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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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NOVEMBER 27, 1979

The Honorable Henry M. Jackson
Chairman, Committee on Energy
and Natural Resources
United States Senate

Dear Mr. Chairman:

Views on Legislation to Continue State and Local
Government Involvement in Promoting National Energy
Objectives (EMD-80-15)

The legislative authority to fund State energy conservation programs authorized by the Energy Policy and Conservation Act (EPCA) (Public Law 94-163) and the Energy Conservation and Production Act (ECPA) (Public Law 94-385) expired at the end of fiscal year 1979. However, authority to fund the programs in 1980 is being considered in the Congress. This scheduled expiration provides an opportunity for the Congress to reevaluate the role States should play in furthering the objectives of the Nation's energy program.

As requested by you, this letter provides our views on an administration bill, S. 1280, 96th Congress, to continue State and local government involvement in promoting national energy objectives based on our past and ongoing energy conservation work as it relates to the appropriate State and local government role in achieving greater levels of energy conservation.

Overall, we agree with the thrust of the bill. We believe legislation of this type is necessary to develop the Federal/State partnership needed to adequately address national energy problems. We also believe that such a partnership is necessary to achieve an energy conservation ethic within the Nation. However, we have comments and suggestions for improving certain bill provisions which we discuss on the following pages.

BACKGROUND

Three major Federal programs provide financial assistance to States for promoting energy conservation activities--the Base and Supplemental State Energy Conservation Programs authorized by EPCA and ECPA, respectively, and the Energy

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Extension Service Program authorized by the National Energy Extension Service Act of 1977 (42 U.S.C. 7001). These programs share a basic purpose--to promote energy conservation within the general public either through the dissemination of basic information, the establishment of laws and regulations, or demonstration and technical assistance for specific energy conservation measures.

The Base Program provides the basis for State involvement in energy conservation. Under this program, to be eligible for Federal assistance each participating State is responsible for developing and implementing a comprehensive State energy conservation plan, containing at a minimum five specific energy conservation measures (lighting and thermal building standards, right-turn-on-red, State procurement standards, and promotion of carpools, vanpools and public transportation). ECPA authorized a total of \$150 million for fiscal years 1976-1978 for States participating in the program. The National Energy Conservation Policy Act (Public Law 95-619) extended this program through fiscal year 1979.

The Supplemental Program expanded the Base State Energy Conservation Program by authorizing an additional \$105 million in Federal financial assistance to be used over fiscal years 1977-79. To be eligible for Federal assistance States were required to include in their energy conservation plans three additional energy conservation measures (public education, coordination of programs in a State, and energy audits).

The Energy Extension Service Program provides a means to increase the capability of individuals to make informed energy decisions concerning practical energy-saving opportunities. The legislation called for States to submit plans for implementing an energy extension service program and provides Federal funds to assist States in carrying out their programs.

The existing State energy conservation programs have met with limited success in achieving greater levels of energy conservation. It appears that a primary reason for the limited success of these programs is the lack of a positive, aggressive approach by the States to reduce energy consumption through conservation. In our view, this situation was also partly the result of the problems in DOE's conservation programs which we will discuss later in this report.

We conducted two major reviews of the State energy conservation programs as part of our legislative mandate, in section 462 of ECPA, to review the Department of Energy's (DOE) activities in carrying out the programs authorized under title IV of that act.

The results of our review of fiscal year 1977 activities showed that States were actively participating and were planning to carry out a number of energy conservation programs beyond those required to be included in the State plans. However, we also found that States were experiencing delays in developing and implementing their program plans and States were not meeting individual project milestones. Also, DOE had not provided timely and adequate technical assistance to States in carrying out their programs. DOE, in commenting on our report, stated that many of the findings contained in the report corroborated its observations over time. However, DOE stated that many of the situations discussed had been corrected.

Preliminary results of our review of fiscal year 1978 program activities indicate that States' estimates of energy savings achieved under the programs are not valid, 1980 energy savings goals are highly optimistic, and States continue to experience slippages in implementing and carrying out program activities.

PROPOSED ENERGY MANAGEMENT PARTNERSHIP ACT

The administration is proposing the Energy Management Partnership Act, S. 1280, 96th Congress, which would authorize a total of \$110 million annually for the purpose of assisting States and local governments over a 5-year period for the following principal activities:

- Develop an overall State energy plan, in cooperation with local governments, for which a State would design its own strategies and programs to meet energy problems in the State.
- Consolidate three existing Federal energy grant programs and application procedures to provide greater flexibility and reduce administration at the State level.
- Create a special energy project program to allow the Secretary to fund directly innovative projects at the local government level which may not qualify for assistance under existing categorical programs.

- Provide additional assistance to States to help cover administrative costs of existing programs, such as the Building Energy Performance Standards (BEPS) Program, establish goals and milestones to achieve energy conservation, and identify potential future energy shortages within the State.

Among the principal purposes of the proposed act is to assist States to develop and carry out State energy plans as a means to establish State energy goals and policies. A State energy plan will include a management plan for and description of its program for conserving depletable resources and expanding the use of renewable resources including

- an identification of major energy consumption sectors with significant conservation potential and a description of a State's goals and objectives for conservation in such sectors;
- a description of a State's programs to achieve its conservation goals and objectives; and
- a description of program objectives by which the State will monitor and assess its progress in implementing the plan.

The program envisioned by the proposed act would carry forward some of the required activities under the existing State energy conservation programs such as right-turn-on-red traffic laws, providing energy audits for certain classes of consumers, implementing public education activities, and implementing an Energy Extension Service. The proposed program would substantially increase the role of States in addressing national energy problems and issues. Features of the program which increase the State's role include:

- Implementing the National Building Energy Performance Standards programs authorized under title III of EPCA.
- More extensive planning of State energy goals and objectives and identification of specific actions which will be taken to meet the goals.
- Addressing energy supply problems and emergency planning for energy supply shortfalls.

--Increased consideration of activities in the renewable energy resource area.

--Sharing in the cost of the program.

Implementation of National Energy Performance Standards for Buildings

To be eligible for Federal assistance under EPCA, each State plan must contain, among other things, mandatory thermal efficiency standards and insulation requirements for new and renovated non-Federal buildings.

The ECPA, required that DOE also develop energy conservation performance standards ^{1/} for new residential and commercial buildings. The effective date for the standards, originally established by law to be no later than February 1981, was advanced to 1980 under the President's National Energy Plan. One purpose of this program is to assure that reasonable energy conservation features will be incorporated into new commercial and residential buildings.

Successful implementation of the energy performance standards will, in all likelihood, require that State and local building codes be revised to assure that buildings being designed and constructed according to such codes will also be designed to meet the energy performance standard. Revising State and local building codes in this manner is expected to be difficult, at best. Our evaluations of the existing State energy conservation programs have found that some States have had difficulty in obtaining legislative authority for building thermal standards as required by these programs. Twenty States and the District of Columbia had not obtained, as of July 30, 1979, legislative authority to implement Statewide mandatory thermal efficiency standards for buildings.

A provision in the proposed act requires States to implement the energy performance standards to be eligible for financial assistance under the proposed program. We have no

^{1/}The term "performance standard" means an energy consumption goal or goals to be met without specification of the methods, materials, and processes to be employed in achieving that goal or goals, but including statements of the requirements, criteria and evaluation methods to be used, and any necessary commentary.

problem with such a requirement. However, because of the difficulties we noted that States have had or are having in implementing building thermal standards, we believe that the proposed act should require DOE to work closely with the States for the establishment of thermal efficiency standards for those States that have not fully met the requirements of the EPCA program. Having such standards in place should help to expedite the effective implementation of building energy performance standards.

Need for a National Energy Conservation Plan

Section 355(a) of the proposed act requires that State energy plans contain, among other things, detailed descriptions of State energy goals, energy conservation programs which will be implemented to achieve the goals, and appropriate monitoring actions. We are in general agreement with this type of energy planning; however, we are concerned that such a requirement is being placed on the States when the Federal Government has failed to come forward with such a detailed plan for the Nation as a whole.

We have continually stressed to DOE and the Congress the need for an energy conservation plan which clearly establishes energy conservation goals, specifies the actions which will be taken to achieve these goals, and identifies standby initiatives which could be implemented if it appeared that established goals would not be met. Such a plan has not been developed. Thus, we question how the basic purpose of the legislation, to promote national energy objectives, will be met when national energy conservation objectives have yet to be established.

In a June 30, 1978, report to the Congress ^{1/} we pointed out that the Federal Government's efforts to achieve energy conservation can be successfully carried out only if those efforts effectively alter consumers' traditional energy use patterns and increase consumers' preference for energy efficient products and equipment. We also pointed out the need to develop consumer attitudes and habits which foster an efficient use of energy--a national energy conservation ethic. In our view, the State energy conservation programs and the

^{1/}"The Federal Government Should Establish and Meet Energy Conservation Goals", EMD-78-38, June 30, 1978.

Energy Extension Service Program could constitute a major Federal effort in the area of developing a national energy conservation ethic.

In a more recent report 1/ we highlighted three overriding problems which, in our opinion, have reduced the effectiveness of existing Federal energy conservation policies and programs. These problems are:

- The lack of consistent, specific planning which clearly identifies what contribution energy conservation is to make in the overall national energy plan.
- The lack of an aggressive coordinated effort to conserve energy in Federal operations and facilities.
- The failure of the administration to timely develop, and have approved by the Congress, emergency energy conservation plans and a gasoline-rationing plan.

In our view, these problems exist because the administration has essentially viewed energy conservation in the context of short-term crisis management of real or threatened energy supply shortfalls; for example, the 1973 oil embargo, unusually cold winters, the national coal strike, and the recent Iranian situation. Even now, with gasoline shortages occurring and various State and regional gasoline purchase restriction plans either activated or seriously envisioned, much of the Nation still sees the energy problem as an "oil company ripoff" rather than a long-run physical supply problem.

In the final analysis, a concentrated effort by the Congress, the administration, and the general public will be needed to move forward with an aggressive, effective national energy conservation program. The actions which need to take place, in our opinion, to effectively move forward include:

- The administration must develop an energy conservation plan which clearly establishes overall energy conservation goals, proposes specific actions which would be taken to achieve those goals, and provides for standby initiatives which could be implemented if it appeared that established goals would not be met.

1/Report to the Chairman of Energy Related Committees and Subcommittees, EMD-79-34, February 13, 1979.

The specific actions proposed in the plan should be identified in terms of the contribution each is to make in achieving the overall energy conservation goal. The plan should also contain milestones and a program to continuously monitor and evaluate each action.

- The Congress must fully support the need to achieve substantial levels of energy conservation and make the hard choices between alternative policy and program actions which, if effectively implemented, will result in the necessary level of energy conservation.
- The general public must be convinced of the need to conserve energy and must be provided the information necessary to make efficient choices in their consumption of energy. Much of the energy consumed in the residential and transportation sectors is directly affected by individual consumers' personal habits and behavior. It appears that a conscientious concerted effort by the public to change their energy consumption habits and behavior has not yet taken place. Convincing the public to make such changes is probably the most important challenge in the energy conservation area.

Energy Supply Problems and Emergency Planning

A State's energy plan is to include a description of the likely source of energy supply, including a projection of the need for electrical power generating facilities. In addition, the plan is to include an energy emergency plan to be used in the event of a severe supply interruption. These emergency plans are to be coordinated with DOE plans and energy supply set aside programs are to be consistent with regulations issued pursuant to the Emergency Petroleum Allocation Act of 1973 (Public Law 93-159).

We believe that such an energy supply and emergency planning system would be beneficial in that it would allow for local initiatives and for State and regional differences. However, it is unclear how DOE can assure that individually developed State emergency plans will be consistent and coordinated with overall National emergency conservation objectives until DOE has established emergency energy conservation plans.

Increased Consideration of
Renewable Resources

The proposed act would require each State to include in its plan reasonable steps it intends to take to remove technical, economic, and institutional barriers to the use of renewable energy resources in the State. The proposed act also requires each State plan to include a projection of the need for electric power generation facilities and a description of the major actions and a schedule for such actions, required to make the facilities available. However, there is no specific requirement that, in planning for such facilities, the States consider the role of renewable energy sources.

In an August 10, 1978, report to the Congress ^{1/} we noted that renewable energy technologies deserve thorough consideration as alternatives to thermal powerplants. These alternative energy sources can be added in smaller increments, require less capital and shorter construction schedules, and generally entail fewer serious environmental risks than nuclear and coal-fired plants. Renewable technologies, often referred to as exotic energy sources, are in some cases off-the-shelf technologies, which were widely used in the recent past and are still being used in more energy-conscious societies. We also noted that there may be a tendency for power planners to concentrate their attention on traditional supply systems in which large central station generating plants produce power for subsequent distribution to points of use. This tendency could obscure the potentials of decentralized applications such as solar waterheating and other renewables.

A requirement in the proposed act that States fully consider alternative renewable energy sources when planning for electric power generating facilities would assure that these alternatives are part of the planning process.

Cost Sharing

The proposed bill requires each State to provide \$1 from non-Federal sources for each \$5 of Federal funds allocated to the State to carry out its program. The existing programs are 100 percent Federally funded.

^{1/}"Region At the Crossroads--The Pacific Northwest Searches For New Sources of Electric Energy", EMD-78-76, August 10, 1978.

Such a requirement should increase the overall funding of conservation programs and give the States more incentive to assure themselves that the programs are carried out in an efficient and effective manner. However, there is also the possibility that some financially pressed States may elect to cut back or eliminate altogether their participation in the program.

As requested by your Office, we plan to restrict further distribution of this report for 4 days from the date of this report unless the report contents are released by your Office before that time.

Sincerely yours,


DEPUTY Comptroller General
of the United States

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