

DOCUMENT RESUME

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[Comments on the Solar Power Satellite Research, Development, and Demonstration Program Act of 1978]. ENE-78-61; B-178726. April 13, 1978. 2 pp.

Report to Rep. Olin E. Teague, Chairman, House Committee on Science and Technology; by Robert F. Keller, Deputy Comptroller General.

Contact: Energy and Minerals Div.


Organization Concerned: Department of Energy.

Congressional Relevance: House Committee on Science and Technology. Rep. Olin E. Teague.

Authority: Solar Energy Research, Development, and Demonstration Act of 1974 (42 U.S.C. 6551). Solar Power Satellite Research, Development, and Demonstration Program Act. H.R. 10607 (95th Cong.).

The Solar Power Satellite Research, Development, and Demonstration Program Act of 1978 would establish a program in the Department of Energy (DOE) to pursue research, development, and demonstration of solar power satellites (SPS) as a major source of energy. Enacting legislation for such a program at this time with the expectation of demonstrating such systems in the near future is premature. Technical, environmental, economic, and institutional issues surrounding SPS systems have not been adequately investigated, and supporting technologies such as the space shuttle and photovoltaic energy systems are years away from being useful in deploying SPS systems. Under existing legislation, the DOE has initiated a SPS Concept Development and Evaluation Program to formulate a better understanding of the SPS concept. This program was begun in fiscal year 1977, and about \$7.6 million has been obligated for carrying out the program through 1978. Program activities are expected to result in the formulation of program recommendations by June 1980 either to continue further study, field testing, and possibly space testing, or to terminate the program. The scope of DOE's ongoing program appears sufficient to gain a better understanding of the issues surrounding SPS systems. After these studies are completed, a better basis will exist for evaluating the pros and cons of a costly SPS development program. (RRS)

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

B-178726

APR 13 1978

The Honorable Olin E. Teague
Chairman, Committee on Science
and Technology
House of Representatives

Dear Mr. Chairman:

By letter dated February 6, 1978, you requested that we comment on H.R. 10601, 95th Congress, the "Solar Power Satellite Research, Development, and Demonstration Program Act of 1978." The purpose of the bill is to establish a program in the Department of Energy (DOE) to pursue research, development, and demonstration of solar power satellites (SPS) as a major source of energy to satisfy our national energy needs. If enacted, this bill would authorize \$25 million to be appropriated in fiscal year 1979 for such a program.

We believe enacting separate legislation for such a program at this time with the expectation of demonstrating these systems sometime in the near future is premature. Many technical, environmental, economic, and institutional issues surrounding SPS systems have not been adequately investigated to provide a basis for an objective comparison of these systems against other long-range energy options such as fusion, breeder reactors, or some solar electric systems. In addition, critical supporting technologies such as the space shuttle and photovoltaic energy systems appear to be years away from being developed to the point whereby they would be useful in deploying SPS systems.

DOE under existing legislation--the Solar Energy Research, Development, and Demonstration Act of 1974, 42 U.S.C. § 6551--has initiated a SPS Concept Development and Evaluation Program. This program is aimed at formulating a better understanding of the SPS concept. The program includes studies of the technical feasibility, economic practicality, and the social and environmental acceptability of SPS systems as well as comparative assessments of SPS systems versus other energy alternatives. This program was initiated in fiscal year 1977 by the former Energy Research and Development Administration. According to DOE officials about \$7.6 million has been obligated for carrying out the program through fiscal year 1978. DOE estimates that the total funding for this program through fiscal year 1980 will amount to nearly \$16 million. The program activities are expected to

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result in the formulation of program recommendations in June 1980 either to continue further study, field testing, and possibly some space testing as part of the space shuttle program; or to terminate the program.

In our view, the scope of DOE's ongoing program appears sufficient to gain a better understanding of the issues surrounding SPS systems. After these studies are completed and the supporting technologies are more fully developed, a better basis would exist for evaluating the pros and cons of committing the Nation to a costly SPS development program. Accordingly we believe any decision regarding the establishment of a large SPS development program should be deferred until DOE's program is completed.

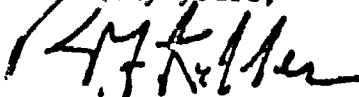
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If the Congress decides that separate legislation is warranted, the legislation should contain language authorizing the General Accounting Office access to records of recipients of financial assistance. Specifically, we prefer to see language such as the following included in the bill.

"(a) Each recipient of Federal assistance under this Act, pursuant to grants, subgrants, contracts, subcontracts, loans or other arrangements, entered into under other than by formal advertising and which are otherwise authorized by this Act, shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which such assistance is given or used, the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

"(b) The Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, shall, until the expiration of 3 years after completion of the project or undertaking referred to in subsection (a) of this section, have access for the purpose of audit and examination to any books, documents, papers and records of such recipients which in the opinion of the Secretary or the Comptroller General may be related or pertinent to the grants, contracts, subcontracts, subgrants, loans, or other arrangements referred to in subsection (a)."

Sincerely yours,



Deputy Comptroller General
of the United States