THE FUTURE OF THE DEPARTMENT OF ENERGY'S COAL CONVERSION PROGRAM

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At the present time, the Department of Energy's ("DOE") coal conversion program consists primarily of the administration of the Powerplant and Industrial Fuel Use Act of 1978[1] ("Fuel Use Act" or "Act"), and what remains of the Energy Supply and Environmental Coordination Act of 1974[2] ("ESECA"), which program was, in large measure, superseded by the Fuel Use Act.

The Fuel Use Act is one of the five main parts of the National Energy Act[3] ("Energy Act") passed by the Congress on October 15, 1978. The purpose of the Fuel Use Act is to facilitate increased energy independence for the United States by providing for the expanded use of alternative energy sources by electric powerplants and major industrial fuel burning installations ("MFBI's" or "installations") which the Congress found was not being effectively accomplished under the ESECA program.[4] The Fuel Use Act prohibits new facilities and allows DOE to prohibit existing facilities, from using petroleum or natural gas as a primary energy source unless DOE determines to grant to such facility an exemption from the Fuel Use Act's prohibitions. By putting the burden primarily on industry rather than DOE, the Fuel Use Act was designed to provide for more rapid conversion of powerplants and installations to alternate fuel use than under ESECA, thereby providing the nation with a greater degree of energy independence. This article will explore the administration of the Fuel Use Act during the first few years of its operation and its continued prospects under the Reagan administration.

II. HISTORY AND PURPOSES

The Energy Act was submitted to Congress by President Carter on April 29, 1977,[5] as the Carter administration's response to demands for an appropriate energy program in order to reduce America's growing reliance upon foreign oil supplies, to reduce increasing trade deficits, and in response to the decrease in America's supply of oil and natural gas.[6] These factors, along with an increasing

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[1]42 U.S.C. §§ 8301-8483 (Supp. III 1979).

[2]15 U.S.C. § 791 (Supp. III 1979).

[3]The National Energy act consists of five separate acts: National Energy Conservation Policy Act of 1978, 42 U.S.C. §§ 8201-8278 (Supp. III 1979); Powerplant and Industrial Fuel Use Act of 1978, 42 U.S.C. §§ 8301-8483 (Supp. III 1979); Public Utility Regulatory Policies Act of 1978, 16 U.S.C. §§ 2601-2645 (Supp. III 1979); Natural Gas Policy Act of 1978, 15 U.S.C. §§ 3301-3432 (Supp. III 1979); and, Energy Tax Act of 1978, Pub. L. No. 95-618, 92 Stat. 3174 (codified in scattered sections of 26 U.S.C.).

[4]H.R. Rep. No. 496, Part IV, 95th Cong. 1st Sess. 12, reprinted in [1978] U.S. Code Cong. Ad. News 8454, 8464-65.

[5]President's letter to Congress transmitting proposed legislation, 13 Weekly Comp. of Pres. Doc. 619 (Apr. 28, 1977).

[6]President's Address to Congress on The National Energy Program, 13 Weekly Comp. of Pres. Doc. 566, 566 (Apr. 20, 1977).

demand for energy, prompted the Carter administration to promote a comprehensive plan for the conservation of energy and for the conversion of alternative fuel capable facilities to the use of such fuels rather than the use of oil or natural gas which were, at that time, in increasingly short supply.[7] The Fuel Use Act was one of the primary parts of the Carter administration's plan.

The Fuel Use Act was designed to cure many of the ills found to be prevalent under ESECA. Because ESECA was an emergency plan, the Congress restricted the authority of the Federal Energy Administration ("FEA") in implementing such plan by requiring the FEA to make a number of detailed findings prior to ordering coal use. Thus, there was ample opportunity for an ESECA order recipient to appeal any order of the FEA. Congress found that the ESECA program was both "cumbersome and time consuming."[8] The Fuel Use Act was designed to correct the problems of the ESECA program by directly prohibiting new facilities from burning petroleum or natural gas and allowing DOE to prohibit existing facilities from burning such products unless it determined, in the case of a particular facility, that an exemption is available. Furthermore, the Fuel Use Act provided that powerplants and MFBI's must meet specified criteria in order to obtain an exemption from the Act's prohibitions. In putting the burden of obtaining an exemption with respect to a new facility on industry, the Fuel Use Act was intended to force new facilities to consider the use of alternate primary energy sources prior to applying for an exemption from the Fuel Use Act's prohibitions. This, in turn, it was believed, would facilitate the faster adoption of alternate fuel use.

The Fuel Use Act sets forth very distinct legislative goals including, among others, the reduction of petroleum imports, the conservation of petroleum or natural gas for essential uses, the encouragement of modernization or replacement of facilities which are incapable of burning alternate fuel, along with the requirement that both powerplants and installations under the jurisdiction of the Fuel Use Act comply in all respects with applicable environmental requirements.[9]

The Fuel Use Act became effective on May 8, 1979, at which time the Carter administration anticipated that detailed regulations for administration of the Fuel Use Act would be in place. The regulations, which were issued in piecemeal fashion between May, 1979, and the present time (August, 1981) have been extensively revised from those proposed by DOE in 1979.[10] Although substantially all of the regulations to be issued under the Fuel Use Act are now issued in final form and are effective, certain important regulations, including those applicable to congeneration facilities are still in interim form and other regulations, including those applicable to non-boilers, have not even been issued in proposed form.

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[7] Id.

[8] S. Rep. No. 361, 95th Cong. 1st Sess. 30, reprinted in]1978] U.S. Code Cong. & Ad. News 8173, 8176; H.R. Rep. No. 496, Part IV, 95th Cong., 1st Sess. 12, reprinted in]1978] U.S. Code Cong. & Ad. News 8454, 8456.

[9] (See Sec. 102 which details the purpose of the Fuel Use Act, 42 U.S.C. Sec. 8301 (Supp. III 1979)).

[10] *See 10 C.F.R.* §§ 515.1-36 (1980) (transitional facilities regulations); 45 Fed. Reg. 53, 694-712 (1980) (to be codified in 10 C.F.R. §§ 504.1-64) (existing facilities regulations); 45 Fed. Reg. 43,963-94, 38,286-99) (1980) (to be codified in 10 C.F.R. §§ 5501.1-183) (administrative procedures regulations); 45 Fed. Reg. 53,374-79 (1980) (to be codified in scattered sections of 10 C.F.R.) (cogeneration facilities regulations), 45 Fed. Reg. 38,308-22 (1980) (to be codified in 10 C.F.R. §§ 503.1-44) (new facilities regulations); 45 Fed. Reg. 38,280-86 (1980) (to be codified in 10 C.F.R. §§ 500.1-5) (Alternate fuels regulations); 45 Fed. Reg. 42,199-205 (1980) (to be codified in scattered sections of 10 C.F.R.); 45 Fed. Reg. 249,84967-84985 (1980) cost test regulations (to be codified in scattered sections of 10 C.F.R.).

In administering the Fuel Use Act, the Carter administration took a most stringent regulatory position. As a result, the regulations which were finally issued, although substantially relaxed from those which were initially proposed, basically require that, except in very limited circumstances, an exemption from the Act's prohibitions will not be granted unless the costs of compliance with the Act "substantially exceed" the cost of using imported petroleum. In practical effect, the regulations force a petitioner to go through a complicated set of cost calculations in order to obtain an exemption, irrespective of whether or not without such calculations an exemption may otherwise be appropriate. For example, in order to obtain an environmental exemption, absent pure physical impossibility, which is almost impossible to prove, an applicant must demonstrate that the cost of environmental compliance does not substantially exceed the cost of using imported petroleum. Since the physical impossibility issue places upon an applicant an almost unreasonable burden of proof in order to obtain an exemption, a petitioner is left with little choice but to present his case in terms of the cost of environmental compliance. Thus, the relatively arduous cost regulation provisions, which only became effective in early 1981, are the primary way in which an applicant can obtain one of the general use exemptions.[11]

Under the cost calculation rules as originally proposed by DOE to implement the statutorially mandated "substantially exceed" cost test exemptions standard,[12] an applicant was required to build an alternate fuel capable facility where the cost of that facility exceeded the cost of using imported petroleum by 30%, calculated under the methodology provided by DOE. In the final cost calculation regulations, DOE has substantially reduced this burden and the harshness of the DOE methodology which must be used by a petitioner in making the calculations. The "substantially exceeds" premium was reduced to $1.00 in the final rule which was issued in December of 1980, thus effectively lowering the percentage value of the premium required to use oil or natural gas over an alternate fuel to an extremely low number.[13] Notwithstanding this lessening of the difficulty of the provisions of the cost calculations, due to the substantial increase in the price of oil over the prices which prevailed in November, 1978 when the Fuel Use Act was enacted by the Congress, obtaining an exemption under the cost calculation provisions is still an extremely difficult task.

III. SCOPE OF REGULATIONS

Under the Fuel Use Act the Secretary of Energy ("Secretary") is given the responsibility to administer the Act and is authorized to issue appropriate rules and orders to insure compliance with the Act's provisions, including rules applicable to the issuance of exemptions under the Act. The Secretary has promulgated

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[11]Under the Fuel Use Act exemptions are available on either a permanent or temporary basis. Additionally these classes of exemptions are further divided between general use exemptions such as the environmental exemption, and limited use exemptions such as for a peakload powerplant (use limited to 1500 hours per annum).

[12]See Secitons 211(a), 212(a), 311(a) and 312(a) of the Fuel Use Act, and the regulations applicable thereto 45 Fed. Reg. 249,84967 (1980).

[13]45 Fed. Reg. 249,84967 (1980). Under the final cost test rule the premium is set forth as a dollar value to be added to the price of imported oil. As a result, it is not readily capable of being quantified in percentage terms due to the revised methodology.

regulations through the Economic Regulatory Administration of DOE, which regulations implement the provisions of the Fuel Use Act, including providing guidelines for obtaining exemptions under the Act.

Under the Fuel Use Act, both new electric powerplants and installations are prohibited from burning natural gas and petroleum unless an exemption is obtained from DOE. Furthermore, electric powerplants must be constructed with the capability to use an alternate fuel such as coal. New MFBI's, while subject to the same fuel use prohibitions, are not required to be constructed with the capability of using an alternate fuel unless they consist of a boiler.

There are no prohibitions applicable to existing MFBI's, unless the Secretary issues a special order to such effect. Existing powerplants were prohibited from using natural gas after 1990 and were further prohibited from using natural gas in excess of certain base year quantities as set forth in the Act. In August, 1981, these provisions of the Fuel Use Act were repealed. As a result, existing powerplants are no longer subject to any restrictions on burning natural gas. (See Omnibus Budget Reconciliation Act of 1981, 127 Cong. Rec. 116, H5511 (July 29, 1981)).

There is little difference in the degree of regulation of powerplants and MFBI's. In the administration of the Fuel Use Act, however, DOE has concentrated practically all of its efforts in the public utility sector. Since powerplants are typically larger facilities than MFBI's, and are usually better able to convert to coal, it has been DOE's policy over the past two years to concentrate on issuing prohibition orders to existing powerplants, where there is assumed to be the largest fuel savings capable of being gained with the least expenditure of DOE resources. Furthermore, DOE has discovered that issuance of proposed prohibition orders to powerplants makes them more readily willing to convert to alternate fuel use. This is primarily due to the fact that, not only is it seen as economical in the long run to convert to an alternate fuel, but that DOE will, in all probability, prevail in its prohibition order proceedings when the process is finally completed.

To date, DOE has issued only one prohibition order to an MFBI. It appears as if DOE has taken the position that most MFBI prohibition order candidates will either voluntarily convert their facilities, or will fight such conversion, depending in each case on a particular company's economic position or desire as to how to best invest its capital resources. DOE is well aware of the differences in position which industrial concerns take toward the conversion of their facilities and their need to stay competitive in the near term which, in many cases, overrides the capital outlays needed to convert a facility. Benefits which may be available over the remaining 25 to 40 years useful life of the facility must be weighed against much shorter capital payback requirements and capital needed for other corporate purposes. With powerplants, a long range viewpoint is much more prelevant in that they are not used to producing competitive products.

IV. ADMINISTRATION OF THE FUEL USE ACT PROGRAM

Since enactment in 1978, DOE has issued proposed prohibition orders to 53 powerplants.[14] Of the 53 proposed prohibition orders, not one has been finalized

[14]See Powerplant and Industrial Fuel Use Act Annual Report, March 1, 1981, p. 11.

to date. Additionally, DOE has received "voluntary" commitments from 13 powerplants to convert their facilities to alternate fuel use.[15] Under the ESECA program, as of December 31, 1980, there were orders issued to 33 powerplants of which virtually all were certified by the Environmental Protection Agency as appropriate for alternate fuel use.[16] Additionally, as of December 31, 1980, 15 industrial facilities were issued ESECA orders, of which all but two were certified as appropriate for conversion by the Environmental Protection Agency.[17]

In the exemption area, through December 31, 1980, DOE has received exemption requests from 47 powerplants and 49 industrial facilities.[18] Of the exemption requests applicable to powerplants, the majority were for exemptions as peakload powerplants, which powerplants are permitted to burn oil or natural gas up to a maximum of 1500 hours per annum.[19] Of the powerplant exemption requests, 20 were from the Southern California Edison Company for a peakload park to contain 20 facilities at one location. The few non-peakload powerplant exemption requests were for either the future use of synthetic fuel or for fuel mixtures.

The MFBI exemption petitions were much more varied in nature. Practically half of the exemption petitions were for fuel mixtures, primarily for mixtures containing 25% or less of natural gas and petroleum and the remainder for alternate fuel use.[20] Of the remaining MFBI petitions, while a few asked for general exemptions due to cost, the remainder were for scheduled equipment outages, cogeneration, emergency purposes, temporary public interest, or the future use of synthetic fuel, an exemption which has been encouraged by DOE.[21]

In addition to the above exemption petition requests, DOE in 1979 issued an exemption rule, the so-called "special rule", allowing existing powerplants to apply for exemptions from the former prohibitions against increased natural gas use over the base period natural gas use previously provided for under the Fuel Use Act. To date, DOE has received petitions from almost 1300 powerplants for this exemption, of which practically all were granted by DOE.[22] As a result of the granting of these exemptions, DOE estimates that approximately 644,000 barrels of oil will be displaced each day.[23] The reason for the large number of utilities requesting the granting of this exemption is the wide disparity between the price of natural gas and the price of fuel oil, which at the present time is approximately two times the price of natural gas. As a result of granting these exemptions, there is virtually an immediate displacement of fuel oil and an immediate dollar savings to the utilities resulting from the use of lower priced gas over oil. With the complete deregulation of oil price controls, this exemption has become even more meaningful to the utilities. As a result of the recent amendments to the Fuel Use Act, existing powerplants will no longer have any need for this exemption.

There is an added benefit for utilities to use natural gas at the present time in that the price of natural gas used in utility boilers is not subject to incremental

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[15]Id. at 3.
[16]Id. at 39.
[17]Id. at 40.
[18]Id. at 5.
[19]Id. at 5.
[20]Id. at 5.
[21]Id. at 5.
[22]Id. at 4.
[23]Id. at 4.

pricing under the Natural Gas Policy Act of 1978,[24] thus making it cheaper for utilities to burn increasing quantities of natural gas versus industrial boilers which must pay higher prices as their gas consumption increases.

V. Proposed Regulatory Changes

On June 9, 1981, DOE issued a Notice of Proposed Rulemaking ("NOPR")[25] in order to simplify certain of the administrative procedures and exemption criteria applicable to owners and operators of new and existing powerplants and MFBI's which are subject to the prohibitions of the Fuel Use Act. The NOPR proposes to eliminate many of the evidentiary submissions presently required of petitioners requesting exemptions under FUA. Additionally, for many of the exemptions, DOE has proposed to streamline the procedures so as to enable a petitioner to qualify for an exemption through a simple certification process.

In the NOPR, DOE has proposed to revise certain of the definitions as used in the regulations in order to reduce the regulatory burden on petitioners who seek FUA exemptions. DOE has proposed changes in the definition of "capability to use alternate fuel"[26] in the regulations so as to treat the concept of alternate fuel capability in the same manner for Title II (new facilities prohibitions) as Title III, (discretionary existing facilities prohibitions). Under the proposal, new facilities would be considered capable of using an alternate fuel without the requirement that the requisite pollution control equipment be on line. This proposed change would not affect the current requirement under FUA that alternate fuels must be used in compliance with all applicable environmental requirements.

DOE in the NOPR proposes to adopt alternate definitions for powerplant and MFBI combined cycle units.[27] DOE proposes to keep the current definition for MFBI's as DOE does not presently regulate non-boiler MFBI's. For powerplants under this proposal, supplementally fired waste heat recovery boilers (one of the traditional components of a combined cycle unit) would not be deemed jurisdictional under FUA unless the firing rate of such boilers is equal to or exceeds 100 million Btu's per hour. As a result, a powerplant system consisting of a combination of a combustion turbine and a waste heat recovery boiler would be treated as two individual units and not as a combined cycle unit.

DOE has proposed to delete the automatic classification as a new combined cycle unit of (1) an existing combustion turbine to which a new waste heat recovery or supplementally fired boiler is added or (2) a combustion turbine, as a heat source in an existing boiler. Under the proposed rules, DOE treats such construction as subject to the general 50 percent test already provided in the regulations under the definitions of "new electric powerplant" and "new major fuel burning installation". Thus, only after unit is remodelled at a cost of over 50 percent of the cost of a replacement unit, would an existing unit be deemed to be new under the regulations.[28]

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[24]See Title II of the Natural Gas Policy Act of 1978, 15 U.S.C. §§ 3301-3432 (Supp. III 1979).

[25]45 *Fed. Reg.* 113,31216 (1981).

[26]Section 500.2

[27]Id.

[28]See the definition of "new major fuel burning installation" and "new electric powerplant" at 45 *Fed. Reg.* 111,38284 (1980).

DOE has eliminated the aggregation test in the NOPR and will not regulate units below 100 million Btu's per hour. By proposing to change the aggregation test, DOE has eliminated a burden to industry by allowing the construction of new facilities at the same site, consistent with prudent industry economic practice, whereas, the present definition has resulted in the encouragement of planning new construction at a different site (this may be a n on-economic choice) so as to avoid FUA regulations.[29]

An important change proposed by DOE is the permissible minimum amount of oil or gas which is excluded from the definition of "primary energy source". DOE proposes to raise this amount from 15 to 25 percent when used for unit ignition, start-up, testing, flame stabilization, and control purposes. Additionally, DOE will allow a petitioner to exclude this amount from any permitted use under the fuel mixtures exemption.[30] Using this new definition, mixtures exemptions clearly are to be encouraged by DOE.

In the NOPR, DOE proposes substantial procedural and somewhat less substantial substantive changes in the method and evidentiary requirements by which an exemption may be obtained. Under the proposed rule, DOE has provided that a petitioner may obtain an exemption by means of certification as to meeting the evidentiary and eligibility requirements with respect to all exemptions except public interest, certain environmental exemptions, and the public interest portion of the cogeneration exemption.

In both the current and proposed regulations, there are three general exemption requirements which must be satisfied by powerplants: no alternative power supply, use of mixtures and alternative site.[31] Under the proposed rules, where applicable, a petitioner will only be required to include duly executed certifications as to meeting these requirements along with the appropriate material supporting the basis of such certification.

In the proposed rules, DOE has modified the cost calculation and fuel price computation regulations[32] so as to allow a petitioner to certify to meeting these evidentiary requirements. DOE believes that by allowing petitioners to certify that the applicable requirements are met provides a more efficient alternative to the detailed evidentiary submissions required by the current regulations. As a result, DOE leaves it up to the petitioner as to the degree of backup material to be submitted with a certification petition.

DOE is proposing to amend Appendix II to the cost calculation regulations to reflect the elimination of price controls on oil. The NOPR also reflects the latest projected inflation rates from the Office of Management and Budget. It should be noted, that the rate of inflation used by the Office of Management and Budget for its planning purposes is less than the current rate of inflation and drops to only 3 percent per year after 1985.

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[29]Under the current FUA regulations, units with a fuel heat input rate of 50 million Btu's per hour or greater may be aggregated towards the 250 million Btu's per hour jurisdictional threshhold. As a result, non-jurisdictional units may later become jurisdictional when, together with other facilities later constructed at the same site, the 250 million Btu's per hour level is reached. See the definitions of "electric powerplant" and "major fuel burning installation" 45 *Fed. Reg.* 111,38282, 38283 (1980).

[30]Section 503.38.

[31]See Sections 504.8 (no alternative power supply), 503.8 (use of mixtures) and 503.9 (alternative site) in both the current and proposed regulations.

[32]Sections 503.6, 504,12 and Appendix II.

Under the NOPR, DOE has amended the requirements dealing with no alternative power supply[33] to allow a petitioner to certify that he is unable to meet the regulatory requirements by the purchase of power for the first year of operation of the proposed unit and, that without such power, the utility's reserve margin will fall below 20 percent. In determining reserve margin requirements, DOE has proposed, consistent with general industry practice, that petitioners may use electric regions, normal dispatch areas, or normal service areas.

DOE has proposed in the NOPR to revise the mixtures general requirement so as to require a petitioner to evaluate only the use of coal mixtures or to substitute such other mixtures as may be agreed upon by the petitioner and DOE. Furthermore, DOE proposes to allow meeting this requirement by means of certification together with a basis for such certification.

In the proposed rules, DOE will permit a powerplant petitioner to obtain an exemption by certifying that no reasonable alternative site exists along with the basis for such certification. Under this proposal, DOE now recognizes that it is generally in the economic self-interest of the utility to analyze alternative sites at which alternate fuel can be used.

Under the NOPR, DOE has determined to limit the exercise of its authority to issue terms and conditions in the grant of an exemption to the unit or units which are subject to an order granting an exemption and to cease issuing terms and conditions which require specific conservation measures. Additionally, ERA does not intend, at the present time, to require the submission of compliance plans for temporary exemptions except in the case of the temporary use of synthetic fuels for which submission of a compliance plan is specifically required under FUA.

In addition to providing for certification for practically all of the exemptions, DOE has proposed a number of changes to the evidence required in order to obtain an exemption. Under the reliability exemption,[34] ERA intends to adopt a uniform loss of load probability standard of one day in 10 years, which standard is both more fuel efficient and widely accepted in the utility industry as a measure of impaired reliability. Under the current regulations, the unit is allowed to be operated only during a period of reliability impairment. The NOPR proposes to allow the unit to be operated at any time once an exemption has been initially granted. Additionally, the area of reliability upon which the exemption is to be based has been broadened to include either the electric region or the utility's normal dispatch or normal service area.

Under the peakload powerplant exemption[35] the NOPR allows a petitioner to certify to obtain this exemption no matter what type of unit is to be used for this purpose. Furthermore, the unit will now be allowed to be operated for any 12-month period up to its design capacity multiplied by 1500 hours, thus providing a more reasonable means to use this type of unit.

In the NOPR, DOE has combined the requirements to obtain a cogeneration exemption as set forth in the interim rule into one section.[36] Additionally, except for the public interest feature of this exemption, petitioners will be now allowed to certify as to meeting the eligibility and evidentiary requirements.

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[33]Section 503.8.
[34]Section 503.40.
[35]Section 503.41.
[36]Section 503.37.

Notwithstanding the fact of the reduction in the regulatory burden and the simplification of procedures permitted by allowing a petitioner to obtain an exemption by certification, the proposed amendments do not provide any relief from the basic statutory requirements which many petitioners have found to be burdensome under the Fuel Use Act. Furthermore, while it is clear that DOE is prepared to accept the certifications of petitioners, the fact of certification does not in and of itself release a petitioner from doing the work required in order to make such certification. However, to the extent that the evidentiary requirements and eligibility requirements have been relaxed (especially in regard to the proposed codification of the recent administrative practice of only requiring a consideration of coal and coal mixtures) the burdens placed upon industry by the current FUA regulations have been substantially reduced.

While DOE has done all within its power to make it easy for industry and utilities to obtain an exemption, where warranted, from the Fuel Use Act's prohibitions, such procedures can be easily frustrated by the request of an interested person for a public hearing. In order to comply with the public hearing procedure provided for under the Act and to give interested persons an opportunity to adequately question petitioner's employees as well as DOE employees, the degree of additional material required and the degree of additional work which must be done by each of the parties will, to a large extent, depend upon the completeness of the backup material forwarded to DOE with a certification petition. The hearing possibility alone should insure to a large degree full compliance by petitioners with FUA requirements, notwithstanding the proposed provisions to allow a petitioner to obtain an exemption through simple certification. Should the rules proposed under the NOPR be finally adopted, experience will provide an adequate means to truly assess whether or not DOE has adequately reduced the burden on industry initially provided by the Fuel Use Act regulations and whether or not statutory amendments are required to further simplify both procedures and exemption requirements.

VI. The Status of the Fuel Use Act Today

Since the Fuel Use Act was enacted, the price of imported oil has almost tripled. Additionally, the price of oil in the United States has been completely deregulated leading to an increase in domestic oil prices. As a result of these price increases, free market forces should, in general, provide an adequate incentive for powerplant and industrial facilities to build new facilities which do not use oil or natural gas, or to convert existing facilities to alternate fuel use. At the same time, however, while deregulation of natural gas is in progress, natural gas is still a less expensive fuel than oil and, at least over the near term, appears to be in abundant supply. In the industrial sector, most petitioners for exemption have been for fuel mixtures, which would indicate that either the Fuel Use Act or free market forces (the high price of oil) has convinced industrial facilities to use alternate fuels or a mixture of primarily alternate fuels and oil or natural gas. While boiler sales in the industrial area are way down, there is no indication as to whether it is the price of oil or natural gas or the Fuel Use Act which is causing industrial facilities, for

the most part, to use alternate fuels, or new facility construction has been limited over the last few years.[37]

At the present time, there are no good statistics available as to whether or not existing natural gas or oil fired industrial facilities which are capable of using an alternate fuel have converted. There are, however, many industrial facilities which are capable of being converted to alternate fuel use which have not converted either because of the capital costs required to convert or environmental problems in the area in which such facilities are located. Generally, it is to be anticipated that industrial facilities will not convert to alternate fuel use unless they are very energy intensive and conversion can be done on an economical basis in accordance with normal corporate planning and pay back requirements. It is to be anticipated that industrial facilities will not voluntarily convert based upon the anticipated 40 year life of a facility as set forth in the Fuel Use Act cost calculation regulations, absent a requirement to do so by DOE.

In the utility sector, the incentive to convert facilities capable of burning alternate fuel is much less apparent. While DOE's annual report on the Fuel Use Act, indicates that 13 plants have voluntarily agreed to convert to alternate fuel use, the annual report also indicates that most other powerplants have not even commenced conversion activities, notwithstanding the issuance of proposed prohibition orders by DOE.[38] One of the major reasons for the failure of many powerplants to convert is the limited availability of capital to many utilities and the priority they place on the utilization of their capital resources toward previously committed new construction projects.[39] At the present time, the market price for many utility stocks has substantially decreased due to the problems which the public utility industry is facing. Additionally, since without any investment, public utility commissions allow for the direct pass through of the cost of fuel used in oil and gas facilities, there is no direct incentive to explore the savings which could be achieved by conversion to coal. This is especially so in light of the environmental requirements and permits which are necessary to successfully convert a powerplant.

While many utilities, as a result of the Fuel Use Act prohibition order process are now studying the conversion of their facilities, few have done so on a voluntary basis or have agreed to do so once a proposed prohibition order was issued. While the cost of conversion could be paid for, in many cases, out of the difference between the price of oil and coal, under most public utility rate making systems, the conversion cost is a capital charge, to be financed by the utility, separate and distinct from the fuel adjustment charges. As a result there is a disincentive for many utilities to convert alternate fuel capable facilities to coal use as the payback period is long, and the funds to convert a facility are either not available or are committed to new construction projects.

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[37]See Statement of the American Boiler Manufacturers Association with respect to FUA Before the Senate Committee on Energy and Natural Resources, Subcommittee on Energy Regulations, p.4 (April 24, 1981). The ABMA indicates that boiler sales dropped 80 percent between 1974 and 1979 and rose only slightly in 1980. The ABMA attributes most of the decline to the FUA and ESECA programs as well as to a leveling off of demand for capital goods and energy conservation measures due to sharply higher energy costs primarily due to imported oil cost increases. See Powerplant and Industrial Fuel Use Act Annual Report, March 1, 1981, p. 9.

[38]Id. at 13.

[39]Id. at 4.

In addition to the problems set forth above, the current, partially regulated, pricing schedule for natural gas and the special temporary public interst exemptions previously granted by DOE may have provided another disincentive for utilities to replace known coal capable plants with alternate fuel fired plants. With the repeal of the Fuel Use Act's 1990 gas ban and the prohibitions against increased natural gas use in existing facilities, the present high level of natural gas use in existing facilities is expected to continue. While this may have resulted in short-term savings to consumers, were such savings not available, utilities may then have studied the feasibility of the replacement of these facilities with alternate fuel fired facilities, or the conversion of existing facilities to alternate fuel use. Because of the high cost of new construction and the availability of relatively inexpensive natural gas, the replacement of oil/gas capable plants with alternate fuel capable plants may have been substantially decreased. This, of course, is coupled with much reduced projections in the current demand for electric power as well as reduced consumption due to conservation measures instituted by consumers so as to ameliorate the high cost of electric power.

VII. RECENT FUEL USE ACT AMENDMENTS

On August 13, 1981, President Reagan signed into law the Omnibus Budget Reconciliation Act of 1981 ("Omnibus Act"), one of the provisions of which Act included amendments to the Fuel Use Act. Under the Omnibus Act, Section 301 of the Fuel Use Act was amended and replaced by a new Section 301 which permits DOE to issue prohibition orders to existing electric powerplants only when the owner or operator of the facility certifies to DOE that the powerplant is capable of burning coal or another alternate fuel. The Omnibus Act uses basically the same standards as provided for under the original Section 301(a). Upon the receipt of an appropriate certification, the Secretary of DOE may grant the requested prohibition order after examining the basis for such certification. Section 301(a), as amended by the Omnibus Act, allows for the same certification procedure for fuel mixtures. The Omnibus Act also provided for an amendment of any such certification prior to the date of any final prohibition order under the Fuel Use Act, as amended.

The Omnibus Act amendments to the Fuel Use Act have eliminated the authority of DOE to issue existing powerplant prohibition orders to non-voluntary prohibition order candidates. The legislative history along with the bill makes it clear that since such conversions would take place pursuant to prohibitions orders that they could not be treated as new sources under Section 113(a)(5) of the Clean Air Act. The Omnibus Act amendments to the Fuel Use Act will, in many cases, make it much more palatable for a utility to agree to voluntary convert a coal capable powerplant.

Under the Omnibus Act, powerplants issued proposed prohibition orders under the former Section 301 are permitted to make an election so as to be treated under the original prohibition order procedures or under the new certification procedure.

As a result of the amendment of Section 301, it is to be assumed that powerplants who do not wish to convert to an alternate fuel will elect to be treated under the new certification procedure, thus effectively stopping DOE's original prohibi-

tion order process. It is also logical to assume that the only utilities who will certify to DOE as appropriate prohibition order candidates are those who wish to avoid the new source performance standards provided for under the Clean Air Act, thus making the conversion of a powerplant much less expensive.

Another major amendment to the Fuel Use Act contained in the Omnibus Act requires public utilities who had powerplants in which natural gas was used as a primary energy source at any time during the one year period ending on the date of the enactment of the Omnibus Act to submit for approval by DOE of an appropriate conservation plan. The plan is to be submitted within one year after date of enactment and to cover a period of five years after approval of the plan. Under the plan requirements as set forth in the Omnibus Act, not later than the fifth year after approval, a utility must conserve electric energy at least equal to 10% of the electric energy output produced by such utility during the most recent four calendar quarters ending prior to the date of enactment of the Omnibus Act attributable to natural gas usage.

Thus, in exchange for the elimination of the natural gas prohibitions contained in section 301(a)[40] utilities are being required to cut gas usage by 10%. Due to the large number of exemptions previously granted to utilities by DOE for increased natural gas usage under the Fuel Use Act's special rule, it is unlikely that the conservation effort will lower natural gas usage much below that which was originally permitted upon enactment of the Fuel Use Act in 1978 and may even allow such usage at a level considerably higher than was allowed under the Act's original provisions.

To the extent that utilities must cut back on current natural gas usage, the resultant effect may not necessarily be conversion of existing facilities to coal, but in fact, may be conversion of such facilities to using oil. This is especially so in many parts of the country where the facilities in question are capable of burning only natural gas or petroleum. It is difficult to reconcile this amendment to the Fuel Use Act with current DOE policies of approving unlimited natural gas use in existing facilities which are incapable of converting to coal while backing out the oil which was previously used in these facilities.

Should DOE elect to vigorously enforce the Omnibus Act's new conservation policy, certain utilities in high growth areas may be forced to reduce natural gas usage prior to a time when such utilities could realistically construct new alternate fuel fired capacity. If plans must be approved by August, 1982, then certain powerplants will have to shut down by August, 1987, three years earlier than the original 1990 gas ban. Furthermore, the Omnibus Act amendments to FUA makes no provisions for DOE to grant any exemptions from the basic statutory provisions. They do, however, provide for DOE to approve amended plans.

VIII. Status of the Fuel Use Act in the Future

President Reagan, in his budget message to Congress, recommended eliminating the Fuel Use Act program. This was based upon the philosophy that the differences between the free market prices of available fuels will cause the conver-

[40]Section 301(a) originally prohibited participants from using natural gas after 1990 and prior to 1990 limited such use to certain statutorially defined base year quantities.

sion of existing facilities and the building of new facilities to use alternate fuel where economics warrant. While this theory may work appropriately in the industrial sector[41] for energy intensive industries, it eliminates a national energy policy where, for the national good, a long term outlook is mandated. A national policy as fostered by the Fuel Use Act forces a company to consider that a boiler has a effective useful life of at least 40 years, rather than a life, in the mind of a corporation constructing such a facility, of somewhere between 5 and 15 years. Where the shorter useful life period is used, the high initial costs of building a coal facility make the use of this fuel highly unlikely to be the elected choice of action. The Fuel Use Act has forced the long term thought process on industrial concerns as a matter of national policy.

On the utility side, it is clear that new facilities will, in general, be constructed with a capability of using an alternate fuel.[42] However, as stated above, existing facilities will in very few cases be converted to alternate fuel use where there is a favorable gas price and the existence of fuel adjustment clauses. As a result, the Fuel Use Act would appear to be needed where free market forces are interfered with in the case of partially regulated natural gas prices and in the case of the operation of a utility through antiquated public utility commission rate of return and rate structure policies which provide little incentive to convert a facility to alternate fuel use.

As our experience has shown, since the 1973 oil embargo, once the crisis passed and oil and natural gas became readily available, the incentive to build new facilities and to convert existing facilities to alternate fuel use severely diminishes. Without a national policy to force alternate fuel use, such as provided by the Fuel Use Act, there appears to be little incentive for individual companies and facilities to go the alternate fuel route on their own. While there are other alternatives which may provide better incentives than the Fuel Use Act, this is the only mechanism presently available. The free market system alone, especially when coupled with regulated gas prices and inadequate public utility regulatory policies are not sufficient. The Omnibus Act represents an intermediate compromise to retain the Fuel Use Act, pending a final determination by both the Administration and the Congress on deregulation of natural gas.

VIII. FUTURE ALTERNATE FUEL USE INCENTIVES

There are many additional incentives which could be granted to large industrial and utility users to build and convert facilities to alternate fuel use. Some of these include larger tax credits for the construction of new or the conversion of existing facilities combined with faster tax write-offs of both obsolete equipment and new construction of alternate fuel capable plants or the costs of the conversion of existing plants. Another major incentive, the use of the funds saved through the use of alternate fuels along with adjustments in state rate-of-return requirements and fuel adjustment pass-throughs, could provide an additional incentive as well as the actual cash funds to convert or replace existing facilities with alternate fuel capable facilities. However, if these matters are left entirely in the hands of state

[41]Id. at 9.
[42]Id. at 9.

regulatory bodies, except in a few instances, public utility commissions appear to be unwilling to change their rate structures and fuel adjustment pass-throughs to provide sufficient incentives to force alternate fuel use. As a result, a national long term energy policy is clearly warranted.

In order to achieve the national goals as set forth in the purposes section of the Fuel Use Act, which goals there has been little argument are appropriate as matters of national energy policy, new incentives and energy policies must be developed at both the federal and state levels. While states can change the actions of their regulatory bodies, without a federal mandate, such action has been rare in the past. Further, tax incentives are clearly the sole province of the federal government. It remains to be seen as to which policies the administration will adopt and the actions which the states and the federal government will take, if any, in fostering appropriate long range energy policies.