased use of petroleum by the powerplant is necessary to prevent impairment of reliability of service in your electric region (after considering the availability of power from contiguous systems, power pools and other sources).

We have also proposed that the applicant for this permit prepare a Fuels Decision Report. This Fuels Decision Report would provide a demonstration of the applicant's good faith efforts to comply with the prohibition by minimizing the quantity and duration of petroleum need through use of alternate fuels (including electricity), mixtures, conservation efforts and natural gas (including propane). We encourage EPA or the relevant State agency to review this Fuels Decision Report as part of the applicant's good faith effort to minimize petroleum use. We invite comments on this proposal.

6. *ERA Findings for Issuing Orders Prohibiting Natural Gas and Petroleum* (Parts 504 and 506). Prior to issuing a final order prohibiting a powerplant or installation from burning petroleum or natural gas as a primary energy source, we must find that: the unit is or previously was technically capable of burning an alternate fuel; the unit can burn that fuel without a substantial physical modification to, or derating of, the unit; and it is financially feasible to use an alternate fuel.

In making our technical capability finding, we propose to assume that units are capable not only of burning the fuels for which they were specifically designed, but that certain units are also technically capable of burning selected alternate fuels which were not included in the purchaser's design specifications. For example, units capable of burning natural gas are also technically capable of burning other gaseous fuels such as gas derived from coal. Similarly, units constructed as to be capable of burning petroleum are also inherently capable of burning alcohol from coal.

In assessing whether a "substantial physical modification" would occur as a result of converting to an alternate fuel, we propose to consider the conversion feasible if the unit has the requisite furnace configuration and tube spacing. Adjustments required to install pollution control equipment such as precipitators or scrubbers generally will not be viewed as substantial modifications to the unit.

We propose that a derating of less than 25 percent of a unit's design capacity will not be considered "substantial." These proposed regulations stipulate that any reduction in useful capacity resulting from the addition of pollution control equipment to the unit will not be included in computing the level of derating. However, where alternate sources of energy are available to operate pollution control equipment required for a particular unit, ERA may consider the cost of using such alternate energy in its cost calculation.

The "financial feasibility" criteria are composed of both a unit-specific evaluation identical to the "substantially exceeds" cost calculation test and an assessment of the affected firm's capability to raise the necessary capital to finance the conversion.

7. *System Compliance Option* (§ 504.4). We are publishing the proposed rules on the System Compliance Option as a section under Part 504 of these proposed rules rather than as a separate Part 507 as stated in the FEDERAL REGISTER Notice of November 17, 1978. The System Compliance Option provides the opportunity for utilities to comply with the prohibitions contained in FUA on a system-wide basis rather than on a individual powerplant basis. We have proposed that utilities agree to implement fuel conservation measures to reduce their overall natural gas and petroleum use as a condition for approval of their system compliance plan. We particularly solicit your comments on the type of conservation measures which could be effected, their relationship to other provisions of the new national energy legislation, and on other terms and conditions which would fulfill the objectives of FUA. We also solicit information on whether the System Compliance Option is a viable mechanism for compliance, on how many utilities are likely to select this option, and on the costs, problems, and benefits associated with the acceptance of a system compliance plan.

Please note that under FUA subsection 501(b) you must submit proposed system plans to ERA before January 1, 1980.

8. *Cost Calculations* (Parts 504 and 506). The cost calculations for existing powerplants and installations are performed in much the same way as for new units. The exceptions are noted below.

(a) *Capital Outlays.* We propose that capital outlays for existing units will be calculated over the *remaining* useful life of the unit.

(b) *Capacity Factor.* We propose that the annual capacity factor be the average capacity factor for the last

five years of operation or the life to date of the existing unit whichever is shorter. For existing powerplants, we are considering an alternate approach which permits the petitioner to rebut this five year average annual capacity factor assumption by considering the impact of changes in the use of other existing powerplants in his electric region.

To rebut this five year average capacity factor (FYACF) assumption, you would have to demonstrate that, over the remaining useful life of the powerplant under consideration, it would operate at an average annual capacity factor significantly different from the five year average capacity factor. Your projected average annual capacity factor for this powerplant would have to exceed or fall short of FYACF by at least ten (10) percent to constitute a significant difference. You would have to calculate the annual capacity factor for the powerplant under consideration on the basis that the powerplant would be economically dispatched with all other powerplants in your electric region, as if that electric region were one large utility.

We are also considering evaluating the economic dispatch on an area larger than the electric region. The electric regions proposed by ERA were designated in the regulations published on November 17, 1978, governing new facilities (43 FR 53987).

We invite your comments on the administrative and the technical feasibility of, as well as necessity for, this alternate approach. Comments on other alternative approaches which would address the impact of altered dispatch ordering on the cost of the existing powerplant under consideration are encouraged. We also invite comment on whether the average annual capacity factor for the powerplant under consideration should be a simple average of the yearly annual capacity factors or an average weighted by the annual discount factors used to compute cost.

You should note that electricity is defined by FUA as an "alternate fuel" and should be taken into account in your evaluation.

B. NEW AND EXISTING FACILITIES

1. *Mandatory Versus Discretionary Exemptions* (§ 500.1). We propose to amend § 500.1 (General Policy) appearing in the FEDERAL REGISTER November 17, 1978, (43 FR 53974) to clarify the difference between mandatory and discretionary exemptions. A list of mandatory exemptions and a list of discretionary exemptions appear in this amendment. Mandatory exemptions will be granted upon a satisfactory showing that you may have met the required evidentiary burden. We may grant discretionary exemptions if you have met the required evidentiary burden and we have decided that granting an exemption would be consistent with the Act, with national energy policy, and in the public interest.

2. *Alternate Fuel Definition* (§ 500.2(a)(7)). (a) *Steam.* We are considering adding "steam" to the list of energy sources constituting alternate fuels. Alternatively, we are evaluating the merits of adding steam to the list only if the steam is derived from alternate fuels or from an approved cogenerating facility. Comments are invited.

(b) *Petroleum Related Resources.* We are considering whether indigenous, petroleum-related resources *which would otherwise remain unexploited* should be classified as "alternate fuels" as a means of increasing our national energy supplies. In this regard, the National Petroleum Refiners Association (NPRA) has recommended that oil from heavy oil sands and tar sands be designated an alternate fuel. Similarly, the California Energy Commission has suggested classifying extremely low-gravity crude oil as an alternate fuel. We request comments on (i) whether ERA should classify these crude oils as an alternate fuel only where they could not otherwise be produced; (ii) if so, how this could be determined; (iii) if we should consider API gravity as a relevant factor, what would be an appropriate cutoff for the measure of gravity and whether we should consider other specifications besides gravity, (iv) how should we make allowances for low-gravity crude oil which is produced or transported with other lighter crudes; (v) whether the Act permits general designation of these petroleum related fuels as "alternate fuels" or whether we must evaluate each fuel at individual locations under the "commercially unmarketable" and other provisions of the "petroleum" definition (Part 507).

Alternatively, we could define these petroleum related fuels as "petroleum", but provide special treatment for mixtures of alternate fuel with these petroleum related fuels. Sections 212(d) and 312(d) of the Act provide for permanent exemptions for mixtures containing alternate fuels and less than a certain percentage of petroleum. In order to encourage the use of heavy oil sands, tar sands and extremely low gravity crude oil, we could approve mixtures containing alternate fuels and at least ninety percent (90 percent) heavy oil sands, tar sands or extremely low gravity crude oils. We request comments on the technical merits and likely impact of this proposal and what mixture percentage should be specified for heavy oil sands, tar sands and extremely low gravity crude oils in powerplants and installations.

3. *Definition and Minimum Size of Units within Aggregation* (§ 500.2(a)(51) and (52)). Section 103(a)(5) A and 103(a)(10)(A) of FUA define electric powerplants and major fuel-burning installations in terms of a single unit which by design is capable of a fuel heat input rate of 100 million Btu's per hour or greater, or in terms of two or more units located at the same site which in the aggregate are by design capable of a fuel heat input rate of 250 million Btu's per hour or greater.

In applying the prohibitions and exemptions under FUA, the emphasis is on the unit. However, for purposes of aggregating units at the same site to determine whether such units are subject to the provisions of the Act, FUA employs a site test. There may be several units at a site which individually are under the 100 million Btu's per hour threshold, but when considered together meet the site aggregation test of 250 million Btu's per hour. Each of the units contributing to the aggregation would then be subject to the pertinent provisions of the Act.

Thus, for example, where each of the existing units at a site are smaller than 100 million Btu's per hour and when aggregated do not equal or exceed 250 million Btu's per hour, the units would not be subject to FUA at that time. If a new unit is constructed or acquired at such site and the contribution of the new unit causes the aggregation threshold to be reached, all of the units contributing to the aggregation would then be subject to the Act.

In instances where all units at the same site are new units (for purposes of FUA, all units for which construction or acquisition began on or after April 20, 1977 are presumed to be new) and are not individually large enough to meet the 100 million Btu's per hour test, such units may become subject to the provisions of FUA pertaining to new units whenever they collectively reach the 250 million Btu's per hour threshold.

As a result of this threshold having been reached, all these new units would either have to be retrofitted or cease operation unless the prohibitions of the Act could be complied with.

For purposes of aggregation, DOE earlier proposed to exclude any unit with a design capacity to consume any fuel, less than 50 million Btu's per hour. ERA is withdrawing this earlier proposed aggregation minimum because of subsequent information indicating that units smaller than 50 million Btu's per hour in capacity can be constructed or modified to utilize an alternate fuel in a technically and fi-

nancially feasible manner. ERA invites comment covering whether a lower aggregation cut-off should be specified or, in the alternative, whether an unreasonableness standard should be employed for purposes of aggregation on a case-by-case basis.

To determine whether units are at the same site for purposes of aggregation, we propose that units which are located within 10 miles of each other, and are owned, operated or controlled by a single firm are presumed to be located at the same site. Furthermore, units located within ten miles of each other and providing output to more than one company are presumed to be located at the same site.

We specifically solicit comments on the above proposals, particularly with respect to the petroleum and natural gas savings which would result and the statutory language and legislative history of FUA.

4. *Internal Combustion Generating Units* (§ 500.2(a)(52)). Section 103(a) of FUA defines the term electric powerplant as "any stationary electric generating unit, consisting of a boiler, a gas turbine, or a combined cycle unit, *which produces electric power for purposes of sale or exchange* (emphasis added) * * *." Under Section 103(a) of FUA, the term MFBI is defined as a "stationary unit consisting of a boiler, gas turbine unit, combined cycle unit, or *internal combustion engine* (emphasis added) * * * (which does) not include any electric powerplant."

In the proposed rules on new facilities published on November 17, 1978, § 500.2 (a), we propose to define a major fuel burning installation (MFBI) as a "stationary unit consisting of a boiler, combustion turbine unit, combined cycle unit, or internal combustion engine, including an internal combustion engine used for generation of electricity * * *."

That regulatory definition was proposed to correct the omission of an internal combustion engine from the statutory definition of an electric powerplant. ERA believes this omission was inadvertent. There does not appear to be any legislative history to explain that omission. ERA believes that the fact of production of electric power for sale or exchange is the controlling factor in the definition of this category of unit, rather than the fact that the term "internal combustion engine" was omitted in the statutory definition of an electric powerplant.

ERA is now considering three alternatives. First, ERA is considering retaining the November 17, 1978 proposal. Second, ERA is considering an alternate definition of electric powerplant which would include an internal combustion engine. For purposes of this alternative, the phrase "a unit which produces electric power for the purpose of sale or exchange" would be given considerable weight, and the phrase "consisting of a boiler, gas turbine, or a combined cycle unit", would be regarded as simply illustrative of the types of units which can produce electricity for sale or exchange and not as an exhaustive list of the possible types of such units. The third alternative is for ERA to withdraw the November 17, 1978 proposal and not to define such internal combustion engines as either powerplants or MFBI's but, instead, to rely on legislative clarification and amendment of the statutory definition of electric powerplant so as to include the term "internal combustion engine"

We welcome comments on each of these alternatives.

5. *Definition of Primary Energy Source* (§500.2(a)(66)). The FEDERAL REGISTER inadvertently did not publish the correct definition of Primary Energy Source. Moreover, the Delaware Solid Waste Authority has suggested expansion of our definition of Primary Energy Source as reflected in (iii) below. We now propose the definition to read:

"Primary Energy Source" means the fuel or fuels used for normal operation by any existing or new electric powerplant or major fuel burning installation, except—

(i) Minimum amounts of fuel required for unit ignition, startup, testing, flame stabilization and control use;

(ii) Minimum amounts of fuel required to alleviate or prevent unanticipated equipment outages and emergencies directly affecting health, safety or welfare which would result from electric power outages; and

(iii) In the case of solid waste and resource recovery facilities, minimum amounts of fuel required for control use including fuels used in secondary boilers during scheduled maintenance and equipment outages.

6. *Filing Fees* (§ 501.20). The Department of Energy (DOE) has earlier proposed to require the payment of certain filing fees as a prerequisite to the submission of petitions for exemption (42 FR 53989, November 17, 1978). Under Title V of the Independent Offices Appropriation Act (IOAA) (31 U.S.C. 483(a)), collection of fees is authorized for administrative processing and review related to regulatory programs such as that established under FUA. Fees are authorized by the IOAA where an agency issues permits or exemptions to identifiable recipients. The proceeds of the fees are paid to the Treasury of the United States and cannot be used by the DOE. The IOAA authorizes collection of reasonable fees by a regulatory agency for specific administrative and processing expenses incurred by that agency in connection with receiving and reviewing petitions for permits or exemptions, where the permits or exemptions would result in direct value or special benefit to an identifiable recipient, such as a petitioner for an exemption from the prohibitions of FUA.

7. *"Substantially Exceeds" Index* (Parts 503, 504, 505 and 506). We propose to designate a specific index as the decision point for the substantially exceeds test. The specific ratio selected as the index will probably be between 1.3 and 1.8, but a higher index may be selected. We are using an index of 1.5 in these proposed regulations for illustrative purposes. We intend to review the index periodically. We invite comments on the magnitude of the index. We further invite comments on whether the same "substantially exceeds" index should be used throughout the regulations. Should the same index be used for new and existing facilities? Should the same index be used for different types of facilities (e.g., combustion turbines, base loaded boiler powerplants)? Should the same index be used for statutory prohibitions and prohibitions by order? Should the same index be used for facilities proposing the use natural gas as for those proposing to use petroleum? Should the same index be used for a temporary exemption as for a permanent exemption? Should the same index be used for general requirements (e.g., alternative power supply) as for exemptions?

8. *No Alternative Power Supply* (§ 503.7 and § 504.13). We are proposing to require that, as part of the demonstration that no alternative power supply exists, a utility demonstrate that the incremental amount of electricity required cannot be obtained from the existing system through improved performance of existing facilities, system conservation measures, utility assisted end use conservation measures (including reduction in demand through utility purchases of insulation for customers), and load management techniques. This treatment was suggested, in part, by the Environmental Defense Fund. We solicit comments on this proposal, and on the manner in which a utility might make such a demonstration.

In order to be consistent with the calculation of cost, we are revising the procedures to evaluate alternative supply of power through amendments to § 503.7. These amendments specify that the cost of purchased power be calculated as a total cost, not a cost per kilowatt hour as previously specified. In addition, these amendments specify that you must evaluate purchasing electricity until an alternate fuel-fired plant can be operational, as well as separately evaluating both purchasing electricity and operating an alternate fuel fired plant.

We solicit comments on whether alternative power supplies should be cal-

culated on a total cost or cost per kilowatt hour basis.

9. *Fuel Classification and Reporting Requirements* (Part 507). (a) *Restructuring of Natural Gas and Petroleum. Definitions.*

In the FEDERAL REGISTER of November 17, 1978 (43 FR 53987), we defined the terms "natural gas" and "petroleum" in § 500.2(d) and (e), respectively. In this notice, we have established a separate Part 507, entitled Fuel Classification and Reporting Requirements which contains and amends these definitions. Proposed changes to these definitions are identified in (i) and (ii) below.

(i) *Natural Gas Definition.* In the proposed rules for new facilities published on November 17, 1978, we proposed to define the term "natural gas" (§ 500.2(d)) to exclude natural gas produced by the user from a well acquired by the user prior to July 18, 1977, the maximum efficient production rate (MEPR) of which is less than 250 million Btu's per day. Such gas would have been defined as an "alternate fuel". Natural gas produced from wells with a MEPR of less than 250 million Btu's per day which were acquired on or after July 18, 1977, would be defined as "natural gas" rather than as an alternate fuel. The purpose of the proposed definition was to preclude users from escaping the statutory prohibitions on natural gas use simply by purchasing wells which meet the MEPR criteria. We also stated in the preamble that we were evaluating the merit of limiting the amount of natural gas burned from such wells acquired prior to July 18, 1977.

After reviewing the legislative history, we have decided to replace these definitions. We now propose to place no restrictions upon the acquisition of these wells or upon the use by producers of natural gas produced therefrom. We do propose, however, to institute an annual reporting requirement of consumption by large utility users of natural gas produced from these wells, under our authority pursuant to Section 711.

In calculating the MEPR of a well, consistent with Section 103(a)(3)(B)(ii) of FUA, we also propose to include the Btu value of any crude oil, gas condensate, and natural gas liquids which may be produced from the well, in addition to the Btu value of the natural gas.

We have also included occluded methane in coal seams in the definition of unmarketable gas, as proposed by the Governor of West Virginia. We ask comments on this proposal as well as on other types of natural gas substitutes which might be included.

(ii) *Petroleum Definition.* The National Petroleum Refiners Association (NPRA) has suggested that all waste gases, liquids, and solids from refinery or other industrial operations be categorized as "commercially unmarketable" because consumption within the refinery or petrochemical site constitutes the most efficient disposition of these energy sources. Comments are requested on this proposal as well as on the specific definitions proposed in § 507.2(b).

(b) *Reporting Requirements.* We have proposed that users of fuels deemed not to be natural gas and petroleum as defined in Part 507 need only annually report to ERA that they are using such fuels and provide certain information. Since no subsequent certification by ERA would be required, this approach would reduce the administrative burden upon both users and the Government.

We ask comments on whether ERA should reserve the authority to determine at a later date that such fuels should not be excluded from the definitions of natural gas or petroleum, based on the evidence submitted by users. Alternatively, ERA could require users to advertise for a specified period of time the availability of such fuels for potential purchase (by users, natural gas pipelines, and distribution companies. If potential purchasers stated a willingness to purchase such fuels, ERA would then determine that they should not be excluded from the definitions of natural gas or petroleum under the Act. In this regard, should we prescribe appropriate procedures in our regulations setting forth a fixed period for users to advertise the availability of such fuels before it is deemed to be unmarketable? If so, should this be done through the states, the ERA the FERC, or some other mechanism?

d. *New Facilities* (Published on November 17, 1978, (43 FR 53974). 1. *Definition of New Electric Powerplant* (§ 500.2(a)(51)(ii)(B)). We propose additional criteria to determine the point at which a previously "existing powerplant" may be designated "new". We feel the addition is necessary to prevent conversion of existing plants (e.g., combustion turbines to combined cycles) which would result in increased petroleum consumption. We propose to accomplish this by revising Section 500.2(a)(51)(ii)(B) to read "(B) which, on a cumulative basis since April 20, 1977, has been reconstructed or refurbished or added to, to the extent that the cost of such reconstructin, refurbishment, or addition equals or exceeds 50 percent of the price of a replacement unit, on a cumulative basis after November 9, 1978, or which changes the thermal cycle of the unit." We solicit comments on this proposed change.

2. *Permanent Fuels Mixtures Exemption* (§ 505.28). ERA invites additional public comments on new MFBI's which plan to use fuel mixtures of less than 25 percent natural gas or petroleum. As written, § 505.28 would require a petitioner to present extensive documentary evidence that he could not utilize less than 25 percent petroleum or natural gas in a mixture with alternate fuels. In light of § 212(d)(2) of FUA, which states that for installations, the Secretary shall not establish a percentage use of petroleum or natural gas less than 25 percent, we invite comments on whether petitioners who propose to construct installations that will consume less than 25 percent petroleum or natural gas in a mixture should be required to comply with only the annual reporting requirement contained in proposed § 505.28(c).

VI. COMMENT PROCEDURES

A. WRITTEN COMMENTS

You are invited to participate in this Rulemaking by submitting data, views or arguments with respect to the issues set forth in this Notice. Comments should be submitted to the address indicated in the "ADDRESSES" section of this Notice and should be identified on the outside envelope and on documents submitted with the designation "Powerplant and Industrial Fuel Use Act" Docket No. ERA-R-78-19. You should submit fifteen copies. Where possible, comments on separate distinct issues should be physically separated and annotated to allow efficient review and consideration. All comments received will be available for public inspection in the DOE Reading Room, GA-152, Forrestal Building, 1000 Independence Avenue, S.W., Washington, D.C. between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. We will consider all comments received by March 2, 1979, 4:30 p.m. regarding the November 17, 1978, Notice and by March 26, 1979, 4:30 p.m. regarding specific issues raised in this Notice.

You should identify separately any information or data you consider to be confidential and file one copy of your submission with the confidential portions deleted. We reserve the right to determine the confidential status of the information or data and to treat it according to our determination.

B. PUBLIC HEARINGS

The time, date and locations for the public hearings are being announced in the FEDERAL REGISTER concurrently with these proposed rules.

A draft regulatory analysis of the proposed regulations, as contemplated by Executive Order No. 12044, was attached as an appendix to the proposed rules published in the FEDERAL REGISTER November 17, 1978 (43 FR 53974, November 17, 1978). Copies may also be obtained from the ERA, 2000 M

Street, N.W., Room B-110, Washington, D.C. 20461, (202) 634-2170. In addition, a draft Environmental Impact Statement (EIS) has been prepared pursuant to the National Environmental Policy Act (NEPA) and is available for review in Room B-110, 2000 M Street, N.W., Washington, D.C.

(Department of Energy Organization Act, Public Law 95-91; Powerplant and Industrial Fuel Use Act of 1978, Public Law 95-620; Title V of the Independent Offices Appropriation Act of 1952, 65 Stat. 290, 31 U.S.C. 483(a); Executive Order 12009, 42 FR 46267).

In consideration of the foregoing, it is proposed to make the following amendments to Title 10, Chapter II, Subchapter E of the Code of Federal Regulations as proposed on November 17, 1978, 43 FR 53974, and it is proposed to add new Parts 504, 506 and 507 to Subchapter E, as set forth below.

Issued in Washington, D.C. on January 22, 1979.

DAVID J. BARDIN,
Administrator,
Economic Regulatory
Administration.

SUBCHAPTER E—ALTERNATE FUELS

AMENDMENTS

10 CFR, Chapter II, Subchapter E, as proposed on November 17, 1978, 43 FR 53974, is amended as follows:

1. The citation of authority appearing at page 53980 of the November 17, 1978 FEDERAL REGISTER is amended to read as follows:

(Department of Energy Organization Act, Pub. L. 95-91; Powerplant and Industrial Fuel Use Act of 1978, Pub. L. 95-620; Title V of the Independent Offices Appropriation Act of 1952, 65 Stat. 290, 31 U.S.C. 483(a); Executive Order 12009, 42 FR 46267).

2. The Table of Contents to Subchapter E is amended by deleting § 500.2(d) (Natural Gas) and § 500.2(e) (Petroleum) appearing at page 53980 of the November 17, 1978 FEDERAL REGISTER.

3. The Table of Contents to Subchapter E is amended by deleting Part 507 (System Compliance) appearing at page 53981 of the November 17, 1978 FEDERAL REGISTER.

PART 500—POLICY AND DEFINITIONS

4. Section 500.1 (General policy) appearing at page 53981 of the November 17, 1978 FEDERAL REGISTER is amended by adding new paragraphs (m) and (n) to read as follows:

§ 500.1 General policy.

* * * * *

(m) *Mandatory and discretionary exemptions.* (1) The following mandatory exemptions will be granted upon a satisfactory showing that the petitioner has met the required evidentiary burden:

(i) *Temporary exemptions for existing units.* (A) Lack of alternate fuel supply;
(B) Site limitations;
(C) Environmental requirements;
(D) Use of synthetic fuels;
(E) Use of innovative technologies;
(F) Units to be retired;
(G) Peakload powerplants; and
(H) Reliability of service.

(ii) *Temporary exemptions for new units.* (A) Lack of alternate fuel supply;
(B) Site limitations;
(C) Environmental requirements; and
(D) Use of synthetic fuels.

(iii) *Permanent exemptions for existing units.* (A) Lack of alternate fuel supply;
(B) Site limitations;
(C) Environmental requirements;
(D) Fuel mixtures;
(E) Emergency purposes;
(F) Peakload powerplants;
(G) Powerplants with design capacity of less than 250 million Btu's;
(H) Use of LNG;
(I) Installations served by certain international pipelines; and
(J) Product or process requirements.

(iv) *Permanent exemptions for new units.* (A) Lack of alternate fuel supply;
(B) Site limitations;
(C) Environmental requirements;
(D) Fuel mixtures;
(E) Emergency purposes;
(F) Peakload powerplants;
(G) Product or process requirements; and
(H) Lack of adequate capital.

(2) The exemptions listed below are discretionary and ERA may grant such exemptions if the petitioner meets the required evidentiary burden and ERA decides that it would be consistent with the Act, with national energy policy, and in the public interest to do so.

(i) *Temporary exemptions for existing units.* (A) Public interest.

(ii) *Temporary exemptions for new units.* (A) Public interest; and
(B) Use of petroleum by installation with design capacities of less than 300 million Btu's.

(iii) *Permanent exemption for existing units.* (A) State or local requirements;
(B) Cogeneration;
(C) Intermediate load powerplants; and
(D) Scheduled equipment outages.

(iv) *Permanent exemptions for new units.* (A) State or local requirements;
(B) Cogeneration;
(C) Reliability of service powerplants;
(D) Intermediate load powerplants; and
(E) Scheduled equipment outages.

(n) *Use of natural gas by existing powerplants and installations.* National energy policy favors the use of renewable energy sources, coal, uranium and other alternate fuels wherever possible. To the extent that the near-term choice for certain existing facilities is limited to petroleum or natural gas, we generally prefer the use of natural gas and propane over middle distillates, kerosene-base jet fuels and imported residual fuel oils. This policy furthers our national strategic objective to reduce our dependence on foreign oil supplies as well as encouraging more vigorous interfuel competition between oil and gas and reducing our overall level of oil imports. We will reflect this policy in implementing Title III and Title IV of the Act. Specifically, under Section 401 of the Act, we have the discretion to prohibit the use of natural gas in existing (non-MFBI) petroleum-capable boilers used for space heating. In order to avoid stimulating increased use of petroleum, we do not plan to prohibit the use of natural gas in these boilers.

PART 501—ADMINISTRATIVE PROCEDURES AND SANCTIONS

[See 43 FR 53988, November 17, 1978]

PART 502—FUELS DECISION REPORT

[See 43 FR 54001, November 17, 1978]

PART 503—NEW ELECTRIC POWERPLANTS

5. Section 503.7 (No alternative power supply—permanent exemptions) appearing at page 54022 of the November 17, 1978 FEDERAL REGISTER is amended to read as follows:

§ 503.7 No alternative power supply—permanent exemptions.

(a) *Application.* Section 212 of the Act provides for a permanent exemption for lack of alternate fuel supply, site limitations, environmental requirements, inability to obtain adequate capital, State or local requirements, fuel mixtures, emergency purposes, reliability of service, or intermediate load. To qualify for one of these exemptions, you must demonstrate to the satisfaction of ERA that, despite diligent good faith efforts, there is no alternative supply of electric power which is available within a reasonable distance at a reasonable cost without impairing short-run or long-run reliability of service which you could obtain. ERA assumes that you will be unable to demonstrate that there is no alternative supply of electric power if the expected date of plant operation is more than 10 years from the date you apply for an exemption. For proposed

plants expected to be operational within 10 years from the date you submit your petition, you must demonstrate to the satisfaction of ERA all of the following.

(1) You cannot purchase electricity from another utility at a cost which does not substantially exceed the cost of your proposed plant using imported petroleum. You may include transmission costs to your service area in your cost calculation. ERA will consider any source of electricity which does not substantially exceed the cost of your proposed plant using imported petroleum to be within a reasonable distance and at a reasonable cost. For this subpart the cost index will be the same as that used in the cost calculation. (§ 503.5).

(2) You cannot construct and operate an alternate fuel fired plant either within or outside your service area at a cost which does not substantially exceed the cost of using imported petroleum. See § 503.5 for instructions on calculations of cost. You may include transmission costs for power delivery to your service area.

(3) You cannot purchase electricity and construct and operate an alternate fuel fired plant at a cost which does not substantially exceed the cost of your proposed plant using imported petroleum. ERA will consider any combination of purchased electricity and an alternate fuel fired plant that costs less than (1.5) times the cost of your proposed plant using imported petroleum to be at a reasonable cost. For this subpart the cost index will be the same as that used in the cost calculation. (§ 503.5).

(4) You cannot meet load requirements with existing facilities by improving the performance of existing facilities, employing system conservation measures, assisting end use customers to conserve electricity, and implementing load management techniques.

(b) *Evidence.* You must include in your Fuels Decision Report the following substantial evidence to corroborate the above requirements:

(1) A detailed description of your methodology to calculate the cost for purchased electricity and the cost for your proposed plant as required in paragraph (a)(1) of this section;

(2) A detailed description of your methodology to calculate the cost for purchased electricity and an alternate fuel fired plant, and your proposed plant as required in paragraph (a)(3) of this section;

(3) Identification and explanation of all figures used in your calculation supporting paragraphs (a)(1) and (a)(3) of this section;

(4) A description of your efforts to purchase electricity;

(5) All data required by § 503.5 (cost calculation) supporting paragraph (a)(2) of this section;

(6) A detailed description of each of the methods your considered as required by paragraph (a)(4) of this section together with an estimate of the cost of implementing each of the methods; and

(7) An estimate of the kilowatt hour savings or additional kilowatt hour potental, as applicable, for each of the methods you considered as required by paragraph (a)(4) of this section.

10 CFR, Chapter II, Subchapter E, as proposed on November 17, 1978, 43 FR 53974, is amended by adding Parts 504, 506 and 507 to read as follows:

PART 504—EXISTING ELECTRIC POWERPLANTS

Subpart A—Restriction on the Use of Petroleum

Sec.
504.1 Prohibition against the increased use of petroleum.

Subpart B—Prohibitions and Systems Compliance Option

504.2 Purpose and scope.
504.3 Statutory prohibitions.
504.4 Electric utility system compliance option.
504.5 Prohibitions by order (case-by-case).

Subpart C—General Requirements for Exemptions

504.10 Purpose and scope.
504.11 Fuels Decision Report.
504.12 Cost calculation for existing powerplants.
504.13 No alternative power supply—general requirement for permanent exemptions.
504.14 Use of mixtures—general requirement for temporary exemptions.
504.15 Use of mixtures—general requirement for permanent exemptions.
504.16 Use of fluidized bed combustion not feasible—general requirement for permanent exemptions.
504.17 Terms and conditions; compliance plans.

Subpart D—Temporary Exemptions for Existing Electric Powerplants

504.20 Purpose and scope.
504.21 Lack of alternate fuel supply.
504.22 Site limitations.
504.23 Inability to comply with applicable environmental requirements.
504.24 Future use of synthetic fuels.
504.25 Use of innovative technologies.
504.26 Powerplants: public interest exemption.
504.27 Retirement.
504.28 Temporary exemption for powerplants necessary to maintain reliability of service.
504.29 Peakload powerplants.

Subpart E—Permanent Exemptions for Existing Electric Powerplants

504.30 Purpose and scope.
504.31 Lack of alternate fuel supply.
504.32 Site limitations.
504.33 Inability to comply with applicable environmental requirements.
504.34 State or local requirements.
504.35 Cogeneration.
504.36 Permanent exemption for certain fuel mixtures containing natural gas or petroleum.
504.37 Emergency purposes.
504.38 Peakload powerplants.
504.39 Intermediate load powerplants.
504.40 Use of natural gas by powerplant with capacity of less than 250 million Btu's per hour.
504.41 Use of liquid natural gas.

AUTHORITY: Department of Energy Organization Act, Pub. L. 95-91; Powerplant and Industrial Fuel Use Act of 1978, Pub. L. 95-620; Title V of the Independent Offices Appropriation Act of 1952, 65 Stat. 290, 31 U.S.C. 483(a); Executive Order 12009, 42 FR 46267.

Subpart A—Restriction on the Use of Petroleum

§ 504.1 Prohibition against the increased use of petroleum.

(a) Pursuant to section 405 of the Act, ERA hereby prohibits any existing electric powerplant, which during calendar year 1977 used an alternate fuel as a primary energy source, from using petroleum as a primary energy source in excess of the quantities of petroleum used in the powerplant as a primary energy source during that year unless ERA issues a permit authorizing the increased use of petroleum.

(b) *Eligibility.* ERA shall not issue the permit unless you demonstrate to the satisfaction of ERA all of the following:

(1) You made a good faith effort to obtain an alternate fuel (including electricity) and natural gas;

(2) You made a good faith effort to minimize the quantity and duration of need for increased petroleum as reflected in a Fuels Decision Report;

(3) You supplied a copy of your Fuels Decision Report for review by the Administrator of the Environmental Protection Agency or the appropriate State air pollution control agency;

(4) The Administrator of the Environmental Protection Agency or the appropriate State air poliution control agency certifies to the ERA: you cannot comply with the requirements of the Clean Air Act, including any applicable implementation plan, as defined in 110(d) of the Clean Air Act, without permission to use petroleum rather than an alternate fuel (including electricity) and natural gas (including propane); and

(5) The appropriate State regulatory authority has certified to ERA that the increased use of petroleum by the powerplant is necessary to prevent impairment of reliability of service in your electric region.

(c) *Evidence.* To submit an adequate application to ERA for a permit to in-

crease use of petroleum you must submit a Fuels Decision Report as specified in Part 502 of these regulations. You must include in your Fuels Decision Report evidence that you sought the full range of alternate fuels (including alternate source of power) and natural gas (including propane) which could alleviate conditions in paragraphs (b)(4) and (5) of this section. You also must include in your Fuels Decision Report evidence that you sought to minimize the quantity and duration of increased petroleum use and Certificates from the Administrator of EPA, or the appropriate State air pollution control agency, and the appropriate State regulatory authority as specified in paragraphs (b)(4) and (5) of this section.

(d) ERA shall issue the permit only for the quantity and duration it determines necessary under paragraphs (b)(1), (2), (4), or (5) of this section for the increased use of petroleum.

Subpart B—Prohibitions and Systems Compliance Option

§ 504.2 Purpose and scope.

(a) *Purpose.* This subpart sets forth the statutory prohibitions imposed on existing electric powerplants by the Act and establishes the procedures ERA intends to employ in administering and implementing its authority to prohibit electric powerplants from using petroleum and natural gas. Also set out in this part are the procedures applicable to the systems compliance option.

(b) *Scope.* This subpart applies to all existing electric powerplants. Any person who has any ownership or interest in, or who operates, rents, or leases a powerplant, is subject to the prohibitions of the Act and the penalties as specified by the Act.

§ 504.3 Statutory prohibitions.

(a) Section 301(a)(1) of the Act prohibits the use of natural gas as a primary energy source by any existing electric powerplant on or after January 1, 1990, unless, and to the extent that, the powerplant is granted either a temporary or permanent exemption under this Part of a Systems Compliance Option has been approved.

(b) Section 301(a)(2) of the Act prohibits the use of natural gas as a primary energy source in any existing electric powerplant before January 1, 1990, unless it used natural gas as a primary energy source anytime during calendar year 1977, or unless, and to the extent that, the powerplant is granted either a temporary or permanent exemption under subpart D or E of this part.

(c) Section 301(a)(3) of the Act prohibits the use of natural gas as a primary energy source in any existing electric powerplant, in any calendar year before 1990, in greater proportions than the average yearly proportion of natural gas which:

(1) The powerplant used as a primary energy source in calendar year 1974 through 1976; or

(2) If the powerplant began operations on or after January 1, 1974, the powerplant used as a primary energy source during the first two calendar years of its operation.

(d) Any prohibition against your use of natural gas on of after January 1, 1990 will be stayed while any petition you have filed for an exemption is resolved. The stay will include the time required for judicial review. Your petition for exemption may be filed at any time after May 8, 1979, the effective date of FUA, but it must be filed at least one year before the date the prohibition is first to take effect.

§ 504.4 Electric utility system compliance option.

(a) *General.* Section 501 of the Act provides for an electric utility system compliance option. You will be considered in compliance with any prohibition on existing powerplants relating to the use of natural gas if ERA has approved a system compliance plan for you. No exemption, except an emergency exemption, for use of natural gas will be available for those plants covered by an approved plan.

(b) *Requirements for Approval.* To qualify you must provide the information requested and demonstrate to the satisfaction of ERA your commitment to the terms listed below. Your proposed plan must be submitted before January 1, 1980 and include the following:

(1) Identification of all powerplants owned or operated by you that would or could be subject to prohibitions under Title III (Existing Facilities) relating to the use of natural gas if a plan for you were not approved;

(2) Identification of those plants covered in paragraph (b)(1) of this section that you feel would be entitled to an exemption if a plan were not approved;

(3) A commitment that if a plan is approved you shall not use natural gas or petroleum as a primary energy source in a new baseload powerplant;

(4) A commitment that if a plan is approved you wil not use natural gas on and after January 1, 1990 in excess of (i) 20 percent of your base period usage of natural gas adjusted for emergency or peakload purposes if applicable, or, if lower; (ii) your minimum peakload requirement;

(5) A commitment that if a plan is approved, on or after January 1, 1990 you will not use natural gas in peakload or intermediate load plants identified in paragraph (b)(2) of this section unless it is necessary to prevent impairment of reliability of service;

(6) A commitment that on and after January 1, 2000 you will not use natural gas as a primary energy source unless ERA grants you a temporary extension;

(7) A commitment that upon approval of the system compliance plan you will obtain natural gas used by your system only under the provisions of a contract (i) which you executed prior to November 9, 1978, other than under an extension or renewal of the contract on or after November 9, 1978, or (ii) which you executed prior to November 9, 1978, or an extension or renewal on or after November 9, 1978 but, only if the contract extension or renewal has been approved by ERA;

(8) A 10 year forecast, to be annually revised and extended, which provides support for a conclusion by ERA that the commitments in your system compliance plan will be met. The forecast should include demand for electricity, construction plans and a financial plan.

(9) A plan for use of fuel conservation measures that will minimize your natural gas and petroleum consumption.

(c) *Calculations of 1990 natural gas volumes for § 504.4 (b)(4)(i).* For purposes of this section volumes of natural gas are the sum of the following:

(1) 20 percent of the natural gas used in calendar year 1976 by your powerplants that were placed in service on or before January 1, 1976;

(2) 10 percent of the natural gas used in the first 24 months of service by your powerplants which were placed in service after January 1, 1976 and before May 8, 1979;

(3) Natural gas volumes for emergency purposes consistent with § 504.37 of these regulations if approved by ERA; and

(4) Natural gas volumes for peakload purposes consistent with § 504.38 of these regulations if approved by ERA; and

(5) Natural gas volumes, if approved by ERA, required (i) because of delays which occurred, despite diligent good faith efforts in the construction of powerplants which will use a primary energy source other than natural gas, or (ii) because without increased volumes reliability of service would be impaired.

(d) *Calculation of minimum peakload requierments for § 504.4(b)(4)(ii).* For purposes of this section the minimum peakload requirement is the volume of natural gas required to generate 17.1 percent of the total electricity by your company in 1990.

(e) *Fuel Conservation Measures for § 504.4(b)(9).* Fuel conservation measures include any activity, service, or investment that would result in lower

consumption of natural gas and petroleum as primary energy sources. Such measures include:

(1) End-use conservation measures, which conserve electric energy generated with natural gas and petroleum by reducing the load to be served;

(2) load management measures, which shape the load so that it may be served by other generation facilities which use less natural gas and petroleum or which use natural gas and petroleum more efficiently. Load management measures include, but are not limited to, time-of-use rates and direct control of customer loads; and

(3) Generation efficiency measures, which conserve natural gas and petroleum by increasing the efficiency of the generation process.

(f) *Temporary extension.* ERA may grant a five-year extension with respect to the use of natural gas if you demonstrate that such gas is needed for:

(1) Emergency purposes consistent with § 504.37 of these regulations, or

(2) Peakload purposes consistent with § 504.38 of these regulations.

(g) *Evidence.* To submit an adequate plan for review by ERA you must include in your plan substantial evidence to corroborate the requirements in § 504.4(b) of this section. Evidence shall include the following:

(1) Identification of your affected powerplants;

(2) Ten-year forecasts of your electric demand, construction plans, and financial plans with sufficient detail to conclude that the commitments in your plan will be carried out;

(3) A schedule for an orderly progression to meet the 1995 and 2000 commitments; and

(4) A description of contracts with appropriate state regulatory authorities regarding the commitments contained in your plan.

(5) A description of the fuel conservation measures planned or of such alternative measures as may be indicated, including:

(i) The amount of natural gas and petroleum likely to be consumed;

(ii) The specific end-loads to be served by the system; and

(iii) A description of the proposed fuel conservation measures including their practicability, effectiveness, cost, anticipated savings, and implementation steps.

(h) *Reporting.* You must annually update the information contained in your plan, including progress on implementing your proposed conservation measures.

(i) *Terms and conditions.* ERA will condition approval of your system compliance plan on such terms and conditions as we determine to be appropriate, including the use of effective fuel conservation measures which are practicable, and consistent with the purposes of the Act.

(j) *Plan revision revocation.* (1) A system compliance plan may be revised or modified for substantially changed circumstances supported by clear and convincing evidence.

(2) A revision to a system compliance plan may be proposed by you or by ERA on its own motion. No proposed revision will be effective without your approval and the approval of ERA.

(3) ERA may revoke a system compliance plan after notice to you and an opportunity for an informal hearing of its intention to revoke based upon a finding by ERA that the system compliance plan is no longer consistent with the purposes of the Act.

(k) *Waiver of certain prohibitions.* Section 216 of the National Energy Conservation Policy Act (NECPA) (Pub. L. 95-619) prohibits utilities from supplying, installing or financing certain end-use conservation measures. Petitions for system compliance plans that propose fuel conservation measures prohibited by NECPA prohibition should include a specific request that the NECPA prohibition be waived by the Secretary.

§ 504.5 Prohibitions by order (case-by-case).

(a) ERA may prohibit, by order, the use of natural gas or petroleum as a primary energy source in an existing electric powerplant if ERA finds that:

(1) The powerplant has, or previously had, the technical capability to use alternate fuel as a primary energy source;

(2) The powerplant presently has this technical capability or could acquire the technical capability without:

(i) A substantial physical modification of the unit; or

(ii) A substantial reduction in the rated capacity of the unit; and

(3) It is financially feasible for the powerplant to use an alternate fuel as its primary energy source.

(b) ERA must make a proposed finding regarding the technical capability of a unit to use alternate fuel as identified in paragraph (a)(1) of this section prior to the date of publication of the notice of the proposed prohibition. ERA will publish this finding in the FEDERAL REGISTER along with the notice of the proposed prohibition.

(c) Your powerplant shall be considered technically capable of using alternate fuel as its primary energy source if:

(1) The powerplant was designed so as to be capable of using a specific alternate fuel as primary energy source, with or without modification of the unit; or

(2) ERA determines that the powerplant is capable of using an alternate fuel as its primary energy source even though the unit was not spcifically designed for that alternate fuel.

(d) Your powerplant does not require substantial physical modification if it has the requisite furnace configuration and the requisite tube spacing to burn an alternate fuel.

(e) No substantial reduction in the rated capacity of the unit will be presumed to occur if the derating does not exceed 25 percent. ERA will not consider the loss of design capacity caused by the use of pollution control equipment.

(f) It is financially feasible for your powerplant to use an alternate fuel as its primary energy source if:

(1) The cost of using an alternate fuel does not substantially exceed the cost of using imported petroleum, as determined by utilizing the cost calculation described in § 504.12 of these regulations; and

(2) You have the ability to raise the capital necessary to convert the unit to burn an alternate fuel as its primary energy source.

(g) If ERA finds that it is technically and financially feasible for your powerplant to use a mixture of petroleum or natural gas and alternate fuel as its primary energy source, ERA may prohibit you, by order, from using petroleum or natural gas in amounts exceeding the minimum amount necessary to maintain the reliability of your operation consistent with maintaining reasonable fuel efficiency of the mixture.

(h) ERA may not issue a final order to your powerplant if you demonstrate by written submission that your facility would be eligible for an exemption under the criteria set out in this part for any applicable exemption, or if you have demonstrated to the satisfaction of ERA that the required findings stated in paragraph (a) of this section cannot be made. However, if your powerplant would be eligible only for a temporary exemption, ERA may issue you a final order that will take effect at the expiration of the temporary exemption.

(i) ERA may not issue a final order, under this section to your powerplant unless prior to issuance of the order there has been published in the FEDERAL REGISTER a notice of the proposed order. This notice shall provide a period of no less than 49 days in which interested persons may file written data, views and arguments and also provide an opportunity for interested persons to request a public hearing on the proposed order. It is during this public comment period that the recipient is given the opportunity to challenge the findings ERA must make prior to issuance of a final order and/or to demonstrate that the installation is eligible for an exemption.

[6450-01-C]

$$\text{EQ 1} \qquad R = \frac{\text{COST (ALTERNATE)}}{\text{COST (OIL)}}$$

(ii) Calculate the cost of using an alternate fuel and imported petroleum with equation 2.

$$\text{EQ 2} \qquad \text{COST} = I + \frac{OM_1 + FL_1}{(1+K)^1} + \frac{OM_2 + FL_2}{(1+K)^2} + \ldots + \frac{OM_N + FL_N}{(1+K)^N} - \frac{S_P}{(1+K)^P} \quad 1/$$

(iii) Calculate investment (I), operations and maintenance (OM), and fuel (FL) for equation 2 using equations 3, 4, and 5.

$$\text{EQ 3} \qquad I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_N}{(1+K)^N}$$

$$\text{EQ 4} \qquad OM = 8760 \times ACF \times O \times C$$

$$\text{EQ 5} \qquad FL = 8760 \times ACF \times C \times f \times H$$

(5) The terms in equations 1 through 5 are defined as follows:

1/ The electric power industry is a regulated industry. Its profits depend upon its regulators as well as its costs. Since there are many regulatory bodies, which do not always act the same way, we decided not to be concerned with the profits, per se, but only with the costs to society of producing electricity. The income taxes paid by the utilities are transfer payments, from a societal point of view, and therefore are not included in the calculation.

(j) If ERA cannot issue your powerplant a final order because your facility is eligible for a permanent exemption, or if the effective date of the order is delayed during the period that a temporary exemption is in effect, ERA will take the necessary action to assure that you comply with the terms and conditions of the order granting the exemption.

(k) ERA may not issue your powerplant an order under this section if your powerplant has been identified as a member of a category subject to a final rule at the time of an issuance of the proposed order.

Subpart C—General Requirements for Exemptions

§ 504.10 Purpose and scope.

This subpart establishes the general requirements necessary to qualify for either a temporary or permanent exemption under this Part and sets out the methodology for calculating the cost of using an alternate fuel and the cost of using imported petroleum.

§ 504.11 Fuels decision report.

(a) Before ERA will accept a petition for either a temporary or permanent exemption from a final prohibition order issued under this Part, you must include as part of your petition a Fuels Decision Report as described in Part 502. The Fuels Decision Report shall contain the analysis and documentation of the evidence required in support of your exemption request.

(b) If you are requesting a temporary or permanent exemption from a proposed prohibition order issued under this part, you are not required to submit a Fuels Decision Report as part of your written submission. Your submission must include, however, all of the evidence required by the applicable section of the regulations pertaining to the exemption.

§ 504.12. Cost calculations for existing powerplants.

(a) *General.* (1) If you are requesting an exemption for an existing powerplant on the basis that the cost of using an alternate fuel as a primary energy source or the cost of using an alternate power supply substantially exceeds the cost of using imported petroleum, you must use the comparative cost test provided in this section.

(2) The cost of using an alternate fuel in lieu of imported petroleum as a primary energy source, or the cost to use an alternate power supply will be deemed to be substantially in excess of the cost to use imported petroleum were the ratio of the former to the latter is greater than the index sex periodically ERA. Initially, ERA sets the index at (1.5). ERA will revise the index from time to time after public notice and an opportunity to comment. Revisions shall become effective for all ERA decisions after final publication.

(3) The cost test takes into consideration capital outlays, operation and maintenance expenses, and delivered fuel expenditures. There are two comparative cost tests—a General Cost Test and a Special Cost Test. You must demonstrate eligibility for a permanent exemption on the basis that the cost of using alternate fuel as a primary energy source substantially exceeds the cost of using imported petroleum. You must use the procedures specified in the General Cost Test (Section b). You must demonstrate eligibility for a temporary exemption using the procedure specified in the General Cost Test (Section b) or the Special Cost Test (Section c).

(4) The General Cost Test differs from the Special Cost Test with respect to the time period over which costs are calculated. When using the General Cost Test, the cost must be computed for the remaining useful life of the powerplant. When using the Special Cost Test, the cost is computed only for the term of the exemption.

(b) *Cost calculation—general cost test.* (1) You may be eligible for a permanent exemption if you demonstrate that the cost of using an alternate fuel starting with each successive year within the first ten years of the exemption will always substantially exceed the cost of using imported petroleum in the powerplant from the time the exemption becomes effective until the end of the powerplant's useful life. You will have to show that the cost of using an alternate fuel, starting in each of the first ten years of this exemption and using oil or natural gas until the start of using an alternate fuel, substantially exceeds the cost of using only imported petroleum. In the case where you are comparing the costs of using an alternate power supply, you need only compare the cost of using the alternate power supply from the time the exemption becomes effective until the end of the useful life of the powerplant to the cost of using imported petroleum in the proposed powerplant over the same time period. If the costs of the former substantially exceeds the latter, you may be eligible for a permanent exemption.

(2) ERA will not grant a permanent exemption if a temporary exemption solves the cost problem within ERA's definition. Therefore, if the cost computed with successive starting dates for alternate fuel use (for the first 10 years of the exemption) does not always substantially exceed the cost of using imported petroleum, you would only be eligible for a temporary exemption. The length of the temporary exemption would be the minimum period where the costs of using alternate fuel always substantially exceeds the cost of using imported petroleum. For example, if you can burn coal, but the coal will not be available from a bona fide supplier for 2 years, ERA may grant a temporary exemption and allow the burning of natural gas based on an acceptable certification of the schedule of delivery of coal.

(3) For the General Coal Test, ERA defines cost as the sum of the annual outlays for capital, operations and maintenance and delivered fuel, discounted to the present.

(4) To conduct the test, you must use the equations that follow:

(i) Calculate the ratio (R) of the cost of using an alternate fuel to the cost of using imported petroleum with equation 1.

[6450-01-M]

R—The ratio of the cost of using an alternate fuel to the cost of using imported petroleum.
COST—The total discounted cost in dollars, of constructing and operating the plant for the remaining useful life of the powerplant.
I—Discounted total net capital outlay in dollars, excluding investment tax credits and "Advances in Aid of Construction" (as per FERC system of accounts). May include investment in additional transmission facilities to deliver power to your service area. (ERA will not consider investment tax credits for oil or gas fired powerplants.)
I_o—Net capital outlay in dollars up to the time the exemption becomes effective.
I_1-I_N—Yearly new capital outlay from first year of the exemption through the remaining life of the plant.
OM—Annual cost in dollars of operating and maintaining the unit starting when the exemption becomes effective. May include expenditures for wheeling power to your service area.
S_p—Salvage value of equipment rendered unless by changing the fuel from oil or natural gas to alternate fuel in year p.
ACF—Annual capacity factor of the plant expressed as a fraction (see Section d).
O—Operations and maintenance in dollars per Kwh at the annual capacity factor ($/Kwh).
C—Design capacity of the plant in KW.
FL—Annual delivered fuel expenditures in dollars starting when the exemption becomes effective.
F—Delivered fuel expenditures to the plant expressed in dollars per Btu.
H—Heat input rate for the plant in Btu per KWH.
P—Year fuel is changed from oil or natural gas to alternate fuel.
K—The real cost of capital expressed as a fraction (see Section d).
N—The remaining useful life of the powerplant (see Section d).
8760—The number of hours in a year.

(6) Fuel transportation costs are part of delivered fuel expenditures except where you must acquire capital equipment to deliver the fuel. The capital outlays for this equipment are included in the capital outlay terms. The operations and maintenance costs of this equipment are included in the operations and maintenance terms. Similarly, the cost of delivering power to your service area should be included in the operations and maintenance costs unless you must construct transmission facilities in which case you may include these expenditures in the capital outlay term.

(7) The step by step procedure that follows shows the comparison that you must make. It outlines the equipment and fuel comparisons as well as the time comparisons. If you are using the test to demonstrate eligibility for a lack of alternate fuel supply exemption begin with step (i). If you are using the test to demonstrate that there is no alternate supply of power, use only steps (i), (iv), (v) and (vi).

(i) Compute the cost (COST) of using an alternate fuel or alternate power supply with equation (2).

(ii) Compute the cost (COST) of using an alternate fuel with equation (2) assuming an alternate fuel is not used as the primary energy source until the end of the first year of the exemption and that oil or natural gas is used for the first year of the exemption. Capital investment, operating and maintenance and fuel expenditures should reflect postponed use of alternate fuel (e.g., installation of scrubber when used).

(iii) Successively compute the cost (COST) of using an alternate fuel with equation (2) assuming alternate fuel is postponed until the end of the second through tenth year of the exemption (and oil or natural gas is used in the years preceding alternate fuel use).

(iv) Compute the cost (COST) of using oil or natural gas with equation (2).

(v) If you are comparing the use of an alternate power supply with the use of imported petroleum, compute the ratio of the cost of using the alternate power supply to the cost of using oil or natural gas. Otherwise, compute the ratios (R) of the cost of using an alternate fuel at the beginning of the exemption, and successively at the end of the first through tenth year of the exemption to the cost of using oil or natural gas from the start of the exemption throughout the remaining useful life of the powerplant with equation (1).

(vi) If all the ratios (R) are greater than, for illustrative purposes, 1.5 (an index to be set periodically by ERA), your exemption would be granted. If one or more of the ratios (R) is equal to or less than 1.5 and a series of ratios (R), starting with the case where alternate fuel is used for the start of operation, are all greater than 1.5, a temporary exemption would be granted for the minimum period in which the cost of starting to use alternate fuel, deferred year by year, always exceeds 1.5.

(8) The following table shows the hypothetical results of four sets of calculations.

HYPOTHETICAL RESULTS OF FOUR SETS OF CALCULATIONS

Year in Which Alternate Fuel Use Commences	Case I	Case II	Case III	Case IV
At Start of Exemption	1.7	.17	1.7	1.3
1	1.7	.17	1.7	1.3
2	1.7	.17	1.7	1.3
3	1.4	.17	1.7	1.3
4	1.4	.17	1.4	1.3
5	1.4	.17	1.4	1.0
6	1.4	.17	1.2	1.0
7	1.4	.17	1.2	1.0
8	1.5	.17	1.2	1.0
9	1.6	.17	1.2	1.0
10	1.7	.17	1.2	1.0

The results of the above table shows that: a two year temporary exemption would be granted in Case I, a permanent exemption would be granted in Case II, a three year temporary exemption would be granted in case III, and no exemption would be granted in Case IV.

(c) *Cost calculations—special cost test.* (1) You may be eligible for a temporary exemption if you demonstrate that the cost of using an alternate fuel will substantially exceed the cost of using imported petroleum over the period of the proposed exemption. The period of the exemption cannot exceed ten years. You will have to show that the cost of using an alternate fuel substantially exceeds the cost of using imported petroleum for the first year of the exemption, the first two years of the exemption, and each successive year of the exemption, up to the period of the proposed exemption.

(2) The factors included in the computation are (i) the operations and maintenance and the delivered fuel expenditures incurred during the proposed exemption, and (ii) the capital outlays associated with the exemption.

(3) To conduct the test, you must use the equations that follow.

[6450-01-C]

$$\text{EQ 6} \quad R = \frac{\text{COST (ALTERNATE)}}{\text{COST (OIL)}}$$

(ii) Calculate the cost using equation 7

$$\text{EQ 7} \quad \text{Cost} = I + \frac{OM_1 + FL_1}{(1+k)^1} + \frac{OM_2 + FL_2}{(1+k)^2} + \ldots + \frac{OM_p + FL_p}{(1+k)^p} - \frac{Sp}{(1+k)^p}$$

(iii) Calculate investment (I), operations and maintenance (OM), and fuel (FL) for equation 7 using equations 8, 9, and 10.

$$\text{EQ 8} \quad I = I_o + \frac{I_1}{(1+k)^1} + \frac{I_2}{(1+k)^2} + \ldots + \frac{Ip}{(1+k)^p}$$

$$\text{EQ 9} \quad OM = 8760 \times ACF \times O \times C$$

$$\text{EQ 10} \quad FL = 8760 \times ACF \times C \times f \times H$$

[6450-01-M]

(4) The terms in equations 6 through 10 are defined as follows:

R—The ratio of the cost of using an alternate fuel to the cost of using imported petroleum.

COST—The total discounted cost in dollars, associated with the exemption, of constructing and operating the powerplant.

I—Discounted total net capital outlay in dollars excluding investment tax credits and "Advance in Aid of Construction" (as per FERC system of accounts) until the end of the proposed exemption. The investment in the basic powerplant (that which would be required if a change in the primary energy source where not being proposed) itself is not included in this comparison. (ERA will not consider investment tax credits for oil or gas fired powerplants.)

I_o—Net capital outlay in dollars up to the time the exemption is effective.

I_1—I_o—Yearly net capital outlay from the first year of this exemption until the change to alternate fuel.

OM—Annual Cost in Dollars of operating and maintaining the powerplant during the exemption.

S_p—Salvage value of equipment rendered useless by changing from oil or natural gas to alternate fuel in year, P.

ACF—Annual capacity factor of the powerplant expressed as a fraction (see Section d).

O—Operations and maintenance costs in dollars per kWh at the annual capacity factor ($/kWh).

C—Design capacity of the plant in kW.

FL—Annual delivered fuel expenditure in dollars during the exemption.

f—Delivered fuel expenditure to the plant expressed in dollars per Btu (see Section d).

H—Heat input rate for the plant in Btu per kWh.

K—The real cost of capital expressed as a fraction (see Section d).

P—The period of the proposed exemption.

8760—The number of hours in a year.

(5) The step by step procedure that follows shows the comparisons you must make.

(i) Compute the cost (COST) of using an alternate fuel assuming the length of the proposed exemption is one year with equation 7.

(ii) Compute the cost (COST) of using oil or natural gas valued at imported petroleum prices assuming the length of the proposed exemption is one year with equation 7.

(iii) Compute the ratio (R) of the cost of using an alternate fuel for the first year to the cost of using imported petroleum for the first year with equation 6.

(iv) Repeat the calculations made in (i), (ii), and (iii) above assuming the length of the proposed exemption is two years, three years, and so on, up to the period of the proposed exemption.

(v) A temporary exemption would be granted where one or more of the successive ratios (r) are greater than, for illustrative purposes, 1.5 (the index to be established by ERA).

(d) *Information on parameters used in the calculation.* (1) All estimated expenditures, except natural gas, and petroleum products, shall be expressed in real (uninflated) terms using the prices in effect at the time the petition is submitted.

(2) The delivered price of oil or natural gas to be used in the cost calculation must reflect the price of imported oil. The imported petroleum price is reflected in th cost calculation in the following way:

$$PFE = \frac{PICO}{PCCO} \times PF$$

where

PICO=Price of imported crude oil. The most recent refiner acquisition cost of imported crude oil as reported in the FEDERAL REGISTER monthly notice for the DOE Domestic Crude Oil Allocation (Entitlements) Program.

PCCO=Price of composite crude oil. The mnost recent weighted average cost of total reported crude oil receipts as reported in the FEDERAL REGISTER notice for the DOE Entitlements Programs.

PF=Price of your fuel. The most recent actual weighted average cost of your fuel oil (other than gas). Alternatively, if no purchases of fuel oil occurred, or you used natural gas during this month, you should use a simple average of the industrial price of fuel oil (capable of being burned in your facility) sold in your area by at least three suppliers. For proposed natural gas users, you shall use the price of No. 2 distillate fuel oil in this calculation.

PFE=Price of fuel for equation. The cost of oil for use in equation 1.

(3) For existing powerplants, the annual capacity factor shall be assumed to be the average capacity factor for the last five years or the life of the powerplant if the powerplant is less than five years old.

(4) The remaining useful life of a coal, nuclear, oil or natural gas fired powerplant will be 35 years minus the number of years of operation prior to the time effective date of the exemption. You may rebut this presumption with suitable engineering evidence.

(5) The cost of capital for electric utilities is 3.5 percent per year in real terms.

(b) All estimated expenditures will be computed in accordance with generally accepted accounted principles.

(e) *Evidence supporting the comparative cost test.* All petitions for exemption requiring the use of the comparative cost test shall include, but not be limited to, the following information:

(1) A detailed accounting of all capital outlays including a description of all major construction and equipment. All critical assumptions should be stated and sufficient data should be included to support your estimates.

(2) A detailed accounting of all operations and maintenance expenditures including a description of all major elements. All critical assumptions should be stated and sufficient data included to support your estimates.

(3) A detailed accounting of all delivered fuel expenditures including transportation. All critical assumptions should be stated and sufficient data included to support your estimates. The fuel characteristics for each alternate fuel should be included.

(4) If you assume that the remaining useful life of the existing powerplant is less than 35 years, minus the number of years of operation before the effective date of this exemption, all critical assumptions should be stated and sufficient data included to support that position.

(5) The powerplant design capacity and the heat input rate, for each fuel considered.

(f) *Example of calculations.* (1) You are considering converting a powerplant from oil to coal. In this particular situation, the delivered cost of coal is much greater for the first three years after the proposed conversion than it will be in later years because of a transportation problem. Do you qualify for an exemption? If so, is it permanent or temporary?

(2) To determine if you qualify for a permanent exemption, you would have to use the General Cost Test and compute the ratios of the cost to use 1) coal for the remaining useful life of the powerplant after the effective date of the exemption, 2) imported petroleum for the first year of the exemption and coal for the remainder of the useful life of the powerplant, 3) imported petroleum for the first two years of the exemption and coal for the remainder of the useful life of the powerplant * * *, and 11) imported petroleum for the first 10 years of the exemption and coal for the remainder of the useful life of the powerplant to the cost of using imported petroleum for the remaining useful life of the

powerplant after the effective date of the exemption.

(3) All eleven ratios would have to be higher than 1.5 (index to be established by ERA) to qualify for a permanent exemption. However, if a series of successive ratios, starting with the case where alternate fuel is used from the start of the exemption, are all greater than 1.5, you would be eligible for a temporary exemption up to the last year the ratio is greater than 1.5.

(4) In this example, we will only compute the ratios of (i) the cost to use coal for the remaining useful life of the powerplant after the effective date of the exemption and (ii) the cost of using imported petroleum for the first three years of the exemption and coal for the remainder of the useful life of the powerplant, to the cost of using imported petroleum for the remaining useful life of the powerplant, after the effective date of the exemption.

(5) To determine if you qualify for a temporary exemption if you have not already done so with the General Cost Test, you would have to use the Special Cost Test and compute the ratios of the cost to use coal in the powerplant to the cost of using imported petroleum in the powerplant for one, two, and three years after the effective date of the exemption. All three ratios would have to be higher than 1.5 in order to qualify for a three year temporary exemption. In this example, we will only compute the ratio of the cost of using coal to the cost of using imported petroleum for the first three years after the effective date of the exemption.

(6) *Parameters.* A set of hypothetical parameters are given below:

(i) Powerplant conversion to coal without changing capacity or remaining useful life.

Net capital outlay (without scrubber) to convert the powerplant to burn coal—$15,460,000.
Salvage value of equipment rendered useless by shifting from oil to coal—$3,860,000.
Net capital outlay for scrubber—$22,500,000.
Operations and maintenance costs per KWH to burn coal—$0.0025/KWH.

Existing oil burning powerplant.

Operations and maintenance cost per KWH—$0.0015/KWH.
Remaining useful life (after exemption becomes effective)—25 years.
Capacity—250,000 KW.

(iii) Fuel.

Delivered price of oil—$2.52/1,000,000 BTU.
Heat rate of oil—10,000 BTU/KWH.
Delivered price of coal for the first three years after the proposed exemption—$4.28/1,000,000 BTU.
Delivered price of coal for the fourth through twenty-fifth year after the proposed conversion—$1.35/1,000,000 BTU.
Heat rate for coal—10,000 BTU/KWH.

(7) *Analysis.* (i) The annual fuel and operations and maintenance expenditures are developed below.

Delivered coal expenditures for the first three years after the proposed conversion.

FL = 8760 × ACF × C × f × H = 8760 hr/yr × 0.7x 250,000 KW $4.28/1,000,000 BTU × 10,000 BTU/KWH = $65,610,000/yr.

Delivered coal expenditures for the fourth through twenty-fifth years after the proposed conversion.

FL = 8760 × ACF × C × f × H = 8760 hr/yr × 0.7 × 250,000 KW × $1.35/1,000,000 BTU × 10,000 BUT/KWH = $20,700,000/yr.

Delivered oil expenditures.

FL = 8760 × ACF × C × f × H = 8760 h/yr × 0.7x × 250,000 KW × $2.52/1,000,000 BTU × 10,000 BTU/KWH = $38,630,000/yr.

Operations and maintenance expenditures to burn coal.

OM = 8760 × ACF × O × C = 8760 h/yr × 0.7 × $0.0025/KWH × 250,000 KW = $3,833,000/yr.

Operations and maintenance expenditures to burn oil.

OM = 8760 × ACF × O × C = 8760 hr/yr × × 0.7 $0.0015/KWH × 250,000 KWH = $2,300,000.

(ii) *General cost test.* The relevant cash flows are shown in the following table for the three cases in which computations are being made.

CASH FLOWS FOR GENERAL COST TEST ($ IN THOUSANDS)

Type of cash flow	Year(s)	Case 1—Coal over remaining useful life of powerplant	Case 2—Imported petroleum for first 3 years and coal thereafter	Case 3—Imported petroleum over the remaining life of the powerplant
Investment	0	$15,460+$22,500	0	0
Investment	3	0	$22,500+$15,460	0
Salvage	0	$3,860	0	0
Salvage	3	0	$3,860	0
Operation and Maintenance	1, 2, 3	$3,833/yr.	$2,300/yr.	$2,300/yr.
Operation and Maintenance	4, —, 25	$3,833/yr.	$3,833/yr.	$2,300/yr.
Fuel	1, 2, 3	$65,610	$38,630/yr.	$38,630/yr.
Fuel	4, —, 25	$20,700/yr.	$20,700/yr.	$38,630/yr.

[6450-01-C]

The following computations are in thousands of dollars.

Case 1. Cost of using coal over the remaining useful life of the powerplant from the start of the exemption.

$$I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_N}{(1+K)^N},$$

$$= (15{,}460 + 22{,}500) + \frac{0}{(1.035)^1} + \frac{0}{(1.035)^1} + \ldots + \frac{0}{(1.035)^{25}}$$

$$= 37{,}960$$

$$COST = I + \frac{OM_1 + FL_1}{(1+K)^1} + \frac{OM_2 + FL_2}{(1+K)^2} + \ldots + \frac{OM_N + FL_N}{(1+K)^N} - \frac{S_p}{(1+K)^p}$$

$$= 37{,}960 + \frac{3{,}833 + 65{,}610}{(1.035)^1} + \frac{3{,}833 + 65{,}610}{(1.035)^2} + \frac{3{,}833 + 65{,}610}{(1.035)^3} + \frac{3{,}833 + 20{,}700}{(1.035)^4} + \ldots + \frac{3{,}833 + 20{,}700}{(1.035)^{25}} - \frac{3860}{(1.035)^0}$$

564,300

Case 2. Cost of using imported petroleum for the first three years of the exemption and coal thereafter.

$$I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_N}{(1+K)^N}$$

$$= 0 + \frac{(22,500 + 15,460)}{(1.035)^3}$$

$$+ \$34,240$$

$$COST = I + \frac{OM_1 + FL_1}{(1+K)^1} + \frac{OM_2 + FL_2}{(1+K)^2} + \ldots + \frac{OM_N + FL_N}{(1+K)^N} - \frac{S_p}{(1+K)^p}$$

$$= 34,240 + \frac{2,300 + 38,630}{(1,035)^1}$$

$$+ \frac{2,300 + 38,630}{(1,035)^2} + \frac{2,300 + 38,63}{(1,035)^3}$$

$$+ \frac{3,833 + 20,700}{(1.035)^4} + \ldots$$

$$+ \frac{3,833 + 20,700}{(1.035)^{25}} - \frac{3,860}{(1.035)^3}$$

$$= 481,000$$

Case 3. Cost of using imported petroleum over the remaining life of the powerplant starting with the effective date of the exemption.

$$I = I_0 + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_N}{(1+K)^N}$$

$$= 0 + \frac{0}{(1.035)^1} + \frac{0}{(1.035)^2} + \ldots + \frac{0}{(1.035)^{25}}$$

$$= 0$$

$$COST = I + \frac{OM_1 + FL_1}{(1+K)^1} + \frac{OM_2 + FL_2}{(1+K)^1} + \ldots +$$

$$+ \frac{OM_N + FL_N}{(1+K)^N} - \frac{S_p}{(1+K)^p}$$

$$= 0 + \frac{2,300 + 38,630}{(1.035)^1}$$

$$+ \frac{2,300 + 38,630}{(1.035)^2} + \ldots + \frac{2,300 + 38,630}{(1.035)^{25}} + 0$$

$$= 674,600$$

Computation of ratios.

$$R = \frac{COST\ (COAL\ \text{throughout remaining life})}{COST\ (OIL)}$$

$$= \frac{564,300}{674,600} = 0.84$$

$$R = \frac{COST\ (OIL\ \text{first three years, coal thereafter})}{COST\ (OIL)}$$

$$= \frac{481,000}{674,600} = 0.91$$

Conclusion. Since the ratios are less than 1.5, you would not qualify for a permanent or temporary exemption, using the general cost test.

(iii) *Special cost test.* The relevant cash flows are shown in the following table for the two cases in which computations are being made.

The following computations are in thousands of dollars.

Case 1. Cost of using coal from the start of the exemption

$$I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots \frac{I_p}{(1+K)^p}$$

$$= (15,460 + 22,500) + \frac{0}{(1.035)^1} + \frac{0}{(1.035)^2} + \ldots + \frac{0}{(1.035)^3}$$

$$= 37,960$$

$$COST = I + \frac{OM_1 + FL_1}{(1+K)^1} + \frac{OM_2 + FL_2}{(1+K)^2} + \ldots + \frac{OM_p + FL_p}{(1+K)^p} - \frac{S_p}{(1+K)^p}$$

$$= + \frac{3,833 + 65,610}{(1.035)^1}$$

$$+ \frac{3,833 + 65,610}{(1.035)^2} + \frac{3,833 + 65,610}{(1.035)^3}$$

$$- \frac{3,860}{(1.035)^0}$$

$$= 228,652$$

Case 2. Cost of using imported petroleum for the first three years of the exemption (and coal thereafter)

$$I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_p}{(1+K)^n}$$

$$= 0 + \frac{(22,500 + 15,460)}{(1.035)^3}$$

$$= 34,240$$

$$COST = I + \frac{OM_1 + FL_1}{(1+K)^1} + \frac{OM_2 + FL_2}{(1+K)^2} + \ldots + \frac{OM_p + FL_p}{(1+K)^p} - \frac{Sp}{(1+K)^p}$$

$$= 34,240 + \frac{2,300 + 38,630}{(1.035)^1} + \frac{2,300 + 38,630}{(1.035)^2} + \frac{2,300 + 38,630}{(1.035)^3} - \frac{3860}{(1.035)^3}$$

$$= 145,400$$

Computation of ratio.

$$R = \frac{\text{COST (COAL FOR PERIOD OF EXEMPTION)}}{\text{COST (OIL FOR PERIOD OF EXEMPTION)}}$$

$$= \frac{228,652}{145,400} = 1.57$$

Conclusion. If ERA had set the index at 1.5, you would be granted a temporary exemption.

[6450-01-M]

CASH FLOW FOR SPECIAL COST TEST (IN THOUSANDS)

Type of Cash Flow	Year(s)	Case 1.—Coal Over Remaining Useful Life of Powerplant	Case 2.—Petroleum for First 3 Yrs and Coal Thereafter
Investment	0	$15,460+$22,500	0
Investment	3	0	$22,500+15,460
Salvage	0	$3,860	0
Salvage	3	0	$3,860
Operation and Maintenance	1, 2, 3	$3,833/yr.	$2,300/yr
Fuel	1, 2, 3	$65,610/yr.	$38,630/yr.

§ 504.13 No alternative power supply—General requirement for permanent exemptions.

(a) *Application.* Section 312 of the Act provides for a permanent exemption for State or local requirements and intermediate load. To qualify for one of these exemptions, you must demonstrate to the satisfaction of ERA that despite diligent good faith efforts, there is no alternative supply of electric power which is available within a reasonable distance at a reasonable cost without impairing short-run or long-run reliability of service which you could obtain. You must demonstrate to the satisfaction of ERA all of the following.

(1) You cannot purchase electricity from another utility at a cost which does not substantially exceed the cost of your existing plant using imported petroleum. You may include transmission costs to your service area in your cost calculation. ERA will consider any source of electricity which does not substantially exceed the cost of your existing plant using imported petroleum to be within a reasonable distance and at a reasonable cost. (For this subpart the cost factor will be the same as that used in the cost calculation.)

(2) You cannot construct and operate an alternate fuel fired plant either within or outside your service at a cost which does not substantially exceed the cost of using imported petroleum. See § 504.12 for instructions on calculations of cost. You may include transmission costs for power delivery to your service area.

(3) You cannot purchase electricity and construct and operate and alternate fuel fired plant at a cost which does not substantially exceed the cost of your existing plant using imported petroleum. ERA will consider any combination of purchased electricity and alternate fuel fired plant that costs less than 1.5 times the cost of your existing plant using imported petroleum to be at a reasonable cost. (For this subpart the cost factor will be the same as that used in the cost calculation.)

(4) You cannot meet load requirements with existing facilities by improving the performance of existing facilities, employing system conservation measures, assisting end use customers to conserve electricity, and implementing load management techniques.

(b) *Evidence.* You must provide the following substantial evidence to corroborate the above requirements:

(1) A detailed description of your methodology to calculate the cost of purchased electricity and the cost for your existing plant as required in paragraph (a)(1) of this section;

(2) A detailed description of your methodology to calculate the cost for purchased electricity and an alternate fuel fired plant, and your proposed plant as required in paragraph (a)(3) of this section;

(3) Identification and explanation of all figures used in your calculations supporting paragraphs (a)(1) and (a)(3) of this section;

(4) A description of your efforts to purchase electricity;

(5) All data required by § 504.12 (Cost Calculation) supporting paragraph (a)(2) of this section;

(6) A detailed description of each of the methods you considered as required by paragraph (a)(4) of this section together with an estimate of the cost of implementing each of their methods; and

(7) An estimate of the kilowatt hour saving or additional kilowatt hour potential, as applicable, for each of the methods you considered as required by paragraph (a)(4) of this section.

§ 504.14. Use of mixtures—General requirement for temporary exemptions.

(a) ERA will not consider a petition for any temporary exemption under Section 311 of the Act to be complete, adequate, or acceptable for filing unless you demonstrate to the satisfaction of ERA in your Fuels Decision Report whether or not the use of a mixture of natural gas or petroleum and an adequate fuel is economically and technically feasible during the period of the proposed exemption.

(b) If ERA determines that use of a particular fuel mixture is technically or economically feasible during the period of the proposed exemption, ERA will condition the granting of any temporary exemption under this Part upon the use of that mixture during the period of the temporary exemption.

§ 504.15 Use of mixtures—General requirement for permanent exemptions.

(a) *Application.* ERA will not consider a petition for any of the following exemptions provided for in Section 312 of the Act (lack of alternate fuel supply, site limitations, environmental requirements, State or local requirements, cogeneration, emergency purposes, intermediate load or use of natural gas in small powerplants) to be complete, adequate, or acceptable for filing unless you demonstrate to the satisfaction of ERA in your Fuels Decision Report that you have considered the use of a mixture(s) for which an exemption under § 504.36 (Fuel Mixtures) of these regulations would be available.

(b) *Demonstration.* EPA will not grant any of the exemptions listed in paragraph (a) of this section unless you demonstrate that use of such a mixture(s) is not economically or technically feasible in the unit for which you are requesting an exemption. To make such a demonstration you must show in your Fuels Decision Report to the satisfaction of ERA that:

(1) If use of a mixture(s) were requirecd, you would be eligible for one of the following permanent exemptions provided for in the Act: lack of alternate fuel supply, site limitations, environmental requirements, or State or local requirements; or

(2) The use of a mixture(s) is not technically or econmically feasible in your specific unit due to design or special circumstances as determined by ERA on a case-by-case basis.

§ 504.16 Use of fluidized bed combustion not feasible—General requirement for permanent exemptions.

(a) *Application.* ERA will not consider a petition for one of the following exemptions provided for in Section 312 of the Act (lack of alternate fuel supply, site limitations, environmental requirements, State or local requirements, cogeneration, emergency purposes, intermediate load or use of natural gas in small powerplants) to be complete, adequate or acceptable for

filing unless you demonstrate to the satisfaction of ERA in your Fuels Decision Report that you have considered the use of a method of fluidized bed combustion of an alternate fuel.

(b) *Finding.* If ERA determines, on a generic basis, that use of a method of fluidized bed combustion is technically and economically feasible, ERA will deny your request for exemption unless you demonstrate to the satisfaction of ERA that:

(1) If use of a method of fluidized bed combustion were required, you would be eligible for one of the following permanent exemptions provided for in Section 312 of the Act: lack of alternate fuel supply, site limitations, environmental requirements, or State or local requirements; or

(2) The use of a method of fluidized bed combustion is not technically or economically feasible in your specific unit due to design or special circumstances as determined by ERA on a case-by-case basis.

§ 504.17 Terms and conditions; compliance plans.

(a) *Terms and conditions generally.* You must comply with the terms and conditions of an exemption granted under the Act by the ERA, including terms and conditions requiring the use of (1) effective fuel conservation measures, and (2) fuel mixtures.

(b) *Compliance plans for temporary exemptions.* (1) A compliance plan certified by the Chief Executive Officer shall accompany a petition for a temporary exemption. The compliance plan shall include at least the following:

(i) A detailed schedule of progressive events and the dates upon which the events are to take place indicating how compliance with the applicable prohibitions of the Act will occur;

(ii) Documentary evidence of binding contracts for fuel or facilities for the production of fuel which would allow for compliance with the applicable prohibitions of the Act;

(iii) Any other documentary evidence which indicates an intention to comply with the applicable prohibitions of the Act; and

(iv) A detailed statement of the manner in which you intend to comply with § 504.14 of these regulations requiring the use of fuel mixtures as a condition to the granting of a temporary exemption where the use of fuel mixtures is technically and economically feasible.

(2) The exemption shall not be effective until the compliance plan is approved by ERA.

(3) *Revisions of compliance plans.* If the petition is granted, you must submit to ERA an updated compliance plan certified by your Chief Executive Officer:

(i) At the end of each 12 month period from the effective date of the exemption;

(ii) Within one month of an alteration of any milestone in the compliance plan, together with the reasons for the alteration and its impact upon the scheduling of all other milestones in the plan; and

(iii) At any time the ERA, in its discretion, determines that a revised compliance plan is necessary to reflect changes in circumstances.

(c) *Enforcement.* An exemption is subject to termination upon the violation of any provision of an exemption or any provision of the pertinent compliance plan.

Subpart D—Temporary Exemptions for Existing Electric Powerplants

§ 504.20 Purpose and scope.

(a) This subpart implements the provisions contained in Section 311 of the Act with regard to temporary exemptions for existing powerplants.

(b) This subpart establishes the criteria and standards which owners or operators of existing powerplants who petition for a temporary exemption must meet to sustain their burden of proof under the Act.

(c) You shall submit all petitions for temporary exemptions for existing powerplants in accordance with the procedures set out in Part 501 of these regulations.

(d) The duration of any temporary exemption granted under this subpart shall be measured from the date that the applicable prohibition would just apply if the exemption had not been granted.

§ 504.21 Lack of alternate fuel supply.

(a) *Eligibility.* Section 311(a)(1) of the Act provides for a temporary exemption due to lack of an alternate fuel supply. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You made a good faith effort to obtain an adequate and reliable supply of an alternate fuel of the quality necessary to conform to th design and operational requirements of the existing powerplant;

(2) For the period of the proposed exemption, the cost of using such a supply would substantially exceed the cost of using imported petroleum as a primary energy source as defined in § 504.12 (cost calculation) of these regulations; and

(3) You will be able to comply with the applicable prohibitions at the end of the proposed exemption period.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A description of the approach and methodology you used to search for and evaluate the use of the alternate fuels you considered;

(2) A description of the detailed design requirements for the existing powerplant (as specified by the purchaser), including capacity, alternate fuel capability, and all other specifications;

(3) A description of the specific fuel characteristics of all the fuels which can be used by the existing powerplant;

(4) Evidence that you sought to obtain the full range of alternate fuels and fuel characteristics which could be used by the existing powerplant, including bid requests, and/or advertisements for supply contracts and all responses thereto, as well as evidence of any other arrangements you attempted to make to secure supplies;

(5) Evidence of the contracts or other arrangements you have made to insure a reliable and adequate supply of an alternate fuel at the end of the proposed exemption; and

(6) All data required by § 504.12 (Cost Calculation) of these regulations necessary for computing the cost calculation formula.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account any extensions or renewals, may not exceed ten years.

§ 504.22 Site limitations.

(a) *Eligibility.* Section 311(a)(2) of the Act provides for a temporary exemption due to a site limitation. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA, that one or more of the following specific physical limitations relevant to the operation of your powerplant exist which, despite your diligent good faith, cannot be overcome before the end of the proposed exemption period:

(1) Alternate fuels would be inaccessible;

(2) Transportation facilities for alternate fuels would be unavailable;

(3) Adequate facilities for handling, using or storing an alternate fuel would be unavailable;

(4) Adequate means for controlling and disposing of wastes would be unavailable;

(5) Adequate and reliable supply of water would be unavailable; or

(6) Other site limitations exist which would not permit the operation of the existing powerplant using an alternate fuel.

(b) *Evidence to be submitted in support of the petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above criteria:

(1) Evidence that the site limitation is a physical limitation, and not a requirement of Federal, state, or local law which could be the basis of an exemption under § 504.34 (State or local requirements);

(2) Evidence that alternative means for overcoming the specific site limitations were considered, with a detailed description of the efforts made to overcome the site limitations set out in your petition;

(3) Evidence of the equipment or space requirements for which the site limitation is claimed; and

(4) Evidence of contracts or other arrangements you have made to insure that the site limitation will be overcome and that you will comply with the applicable prohibitions at the end of the proposed exemption period. Examples of evidence relevant to establishing a site limitation for purposes of a temporary exemption are as follows:

(i) Detailed documentation of impediments, including rights of way problems, site diagrams, maps of the surrounding areas and other items essential to the showing of a site limitation;

(ii) Identification of transportation facilities relevant to the specific site of the powerplant and demonstration why existing transportation facilities cannot be utilized or new facilities constructed;

(iii) Copies of bid requests, and advertisements, and other evidence of general efforts made to secure alternative transportation facilities;

(iv) Identification of potential alternate fuel storage locations within a reasonable geographic area surrounding the powerplant;

(v) Detailed scale site plans of the entire facility which include those areas not directly involved with the specific powerplant;

(vi) A specific listing of all equipment necessary and not currently available to properly handle alternate fuels;

(vii) Copies of bid requests, and advertisements and other evidence of general efforts made to secure alternative fuel storage facilities;

(viii) Copies of quotes from bona fide suppliers, indicating lead times for purchase and installation of required ancillary storage of handling equipment;

(ix) Specific listing of any equipment necessary and not currently available to properly control and dispose of waste;

(x) Identification of potential alternate waste disposal locations within a reasonable geographic area surrounding the powerplant;

(xi) A description of efforts made to secure offsite disposal areas, including the cost of acquisition of the sites, transportation facilities and waste handling costs involved in their use; and

(xii) Copies of bid requests, and advertisements, and other evidence of general efforts made to secure waste control and disposal equipment.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account any extensions or renewals, may not exceed five years.

§ 504.23 Inability to comply with applicable environmental requirements.

(a) *Eligibility.* Section 311(a)(3) of the Act provides for a temporary exemption due to an inability to comply with applicable environmental requirements. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that despite diligent good faith efforts:

(1) You are unable to comply immediately with the applicable prohibitions imposed by the Act or orders by ERA without violating applicable Federal or State environmental requirements;

(2) You will be able to comply with the applicable prohibitions imposed by the Act or ERA orders by the end of the temporary exemption period.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA, you must provide in your petition the following substantial evidence to corroborate the above requirements:

(1) A detailed explanation why the facility cannot burn an alternate fuel or comply with the prohibitions of the Act without violating applicable environmental requirements;

(2) Copies of all technical studies that you have relied upon with regard to consideration of alternate fuels, pollution control equipment, variances, State Implementation Plan revisions, and delayed compliance orders;

(3) Copies of requests for bids, all responses received, and contracts signed, if any, for an alternate fuel supply and for the purchase and installation of pollution control equipment; and

(4) Copies of correspondence with the State or EPA concerning variances, State Implementation Plan revisions, delayed compliance orders, solid waste permits or approvals, or modifications to National Pollution Discharge Elimination System (NPDES) permits.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account extensions or renewals, may not exceed 5 years.

§ 504.24 Future use of synthetic fuels.

(a) *Eligibility.* Section 311(b) of the Act provides for a temporary exemption based upon the future use of synthetic fuels. ERA shall grant you such exemption if you demonstrate to the satisfaction of ERA that:

(1) You will be able to comply with the applicable prohibitions, rule or order by the end of the proposed exemption period by the use of synthetic fuel as a primary energy source in your powerplant;

(2) Your will not be capable of complying with the applicable prohibitions by using an alternate fuel in your powerplant before the end of the proposed exemption period.

(b) *Evidence required in support of a petition.* To submit an adequate petition of review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) Copies of economic and technical feasibility studies pertaining to the adoption of an innovative technology for use of an alternate fuel in your powerplant;

(2) A complete description of the innovative technology you propose to use including explanation of its innovative characteristics, detailed engineering and design specifications, and a description of the specific fuel characteristics of the alternate fuel(s) which can be used with the innovative technology;

(3) Reliable evidence of the financial and contractual commitments you have made to construct or modify, op-

erate and maintain equipment which represents an innovative technology for use of an alternate fuel

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You shall submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption may be granted for a period of up to five years and may be extended for an additional five years, but so extended may not exceed 10 years.

§ 504.25 Use of innovative technologies.

(a) *Eligibility.* Section 311(c) of the Act provides for a temporary exemption based upon the use of innovative technologies. ERA shall grant you an exemption if you demonstrate to the satisfaction of ERA that:

(1) You will be able to comply with the applicable prohibitions, rule or order at the end of the proposed exemption period by adoption of a technology for the use of an alternate fuel which ERA has determined to be an innovative technology.

(2) You will not be capable of complying with the applicable prohibitions by using an alternate fuel in your powerplant before the end of the proposed exemption period.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) Copies of economic and technical feasibility studies pertaining to the adoption of an innovative technology for use of an alternate fuel in your powerplant;

(2) A complete description of the innovative technology you propose to use including explanation of its innovative characteristics, detailed Engineering and design specifications, and a description of the specific fuel characteristics of the alternate fuel(s) which can be used with the innovative technology;

(3) Reliable evidence of the financial and contractual commitments you have made to construct or modify, operate and maintain equipment which represents an innovative technology for use of an alternate fuel and which will be used at the end of the proposed exemption period; and

(4) Copies of bid requests, advertisements, contracts and/or other agreements you have made to insure a reliable and adequate supply of an alternate fuel at the end of the proposed exemption;

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. Your shall submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption may be granted for a period of up to 5 years and may be extended for an additional 5 years, but so extended may not exceed 10 years.

§ 504.26 Powerplants: public interest exemption.

(a) *Eligibility.* Section 311(e) of the Act provides for a temporary public interest exemption. ERA may grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You are unable to comply with the applicable prohibitions imposed by the Act, or order or rule issued by DOE, except in extraordinary circumstances, during the period for which the exemption is requested, but that you will be capable of complying at the end of the proposed exemption period;

(2) You are not eligible for a temporary exemption based on lack of alternate fuel supply, site limitations, environmental requirements, synthetic fuels, innovative technologies, retirement, peakload, or reliability of service;

(3) The granting of the petition is in accord with the purposes of the Act and is in public interest.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition substantial evidence to corroborate the above requirements.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account extensions or renewals, may not exceed 5 years.

(e) *Special rule for temporary public interest exemption.* Part 508 provides criteria and expedited procedures for you to petition for a temporary public interest exemption from the prohibitions against the use of natural gas contained in section 301(a) (2) and (3) of the Act if you own or operate an existing powerplant which is using a middle distillate as a primary energy source.

§ 504.27 Retirement.

(a) *Eligibility.* Section 311(d) of the Act provides for a temporary exemption for retirement. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) The powerplant will be retired at or before the expiration of this temporary exemption;

(2) You will not be capable of complying with the application prohibitions contained in Title III, Subtitle A of FUA by consuming alternate fuels before retirement of the powerplant.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A detailed engineering analysis explaining why the powerplant cannot use alternate fuels prior to retirement;

(2) Copies of FPC form No. 12 including Schedules A & B, filed by the operating utility during the previous two years;

(3) Copies of reports filed by the operating utility during the two years preceding the petition with its Reliability Council detailing 10 year projections of changes in generating capacity. (These reports are required by FPC Form No. 383-4.);

(4) Any state PUC permits necessary for the retirement of a powerplant; and

(5) Any other documentary evidence which indicates the reasons for retirement and plans for replacement or substitution of the retired powerplant.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You shall submit an updated compliance plan as required by § 504.17 (except § 504.17 (b)(1)(ii)) of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account extensions or renewals, may not exceed 5 years.

(e) *Restriction.* In the event this exemption is granted you will not be eligible for any other exemption under Title III, Subtitle B of the Act.

§ 504.28 Temporary exemption for powerplants necessary to maintain reliability of service.

(a) *Eligibility.* (1) Section 311(g) of the Act provides for a temporary exemption to maintain reliability of service. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that you are not capable of complying with the applicable prohibitions imposed by the Act or by ERA order without an impairment of reliability of service as measured by the loss of load probability technique described in paragraphs (a)(2) and (a)(3) of this section.

(2) You must calculate reliability of service utilizing the loss of load probability (LOLP) technique. The LOLP must be computed for your electric region for the period of time the plant is unavailable for operation or available at a reduced capacity. It is to be calculated as the sum of either the weekly or the monthly estimates of hourly load/capacity deficits. You may decide whether to perform the calculation using weekly or monthly data. The LOLP calculation must take into consideration equipment forced outage rates, projected customer electrical demand, and generating capacity projections for the electric region, including existing generating capacity, planned generating capacity additions and projected firm bulk electrical purchases and sales, and projected retirements. If necessary, you may also calculate LOLP with modifications to account for transmission constraints, energy shortages, and other factors that are not adequately addressed by adhering to the foregoing specifications.

(3) Reliability of service is impaired if the LOLP at the time the plant is out of service or operates at reduced capacity, including all available emergency reliability connections and other bulk power ties, is greater than one day in five years.

(b) *Evidence supporting the petition.* To submit an adequate petition for review by ERA you must provide the following substantial evidence to corroborate the above requirements:

(1) All data you used in determining the loss of load probability;

(2) An explanation including equations of how you are calculating the loss of load probability; and

(3) A showing that modifications to the plant could not have been scheduled at a different time so that reliability would not be impaired.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account extensions or renewals, may not exceed ten years, or extend beyond December 31, 1994, in the case of natural gas whichever comes first.

§ 504.29 Peakload powerplants.

(a) *Eligibility.* (1) Section 311(f) of the Act provides for a temporary exemption for peakload powerplants. ERA shall grant you such an exemption if you certify to ERA that the powerplant will be operated solely as a peakload powerplant for the period of the exemption.

(2) Your powerplant is operated solely as a peakload powerplant if the electrical generation of the powerplant in kilowatt hours does not exceed, for any 12-calendar-month period, the powerplant's design capacity multiplied by 1,500 hours.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA your petition must be accompanied by a sworn statement signed by the Chief Executive Officer of the electric utility which will operate the powerplant certifying that the powerplant is to be operated solely as a peakload powerplant. The certification must set forth the design capacity of the powerplant and the maximum allowable generation of the powerplant in kilowatt hours according to the definition of peakload for each 12 months of operation as a peakload powerplant.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 504.17 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You shall submit an updated compliance plan as required by § 504.17 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Liability for operating in excess of exemption.* The operation of a peakload powerplant which has been granted this exemption in excess of that allowed by the exemption shall be subject to penalties under Title VII, Subtitle C of the Act unless the powerplant meets the criteria set forth in section 721(c) of the Act.

(e) *Duration.* This temporary exemption, taking into account extensions or renewals, may not exceed 5 years or in the case of natural gas extend beyond December 31, 1994 whichever comes first.

(f) *Reporting requirement.* If the petition is granted, you must report to ERA, at the end of each 12-month period from the first day of the month following the effective date of the exemption and, if applicable, upon reaching the maximum number of hours of permitted operation within each 12-month period, the name, location, and design capacity of the exempted unit, the number of hours of operation permitted by the exemption, and the number of hours of actual operation.

Subpart E—Permanent Exemptions for Existing Electric Powerplants.

§ 504.30 Purpose and scope.

(a) This subpart implements the provisions contained in Section 312 of the Act with regard to permanent exemptions for existing electric powerplants.

(b) This subpart establishes the criteria and standards which owners or operators of existing powerplants that petition for a permanent exemption must meet to sustain their burden of proof under the Act.

(c) You must submit all petitions for permanent exemptions for existing powerplants in accordance with the procedures set out in Part 501 of these regulations.

§ 504.31 Lack of alternate fuel supply.

(a) *Eligibility.* Section 312(a)(1)(A) of the Act provides for a permanent exemption due to lack of an alternate fuel supply at a cost which does not substantially exceed the cost of using imported petroleum. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You made a good faith effort to obtain an adequate and reliable supply of an alternate fuel of the quality necessary to conform to design and operational requirements of the existing powerplant; and

(2) The cost of using such a supply would substantially exceed the cost of using imported petroleum as a primary energy source during the remaining useful life of the existing powerplant as defined in § 504.12 (Cost Calculation) of these regulations.

(b) *Evidence in support of a petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A detailed description of the design requirements for the existing powerplant (as specified by the purchaser), including capacity, alternate fuels capability, and all other pertinent specifications;

(2) A description of the spcific fuel characteristics of all the fuels which can be used by the existing powerplant;

(3) Evidence that you sought the full range of alternate fuels and fuel characteristics which could be used by the

existing powerplant, including bid requests and/or advertisements for supply contracts, all proposals and responses thereto, as well as evidence of any other arrangements you attempted to make to secure supplies;

(4) All data required by § 504.12 of these regulations (Cost Calculation) necessary for computing the cost calculation formula; and

(5) A description of the approach and methodoloy you used to search for and evaluate the use of the alternate fuels you considered.

§ 504.32 Site limitations

(a) *Eligibility.* Section 312(a)(1)(B) of the Act provides for a permanent exemption due to a site limitation. ERA shall grant you such an exemption if you demonstrate to the satisfacton of ERA that, despite food faith efforts:

(1) Alternate fuels are inaccessible as a result of a specific physical limitation to the operation of the existing powerplant;

(2) Transportation facilities for alternate fuels would be unavailable;

(3) Adequate facilities for handling, using or storing alternate fuels would be unavailable;

(4) Adequate means for controlling and disposing of wastes would be unavailable;

(5) Adequate and reliable supply of water would be unavailable; or

(6) Other site limitations exist which would not permit the operation of the existing powerplant using an alternate fuel, and these limitations cannot be resonably expected to be overcome within five years after effective date of the prohibition.

(b) *Evidence to be submitted in support of the petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above criteria.

(1) Evidence that the site limitation is a physical limitation, and not a requirement of Federal, State, or local law which could be the basis of an exemption under § 504.34 (State or local requirements);

(2) Evidence that alternative means for overcoming the specific site limitations were sought, with a detailed description of the efforts made to overcome the site limitations set out in your petition; and

(3) Evidence of the equipment or space requirments for which the site limitation is claimed. Examples of evidence relevant to establishing a site limitation for purposes of a permanent exemption are as follows:

(i) Detailed documentation of impediments, including rights of way problems, site diagrams, maps of the surrounding areas and other items essential to the showing of a site limitation;

(ii) Identification of transportation facilities relevant to the geographic site of the powerplant and demonstration why existing transportation facilities cannot be utilized or new facilities constructed;

(iii) Copies of bid requests, advertisements and evidence of general efforts made to secure alternative transportation facilities;

(iv) Identification of potential alternate fuel storage locations within a reasonable geographic surrounding the powerplant;

(v) Detailed scale site plans of the entire facility which include those areas not directly involved with the specific powerplant;

(vi) A specific listing of all equipmpent necessary and not currently available to properly handle alternate fuels;

(vii) Copies of bid requests, and advertisements and evidence of general efforts made to secure alternative fuel storage facilities;

(viii) Copies of quotes from bona fide supplier, indication lead times for purchase and installation or required ancillary storage or handling equipment;

(ix) Specific listing of any equipment necessary and not currently available to properly control and dispose of waste;

(x) Identification of potential alternate waste disposal locations within a reasonable geographic area surrounding the powerplant;

(xi) A description of efforts made to secure off-site disposal area, including the cost of acquisition of the sites, transportation facilities and waste handling costs involved in their use; and

(xii) Copies of bid requests, advertisements, and general efforts made to secure waste control and disposal equipment.

§ 504.33 Inability to comply with applicable environmental requirements.

(a) *Eligibility.* Section 312(a)(1)(C) of the Act provides for a permanent exemption due to the inabilility to comply with the applicable environmental requirements. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that, despite good faith efforts you cannot burn alternate fuels without violating applicable environmental requirements within five years after the effective date of the prohibition.

(b) *Evidence supporting petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A detailed explanation why the facility cannot comply with the prohibitions of the Act within five (5) years without violating applicable environmental requirements;

(2) Copies of all technical studies that you have relied upon with regard to consideration of alternate fuels, pollution control equipment, variances, State Implementation Plan revisions, and delayed compliance orders;

(3) Copies of requests for bids, all responses received, and contracts signed, if any, for an alternate fuel supply and for the purchase and installation of pollution control equipment; and

(4) Copies of correspondence with the State or EPA concerning variances, State Implementation Plan revisions, delayed compliance orders, soiid waste permits or approvals, or modifications to NPDES permits.

(c) *Prepetition actions.* It is recommended that you request a meeting with ERA and EPA or the appropriate State regulatory agency to discuss options for complying with the prohibitions.

§ 504.34 State or local requirements.

(a) *Eligibility.* Section 312(b) of the Act provides for a permanent exemption due to certain State or local requirements. ERA may grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) With respect to the site of the powerplant, the operation of the existing powerplant using an alternate fuel is infeasible because of a state or local requirement;

(2) If such state or local requirement is under a building code or nuisance or zoning law, no other exemption under Title III, Subtitle B of the Act could be granted;

(3) You have, in good faith, attempted unsuccessfully to obtain a waiver or variance from the state or local requirement or have demonstrated why none is available; and

(4) The granting of the exemption would be in the public interest and would be consistent with the purposes of this Act.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA, you must provide the following substantial evidence to corroborate the above requirements:

(1) A copy of the pertinent state or local requirement with its citation and its legislative history;

(2) The identification and location of the administrative body which implements the requirement;

(3) A description of your attempts to obtain a waiver or a variance from the requirement;

(4) A description of any activities you were involved in pertaining to the enactment of the requirement;

(5) A description of equipment, procedures, advance planning time and

costs necessary to comply with the requirement;

(6) A detailed description of why compliance is infeasible;

(7) The impact upon you and/or your local community, if any, should this petition be denied;

(8) An explanation of the reasons why granting this exemption would be in the public interest; and,

(9) An analysis of why you cannot qualify for an exemption under Subtitle B if such state or local requirement is under a building code or nuisance or zoning law.

§ 504.35 Cogeneration.

(a) *Eligibility.* Section 312(c) of the Act provides for a permanent exemption for cogeneration. ERA may grant you such an exemption if you demonstrate to the satisfaction of ERA that you meet at least the following minimum criteria:

(1) You are unable to comply with the applicable prohibitions; and

(2) There are economic and other benefits of cogeneration with petroleum or natural gas, which are unobtainable through the use of an alternate fuel.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) Documentary evidence which demonstrates that you considered the use of alternate fuels, including a description of the fuel alternatives you examined and the factors important in your decision to reject the use of alternate fuels. Such factors would include lack of alternate fuel supply, site limitations, or environmental requirements;

(2) The design specifications of the existing unit;

(3) An engineering description of the system, including existing system output and uses thereof, with sufficient detail to ensure that the unit qualifies as a cogeneration facility;

(4) A detailed economic and engineering analysis demonstrating the benefits of cogenerating with petroleum or natural gas and demonstrating that these benefits are not obtainable through the use of alternate fuels.

(5) A comparison of the total oil and gas consumption by the existing cogeneration facility and the best feasible alternatives, including the effect on oil or gas used by the electric utility or by other affected parties; and

(6) An analysis of the immediate and long-term economic impacts on parties not directly involved with the facility (for example, the other customers of the utility receiving the electricity).

§ 504.36 Permanent exemption for certain fuel mixtures containing natural gas or petroleum.

(a) *Eligibility.* Section 312(d) of the Act provides for a permanent exemption for certain fuel mixtures. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You propose to use a mixture of natural gas or petroleum and an alternate fuel as a primary energy source;

(2) You are not capable of complying with the applicable prohibitions; and

(3) The amount of petroleum or natural gas you propose to use in the mixture will not exceed the minimum percentage of the total Btu heat input needed to maintain operational reliability consistent with maintaining a reasonable level of fuel efficiency.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A complete description of the fuel mixture, component elements of the mixture, and percentage of each component to be utilized;

(2) The design specifications for the unit for which you are requesting an exemption;

(3) An engineering assessment of the proportions of petroleum or natural gas needed to maintain operational reliability and an adequate level of fuel efficiency; and

(4) Documentary evidence which demonstrates that you have considered the use of alternate fuels as a primary energy source. You must include a description of the supply alternatives you considered, the cost and availability of each alternate fuel considered, and the factors important in your decision to reject the use of an alternate fuel as a primary energy source; and

(5) If the amount of natural gas you impose to use in the mixture exceeds the minimum percentage needed to maintain operational reliability and an adequate level of fuel efficiency, documentary evidence which demonstrates that the natural gas will be mixed with synthetic fuels derived from municipal wastes or agricultural wastes and that use of an increased percentage of natural gas would encourage the use of alternate or new technologies which use renewable sources of energy.

(c) *Reporting requirement.* If the exemption is granted, you must submit an annual report to ERA certifying that the affected units have used no more than the percentage of oil or natural gas specified in the exemption order. The certification shall be executed by your Chief Executive Officer.

§ 504.37 Emergency purposes.

(a) *Eligibility.* Section 312(e) of the Act provides for a permanent exemption for emergency purposes. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(a) You are unable to comply with the applicable prohibitions or orders or rules issued by ERA;

(2) You shall operate and maintain the powerplant for emergency purposes only.

(b) *Definition.* For the purposes of this permanent exemption an emergency exists when the operating utility has been required to curtail its industrial customers by 10 percent or more from expected non-interruptible demand.

(c) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must provide substantial evidence to corroborate the above requirements. The evidence submitted must include at a minimum:

(1) A certificate executed by the Chief Executive Officer of the operating utility stating that emergency operation under the provisions of this exemption will occur only when the utility has curtailed industrial customers by 10 percent or more from expected non-interruptible demand; and

(2) Documentary evidence which demonstrates that you considered the use of alternate fuels, including a description of the fuel alternatives you examined and the factors important in your decision to reject the use of alternate fuels. Such factors would include lack of alternate fuel supply, site limitations, environmental requirements, certain State or local requirements, or other reasons which would preclude the use of an alternate fuel.

(d) *Reporting requirement.* At the end of each 12 month period from the effective date of the exemption, you must report to ERA the monthly and annual total generating capacity used and amounts of electricity generated under the provisions of this exemption with a description of the purposes of use.

§ 504.38 Peakload powerplants.

(a) *Eligibility.* (1) Section 312(f) of the Act provides for a permanent exemption for peakload powerplants. ERA shall grant you such an exemption if you demonstrate to ERA that:

(i) The powerplant will be operated solely as a peakload powerplant for the remaining life of the powerplant;

(ii) You are not capable of complying with the applicable prohibitions imposed by the Act or by ERA order without an impairment of reliability of service as measured by the loss of load probability technique described in

paragraphs (a)(3), and (a)(4) of this section; and

(iii) Modification of the powerplant to permit compliance with the prohibitions of the Act—

(A) Is technically infeasible; or

(B) Would result in an unreasonable expense as described in the cost calculations portion (see § 504.12) of these regulations.

(2) Your powerplant is operated solely as a peak-load powerplant if the electrical generation of the powerplant in kilowatt hours does not exceed, for any 12-calendar-month period, the powerplant's design capacity multiplied by 1,500 hours.

(3) You must calculate reliability of service utilizing the loss of load probability (LOLP) technique. The LOLP must be computed for your electrical region using the first 12-month period of the proposed exemption. It is to be calculated as the sum of either the weekly or the monthly estimates of hourly load/capacity deficits. You may decide whether to perform the calculation using weekly or monthly data. The LOLP calculation must take into consideration equipment forced outage rates, projected customer electrical demand, and generating capacity projections for the electrical region, including existing generating capacity, planned generating capacity additions and projected retirements. If necessary, you may also calculate LOLP with modifications to account for transmission constraints, energy shortages, and other factors that are not adequately addressed by adhering to the foregoing specifications.

(4) Reliability of service is impaired if the LOLP including all available emergency reliability connections and other bulk power ties, is greater than one day in five years.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must provide the following substantial evidence to corroborate the above requirements:

(1) A sworn statement signed by the Chief Executive Officer of the electric utility which will operate the powerplant certifying that the powerplant is to be operated solely as a peakload powerplant; the certification must set forth the design capacity of the powerplant and the maximum allowable generation of the powerplant in kilowatt hours according to the definition of peakload for each 12 month period of operation as a peakload powerplant;

(2) All data you used in determining the loss of load probability;

(3) An explanation including equations of how you are calculating the loss of load probability;

(c) *Liability for operating in excess of exemption.* The operation of a peak-load powerplant which has been granted this exemption in excess of that allowed by the exemption shall be subject to penalties under Title VII, Subtitle C of the Act unless the powerplant meets the criteria set forth in section 721(c) of the Act.

(d) *Reporting requirement.* If the petition if granted, you must report to ERA, at the end of each 12 month period from the first day of the month following the effective date of the exemption and, if applicable, upon reaching the maximum number of hours of permitted operation within each 12 month period, the name, location, and design capacity of the exempted unit, the number of hours of operation permitted by the exemption, and the number of hours of actual operation.

§ 504.39 Intermediate load powerplants.

(a) *Eligibility.* Section 312(g) of the Act provides for an exemption for use of petroleum as a primary energy source by intermediate load powerplants. ERA may grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) The Administrator of the EPA or the Director of the appropriate State air pollution control agency has certified that the use of any available alternate fuel as a primary energy source will cause or contribute to a concentration, in an air quality control region or any area within such region, of a pollutant for which any national ambient air quality standard is or would be exceeded as described in (c) below:

(2) The intermediate load powerplant operated will replace no more than the equivalent generating capacity of existing units which:

(i) Permanently cease operation within one month of ERA's granting the intermediate load powerplant this exemption;

(ii) Use natural gas or petroleum as a primary energy source;

(iii) Are owned by the same person who is to operate the existing powerplant;

(iv) Are capable of using coal as a primary energy source; and

(v) Would cause or contribute to a pollutant concentration in a manner described in paragraph (a)(1), of this section;

(3) The powerplant is and shall continue to be operated only as an intermediate load powerplant in which the electrical generation, in kilowatt hours, for any 12-calendar-month period, shall not exceed the powerplant's design capacity multiplied by 3,500 hours;

(4) The net heat input rate for the powerplant will be maintained at or less than 9,500 Btu's per kilowatt hour throughout the useful life of the powerplant;

(5) The powerplant has the capability to use a synthetic fuel derived from an alternate fuel as a primary energy source.

(b) *Evidence supporting the petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A copy of your application for air quality certification for this unit filed with the EPA or State air pollution control agency, and all supporting documentation filed with or subsequent to the application;

(2) A description of the existing powerplants to be replaced, if any, by the intermediate load powerplant which shall include:

(i) The name and location of each of the existing powerplants;

(ii) The volume of fuel consumed by type for the previous two years by the existing powerplants;

(iii) The corporate ownership of the existing powerplants;

(iv) Evidence that the existing powerplants are capable of using coal; and

(v) The reasons for claiming that the existing powerplants would cause or contribute to a pollutant concentration if they used coal as a primary energy source;

(3) An affidavit executed by the Chief Executive Officer of the electric utility which will operate the powerplant certifying that the powerplant shall be operated at all times in the future only as an intermediate load powerplant. The certification shall set forth the design capacity of the powerplant and the maximum allowable generation of the powerplant in kilowatt hours for its first 12 months of operation from the date the petition for the exemption is filed.

(4) An affidavit executed by the Chief Executive Officer and a qualified engineer of the operating utility of the powerplant which certifies that the powerplant can operate at a heat rate of 9,500 Btu's per kilowatt hour or less throughout the useful life of the powerplant;

(5) An affidavit executed by the Chief Executive Officer and a qualified engineer of the operating utility certifying that the powerplant will meet the synthetic fuels capability requirement described in paragraph (a)(5) of this section. The affidavit must include a description of the specific characteristics that make the intermediate load powerplant capable of using a synthetic fuel; and,

(6) Identification and description with appropriate documentation of the synthetic fuels you have selected and a description of the basis for your

decision to select that particular fuel, including any marketing studies, contracts or other documents relating to that selection.

(c) *Air quality certification to the Secretary.* Your petition is not complete unless the Administrator of the Environmental Protection Agency or the Director of the appropriate State air pollution control agency has certified to the Secretary that the use by the powerplant of an alternate fuel as a primary energy source will cause or contribute to a concentration in an air quality control region or any area within the region of a pollutant for which any national ambient air quality standard is or would be exceeded.

The air quality certification shall be an essential part of the ERA administrative record on the petition and the record shall not be complete without it. The certificate shall include at least a specification of each alternate fuel considered by EPA or the appropriate State air pollution control agency in reaching its decision regarding certification.

(d) *Reporting requirements.* If the petition is granted, you must report to ERA, at the end of each 12 month period from the first day of the month following the effective date of the exemption and, if applicable, upon reaching the maximum number of hours of permitted operation within each 12 month period, the name, location and design capacity of the exempt unit, the number of hours of operation permitted by the exemption, the number of hours of actual operation, and efforts taken to seek and obtain a synthetic fuel for use in the powerplants.

(e) *Periodic review.* ERA shall, from time to time, review this exemption and shall terminate it when he finds that there is available a supply of synthetic fuel suitable for use by the exempt powerplant.

(f) *Enforcement.* Violations of the provisions of this exemption shall subject you to the maximum penalties provided for by Part 501, Subpart O of these regulations.

§ 504.40 Use of natural gas by powerplant with capacity of less than 250 million Btu's per hour

(a) *Eligibility.* Section 312(h) of FUA provides for a permanent exemption for the use of natural gas by powerplants with a capacity of 250 million Btu's per hour or less. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) The design capacity of the powerplant for consuming fuel (or mixture thereof) is less than a heat input rate of 250 million Btu's per hour;

(2) The electrical generation of the powerplant in 1976 and 1977 exceeded, in kilowatt hours, the powerplants design capacity multiplied by 3500 hours; and

(3) The powerplant is not capable of burning coal without—

(a) A substantial physical modification of the unit, as determined by the nature of the modifications and the cost calculation formula contained in Section 504.12 of these regulations; or

(b) A derating of greater than 25%.

(b) *Evidence required to support the petition.* To submit an adequate petition for review by ERA, you must include the following substantial evidence to corroborate the above requirements:

(1) The purchaser's design specifications and date of installation for the powerplant;

(2) A detailed history of the fuel consumption of the powerplant for 1976 and 1977 on a monthly basis for each fuel consumed;

(3) An itemized list of the modifications required to burn coal as a primary energy source, the estimated cost for each modification, and the time required to make these modifications, to include copies of all pertinent engineering documents utilized to arrive at these estimates;

(4) A current plot plan of the facility and an additional plot plan indicating the modifications needed to burn coal as a primary energy source;

(5) Comparative costs for burning natural gas as opposed to converting to and burning coal, in accordance with the cost calculations set out in § 504.12; and

(6) The derating factor, if any, anticipated from burning coal as a primary energy source in the unit(s) and a detailed description of the formulas and assumptions used to arrive at that factor.

(c) *Restriction.* (1) This exemption may only apply to the prohibitions under Section 301 of FUA and prohibitions by final rules or orders issued before January 1, 1990;

(2) A petition for this exemption must be submitted to DOE for filing on or before December 31, 1988.

§ 504.41 Use of liquified natural gas.

(a) *Eligibility.* Section 312(i) of the Act provides for a permanent exemption for the use of liquified natural gas (LNG). To qualify you must demonstrate to the satisfaction of ERA that:

(1) The Administrator of the EPA or the appropriate State air pollution control agency has certified that the use of coal or any available coal derived fuel as a primary energy source will cause or contribute to a concentration, in an air quality control region or any area within such region, of a pollutant for which any national ambient air quality standard is or would be exceeded (air quality certification);

(2) The Administrator of the EPA or the appropriate State air pollution control agency has certified that you will be unable to use coal or any available coal derived fuel as a primary energy source without violating applicable environmental requirements (environmental certification); and

(3) The LNG to be used at your powerplant will be produced in a foreign country.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA you shall include the following substantial evidence to corroborate the above requirements:

(1) Copies of your applications for an air quality certification and an environmental certification filed with the EPA or State air pollution control agency which request certification for coal and all available coal derived fuels, and copies of all supporting documentation filed with or subsequent to the applications; and

(2) The name of the country that will be the source of your LNG, the name of the company that owns the LNG terminal through which your LNG will be imported and the name and location of such terminal, and the name of the company that will be supplying you with LNG.

(c) *Air quality certification to the Secretary.* (1) Your petition is not complete unless the Administrator of the Environmental Protection Agency or the Director of the appropriate State air pollution control agency has certified to the Secretary that the use by the powerplant of an alternate fuel as a primary energy source will cause or contribute to a concentration in an air quality control region or any area within the region of a pollutant for which any national ambient air quality standard is or would be exceeded, and that you will be unable to use coal or a fuel derived from coal without violating applicable environmental requirements.

(2) The air quality certification and the environmental certification shall be an essential part of the ERA administrative record on the petition and the record shall not be completed without it. The certificate shall include at least a specification of each type of coal and fuel derived from coal considered by EPA or the appropriate State air pollution control agency in reaching its decision regarding certification.

(d) *Reporting requirement.* If the petition is granted, your must report to ERA, at the end of each 12 month period from the first day of the month following the effective date of the exemption and, if applicable, upon reaching the maximum number of

hours of permitted operation within each 12 month period, the name, location and design capacity of the exempt unit, the number of hours of operation permitted by the exemption, the number of hours of actual operation, and efforts taken to seek and obtain a synthetic fuel for use in the powerplants.

(e) *Periodic review.* ERA shall, from time to time, review this exemption and shall terminate it when he finds that there is available a supply of synthetic fuel suitable for use by the exempt powerplant.

(f) *Enforcement.* Violations of the provisions of this exemption shall subject you to the maximum penalties provided for by Part 501 Subpart O of these regulations.

PART 505—NEW MAJOR FUEL BURNING INSTALLATIONS

[See 43 FR 54030, November 17, 1978]

PART 506—EXISTING MAJOR FUEL BURNING INSTALLATIONS

Subpart A—Prohibitions

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506.1 Purpose and scope.
506.2 Prohibitions by order (case-by-case).

Subpart B—General Requirements for Exemptions

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506.11 Fuels Decision Report.
506.12 Cost calculation for existing installations.
506.13 Use of mixtures—general requirement for temporary exemptions.
506.14 Use of mixtures—general requirement for permanent exemptions.
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506.16 Terms and conditions; compliance plans.

Subpart C—Temporary Exemptions for Existing Major Fuel-Burning Installations

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506.21 Lack of alternate fuel supply.
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Subpart D—Permanent Exemptions for Existing MFBI's

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506.40 Installations served by certain international pipelines.

AUTHORITY: Department of Energy Organization Act, Pub. L. 95-91; Powerplant and Industrial Fuel Use Act of 1978, Pub. L. 95-620; Title V of the Independent Offices Appropriation Act of 1952, 65 Stat. 290, 31 U.S.C. 483(a); Executive Order 12009. 42 FR 46267.

Subpart A—Prohibitions

§ 506.1 Purpose and scope.

(a) *Purpose.* This subpart establishes the procedures ERA intends to employ in administering and implementing its authority to prohibit installations from using petroleum or natural gas.

(b) *Scope.* This subpart applies to all existing major fuel burning installations. Any person who has any ownership or interest in, or who operates, rents or leases an installation, is subject to the prohibitions of the Act and the penalties as specified by the Act.

§ 506.2 Prohibitions by order (case by case).

(a) ERA may prohibit, by order, the use of natural gas or petroleum as a primary energy source in an existing major fuel burning installation if ERA finds that—

(1) The installation has, or previously had, the technical capability to use an alternate fuel as a primary energy source;

(2) The installation has this technical capability or could acquire the technical capability without:

(i) A substantial physical modification of the unit, or

(ii) A substantial reduction in the rated capacity of the unit;

(3) It is financially feasible for the installation to use an alternate fuel as its primary energy source.

(b) ERA must make a proposed finding regarding the technical capability of a unit to use an alternate fuel as identified in paragraph (a)(1) of this section prior to the date of publication of the notice of the proposed prohibition. ERA will publish this finding in the FEDERAL REGISTER along with the notice of the proposed prohibition.

(c) Your installation shall be considered technically capable of using an alternate fuel as its primary energy source if:

(1) The installation was designed so as to be capable of using a specific alternate fuel as the primary energy source, with or without modification; or

(2) ERA determines that the installation is capable of using an alternate fuel as the primary energy source, even though the unit was not specifically designed for that alternate fuel.

(d) Your installation does not require substantial physical modification if it has the requisite furnace configuration and the requisite tube spacing to burn an alternate fuel.

(e) No substantial reduction in the rated capacity of the unit will be presumed to occur if the derating does not exceed 25 percent. ERA will not consider the loss of design capacity caused by the use of pollution control equipment.

(f) It is financially feasible for your installation to use an alternate fuel as its primary energy source if (1) the cost of using an alternate fuel does not substantially exceed the cost of using imported petroleum, as determined by utilizing the cost calculation described in § 506.12 of these regulations; and (2) you have the ability to raise the capital necessary to convert the unit to burn an alternate fuel as its primary energy source.

(g) If ERA finds that it is technically and financially feasible for your installation to use a mixture of petroleum or natural gas and an alternate fuel as its primary energy source, ERA may prohibit you, by order, from using petroleum and natural gas in amounts exceeding the minimum percentage of the total Btu heat input of the primary energy sources necessary to maintain reasonable fuel efficiency of the mixture. The minimum percentage (determined by ERA) may not, however, be less than 25 percent.

(h) ERA may not issue a final order to your installation (covered by this section) if you demonstrate by written submission that your facility would be eligible for an exemption under the criteria set out in this Part for any applicable exemption, or if you have demonstrated to the satisfaction of ERA that the required findings stated in paragraph (a) of this section cannot be made. However, if your installation would be eligible only for a temporary exemption, ERA can issue you a final order that will take effect at such time as the temporary exemption would have expired.

(i) ERA may not issue a final order under this section to your installation unless prior to issuance of the order there has been published in the FEDERAL REGISTER a notice of the proposed order. This notice shall provide a period of no less than 49 days in which interested persons may file written data, views and arguments and also provide an opportunity for interested persons to request a public hearing on the proposed order. It is during this public comment period that the recipient is given the opportunity to challenge the findings ERA must make to issue a final order and/or to demonstrate that the installation is eligible for an exemption.

(j) If ERA cannot issue your installation a final order because your facility is eligible for a permanent exemption,

or if the effective date of this order is delayed during the period that a temporary exemption is in effect, ERA will take the necessary action to assure that you comply with the terms and conditions of the order granting the exemption.

(k) ERA may not issue your installation an order under this section if your installation has been identified as a member of a category subject to a final rule at the time of the issuance of the proposed order.

Subpart B—General Requirements for Exemptions

§ 506.10 Purpose and scope.

This subpart establishes the general requirements necessary to qualify for either a temporary or permanent exemption under this Part and sets out the methodology for calculating the cost of using an alternate fuel and the cost of using imported petroleum.

§ 506.11 Fuels decision report.

(a) Before ERA will accept a petition for either a temporary or permanent exemption from a final prohibition order issued under this Part, you must include as part of your petition a Fuels Decision Report as described in Part 502. The Fuels Decision Report shall contain the analysis and documentation of the evidence required in support of your exemption request.

(b) If you are requesting a temporary or permanent exemption from a proposed prohibition order issued under this Part, you are not required to submit a Fuels Decision Report as part of your written submission. Your submission must include, however, all of the evidence required by the applicable section of the regulations pertaining to the exemption.

§ 506.12 Cost calculation for existing installations.

(a) *General.* (1) If you are requesting an exemption for an existing installation on the basis that the cost of using an alternate fuel as a primary energy source substantially exceeds the cost of using imported petroleum, you must use the comparative cost test provided in this section.

(2) The cost of using an alternate fuel in lieu of imported oil or gas as a primary energy source will be deemed to be substantially in excess of the cost of using imported oil or gas where the ratio of the former to the latter is greater than the index set periodically by ERA. Initially, ERA sets the index at (1.5). ERA will revise the index from time to time after public notice and time to comment. Revisions shall become effective for all ERA decisions after final publication.

(3) The cost test takes into consideration capital outlays, operation, and maintenance expenses, delivered fuel expenditures, and the effect of depreciation and taxes on cash flow. There are two comparative cost tests—a General Cost Test and a Special Cost Test. To demonstrate your eligibility for a permanent exemption on the basis that the cost of using an alternate fuel as a primary energy source substantially exceeds the cost of using imported petroleum, you must use the procedures specified in the General Cost Test (Section b). To demonstrate your eligibility for a temporary exemption, you may use either the procedures specified in the General Cost Test (Section b) or the Special Cost Test (Section c).

(4) The General Cost Test differs from the Special Cost Test with respect to the time period over which costs are calculated. When using the General Cost Test, the cost is computed for the remaining useful life of the installation. When using the Special Cost Test the cost is computed only for the term of the exemption.

(b) *Cost calculation—General cost test.* (1) You may be eligible for a permanent exemption if you demonstrate that the cost of using an alternate fuel starting with each successive year within the first ten years of the exemption will always substantially exceed the cost of using imported petroleum in the unit from the time the exemption becomes effective until the end of the installation's useful life. You will have to show that the cost of using an alternate fuel starting in each of the first ten years of the exemption and using oil or natural gas until the start of using alternate fuel, substantially exceeds the cost of using only imported petroleum.

(2) ERA will not grant a permanent exemption if a temporary exemption solves the cost problem within ERA's definition. Therefore, if the cost computed with successive starting dates for alternate fuel use (for the first ten years of the exemption) does not always substantially exceed the cost of using imported petroleum, you would only be eligible for a temporary exemption. The length of the temporary exemption would be the minimum period within which the cost of using alternate fuel always substantially exceeds the cost of using imported petroleum. For example, if you can burn coal but the coal will not be available from a bona fide supplier for 2 years, ERA may grant a temporary exemption and allow the burning of natural gas based on an acceptable certification of the schedule of delivery of coal.

(3) In the General Cost Test, ERA defines cost as the sum of the annual after-tax cash outlays for capital, operations and maintenance, and delivered fuel, and the effect of depreciation and taxes on cash flow discounted to the present.

(4) To conduct the test, you must use the equations that follow:

[6450-01-C]

(i) Calculate the ratio (R) of the cost of using an alternate fuel to the cost of using imported petroleum with equation 1.

EQ 1 $$R = \frac{\text{COST (ALTERNATE)}}{\text{COST (OIL)}}$$

(ii) Calculate the cost of using an alternate fuel and imported petroleum with equation 2.

EQ 2 $$\text{COST} = I + \frac{(1-t)(OM_1 + FL_1) - (t)(DPR_1)}{(1+K)^1} + \frac{(1-t)(OM_2 + FL_2) - (t)(DPR_2)}{(1+K)^2} + \ldots + \frac{(1-t)(OM_N + FL_N) - (t)(DPR_N)}{(1+K)^N} - \frac{Sp}{(1+K)^P}$$ 1/

(iii) Calculate investment (I), for equation 2 using equation 3.

EQ 3 $$I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_N}{(1+K)^N}$$

1/ This definition of cost follows accepted industry practice of basing investment decisions on the after-tax cash flow associated with investment, depreciation and operating expenses.

[6450-01-M]

(5) The terms in equations 1 through 3 are defined as follows:

R—The ratio of the cost of using an alternate fuel to the cost of using imported oil or gas.

COST—The total discounted after-tax cost in dollars of constructing and operating the installation for the remaining useful life of the installation.

I—Discounted total net capital outlay in dollars excluding investment tax credits.

I_o—Net capital outlay in dollars up to the time the exemption becomes effective.

I_1-I_N—Yearly net capital outlays from first year of the exemption through the remaining useful life of the installation.

OM—Annual cost in dollars of operating and maintaining the installation starting when the exemption becomes effective.

t—Federal income tax rate (see Section d).

FL—Annual delivered fuel cost in dollars starting when the exemption becomes effective (see Section d).

P—Year fuel is changed from oil to alternate fuel.

K—The real cost of capital expressed as a fraction (see Section d).

N—The remaining useful life of the installation (see Section d).

DPR—Annual depreciation using the method which depreciates the asset as quickly as allowed by law. Includes all relevant equipment, not just the equipment included in I.

Sp—Salvage value of equipment rendered useless by changing the fuel from oil or natural gas to alternate fuel in year P.

(6) The step by step procedure that follows shows the comparisons that you must make. It outlines the fuel comparisons as well as the time comparisons.

(i) Compute the cost (COST) of using an alternate fuel with equation 2.

(ii) Compute the cost (COST) of using an alternate fuel with equation 2 assuming an alternate fuel is not used as the primary energy source until the end of the first year of the exemption and that oil or natural gas is used for the first year of the exemption. Capital investment, operating and maintenance and fuel expenditures should reflect postponed use of alternate fuel (e.g., installation of scrubber when used).

(iii) Successively compute the cost (COST) of using an alternate fuel with equation 2 assuming use of an alternate fuel is postponed until the end of the second through tenth year of the exemption (and oil or natural gas is used in the years preceding alternate fuel use).

(iv) Compute the cost (COST) of using oil or natural gas with equation 2.

(v) Compute the ratios (R) of the cost of using an alternate fuel at the beginning of the exemption, and successively at the end of the first through tenth year of the exemption to the cost of using oil or natural gas from the start of the exemption throughout the remaining useful life of the installation with equation 1.

(vi) If all the rations (R) are greater than, for illustrative purposes, (1.5) (an index to be set periodically by ERA), your installation would meet the cost criteria for a permanent exemption. If one or more of the ratios (R) are equal to or less than (1.5) and a series of ratios (R) starting with the case where alternate fuel is used from the start of operation, are all greater than (1.5), a temporary exemption would be granted for the minimum period in which the cost of using an alternate fuel, deferred year by year, always exceeds (1.5).

(7) The following table shows the hypothetical results of four sets of calculations.

HYPOTHETICAL RESULTS OF FOUR SETS OF CALCULATIONS

Year in Which Alternate Fuel Use is Commenced	Case I	Case II	Case III	Case IV
At Start of Exemption	1.7	1.7	1.7	1.3
1	1.7	1.7	1.7	1.3
2	1.7	1.7	1.7	1.3
3	1.4	1.7	1.7	1.3
4	1.4	1.7	1.4	1.3
5	1.4	1.7	1.4	1.0
6	1.4	1.7	1.2	1.0
7	1.4	1.7	1.2	1.0
8	1.4	1.7	1.2	1.0
9	1.4	1.7	1.2	1.0
10	1.4	1.7	1.2	1.0

The results of the above table shows that: a two year temporary exemption would be granted in case I, a permanent exemption would be granted in Case II, a three year temporary would be granted in Case III, and no exemption would be granted in Case IV.

(c) *Cost calculation-special cost test.* (1) You may be eligible for a temporary exemption if you demonstrate that the cost of using an alternate fuel will substantially exceed the cost of using imported petroleum over the period of the proposed exemption. The period of the exemption cannot exceed ten years. You will have to show that the cost of using alternate fuel substantially exceeds the cost of using imported petroleum for the first year of the exemption, the first two years of the exemption, and each successive year of the exemption, up to the period of the proposed exemption. ERA will limit the duration of a temporary exemption to the shortest time possible.

(2) The calculation takes into consideration (i) the operations and maintenance and delivered fuel expenditures incurred during the proposed exemption, (ii) the effect of depreciation and taxes on cash flow during the proposed exemption and, (iii) the capital outlays associated with the exemption.

(3) To conduct the test you must use the equations that follow:

[6450-01-C] (i) Calculate the ratio (R) of the cost of using an alternate fuel to the cost of using imported petroleum with equation 6.

$$\text{EQ 6} \quad R = \frac{\text{COST (ALTERNATE)}}{\text{COST (OIL)}}$$

(ii) Calculate the cost using equation 7.

$$\text{EQ 7} \quad \text{Cost} = I + \frac{(1-t)(OM + FL) - (t)(DPR)}{(1+K)^1}_1 + \frac{(1-t)(OM + FL) - (t)(DPR)}{(1+K)^2}_2 + \ldots\ldots\ldots + \frac{(1-t)(OM + FL) - (t)(DPR)}{(1+K)^p}_p - \frac{Sp}{p}$$

(iii) Calculate investment (I) using equation 8.

$$\text{EQ 8} \quad I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots\ldots\ldots + \frac{I_p}{(1+K)^p}$$

[6450-01-M]

(4) The terms in equations 6 through 8 are defined as follows:

R—The ratio of the cost of using an alternate fuel to the cost of using imported petroleum.

COST—The total discounted after-tax cost in dollars, associated with the exemption, of constructing and operating the installation.

I—Discounted total net capital outlay in dollars excluding investment tax credit until the end of the proposed exemption. The investment in the basic installation itself (that which would be required if a change in the primary energy source were not being proposed) is not included. (ERA will not consider investment tax credits for oil- and gas-fired installations.)

I_o—Net capital outlay in dollars up to the time the exemption is effective.

I_1-I_p—Yearly net capital outlay from the first year of the exemption until the change to alternate fuel.

OM—Annual cost in dollars of operating and maintaining the installation during the exemption.

Sp—Salvage value of equipment rendered useless by changing from oil or natural gas to alternate fuel in year P.

t—Federal income tax rate (see Section d).

FL—Annual delivered fuel cost in dollars during the exemption (see Section d).

K—The real cost of capital expressed as a fraction (see Section d).

P—The period of the proposed exemption.

DPR—Annual depreciation using the method which depreciates the asset as quickly as allowed by law. Includes all relevant equipment, not just that equipment included in I.

(5) The step by step procedure that follows shows the comparison you must make.

(i) Compute the cost (COST) of using an alternate fuel assuming the length of the proposed exemption is one year with equation 7.

(ii) Compute the cost (COST) of using oil or natural gas valued at imported petroleum prices assuming the length of the proposed exemption is one year with equation 7.

(iii) Compute the ratio (R) of the cost of using an alternate fuel for the first year to the cost of using imported petroleum for the first year with equation 6.

(iv) Repeat the calculation made in (i), (ii), and (iii) above assuming the length of the proposed exemption is two years, three years, four years, and so on, up to the period of the proposed exemption.

(v) A temporary exemption would be granted, where one or more successive ratios (R) are greater than, for illustrative purposes, (1.5) (the index established by ERA).

(d) *Information on parameters used in the calculation.* (1) All estimated expenditures, except natural gas and petroleum products, shall be expressed in real (uninflated) terms using the prices in effect at the time the petition is submitted.

(2) The delivered price of oil or natural gas to be used in the cost calculation must reflect the price of imported oil. The imported petroleum price is reflected in the cost calculation in the following way:

$$PFE = \frac{PICO}{PCCO} \times PF$$

where

PICO=Price of imported crude oil. The most recent refiner acquistion cost of imported crude oil as reported in the FEDERAL REGISTER monthly notice for the DOE Domestic Crude Oil Allocation (Entitlements) Program.

PCCO=Price of composite crude oil. The most recent weighted average cost of total reported crude oil receipts as reported in the FEDERAL REGISTER notice for the DOE Entitlements Program.

PF=Price of your fuel. The most rcent actual weighted average cost of your fuel oil (other than natural gas). Alternatively, if no purchases of fuel oil occurred, or you used natural gas during that month, you should use a simple average of the industrial price of fuel oil (capable of being burned in your facility) sold in your area by at least three suppliers.

For proposed natural gas users, you shall use the price of No. 2 distillate fuel oil in this calculation.

PFE=Price of fuel for equation. The cost of oil for use in equation 1.

(3) For existing installations, the annual capacity factor shall be assumed to be the average capacity factor for the last five years or the life of the installation, if the installation is less than five years old. You may rebut this presumption with suitable engineering evidence.

(4) The remaining useful life of major fuel burning installations shall be 40 years minus the number of years of operation before the effective date of the exemption. You may rebut this presumption with suitable engineering evidence.

(5) The cost of capital for major fuel burning installations is 7.0 percent per year in real terms.

(6) The Federal income tax rate is 46 percent.

(7) All estimated expenditures will be computed in accordance with generally accepted accounting principles.

(e) *Evidence supporting the comparative cost test.* All petitions for exemption requiring the use of the comparative cost test shall include, but not be liminted to, the following information:

(1) A detailed accounting of all capital outlays including a description of all major construction and equipment. All critical assumptions should be stated and sufficient data should be included to support your estimates.

(2) A detailed accounting of all operations and maintenance expenditures including a description of all major elements. All critical assumptions should be stated and sufficient data included to support your estimates.

(3) A detailed accounting of all delivered fuel expenditures including transportation. All critical assumptions should be stated and sufficient data included to support your estimates. The fuel characteristics for each alternate fuel should be included.

(4) If you assume that the remaining useful life of the installation is less than 40 years minus the number of years of operation before the effective date of the exemption, all critical assumptions and sufficient data to support that position.

(5) A detailed accounting of the depreciation which should include the depreciable base and its tax life. All critical assumptions should be stated and sufficient data included to support your estimates.

(f) *Example of calculations.* (1) You are considering converting a major fuel burning installation from oil to coal. In this particular situation, the delivered cost of coal is much greater

for the first three years after the proposed conversion than it will be in the later years because of a transportation problem. Do you qualify for an exemption? If so, is it permanent or temporary?

(2) To determine if you qualify for a permanent exemption, you would have to use the General Cost Test and compute the ratios of the cost to use 1) coal for the remaining useful life of the installation after the effective date of the exemption; 2) imported petroleum for the first year of the exemption and coal for the remainder of the useful life of the installation; 3) imported pertroleum for the first two years of the exemption and coal for the remainder of the useful life of the installation, * * * ; and 11) imported petroleum for the first ten years of the exemption and coal for the remainder of the useful life of the installation to the cost of using imported petroleum for the remaining useful life of the installation after the effective date of the exemption.

(3) All eleven ratios would have to be higher than (1.5) (assumed index established by ERA) to qualify for a permanent exemption. However, if a series of successive ratios, starting with the case where alternate fuel is used from the start of the exemption, are all greater than (1.5), you would be eligible for a temporary exemption up to the last year the ratio is greater than (1.5).

(4) In this example, we will only compute the ratios of (i) the cost to use coal for the remaining useful life of the installation after the effective date of the exemption and (ii) the cost to use imported petroleum for the first three years of the exemption and coal for the remainder of the useful life of the installation, to the cost of using imported petroleum for the remaining useful life of the installation after the effective date of the exemption.

(5) To determine if you qualify for a temporary exemption, if you have not already done so with the General Cost Test, you would have to use the Special Cost Test and compute the ratios of the cost to use coal in the installation to the cost to use imported petroleum in the installation for one, two, and three years after the effective date of the exemption. All three ratios would have to be higher than (1.5) in order to qualify for a three-year temporary exemption. In this example, we will only compute the ratio of the cost of using coal to the cost to using imported petroleum for the first three years after the effective date of the exemption.

(6) *Parameters*—a set of hypothetical parameters are given below:

(i) Installation conversion to coal without changing capacity or remaining useful life:

Net capital outlay (without scrubber) to convert the installation to burn coal.—$890,000.
Salvage value of equipment rendered useless by shifting from oil to coal.—223,000.
Net capital outlay for scrubber.—2,575,000.
Operations and maintenance costs per year to burn coal.—858,000.

(ii) Existing oil burning installation.

Book value of installation.—2,668,000.
Operations and maintenance cost per year.—258,000.
Remaining useful life (after exemption becomes effective).—30 years.

(iii) Fuel.

Annual cost to burn imported oil.—2,163,000.
Annual cost to burn coal for the first three years of after the proposed conversion.—3,447,000.
Annual cost to burn coal for the fourth through thirtieth year after the proposed conversion.—1,159,000.

(7) *Analysis. (1) General cost test.* The relevant cash flows are shown in the following table for the three cases in which computations are being made.

CASH FLOWS FOR GENERAL COST TEST IN (IN THOUSANDS)

Type of cash flow	Year(s) flow occurs	Case 1—Coal over remaining useful life of installation	Case 2—Imported Petroleum for first 3 years and Coal Thereafter	Case 3—Imported petroleum over the remaining life of the installation
Investment	0	$890+$2,575	0	0
Investment	3	0	$890+2,575	0
Salvage	0	223	0	0
Salvage	3	0	$223	0
Operation & Maintenance	1, 2, 3	$858/yr.	$258/yr.	$258/yr.
Operation & Maintenance	4, —, 30	$858/yr.	$858/yr.	$258/yr.
Fuel	1, 2, 3	$3,477/yr.	$2,163/yr.	$3,163/yr.
Fuel	4, —, 30	$1,159/yr.	$1,159/yr.	$2.163/yr.
Effect of Taxes and Depreciation	1, —, 30	[1]	[1]	[1]

[1] Depreciation is greater of double declining balance or straight line over remaining period. For the purposes of this example all equipment is depreciated in the same way.

[6450-01-C]

The following computations are in thousands of dollars.

Case 1. Cost of using coal over the remaining life of the powerplant from the start of the exemption.

$$I = I_o + \frac{I_1}{(1+K)^1} + \frac{I_2}{(1+K)^2} + \ldots + \frac{I_N}{(1+K)^N}$$

$$= (890 + 2,575) + \frac{0}{(1.07)^1} + \frac{0}{(1.07)^2} + \ldots + \frac{0}{(1.07)^{30}}$$

$$= \$3,465$$

$$COST = I + \frac{(1-t)(OM_1 + FL_1) - (t)(DPR_1)}{(1+K)^1} + \frac{(1-t)(OM_2 + FL_2) - (t)(DPR_2)}{(1+K)^2} + \ldots + \frac{(1-t)(OM_N + FL_N) - (t)(DPR_N)}{(1+K)^N} - \frac{S_p}{(1+K)^p}$$

$$COST = 3,465 + \frac{(1-0.46)(858 + 3477) - 0.46 \times DPR_1}{(1.07)^1} + \frac{(1-0.46)(858 + 3477) - 0.46 \times DPR_2}{(1.07)^2} + \frac{(1-0.46)(858 + 3477) - 0.46 \times DPR_3}{(1.07)^3}$$

$$+ \frac{(1-0.46)\ (858 + 1159) - 0.46 \times DPR}{(1.07)^4}$$

$$+ \ldots + \frac{(1-0.46)\ (858 + 1159) - 0.46 \times DPR}{(1.07)^{30}}$$

$$- \frac{223}{(1.07)^0}$$

$$= 18{,}623$$

Case 2. Cost of using imported petroleum for the first three years of the exemption and coal thereafter.

$$I = I + \frac{I_1}{(1+k)^1} + \frac{I_2}{(1+k)^2} + \ldots + \frac{I_N}{(1+K)^N}$$

$$= 0 + \frac{(2{,}575 + 890)}{(1.07)^3}$$

$$= 2{,}828$$

$$COST = I + \frac{(1-t)\ (OM_1 + FL_1) - (t)(DPR_1)}{(1+k)^1}$$

$$+ \frac{(1-t)\ (OM_2 + FL_2) - (t)(DPR_2)}{(1+k)^2} + \ldots$$

$$+ \frac{(1-t)\ (OM_N + FL_N) - (t)(DPR_N) - S_p}{(1+k)^N (1+k)^p}$$

$$\text{COST} = 2{,}828 + \frac{(1-0.46)\ (258 + 2{,}163) - 0.46 \times \text{DPR}_1}{(1.07)^1} + \frac{(1-0.46)\ (258 + 2{,}163) - 0.46 \times \text{DPR}_2}{(1.07)^2} + \frac{(1-0.46)\ (258 + 2{,}163) - 0.46 \times \text{DPR}_3}{(1.07)^3} + \frac{(1-0.46)\ (858 + 1{,}159) - 0.46 \times \text{DPR}_4}{(1.07)^4} + \ldots\ldots + \frac{(1-0.46)\ (858 + 1{,}159) - 0.46 \times \text{DPR}_{30}}{(1.07)^{30}} - \frac{223}{(1.07)^3}$$

$$= 15{,}426$$

Case 3. Cost of using imported petroleum over the remaining useful life of the installation starting with the effective date of the exemption.

$$I = I_o + \frac{I_1}{(1+k)^1} + \frac{I_2}{(1+k)^2} + \ldots + \frac{I_N}{(1+k)^N}$$

$$= 0 + \frac{0}{(1.07)^1} + \frac{0}{(1.07)^2} + \ldots + \frac{0}{(1.07)^{30}}$$

$$= 0$$

$$COST = I + \frac{(1-t)(OM_1 + FL_1) - (t)(DPR_1)}{(1+k)^1}$$

$$+ \frac{(1-t)(OM_2 + FL_2) - (t)(DPR_2)}{(1+k)^2} + \ldots$$

$$+ \frac{(1-t)(OM_N + FL_N) - (t)(DPR_N)}{(1+k)^N} - \frac{S_p}{(1+k)^p}$$

$$COST = 0 + \frac{(1-0.46)(258 + 2,163) - 0.46 \times DPR_1}{(1.07)^1}$$

$$+ \frac{(1-0.46)(258 + 2,163) - 0.46 \times DPR_2}{(1.07)^2}$$

$$+ \ldots\ldots$$

$$+ \frac{(1-0.46)\,(258 + 2,163) - 0.46 \times DPR_{30}}{(1.07)^{30}}$$

$$= 15,605$$

Computation of ratios.

$$R = \frac{\text{COST (COAL THROUGHOUT LIFE)}}{\text{COST (OIL)}}$$

$$+ \frac{18,623}{15,605} = 1.19$$

$$R = \frac{\text{COST (OIL FIRST THREE YEARS, COAL THEREAFTER)}}{\text{COST (OIL)}}$$

$$= \frac{15,426}{15,605} = 0.99$$

Conclusion. Since the assumed index is (1.5), you would not qualif for a permanent exemption, or a temporary exemption using the General Cost Test.

(ii) Special Cost Test. The relevant cash flows are shown in the following tables for the two cases in which computations are being made.

CASH FLOW FOR SPECIAL COST TEST (IN THOUSANDS)

Type of Cash Flow	Year(s)	Case 1 Coal Over Remaining Useful Life of Installation	Case 2 Imported Petroleum First 3 Yrs. & Coal Thereafter
Investment	0	$890 + 2,575	0
Investment	3	0	$890 + $2,575
Salvage	0	223	
Salvage	3	0	$223
Operation & Maintenance	1, 2, 3	$ 858/yr.	$258/yr.
Fuel	1, 2, 3	$3,477/yr.	$2,163/yr.
Effects of Taxes and Depreciation	1, 2, 3	Depreciation is greater of double declining balance or straight line over remaining period. For the purposes of this example, all equipment is depreciated depreciated in the same way.	

The following computations are in thousands of dollars.

Case 1. Cost of using coal from the start of the exemption

$$I = I_o + \frac{I_1}{(1+k)^1} + \frac{I_2}{(1+k)^2} + \ldots + \frac{I_p}{(1+k)^p}$$

$$= (890 + 2,575) + \frac{0}{(1.07)^1} + \frac{0}{(1.07)^2} + \frac{0}{(1.07)^3}$$

$$= 3,465$$

$$COST = I + \frac{(1-t)(OM_1 + FL_1) - t.DPR_1}{(1+k)^1} + \frac{(1-t)(OM_2 + FL_2) - t.DPR_2}{(1+k)^2} + \ldots. + \frac{(1-t)(OM_p + FL_p) - t.DPR_p}{(1+k)^p} - \frac{S_p}{p}$$

$$COST = 3,465 + \frac{(1-0.46)(858 + 3,477) - 0.46 \times DPR_1}{(1.07)^1} + \frac{(1-0.46)(858 + 3,477) - 0.46 \times DPR_2}{(1.07)^2} + \frac{(1-0.46)(858 + 3,477) - 0.46 \times DPR_3}{(1.07)^3} - \frac{223}{(1.07)^o}$$

$$= \$8,922$$

Case 2. Cost of using imported petroleum for the first three years of the exemption (and coal thereafter)

$$I = I_o + \frac{I_1}{(1+k)^1} + \frac{I_2}{(1+k)^2} + \ldots + \frac{I_p}{(1+k)^p}$$

$$= 0 + \frac{(2{,}575 + 890)}{(1.07)^3}$$

$$= \$2{,}828$$

$$COST = I + \frac{(1-t)(OM_1 + FL_1) - t.DPR_1}{(1+k)^1} + \frac{(1-t)(OM_2 + FL_2) - t.DPR_2}{(1+k)^2} + \ldots + \frac{(1-t)(OM_p + FL_p) - t.DPR_p}{(1+k)^p} - \frac{S_p}{(1+k)^p}$$

$$COST = \$2{,}828 + \frac{(1-0.46)(258 + 2{,}163) - 0.46 \times DPR_1}{(1.07)^1} + \frac{(1-0.46)(258 + 2{,}163) - 0.46 \times DPR_2}{(1.07)^2} + \frac{(1-0.46)(258 + 2{,}163) - 0.46 \times DPR_3}{(1.07)^3} - \frac{223}{(1.07)^3}$$

$$= 5{,}460$$

Computation or ratio.

$$R = \frac{\text{COST (COAL FOR PERIOD OR EXEMPTION)}}{\text{COST (OIL FOR PERIOD OF EXEMPTION)}}$$

$$\frac{8{,}922}{5{,}460} = 1.63$$

Conclusion. If ERA had set the index at 1.5, you would be granted a temporary exemption.

[6450-01-M]

§ 506.13 Use of mixtures—general requirement for temporary exemption.

(a) ERA will not consider a petition for a temporary exemption under Section 311 of the Act to be complete, adequate or acceptable for filing unless you demonstrate, to the satisfaction of the ERA in your petition, whether or not the use of a mixture of natural gas or petroleum and an alternate fuel is economically and technically feasible during the period of the proposed exemption.

(b) If ERA determines that the use of a particular fuel mixture is technically and economically feasible during the period of the proposed exemption, ERA will condition the granting of any temporary exemption under this Part upon the use of that mixture during the period of the temporary exemption.

§ 506.14 Use of mixtures—general requirement for permanent exemption.

(a) *Application.* ERA will not consider a petition for any of the following exemptions provided for in Section 312 of the Act (lack of alternate fuel supply, site limitations environmental requirements, State or local requirements, cogeneration, emergency purposes, product/process requirements, or scheduled equipment outages) to be complete, adequate, or acceptable for filing unless you demonstrate to the satisfaction of ERA in your petition that you have considered the use of a mixture(s) for which an exemption under § 506.36 (Fuel Mixtures) of these regulations would be available.

(b) *Demonstration.* ERA will not grant any of the exemptions listed in subsection (2) unless you demonstrate that use of such a mixture(s) is not economically or technically feasible in the unit for which you are requesting an exemption. To make such a demonstration, you must show in your petition to the satisfaction of ERA that:

(1) If use of a mixture(s) were required, you would be eligible for one of the following permanent exemptions provided for in the Act: lack of alternate fuel supply, site limitations, environmental requirements, or state or local requirements; or

(2) The use of a mixture(s) is not technically or economically feasible in your specific unit due to design or special circumstances as determined by ERA on a case-by-case basis.

§ 506.15 Use of fluidized bed combustion not feasible-general requirement for permanent exemption.

(a) *Application.* ERA will not consider a petition for one of the following permanent exemptions provided for in Section 312 of the Act (lack of alternative fuel supply, site limitations, environmental requirements, state or local requirements, cogeneration, emergency, product/process, or equipment outages), to be complete, adequate or acceptable for filing unless you demonstrate in your petition to the satisfaction of ERA that you have considered the use of a method of fluidized bed combustion of an alternate fuel.

(b) *Finding.* If ERA determines, on a generic basis, that use of a method of fluidized bed combustion is economically and technically feasible, ERA will deny your request for exemption unless you demonstrate to the satisfaction of ERA that:

(1) If use of a method of fluidized bed combustion, were required, you would be eligible for one of the following permanent exemption provided for in Section 312 of the Act: lack of alternate fuel supply, site limitations, environmental requirements, or state and local requirements; or

(2) The use of a method of fluidized bed combustion is not technically or economically feasible in your specific unit due to design or special circumstances as determined by ERA on a case-by-case basis.

§ 506.16 Terms and conditions; compliance plans.

(a) *Terms and conditions generally.* You must comply with the terms and conditions of an exemption granted under the Act by the ERA, including terms and conditions requiring the use of (1) effective fuel conservation measures and (2) fuel mixtures.

(b) *Compliance plans for temporary exemptions.*

(1) A compliance plan certified by your Chief Executive Officer must accompany a petition for a temporary exemption. The compliance plan shall include at least the following:

(i) A detailed schedule of progressive events and the dates upon which the events are to take place indicating how you will comply with the applicable prohibitions of the Act;

(ii) Documentary evidence of binding contracts for fuel or facilities for the production of fuel which you require to comply with the applicable prohibitions of the Act;

(iii) Any other documentary evidence which indicates your intention to comply with the applicable prohibitions of the Act; and

(iv) A detailed statement of the manner in which you intend to comply with § 506.13 of these regulations requiring the use of fuel mixtures as a condition to the granting of a temporary exemption where the use of fuel mixtures is technically and economically feasible.

(2) The exemption shall not be effective until the compliance plan is approved by ERA.

(3) Revisions of Compliance Plans. If the petitions is granted, you must submit to ERA an updated compliance plan certified by your Chief Executive Officer:

(i) At the end of each 12 month period from the effective date of the exemption;

(ii) Within one month of an alteration of any milestone in the compliance plan, together with the reasons for the alteration and its impact upon the scheduling of all other milestones in the plan; and

(iii) At any time the ERA, in its discretion, determines that a revised compliance plan is necessary to reflect changes in circumstances.

(c) *Enforcement.* Any exemption is subject to termination upon the violation of any provision of the exemption or any provision of the pertinent compliance plan.

Subpart C—Temporary Exemptions for Existing Major Fuel Burning Installations

§ 506.20 Purpose and scope.

(a) This subpart implements the provisions contained in Section 311 of the Act with regard to temporary exemptions for existing installations.

(b) This subpart establishes the criteria and standards which owners or operators of existing installations who petition for a temporary exemption must meet to sustain their burden of proof under the Act.

(c) You must submit all petitions for temporary exemptions for existing installations in accordance with the procedures set out in Part 501 of these regulations.

(d) The duration of any temporary exemption granted under this subpart shall be measured from the date that the applicable prohibition would first apply if the exemption had not been granted.

§ 506.21 Lack of alternate fuel supply.

(a) *Eligibility.* Section 311(a)(1) of the Act provides for a temporary exemption due to lack of an alternate fuel supply. ERA shall grant such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You made a good faith effort to obtain an adequate and reliable supply of an alternate fuel of the quality necessary to conform to the design and operational requirements of the existing installation;

(2) For the period of the proposed exemption, the cost of using such a supply would substantially exceed the cost of using imported petroleum as a primary energy source as defined in § 506.12 (Cost Calculation) of these regulations; and

(3) You will be able to comply with the applicable prohibitions, rule or

order at the end of the proposed exemption period.

(b) *Evidence required in support of a petition.* In order to submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A description of the approach and methodology you used to search for an evaluate the use of the alternate fuels you considered.

(2) A description of the detailed design requirements for the existing installation including capacity, alternate fuel capability, and all other specifications;

(3) A description of the specific fuel characteristics of all the fuels which can be used by the existing installation;

(4) Evidence that you sought to obtain the full range of alternate fuels and fuel characteristics which could be used by the existing installation, including bid requests and/or advertisements for supply contracts and all response thereto, as well as evidence of any other arrangements you attempted to make to secure supplies;

(5) Evidence of the contracts or other arrangements you have made to insure a reliable and adequate supply of an alternate fuel at the end of the proposed exemption; and

(6) All data required by § 506.12 (Cost Calculation) of these regulations necessary for computing the cost calculation formula.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 506.16 of these regulations simultaneously with submission of your petition in order to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 506.16 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account any extensions or renewals, may not exceed 10 years.

§ 506.22 Site limitations.

(a) *Eligibility.* Section 311(a)(2) of the Act provides for a temporary exemption due to a site limitation. ERA shall grant you such an exemption if you demonstrate, to the satisfaction of the ERA, that one or more of the following specific physical limitations relevant to the operation of your installation exist which, despite your diligent good faith efforts, cannot be overcome before the end of the proposed exemption period.

(1) Alternate fuels would be inaccessible as a result of a specific physical limitation relevant to the operation of the existing installation;

(2) Transportation facilities for alternate fuels would be unavailable;

(3) Adequate facilities for handling, using or storing an alternate fuel would be unavailable;

(4) Adequate means for controlling and disposing of wastes would be unavailable;

(5) Adequate and reliable supply of water would be unavailable; or

(6) Other site limitations exist which would not permit the operation of the existing installation using an alternate fuel.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above criteria:

(1) Evidence that the site limitation is a physical limitation, and not a requirement of a Federal, State, or local law which could be the basis of an exemption under Section 506.34 (State or local requirements);

(2) Evidence that alternative means for overcoming the specific site limitations were considered, with a detailed description of the efforts made to overcome the site limitations set out in your petition;

(3) Evidence of the equipment or space requirements for which the site limitation is claimed.

(4) Evidence of the contracts or other arrangements you have made to insure that the site limitation will be overcome and that you will comply with the applicable prohibitions at the end of the proposed exemption period. Examples of evidence relevant to establishing a site limitation for purposes of a temporary exemption are as follows:

(i) Detailed documentation of impediments, including rights of way problems, site diagrams, maps of the surrounding areas and other items essential to the showing of a site limitation;

(ii) Identification of transportation facilities relevant to the specific site of the installation and a demonstration why existing transportation facilities cannot be utilized or new facilities constructed;

(iii) Copies of bid requests, advertisements and other evidence of general efforts made to secure alternate transportation facilities;

(iv) Identification of potential fuel storage locations within a reasonable geographic area surrounding the existing installation;

(v) Detailed scale site plans of the entire facility which include those areas not directly involved with the specific installation;

(vi) A specific listing of all equipment necessary and not currently available to properly handle alternate fuel;

(vii) Copies of bid requests, advertisements and other evidence of general efforts made to secure alternative fuel storage facilities;

(viii) Copies of quotes from bona fide suppliers, indicating lead times for purchase and installation of required ancillary storage or handling equipment;

(ix) Specific listing of any equipment necessary and not currently available to properly control and dispose of waste;

(x) Identification of potential alternate waste disposal locations within a reasonable geographic area surrounding the existing installation;

(xi) A description of efforts made to secure offsite disposal areas, including the cost of acquisition of the sites, transportation facilities and waste handling costs involved in their use; and

(xii) Copies of bid requests, advertisements, and other evidence of general efforts made to secure waste control and disposal equipment.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 506.16 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 506.16 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account any extensions and renewals, may not exceed five years.

§ 506.23 Inability to comply with applicable environmental requirements.

(a) *Eligibility.* Section 311(a)(3) of the Act provides for a temporary exemption due to an inability to comply with applicable environmental requirements. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that despite diligent good faith efforts:

(1) You are unable to comply with rules or orders of ERA without violating applicable Federal or state environmental requirements; and

(2) You will be able to comply with rules or orders of ERA by the end of the temporary exemption period.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA, you must provide the following substantial evidence to corroborate the above requirements:

(1) A detailed explanation why the facility cannot immediately burn an alternate fuel without violating applicable environmental requirements;

(2) Copies of all technical studies that you have relied upon with regard

to consideration of alternate fuels, pollution control equipment, variances, State Implemenation Plan revisions, and delayed compliance orders;

(3) Copies of requests for bids, responses received, and contracts signed, if any, for an alternate fuel supply and for the purchase and installation of pollution control equipment; and

(4) Copies of correspondence with the State or EPA concerning variances, State Implementation Plan revisions, delayed compliance orders, solid waste permits or approvals, or modifications to National Pollution Disposal Elimination System permits.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 506.16 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 506.16 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption taking into account extensions and renewals, may not exceed 5 years.

§ 506.24 Future use of synthetic fuels.

(a) *Eligibility.* Section 311(b) of the Act provides for a temporary exemption based upon the future use of synthetic fuels. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You will be able to comply with the applicable rule or orders at the end of the proposed exemption period by the use of synthetic fuel as a primary energy source in your installation; and

(2) That you will not be capable of complying with the applicable rule or orders by using an alternate fuel in your installation before the end of the proposed exemption period.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) Copies of economic and technical feasibility studies pertaining to the use of synthetic fuels by your installation;

(2) Reliable evidence of the financial commitments you have made to construct, operate and maintain equipment which will use synthetic fuel as the primary energy source at the end of the proposed exemption period,

(3) Copies of bid request, advertisements, contracts and/or other agreements relating to the production, purchase, and transportation of synthetic fuel; and

(4) Information with regard to permits that may be required by Federal or State Agencies for the operation of an installation using synthetic fuels.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accord with Section 314 of the Act and § 506.16 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You shall submit an updated compliance plan as required by § 506.16 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption may be granted for a period of up to five years and may be extended for an additional five years, but so extended may not exceed ten years.

§ 506.25 Use of innovative technologies.

(a) *Eligibility.* Section 311(c) of the Act provides for a temporary exemption based on the use of innovation technologies. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You will be able to comply with the applicable rule or order at the end of the proposed exemption period by adoption of a technology for the use of an alternate fuel which ERA has determined to be an innovative technology;

(2) You will not be capable of complying with the applicable rule or order before the end of the proposed exemption period.

(b) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements.

(1) Copies of economic and technical feasibility studies pertaining to adoption of an innovative technology for use of an alternate fuel in your installation;

(2) A complete description of the innovative technology you propose to use including explanation of its innovative characteristics, detailed design and engineering specifications, and a description of the fuel characteristic of the alternate fuels which can be used with the innovative technology;

(3) Reliable evidence of the financial and contractual commitments you have made to construct or modify, operate, and maintain equipment which represents an innovative technology for the use of alternate fuel and which will be used at the end of the proposed exemption period; and

(4) Copies of bid requests, advertisements contracts, and/or other arrangements you have made to insure a reliable and adequate supply of an alternate fuel at the end of the proposed exemption.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 506.16 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You shall submit an updated compliance plan as required by § 506.16 of these regulations and as required by the terms and conditions of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption may be granted for a period of up to 5 years and may be extended for an additional 5 years, but so extended may not exceed 10 years.

§ 506.26 Retirement.

(a) *Eligibility.* Section 311(d) of the Act provides for a temporary exemption for retirement. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) The installation will be retired at the expiration of this temporary exemption;

(2) You will not be capable of complying with the applicable prohibitions contained in Title III, Subtitle A of the FUA by consuming coal or other alternate fuels before retirement of the installation.

(b) *Evidence required in support of the petition.* To submit an adequate petition sufficient for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A detailed engineering analysis explaining why the installation cannot use alternate fuels prior to retirement;

(2) Any other documentary evidence which indicates the reasons for retirement and plans for replacement or substitution of the retired installation;

(c) *Compliance plan.* You must submit to ERA a compliance plan in accord with Section 314 of the Act simultaneously with submission of the petition to satisfy ERA requirements for petition adequacy. The petitioner shall submit an updated compliance plan as required by § 506.16 except § 506.16(b)(1)(ii) these regulations and by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account extensions and renewals, may not exceed 5 years.

(e) *Restriction.* In the event this exemption is granted you will not be eligible for any other exemption under Title III, Subtitle B of the Act.

§ 506.27 Public interest exemption.

(a) *Eligibility.* Section 311(c) of the Act provides for a temporary public interest exemption. ERA may grant you

such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You are unable to comply with the applicable rule or orders, except in extraordinary circumstances, during the period for which the exemption is requested, but that you will be capable of complying at the end of the proposed exemption period;

(2) You are not eligible for a temporary exemption based on lack of alternate fuel supply, site limitations, environmental requirements, synthetic fuels, innovative technologies, or retirement; and

(3) The granting of the exemption request is in accord with the purposes of the Act and is in the public interest.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition substantial evidence to corroborate the above requirements.

(c) *Compliance plan.* You must submit to ERA a compliance plan in accordance with Section 314 of the Act and § 506.16 of these regulations simultaneously with submission of your petition to satisfy ERA requirements for petition adequacy. You must submit an updated compliance plan as required by § 506.16 of these regulations and as required by the terms of any order granting an exemption under this subpart.

(d) *Duration.* This temporary exemption, taking into account extensions and renewals, may not exceed 5 years.

Subpart D—Permanent Exemptions for Existing MFBI's

§ 506.30 Purpose and scope.

(a) This subpart implements the provisions contained in Section 312 of the Act with regard to permanent exemptions for existing major fuel burning installations.

(b) This subpart establishes the criteria and standards which owners or operators of existing installations who petition for a permanent exemption must meet to sustain their burden of proof under the Act.

(c) You must submit all petitions for permanent exemptions for existing installations in accordance with the procedures set out in Part 501 of these regulations.

§ 506.31 Lack of alternate fuel supply.

(a) *Eligibility.* Section 312(a)(1)(A) of the Act provides for a permanent exemption due to lack of an alternate fuel supply at a cost which does not substantially exceed the cost of using imported oil. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You made a good faith effort to obtain an adequate and reliable supply of an alternate fuel of the quality necessary to conform to design and operational requirements of the existing installation; and

(2) The cost of using such a supply would substantially exceed the cost of using imported petroleum as a primary energy source, as defined in § 506.12 (Cost Calculation) of these regulations during the remaining useful life of the existing installation.

(b) *Evidence in support of a petition.* In order to submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A description of the detailed design requirements for the existing installation, including capacity, alternate fuels capability, and all other pertinent specifications;

(2) A description of the specific fuel characteristics of all the fuels which can be used by the existing installations.

(3) Evidence that you sought the full range of alternate fuels and fuel characteristics which could be used by the existing installation, including bid requests, and/or advertisements for supply contracts, all responses you received, as well as evidence of any other arrangements you attempted to make to secure supplies;

(4) All data required by § 506.12 of these regulations (Cost Calculation) necessary for computing the cost calculation formula; and

(5) A description of the approach and methodology you used to search for and evaluate the use of the alternate fuel you considered.

§ 506.32 Site limitations.

(a) *Eligibility.* Section 312 (a)(1)(B) of the Act provides for a permanent exemption due to a site limitation. ERA shall grant you such an exemption if you demonstrate to the satisfaction of the ERA that, despite good faith efforts:

(1) Alternate fuels would be inaccessible as a result of a specific physical limitation to the operation of the existing installation;

(2) Transportation facilities for alternate fuels would be unavailable;

(3) Adequate facilities for handling, using or storing alternate fuels would be unavailable;

(4) Adequate means for controlling and disposing of wastes would be unavailable;

(5) Adequate and reliable supply of water would be unavailable; or

(6) Other site limitations exists which would not permit the operation of the existing installation using an alternate fuel and that these limitations cannot be reasonably expected to be overcome within five years after the application for exemption from the rule or order is filed.

(b) *Evidence required in support of the petition.* In order to submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above criteria:

(1) Evidence that the site limitation is a physical limitation, and not a requirement of a Federal, State, or local law which could be the basis of an exemption under § 506.34 (State or local requirements);

(2) Evidence that alternate means for overcoming the specific site limitation were sought, with a detailed description of the efforts made to overcome the site limitation set out in your petition; and

(3) Evidence of the equipment or space requirements for which the site limitation is claimed. Examples of evidence relevant to establishing a site limitation for purposes of a permanent exemption are as follows:

(A) Detailed documentation of impediments, including rights of way problems, site diagrams, maps of the surrounding areas and other items essential to the showing of a site limitation;

(B) Identification of transporation facilities relevant to the geographic site of the installation and demonstration showing why existing transportation facilities cannot be utilized or new facilities constructed;

(C) Copies of bid requests, advertisements and evidence of other general efforts made to secure alternative transportation facilities;

(D) Identification of potential alternate fuel storage locations within a reasonable geographic area surrounding the installation;

(E) Detailed scale site plans of the entire facility which include those areas not directly involved with the specific installation;

(F) A specific listing of all equipment necessary and not currently available to properly handle alternate fuels;

(G) Copies of bid requests, advertisements and evidence of other general efforts made to secure alternate storage facilities;

(H) Copies of quotes from bona fide suppliers, indicating lead times for purchase and installation for required ancillary storage or handling equipment;

(I) Specific listing of any equipment necessary and not currently available to properly control and dispose of waste;

(J) Identification of potential alternate waste disposal locations within a reasonable geographic area surrounding the installation;

(K) A description of efforts made to secure off site disposal area transpor-

tation facilities and waste handling costs involved in their use; and

(L) Copies of bid requests, advertisements, and evidence of other general efforts made to secure waste control and disposal equipment.

§ 506.33 Inability to comply with applicable environmental requirements.

(a) *Eligibility.* Section 312(a)(1)(C) of the Act provides for a permanent exemption due to inability to comply with applicable environmental requirements. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that, despite good faith efforts, you cannot burn alternate fuels without violating applicable environmental requirements within five years after the application for exemption is filed.

(b) *Evidence supporting petition.* To submit an adequate petition for review by ERA, you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A detailed explanation why the facility cannot comply with the prohibition of the Act within five years without violating applicable environmental requirements;

(2) Copies of all technical studies that you have relied upon with regard to consideration of alternate fuels, pollution control equipment, variances, State Implementation Plan revisions, and delayed compliance orders;

(3) Copies of requests for bids, responses received, and contracts signed, if any, for an alternate fuel supply and for the purchase and installation of pollution control equipment; and

(4) Copies of correspondence with the State or EPA concerning variance, State Implementation Plan revisions, delayed compliance orders, solid waste permits or approvals, or modifications to NPDES permits.

(c) *Prepetition actions.* It is recommended that you request a meeting with ERA nad EPA or the appropriate State regulatory agency to discuss options for complying with the prohibitions.

§ 506.34 State or local requirements.

(a) *Eligibility.* Section 312(b) of the Act provides for an exemption due to certain State or Local requirements. ERA may grant you such an exemption if you demonstrate to the satisfaction of the ERA that:

(1) With respect to the site of the installation the operation of the installation using an alternate fuel is infeasible because of a State or Local requirement;

(2) If such State or local requirement is under a building code or nuisance or zoning law, no other exemption under Title III, Subtitle B of the Act could be granted;

(3) You have, in good faith, attempted unsuccessfully to obtain a waiver or a variance from the State and local requirement or have demonstrated why none is available; and

(4) The granting of the exemption would be in the public interest and would be consistent with the purposes of the Act.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA, you must provide the following substantial evidence to corroborate the above requirements:

(1) A copy of the pertinent State or local requirement with its citation and its legislative history;

(2) The identification and location of the administrative body which implements the requirements;

(3) A description of your attempts to obtain a waiver or a variance from the requirements;

(4) A description of any activities you were involved in pertaining to the enactment of the requirements;

(5) A description of equiment, procedures, advance planning time and costs necessary to comply with the requirements;

(6) A detailed description of why compliance is infeasible;

(7) The impact upon you and/or your local community, if any, should your petition be denied;

(8) An explanation of the reasons why granting this exemption would be in the public interest; and

(9) An analysis of why you cannot qualify for an exemption under Title III, Subtitle B if such State or local requirement is under a building code, nuisance or zoning law.

§ 506.35 Cogeneration.

(a) *Eligibility.* Section 312(c) of the Act provides for a permanent exemption for cogeneration. ERA may grant you such an exemption if you demonstrate to the satisfaction of ERA at least the following minimum criteria:

(1) You are unable to comply with the applicable rule or order;

(2) That there are economic and other benefits of cogeneration with petroleum or natural gas which are unobtainable through the use of an alternate fuel.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) Documentary evidence which demonstrates that you considered the use of alternate fuels, including a description of the fuel alternatives you examined and the factors important in your decision to reject the use of alternate fuels. Such factors would include lack of alternate fuel supply, site limitations, or environmental requirements;

(2) Design specifications for the existing unit;

(3) An engineering description of the system, including existing system output and uses thereof, with sufficient detail to insure that the unit qualifies as a cogeneration facility;

(4) A detailed economic and engineering analysis demonstrating the benefits of cogeneration with petroleum or natural gas and demonstrating that these benefits are not obtainable through the use of alternate fuels;

(5) A comparison of the total oil and gas consumption by the existing cogeneration facility and the best feasible alternative, including the effect on oil or gas used by the installation or by other affected parties; and

(6) An analysis of the immediate and long-term economic impacts on parties not directly involved with the facility.

§ 506.36 Permanent exemption for certain fuel mixtures containing natural gas or petroleum.

(a) *Eligibility.* Section 312(d) of the Act provides for a permanent exemption for certain fuel mixtures. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You propose to use a mixture of natural gas or petroleum and an alternate fuel as a primary energy source;

(2) You are not capable of complying with the applicable prohibitions; and

(3) The amount of petroleum or natural gas you propose to use in the mixture will not exceed the minimum percentage of the total Btu heat input of the primary energy sources of the installation needed to maintain operational reliability consistent with maintaining a reasonable level of fuel efficiency.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A complete description of the fuel mixture, component elements of the mixture, and percentage of each component to be utilized;

(2) The design specifications for the unit for which you are requesting an exemption.

(3) An engineering assessment of the proportions of petroleum or natural gas needed to maintain operational reliability and an adequate level of fuel efficiency; and

(4) Documentary evidence which demonstrates that you have considered the use of alternate fuels as a primary energy source. You must include a description of the supply alternatives you considered, the cost and

availability of each alternate fuel considered, and the factors important in your decision to reject the use of an alternate fuel as a primary energy source.

(c) *Reporting requirement.* If the exemption is granted, you must submit an annual report to ERA certifying that the affected units have used no more than the percentage of oil or natural gas specified in the exemption order. The certification shall be executed by your Chief Executive Officer.

§ 506.37 Emergency purposes.

(a) *Eligibility.* Section 312(e) of the Act provides for a permanent exemption for emergency purposes. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You are unable to comply with the applicable prohibitions;

(2) You will operate and maintain the installation for emergency purposes only.

(b) *Definition.* For the purposes of this permanent exemption, an emergency exists when operation is necessary for (1) plant protection, or (2) the preservation of human health, including services to hospitals, public transportation facilities, sanitation, water supply and pumping, or other essential services. Secondary services which support essential services are excluded.

(c) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must provide the following substantial evidence to corroborate the above requirements:

(1) Certification executed by the Chief Executive Officer stating that emergency operation under the provisions of this exemption will occur only when plant protection or the preservation of human health is required;

(2) Documentary evidence which demonstrates that you considered the use of alternate fuels, including a description of the alternate fuels you examined and the factors important in your decision to reject the use of alternate fuels. Such factors would include lack of alternate fuel supply, site limitations, environmental requirements, certain State or local requirements, or other reasons which would preclude the use of an alternate fuel;

(3) An estimate of the emergency generating capacity required for the first three 12 month periods of exempt operation to be used for plant protection and for preservation of human health;

(4) A list of specific uses described by the terms plant protection and preservation of human health, as provided in subparagraph (b) above;

(5) The total emergency generating capacity for which exemption is requested; and

(6) Identification and description of previous exemptions, if any, granted under the provisions of this subsection.

(d) *Reporting requirement.* At the end of each 12 month period from the effective date of the exemption you must report to ERA the monthly and annual total generating capacity used and amounts generated under the provisions of this exemption with a description of the purposes of use.

§ 506.38 Product or process requirements.

ERA has made a preliminary determination that this exemption (Section 311(k) of the Act) applies solely to certain nonboiler categories. The Act provides ERA with the discretionary authority to promulgate rules prohibiting oil and natural gas use by these categories of non-boilers. ERA does not intend to issue rules pertaining to those categorical prohibitions at this time. Therefore, we do not intend to issue at this time regulations governing the eligibility and evidence requirements for granting this exemption.

§ 506.39 Scheduled equipment outages.

(a) *Eligibility.* Section 312(1) of the Act provides for a permanent exemption to meet scheduled equipment outages. ERA may grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) You are unable to comply with the applicable rule or order;

(2) Your routine maintenance schedule does not permit continuing operation unless ERA grants this exemption and the reasons why; and

(3) The pertinent unit will be used only during those periods when other units are not in operation for reason of scheduled outages.

(b) *Evidence required in support of a petition.* To submit an adequate petition for review by ERA you must include in your petition the following substantial evidence to corroborate the above requirements:

(1) A schedule of operations for the pertinent unit estimating the number of hours per year and fuel consumption for projected use during the next 12 months of operation;

(2) A description of the maintenance schedule for all units located at the facility specifically identifying those units at the facility which will be out of service for scheduled maintenance at times when the unit for which the exemption is requested, is operating; and

(3) Documentary evidence which demonstrates that you considered the use of alternate fuels, including a description of the alternate fuels you examined and the factors important in your decision to reject the use of alternate fuels. Such factors would include lack of alternate fuels supply, site limitations, environmental requirements, or certain State or local requirements.

(c) *Reporting requirements.* ERA will rely upon the schedule of operation of the unit submitted with the petition as the permanent schedule for exempt use. You must notify ERA in advance of any changes to this schedule.

§ 506.40 Installations served by certain international pipelines.

(a) *Eligibility.* Section 312(j) of the Act provides for a permanent exemption for the use of natural gas by installations served by certain international pipelines. ERA shall grant you such an exemption if you demonstrate to the satisfaction of ERA that:

(1) Your primary source of natural gas is under a contract with a pipeline between the United States and Canada;

(2) The contract was signed before April 21, 1977;

(3) The natural gas would revert to Canada if you are not granted an exemption;

(4) The pipeline serves high priority users;

(5) You would suffer substantial financial penalty if the contract were concelled and there is no available relief from the penalty; and

(6) The revenues from the transportation and sale of natural gas under your contract are essential to the economic vitality of the pipeline.

(b) For purposes of this section the term "high priority user" means any residential user of natural gas or any commercial user whose consumption of natural gas on a peak day is less than 50 MCF.

(c) *Evidence required in support of the petition.* To submit an adequate petition for review by ERA you must provide the following substantial evidence to corroborate the above requirements.

(1) A copy of your contract with international pipeline with the applicable sections underlined;

(2) A certification from the natural gas supplier of the pipeline that the natural gas would revert to Canada upon cancellation of the contract;

(3) A certification by the pipeline that it serves high priority users and a description of those users;

(4) An explanation of the substantial financial penalty that would be incurred;

(5) An explanation of why *force majeure* would not apply to the contract cancellation;

(6) A description of your attempt to transfer your contract as described in Section 731 of the Act; and,

(7) A decision from the Federal Energy Regulatory Commission that the revenues from the transportation and sale of natural gas under your contract are essential to the economic vitality of the pipeline.

PART 507—FUEL CLASSIFICATION AND REPORTING REQUIREMENTS

Sec.
507.1 Purpose and scope.
507.2 Definition of fuels.
507.3 Exclusions from the definition of natural gas.
507.4 Exclusion from the definition of petroleum.
507.5 Reporting requirements of powerplants using natural gas from small wells.
507.6 Reporting requirements on use of commercially unmarketable natural gas.
507.7 Reporting on use of commercially unmarketable by-products of refinery operations

AUTHORITY: Department of Energy Organization Act, Pub. L. 95-91; Powerplant and Industrial Fuel Use Act of 1978, Pub. L. 95-620; Title V of the Independent Offices Appropriation Act of 1952, 65 Stat. 290, 31 U.S.C. 483(a); Executive Order 12009, 42 FR 46267.

§ 507.1 Purpose and scope.

(a) *Purpose.* This subpart excludes certain gaseous and liquid from the terms "natural gas" and "petroleum" for the purposes of the Act and requires reporting by certain users of such excluded fuels.

(b) *Scope.* This subpart applies to use of such excluded fuels in all new and existing electric powerplants and major fuel burning installations.

§ 507.2 Definition of fuels.

(a) Natural gas means any fuel consisting in whole or in part of natural gas; liquid petroleum gas; synthetic gas derived from petroleum or natural gas liquids; or any mixture of natural gas and synthetic gas, except as designated in § 507.3(f) of this part. Natural gas does not include any of the fuels excluded by § 507.3.

(b) Petroleum means crude oil and products derived from crude oil. Petroleum does not include any of the fuels excluded by § 507.4.

§ 507.3 Exclusions from the definition of natural gas.

(a) Natural gas does not include gas specifically designated as an alternate fuel in these regulations § 500.2(a)(7)).

(b) Natural gas does not include that which is commercially unmarketable, by reason of quality, quantity or distance from existing transportation networks. Gas is commercially marketable unless:

(1) No interstate pipeline, intrastate pipeline or local gas distribution company has made a bona fide offer to purchase such gas; and

(2) The gas is transported from the well to the user's powerplant or installation by a direct pipeline performing only that function.

(c) Natural gas does not include that produced by the user from a well, the maximum efficient production rate of which is less than 250 million Btu's per day. For purposes of this subparagraph—

(1) "produced by the user" means

(i) All gas produced by the well, where such gas is delivered for use in the user's facility through a gas delivery, gathering or transportation system which could not deliver such gas to any other market, or

(ii) Only that amount which represents the user's net working (mineral) interest in the gas produced from such wells, where such gas is delivered for use in the user's facility through a gas delivery, gathering or transportation system which would deliver such gas to any other market.

(2) "maximum efficient production rate" (MEPR) means that rate at which production of natural gas and oil may be sustained without damage to the reservoir or the rate which may be sustained without damage to the ultimate recovery of oil or gas through the well. The MEPR must include the Btu value of any crude oil, gas condensate, and natural gas liquids which may be prduced from the well, in addition to that of the natural gas.

(d) Natural gas does not include occluded methane in coal seams;

(e) Natural gas does not include synthetic gas derived from an alternate fuel which is not mixed with natural gas;

(f) Natural gas does not include mixtures of natural gas and synthetic gas derived from alternate fuels for which the person proposing to use the gas certifies to ERA that:

(1) He owns, or is entitled to receive at the point of manufacture, synthetic gas derived from alternate fuels;

(2) The Btu content of such synthetic gas is equal to or greater than the Btu content of the natural gas to be covered by this subsection, plus the approximate Btu content of any natural gas consumed or lost in transportation;

(3) He delivers or arranges for the delivery of, such synthetic gas to a pipeline or pipelines which by transport or displacement are capable of delivering such synthetic gas, mixed with natural gas, to facilities owned by the user; and

(4) All necessary permits, licenses, or approvals from appropriate Federal, State and local agencies (including Indian tribes) have been obtained for construction and operation of the facilities for the manufacture of the synthetic gas involved, except that for purposes of the prohibition under Section 201 (2) of the Act against powerplants being constructed without the capability of using coal or the construction of synthetic gas facilities shall be required under this subparagraph to be certified and documented.

§ 507.4 Exclusion from the definition of petroleum

Petroleum does not include:

(a) Petroleum products specifically designated as alternate fuels in these regulations (§ 500.2(a)(7));

(b) Synthetic gas derived from crude oil and its derivatives;

(c) Liquid petroelum gas;

(d) Petroleum coke or waste gases from non-refinery industrial operations; and

(e) Liquid, solid, or gaseous by-products of refinery operations which are commerically unmarketable by reason of—

(1) Quality, where the by-products, including components such as butane and propane which can be extracted from the by-products, could not—

(i) Reasonably be expected to be used in non-refinery operations; and

(ii) Be produced and distributed at a price which would provide adequate revenue to pay the operating expenses of this production and distribution; or

(2) Quantity, where—

(i) Insufficient or sporadic quantities of the by-product, including components such as butane and propane which can be extracted from the by-products, are produced to maintain an adequate and reliable supply to a potential user; and

(ii) No dependable market exists for these by-products, or components of the by-products, which can support a price which will provide adequate revenue to pay the operating expenses of the production and distribution of the by-product or its components.

§ 507.5 Reporting requirements of powerplants using natural gas from small wells.

If you own or operate a powerplant which uses or intends to use more than 4.0 billion Btu's per day of natural gas produced from wells with a maximum efficient production rate of less than 250 million Btu's per day (§ 507.3(c), you must report to ERA by January 30, 1980, and annually thereafter:

(a) Facilities using such gas;

(b) Yearly quantities and the Btu value of such gas used in each such facility;

(c) The number, location and total daily production of all such wells which were acquired prior to November 9, 1978; and

(d) the number, location and total daily production of all such wells which were acquired on or after November 9, 1978.

§ 507.6 Reporting requirements on use of commercially unmarketable natural gas.

(a) If you use or intend to use natural gas which you consider to be commercially unmarketable (§ 507.3(b)), you must file a report to ERA by January 30, 1980, and annually thereafter, the following:

(1) The facilities which are burning such gas;

(2) Yearly quantities and the Btu value of such gas used in each such facility;

(3) The number and location of each well producing gas burned in each such facility;

(4) The quantity of gas produced from each such well over the past twelve months and the MEPR of each such well;

(5) A production of the total quantity of such gas you intend to use from such wells over the next twelve months; and

(6) Certification by the Chief Executive Officer that the gas is transported from the well to the facility site by a direct pipeline serving only the single site.

§ 507.7 Reporting on use of commercially unmarketable by-products of refinery operations.

(a) If you use or intend to use gaseous or liquid by-products of refinery operations which you consider to be commercially unmarketable (§ 507.4), you must file a report with ERA by January 30, 1980, and annually thereafter including the following:

(1) The facilities which are burning such by-products;

(2) A description of the gaseous or liquid by-products, including the components of those by-products which could physically be extracted, notwithstanding the fact that you may not own the equipment necessary to perform this extraction;

(3) Monthly production levels of these by-products and their components; and

PART 506—SPECIAL RULE FOR TEMPORARY PUBLIC INTEREST EXEMPTION

[See 44 FR 1694, January 5, 1979]

APPENDIX

FEDERAL ENERGY REGULATORY COMMISSION

[18 CFR Part 285]

[Docket No. RM79-10]

Determination of Powerplant Design Capacity; Notice of Proposed Rulemaking

DECEMBER 29, 1979.

Section 103(a)(18)(D) of the Powerplant and Industrial Fuel Use Act of 1978 (Act) Pub. L. 95-1749, requires the Federal energy Regulatory Commission (Commission) to promulgate rules under which a powerplant's design capacity may be determined. The determination of a powerplant's design capacity is necessary because it is an element of each of the statutory definitions of the terms "peakload powerplant", "intermediate load powerplant", and "base load powerplant" as provided in section 103(a)(18) of the Act. The definitions of those terms will be used to determine the applicability of certain temporary and permanent exemptions from sections 201 and 202 of the Act, which proscribe the use of natural gas or petroleum as a primary energy source in new electric powerplants, under sections 212(g) and 212(h). The definitions are also to be used to determine the applicability of certain temporary and permanent exemptions from sections 301 and 302 of the Act, relating to existing electric powerplants, under sections 311(f), 312(f), and 312(g) of the Act. Finally, determinations regarding design capacity are necessary under section 501 of the act, Electric Utility System Compliance Option, in order to determine if existing electric utilities are in compliance with Title III of the Act.

Discussion

The Commission proposes that the rules contained herein be used to determine a powerplant s design capacity. There are a number of powerplant capacity ratings used by the electric power industry. However, these are used principally for operational purposes, reflecting seasonal weather conditions, degradation of a powerplant, or other factors, and may be substantially different from a powerplant's design capacity. The Commission has established criteria that the design rating should be (1) determinable unequivocably from the manufacturer's data and ordinarily not change during a powerplant's physical life, unless there is substantial modification of the unit; (2) a familiar and recognizable quantity throughout the electric power industry; and (3) a published value readily available to any party interested in obtaining it. These criteria and the proposed rules evolving therefrom were developed in consultation with the Staff of the Secretary of Energy. The proposed rules are summarized below:

(1) The design capacity of a steam-electric generating unit shall be its maximum generator nameplate rating which has been reported to the Energy Information Administration on EIA Form (formerly FPC Form 12).

(2) The design capacity of a combustion turbine shall be its peak load rating as defined by both the American National Standards Institute (ANSI) and by the International Standards Organization (ISO). This peak load rating, which applies to units operating for peaking service with a maximum of 2,000 hours per year operation, is based on an ambient temperature of 59 degrees Fahrenheit (15 degrees Celcius) and a pressure of 14.696 psia (sea level). This should be the capacity rating reported to the Energy Information Administration on EIA Form (formerly FPC Form 12). If those reported ratings are based on different conditions, they will be adjusted to ISO standard conditions for the purposes of the Powerplant and Industrial Fuel Use Act.

(3) The design capacity of a combined cycle unit shall be the sum of its combustion turbine peak load rating, based on ANSI/ISO standard conditions, and the maximum generator nameplate rating of the steam turbine portion of the unit.

(4) The design capacity of an internal combustion engine shall be the capacity rating which has been reported to the Energy Information Administration on EIA Form —— (formerly FPC Form 12).

The Commission solicits comments from interested parties concerning how well the proposed rules support the criteria established by the Commission. Also, the Commission is interested in any problems or concerns regarding the applicability of the proposed rules in meeting the requirements of the Act.

Public Comment Procedures

Interested persons may participate in this proposed rulemaking by submitting written data, views or arguments to the Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, on or before January 30, 1979. Each person submitting a comment should include his name and address, identify the notice (Docket No. RM79-10), and give reasons for any recommendations. An original and 14 conformed copies should be filed with the Secretary of the Commission. Comments should indicate the name, title, mailing address, and telephone number of one person to whom communications concerning the proposal may be addressed. Written comments will be placed in the Commission's public files and will be available for public inspection at the Commission's Office of Public Information, Room 1000, 825 North Capitol Street, N.E., Washington, D.C. 20426, during regular business hours.

(Department of Energy Organization Act, P.L. 95-91, E.O. 12009, 42 F.R. 46267, Powerplant and Industrial Fuel Use Act of 1978, P.L. 95-1749)

In consideration of the foregoing, the Commission proposes to amend Chapter I of Title 18, Code of Federal Regulations, as set forth below.

By the Commission.

LOIS D. CASHELL,
Acting Secretary.

Chapter I of Title 18 is amended by adding a new Subchapter J to read as follows:

SUBCHAPTER J—REGULATIONS UNDER THE POWERPLANT AND INDUSTRIAL FUEL USE ACT OF 1978

PART 285—RULES GENERALLY APPLICABLE TO POWERPLANT AND INDUSTRIAL USE

§ 285.101 *Determination of powerplant design capacity.* For purposes of this subchapter, a powerplant's design capacity shall be determined as follows:

(a) *Steam-electric generating unit.* The design capacity of a steam-electric generating unit shall be taken as the maximum generator nameplate rating which has been reported to the Energy Information Administration on EIA Form —— (formerly FPC Form 12).

(b) *Combustion turbine.* The design capacity of a combustion turbine shall be taken as its peak load rating as defined by both the American National Standards Institute

(ANSI) and by the International Standards Organization (ISO). This peak load rating, which applies to units operating for peaking service with a maximum of 2,000 hours per year operation, is based on an ambient temperature of 59 degrees Fahrenheit (15 degrees Celcius) and a pressure of 14.696 psia (sea level). If capacity ratings as reported to Energy Information Administration on EIA Form —— (formerly FPA Form 12) are based on different conditions, these reported ratings will be adjusted to ISO standard conditions.

(c) *Combined cycle unit.* The design capacity of a combined cycle unit shall be taken as the sum of its combustion turbine peak load rating, based on ANSI/ISO standard conditions, and the maximum generator nameplate rating of the steam turbine portion of the unit.

(d) *Internal combustion engine.* The design capacity of an internal combustion engine shall be taken as the capacity rating which has been reported to the Energy Information Administration on EIA Form —— (formerly FPC Form 12).

[FR Doc. 79-2856 Filed 1-24-79; 10:21 am]

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