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STATEMENT OF FRANK G. ZARB
ADMINISTRATOR
FEDERAL ENERGY ADMINISTRATION

before the

COMMITTEE ON PUBLIC WORKS

IN CONJUNCTION WITH THE

NATIONAL FUELS AND ENERGY POLICY STUDY

UNITED STATES SENATE

June 23, 1975

Mr. Chairman and Members of the Committee, I appreciate this opportunity to discuss the coal substitution program that would be established by the proposed National Petroleum and Natural Gas Conservation and Coal Substitution Act of 1975, particularly in light of our experience in carrying out the coal conversion authorized under the Energy Supply and Environmental Coordination Act of 1974.

The bill attempts to lessen our reliance on foreign sources of energy supplies by turning to coal, our most abundant fossil fuel resource. It would require that large industrial installations and powerplants install coal burning and pollution control equipment, and that between 1980 and 1985 they actually begin to burn coal, unless they qualify for limited exemptions.

The substitution of coal for insecure foreign sources of oil, and for our own dwindling supplies of natural gas, is imperative if we are to lessen the nation's energy vulnerability. While we vigorously support the basic goals of the bill, I have reservations about some of its detailed provisions and about its mechanisms of implementation. I do, however, endorse increased reliance on coal to regain energy independence.

Any examination of government efforts to foster coal utilization should begin with the pioneer program authorized by Congress last June in the Energy Supply and Environmental Coordination Act of 1974 (ESECA).

I understand that the committee is particularly interested in what we have learned this past year about mandatory fuel switching, as well as the constraints that we have found would face any expanded coal substitution effort.

I. The ESECA Program

Last June, Congress passed ESECA, which authorizes FEA to prohibit certain powerplants and "major fuel burning installations" from burning oil or gas as their primary energy source, and to order certain powerplants in the "early planning process" to be built with coal burning capability. ESECA was passed as an emergency program, and Congress gave FEA limited authority to implement the coal conversion program. At that time, mandatory conversion was untried and untested; the economic and environmental consequences were "unknown;" and some even thought that this novel program would be unworkable.

Our experience indicates otherwise. ESECA's program, though burdened with statutory complexities, is workable, and we have proposed amendments -- in Title IV of the President's Energy Independence Act -- calling for its extension and improvement.

As you know, ESECA requires FEA to make a number of factual findings before it can prohibit a powerplant or major fuel burning installation from using oil or natural gas as its "primary energy source." Moreover, FEA's authority is basically limited to existing plants or installations that had the necessary equipment to burn coal on June 22, 1974.

In each case, FEA must also find that coal and coal transportation facilities will be available during the period that FEA's prohibition order will be in effect; that the order is "practicable," meaning "economically feasible;" and, in the case of powerplants, that conversion to coal will not impair the reliability of service to the area served.

In addition, further requirements of ESECA and other laws have affected the characteristics of FEA's coal conversion program. For example, ESECA includes a salutory requirement that the public be allowed to participate in the conversion process; we have carried out this provision by conducting a public hearing before issuing each prohibition order. Moreover, the National Environmental Policy Act of 1969 (NEPA) requires a "program" environmental impact statement at an early stage, and in this program, site-specific environmental analyses thereafter. In some cases, a site-specific EIS will also be called for. Finally, the tight June 30, 1975 time limit on FEA's authority to issue orders required a major effort to identify candidates and to assemble and present the complex technical data necessary to support these orders if they are challenged in court.

ESECA's two-agency approach -- with complementary responsibilities carried out by FEA and the Environmental Protection Agency -- requires that the recipient of an FEA prohibition order must receive EPA's approval of its compliance schedule before FEA's order can go into effect. Though this element assures that the increased use of coal will be consistent with maintenance of the Nation's air quality standards, it makes somewhat uncertain the timing of the conversion even after FEA's order is issued.

I can report significant FEA progress in reaching ESECA's goals. Since I last discussed coal conversion on March 20 -- before Senator Muskie's subcommittee -- FEA has completed most of the complex technical analysis called for by ESECA, as well as the Act's procedural prerequisites for conversion. We have completed this analysis for 43 generating stations, and 32 of these have been issued Notices of Intent. The remaining eleven stations will require further examination before a final decision is made to issue a Notice of Intent, and this analysis will not be complete prior to June 30.

On April 25, FEA issued a final environmental impact statement for the entire program. This EIS, which was published after full public comment and hearing procedures, analyzes the air, water and waste disposal impacts of increased coal use, as well as the impact of increased coal production on the environment. We expect that FEA's programmatic EIS will serve as the point of departure for analysis in other coal-related Government programs.

On May 9, we issued final regulations which set forth the program's administrative procedures and explain the substantive criteria for the ESECA coal utilization program. We believe that our regulations carry out the Congressional intent, and that they combine practical experience with legal and technical expertise to develop key terms left undefined in ESECA itself. The regulations draw upon this expertise to define ESECA's pivotal concepts, such as "primary energy source," "early planning process," and "major fuel burning installation." These regulations, which also establish an administrative system to appeal or modify FEA's orders, can serve as the foundation for future coal substitution programs.

In early May we began to issue "Notices of Intent" to issue prohibition orders. The Notices cover 70 boilers in 32 generating stations. Each Notice states the results of FEA's investigation in the form of proposed findings, and invites the utility and the public to present their own data and arguments at the hearing or as written comments. FEA voluntarily adopted this procedure to make the basis of our findings clear to all concerned, and to be responsive to the Congressional intent that the public be afforded an opportunity to participate in this program.

Since early May we have held public hearings on 74 proposed orders. All in all, these hearings will involve utilities in 17 states. Based on the information obtained during these hearings, we are now preparing prohibition orders where warranted by available data. If the Notices of Intent stand up to public scrutiny and EPA approves the source's compliance schedules in all of these cases, the orders we issue this month could result in the ultimate substitution of 19 million tons of coal for 64 million barrels of oil and 88M MCF of natural gas per year.*

*Fuel substitution statistics based on 1973 consumption data.

ESECA adopted the phrase "major fuel burning installation" but left the term to describe the industrial plants subject to prohibition orders, undefined. After technical, economic and legal analysis, we defined the term in our regulations as a facility with capacity to burn 100 million Btu's per hour or greater. These plants are large enough to yield substantial oil or gas savings, and their size makes it probable that they would best be able to afford the initial costs of conversion. After powerplants, these conversions will yield the greatest oil savings with the least Government effort -- perhaps the equivalent of 300,000 bbls/day.

In contrast to powerplants -- which are subject to regulation and must file periodic reports on equipment and fuel consumption with the Federal Power Commission -- major industrial plants are free from this kind of government scrutiny. After investigation of Government data revealed this information gap, we initiated a program to identify these plants by means of notices in the Federal Register and GAO-approved reporting forms.

We are now preparing an inventory of "major fuel burning installations" and identifying those oil or gas fired installations that have coal burning capability. This is the first time that the Government has compiled such information. This inventory will prove invaluable for future planning efforts, and will serve us especially well should another oil embargo be imposed.

We estimate that there are approximately 4,000 major fuel burning installations, as defined by FEA, in the Nation; we will have a more exact total when we have finished analyzing the mountain of responses to our Federal Register notice and questionnaire.

The task of identifying major fuel burning installations for conversion has proved to be formidable. These plants could yield significant oil savings, but the absence of a firm Government data base made it impossible to single out those plants that had coal burning capability last June, as required by ESECA. In addition, the priorities in section 2(a) of ESECA -- which requires FEA to convert powerplants while leaving conversion of major fuel burning installations to FEA's discretion -- direct the initial major thrust of the program toward powerplants.

II. The Coal Substitution Bill

I recognize that this bill is still in the development stage, and that it may be revised on the basis of these hearings, consultation with the executive branch, and analysis of the Senate's questionnaires that are to be returned to the Committee on July 1. While we vigorously support the concept of coal conversion contemplated by this bill, I have some reservations as to the effects of the broad regulatory scheme contained in the current version.

This bill goes further than ESECA in a number of respects. First, this is not a reconversion bill, for it is directed at all plants and installations that begin operation before January 1, 1979, even if they never had the ability to burn coal. Second, while ESECA allows FEA to order powerplants in the "early planning process" to install coal-burning equipment, this bill would direct powerplants and major industrial installations that were in the "early planning process" to install coal burning and pollution control equipment; the bill further expands on ESECA by requiring that these plants actually burn coal.

ESECA provides FEA with some discretion to identify candidates, make findings and issue orders. This allows FEA to consider economic and other important factors before issuing a prohibition order. The proposed bill, however, provides a mandatory conversion standard with no regard to these factors.

In its current form, the draft bill would require large capital commitments and outlays from industry during a period of capital shortage. The funds for coal substitution might have to be diverted from the development of alternate sources, primarily nuclear energy. Especially in the case of existing plants that have never burned coal, retrofitting would require downtime, which could cause temporary losses of production and employment. New incentives might be required to minimize these impacts and to avoid passing on these costs directly to consumers. All of these factors should be subject to scrutiny and evaluation by those who would implement the program, but the proposed bill does not appear to contemplate weighing such factors in the course of its broad coal conversion program.

The costs of acquiring coal burning and pollution control equipment will be substantial, and some businesses will be better able to bear them than others. ESECA meets this economic problem head-on by directing FEA to make a finding in each case that conversion would be "economically feasible."

The new bill does not adequately recognize the economic problems associated with coal conversion. Thus, the substantive sections only allow FEA to grant exceptions if, despite the plant's good faith efforts, coal, coal transportation facilities, and/or pollution control equipment are not available. I think it essential that FEA retain the discretion it now has under ESECA to avoid forcing a business into insolvency to comply with the coal conversion objectives of this bill.

I note that the bill also leaves EPA's role in this process unclear. In contrast to ESECA, this bill provides no environmental compliance extensions for existing plants that convert, and it is unclear how and when it will be determined whether a plant's pollution control equipment is adequate.

Section 102 (c) provides only that FEA shall "consult" with EPA and obtain a "certification of conformance with applicable air pollution requirements." The relationship between the two agencies in this bill lacks the clarity that the Congress took pains to achieve last year in ESECA.

III. Immediate Steps

The outstanding energy, environmental and economic issues left unresolved in this bill will require further analysis and development. My staff and I will be happy to assist the Committee as it further considers this proposed legislation.

In the meantime, we must press ahead immediately on coal conversion under the authority we already have. As you know, FEA's order issuance authority under ESECA expires this June 30. In January, the President proposed several necessary amendments to ESECA and the Clean Air Act, including extension of FEA's authority to issue prohibition orders until June 30, 1977. Congress has yet to act on these proposed amendments, and the authority for the current coal conversion program expires within a month. It is crucial now, in the interim, for Congress to enact a simple six-month extension of ESECA so that the bill can be on the President's desk by June 30. Then I urge that the Congress act promptly on the improvements that we have recommended to the coal conversion program in Titles IV and V of the President's Energy Independence Act, including the extension of ESECA order authority until June 30, 1977.

This two-year extension will allow FEA to complete investigation of those powerplants that we have found involve difficult analytical problems under ESECA, and we estimate that this could result in orders yielding a potential additional savings of 200,000 bbls/day of oil.

In addition, as I mentioned, this extension would permit FEA to identify, analyze and issue orders to a sizeable group of major fuel-burning installations other than powerplants, providing potential savings of another 200,000 to 500,000 barrels of oil per day.

This amendment will also extend for two years FEA's authority to order powerplants in the early planning process to be built with coal burning equipment. Thus, while we await further action on this bill, FEA will be able to order plants that enter the early planning process as late as June 1977, to be built with coal-burning capability.

The second proposed amendment to ESECA extends FEA's authority to enforce its orders through December 31, 1984.

This six year extension of FEA's present enforcement authority would insure that the plants which are converted from natural gas and oil to coal will continue to use coal until 1985. Thus, regardless of the final outcome of

consideration of this new bill, the amendment assures that oil savings which FEA achieves through great effort under the existing legislation will not be lost by voluntary reconversions during the period between 1979 and 1985.

The third proposed amendment expands FEA's authority to issue prohibition orders to powerplants or major fuel burning installations not now covered by ESECA. In contrast to ESECA, which authorizes FEA to issue prohibition orders only to plants or installations that had coal-burning capability on June 22, 1974, the Administration's amendment would expand FEA's authority to include:

(1) existing powerplants or installations which acquire coal burning capability after June 22, 1974;

(2) new powerplants and installations which are built voluntarily with coal burning capability; and

(3) powerplants that receive orders from FEA requiring them to be built with coal burning capability.

All new plants affected by this amendment would remain subject to applicable New Source Performance Standards under the Clean Air Act. We expect that the Administration's ESECA amendments would result in substantial oil savings -- which would be realized until 1985 if the proposed amendment extending FEA's order-enforcement authority is enacted.

In addition, in Title V of the Energy Independence Act, the Administration has offered several amendments to the Clean Air Act which will permit additional conversions -- or allow earlier conversion -- to coal. These amendments will also permit additional plants that are now burning coal, and which would otherwise have to convert to oil to meet air pollution requirements that are more stringent than National Ambient Air Quality Standards to continue burning coal. We believe that these amendments are appropriate and consistent with protecting public health.

One of these amendments would remove the "regional limitation" provision now applicable to plants that receive prohibition orders from FEA under ESECA. The regional limitation applies to plants receiving FEA orders that are located in air quality control regions where primary (health related) standards are being exceeded for a particular pollutant, such as sulfur dioxide or particulates. Many of these regions are arbitrary geographical units containing plants which, because of meteorological conditions and the location of the plant, do not contribute to the region's air quality problems.

Plants located in these regions must meet the requirements contained in the state implementation plan for the particular pollutant, and cannot receive a compliance date extension under ESECA, even though the plant itself does not contribute to the violation of health-related standards, because of its remote location.

FEA has concluded that the regional limitation provision will significantly delay potential conversions to coal. Removal of the provision would save about 64,000 barrels per day of oil in early 1976, and 100,000 barrels per day in 1978. At the same time, this will not affect public health, since plants will be required by the Act to meet primary standard conditions.

Other proposed amendments to the Clean Air Act which affect the ESECA coal utilization program are:

- An amendment which makes it clear that plants which had historically burned coal -- and which had, before receiving an order from FEA, planned to convert to oil to meet Clean Air Act requirements -- are eligible for compliance date extensions under Sec. 119 of the Clean Air Act. The amendment would give such plants adequate time to install pollution control equipment, instead of forcing them to switch to oil first to meet pollution requirements, and then ordering a switch back to coal when control equipment is installed.

- An amendment to permit a plant that receives a compliance date extension to meet the same air quality requirements at the conclusion of the extension, as any other plant. This will ensure that all plants receive the benefits of the state implementation plan revisions that are now underway pursuant to section 4 of ESECA.

- An amendment to extend the date of termination of compliance date extensions by one year, to January 1, 1980, as a conforming amendment to the proposal to extend FEA's order-issuance authority to 1977. Plants receiving orders between 1975 and 1977 will have additional time to come into compliance with state implementation plans.

- An amendment to permit rural coal-burning powerplants -- including those subject to prohibition orders under ESECA -- up to 1985 to acquire and operate scrubber systems or acquire long-term low-sulfur coal contracts. Until these permanent emission control systems are operational, plants could use intermittent control systems, where reliable and enforceable, to meet primary Ambient Air Quality Standards.

Mr. Chairman, since the passage of ESECA last summer, FEA has closely examined the possibilities for increased use of our most abundant fossil fuel resource, coal. While this new coal substitution bill takes a long second step in this direction, it appears that further consideration of the issues I mentioned must be completed before it can become law.

And it is clear that the most pressing item now before this Committee should be prompt action to extend for six months our current authority under ESECA, and immediately hereafter to consider the further extensions and improvements of ESECA proposed last January in the Energy Independence Act.

We appreciate this opportunity to discuss the coal utilization program with the Committee. Thank you.

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