THE WHITE HOUSE
WASHINGTON

ENROLLED BILL

SUBJECT:  Enrolled Bill H. R. 11864 - Solar

Heating and Cooling Demonstration Act of 1974

<table>
<thead>
<tr>
<th>Name</th>
<th>Approval</th>
<th>Date</th>
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<tr>
<td>Michael Duval</td>
<td>Yes</td>
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<td>Tod Hullin</td>
<td>Yes</td>
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<td>NSC/S</td>
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<td>Phil Buchen</td>
<td>Yes</td>
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<td>Bill Timmons</td>
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<td>Ken Cole</td>
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Comments:
NSC feels that the Atomic Energy Commission should submit their recommendation.
ACTION MEMORANDUM

Date: August 29, 1974
Time: 3:30 p.m.

FOR ACTION: Michael Duval
Bob Hullin
NSC/S
Phil Bilchen
Bill Timmons

cc (for information): Warren K. Hendriks
Jerry Jones
Dave Gergen

FROM THE STAFF SECRETARY

DUE: Date: Friday, August 30, 1974
Time: 2:00 p.m.

SUBJECT: Enrolled Bill H.R. 11864 - Solar Heating and Cooling
Demonstration Act of 1974

ACTION REQUESTED:

--- For Necessary Action
XX For Your Recommendations
--- Prepare Agenda and Brief
--- Draft Reply
--- For Your Comments
--- Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

K. R. COLE, JR.
For the President
MEMORANDUM FOR THE PRESIDENT

Sponsors - Rep. McCormack (D) Washington and 20 others

Last Day for Action
September 3, 1974 - Tuesday

Purpose
Provides for the early development and demonstration of both solar heating and combined solar heating and cooling systems.

Agency Recommendations

<table>
<thead>
<tr>
<th>Office of Management and Budget</th>
<th>Approval</th>
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<tr>
<td>National Aeronautics and Space Administration</td>
<td>Approval</td>
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<tr>
<td>Federal Energy Administration</td>
<td>Approval</td>
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<tr>
<td>Federal Home Loan Bank Board</td>
<td>Approval</td>
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<tr>
<td>National Science Foundation</td>
<td>No objection (signing statement attached)</td>
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<tr>
<th>Department of Commerce</th>
<th>No objection</th>
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<tr>
<td>General Services Administration</td>
<td>No objection</td>
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<tr>
<td>Department of the Treasury</td>
<td>No objection</td>
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<tr>
<td>Department of Defense</td>
<td>Defers to interested agencies</td>
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<tr>
<td>Department of Housing and Urban Development</td>
<td>Would not recommend disapproval</td>
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Discussion

H.R. 11864 would establish a demonstration program to test and demonstrate the feasibility of solar energy as a partial substitute for conventional heating and cooling systems. It would respond to the need for development of alternatives to increasingly limited fossil fuel supplies.

The bill would provide for an interagency program to demonstrate within a three year period the practical use of solar heating technology and to provide for the development and demonstration within a five year period of the practical use of combined solar heating and cooling technology.

H.R. 11864 provides in effect for a two-stage demonstration program. First, NASA would be responsible for research, development and procurement of solar heating and combined solar heating and cooling equipment, meeting performance criteria prescribed by HUD, utilizing the services of the National Bureau of Standards. Second, HUD and Defense would be responsible for arranging for the installation of equipment in residential dwellings and NASA for installation in commercial buildings through arrangements with other Federal agencies.

More, specifically, agency responsibilities would be as follows:

NASA would

-- conduct a program of applied research
-- work with HUD to develop performance criteria for projects
-- procure equipment
-- enter into arrangements with appropriate Federal agencies to carry out research and development and to install demonstration projects in commercial types of buildings

HUD would

-- determine and publish interim suitability criteria for residential dwellings and performance criteria for solar heating and as soon as possible combined solar heating and cooling systems
install equipment procured by NASA in a "substantial" number of residential dwellings

provide for the satisfactory operation of such installations during the demonstration period

prescribe terms and conditions under which title and ownership of any dwellings constructed or solar heating systems installed may be conveyed to purchasers or owners of such dwellings

monitor the performance and operation of solar energy equipment

establish and operate a Solar Heating and Cooling Information Data Bank for the purpose of collecting, reviewing and disseminating solar heating and cooling information to Federal, State and local authorities, the building industry, the scientific and technical community, and the public

from time to time conduct studies and make appropriate special reports to the Congress evaluating the effectiveness of combined programs

Defense would be responsible to arrange for the installation of solar heating and combined heating and cooling systems procured by NASA in a "substantial" number of residential dwellings which are located on Federal or federally administered property.

NSF would be responsible to conduct a program of applied research relevant to the improvement and practical application of combined solar heating and cooling systems.

NASA and HUD, in consultation with NSF, Defense, the National Bureau of Standards, and other agencies, would be directed to submit to the Congress within 120 days of enactment a comprehensive program plan for carrying out the residential demonstration program.

Within 60 days after the effective date of legislation creating an Energy Research and Development Administration (ERDA), or similar organization, all energy research and development functions vested in NASA and NSF under this Act could be transferred to such Federal agency. Furthermore, any funds
appropriated under this Act could also be transferred -- to the extent appropriate -- to ERDA. Legislation to establish ERDA is now in conference.

The bill authorizes appropriations of $5 million each to HUD and NASA for fiscal year 1975 and $50 million in the aggregate for fiscal years 1976 through 1979. Because activities authorized by this bill could be funded out of existing agency appropriations for solar energy activities, or through reprogramming actions, the bill would not require an increase over the 1975 budget.

As in the case of another enrolled bill now pending before you, H.R. 14920, the "Geothermal Energy Research, Development, and Demonstration Act of 1974," we do not believe that this bill is essential to the conduct of a Federal research and development program in the solar energy area. However, we are recommending approval of H.R. 11864 for reasons basically similar to those set out in our enrolled bill memorandum recommending approval of the geothermal energy bill. In addition, we note the strong Congressional support for this bill (passed the House 253-2 and the Senate by voice vote after having been referred to five Senate committees).

H.R. 11864 provides an interim basis for demonstrating the feasibility of solar energy and accelerating development of practical application of solar energy technology with whatever environmental, economic, and energy conserving implications that would have and provides for a prototype demonstration program as opposed to a large-scale, expensive operation. The provision authorizing transfer of most functions and funding to ERDA should make it possible to minimize a number of the problems raised by the bill. Remedial legislation can be proposed to deal with other problems if this is later deemed appropriate.

In summary, while the organizational and funding provisions of the bill are imprecise, most of the relationships can be worked out if NASA and HUD exercise effective leadership. The overall purposes of accelerating development of solar energy applications are commendable. Accordingly, we recommend approval of the bill.
It is our understanding that White House staff is preparing a draft of a signing statement for your consideration covering both the present bill and the geothermal bill.

H. H. Rommel, 7/28/74

Helfried H. Rommel
Assistant Director for Legislative Reference

Enclosures
TH~ WHITE HOUSE
WASHINGTON

August 30, 1974

MEMORANDUM FOR: MR. WARREN HENDRIKS
FROM: WILLIAM E. TIMMONEs
SUBJECT: Action Memorandum - Log No. 554

The Office of Legislative Affairs concurs in the attached proposal and has no additional recommendations.

Attachment
ACTION MEMORANDUM
THE WHITE HOUSE
WASHINGTON

Date: August 29, 1974
Time: 3:30 p.m.

FOR ACTION: Michael Duval
Tod Hullin
NSC/S
Phil Buchen
Bill Timmons

ACTION REQUESTED:

XX For Your Recommendations

cc (for information): Warren K. Hendriks
Jerry Jones

FOR YOUR COMMENTS

Prepare Agenda and Brief

Draft Reply

Draft Remarks

FROM THE STAFF SECRETARY

FROM THE STAFF SECRETARY

DUE: Date: Friday, August 30, 1974

SUBJECT: Enrolled Bill H.R. 11864 - Solar Heating and Cooling
Demonstration Act of 1974

ACTION REQUESTED:

XX For Your Recommendations

Draft Reply

Draft Remarks

REMIX:

Please return to Kathy Tindle - West Wing

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a
delay in submitting the required material, please
telephone the Staff Secretary immediately.

Warren K. Hendriks
For the President
MEMORANDUM FOR THE PRESIDENT

Sponsors - Rep. McCormack (D) Washington and 20 others

Last Day for Action
September 3, 1974 - Tuesday

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Approval
Federal Energy Administration
Approval
Federal Home Loan Bank Board
No objection
National Science Foundation
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Department of Commerce
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General Services Administration
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NASA and HUD, in consultation with NSF, Defense, the National Bureau of Standards, and other agencies, would be directed to submit to the Congress within 120 days of enactment a comprehensive program plan for carrying out the residential demonstration program.

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appropriated under this Act could also be transferred -- to the extent appropriate -- to ERDA. Legislation to establish ERDA is now in conference.

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As in the case of another enrolled bill now pending before you, H.R. 14920, the "Geothermal Energy Research, Development, and Demonstration Act of 1974," we do not believe that this bill is essential to the conduct of a Federal research and development program in the solar energy area. However, we are recommending approval of H.R. 11864 for reasons basically similar to those set out in our enrolled bill memorandum recommending approval of the geothermal energy bill. In addition, we note the strong Congressional support for this bill (passed the House 253-2 and the Senate by voice vote after having been referred to five Senate committees).

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In summary, while the organizational and funding provisions of the bill are imprecise, most of the relationships can be worked out if NASA and HUD exercise effective leadership. The overall purposes of accelerating development of solar energy applications are commendable. Accordingly, we recommend approval of the bill.
It is our understanding that White House staff is preparing a draft of a signing statement for your consideration covering both the present bill and the geothermal bill.

H. H. Rommel, 9/29/74.

Helfred H. Rommel
Assistant Director for Legislative Reference

Enclosures
This is an Enrolled Enactment report on H.R. 11864, "An Act to provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems." It is submitted pursuant to Mr. Wilfred H. Rommel's request.

The Enrolled Bill declares that it is "the policy of the United States and the purpose of this Act to provide for the demonstration within a three-year period of the practical use of solar heating technology, and to provide for the development and demonstration within a five-year period of the practical use of combined heating and cooling technology." To carry out this policy, the Bill would authorize and direct an interagency program involving the National Aeronautics and Space Administration (NASA), the Department of Housing and Urban Development (HUD), the Department of Defense (DOD), the General Services Administration (GSA), the National Science Foundation (NSF), and the Department of Commerce (DOC), with specific responsibilities given to the National Bureau of Standards (NBS).

Summary of Agency Responsibilities

NASA would have the responsibility under the Bill for the research, development and procurement of solar heating and combined solar heating and cooling equipment, meeting performance criteria prescribed by HUD, utilizing the services of NBS and in consultation with NSF and NASA.

HUD would install in residential dwellings the equipment procured by NASA, with authority to convey title thereto to purchasers or owners of the dwellings, and DOD would install the equipment in military residential dwellings. HUD would
establish priorities for the program in accordance with criteria set forth in the Bill, monitor performance of the equipment, disseminate information on the projects, and generally coordinate the demonstrations with the building industry and professional societies.

The equipment would be installed "in a substantial number of residential dwellings," defined in the conference report on the bill as "adequate to assure sufficient numbers of demonstration units, but at the same time to avoid the risk of mass failures which could cause a serious setback to the acceptance of solar energy systems." There was an agreement between the House and Senate conferees "that a massive program is not required," but that the equipment used is not to be "one of a kind."

NASA and HUD, in consultation with NSF, NBS, DOD and other agencies, would be directed to prepare and submit to the President and to Congress, within 120 days after enactment of the Bill, a comprehensive program plan for carrying out the residential demonstration program.

NASA would be charged with the primary responsibility, concurrently with the conduct of the residential program, to enter into arrangements with appropriate Federal agencies to carry out solar heating and cooling demonstration projects with respect to commercial buildings, i.e., office buildings, factories, apartment buildings, public buildings, etc. In these efforts NASA would act in consultation with HUD, GSA, NSF and NBS.

The Bill would amend the National Aeronautics and Space Act of 1958, as amended, specifically to authorize NASA to carry out its functions under the Bill.

NSF would be directed to conduct a program of applied research in support of the demonstration program and to apprise HUD and NASA of the results of that research.

The Bill would authorize an appropriation of $5 million for NASA for FY 1975 to remain available until expended. It would authorize $5 million for HUD for FY 1975 to remain available until expended to carry out its responsibilities under the Bill and for transfer to DOD, NBS and GSA to enable them to carry out their functions under the Bill. The Bill further would authorize to be appropriated for FY 1976, 1977, 1978, and 1979, $50 million "in the aggregate to carry out the programs established by this Act."
The Bill would permit the transfer to the Energy Research and Development Administration (ERDA), within 60 days after its creation, of all "energy research and development" functions vested in NASA and NSF by the Bill and any funds appropriated pursuant to the authorization provided in the Bill, in accordance with regulations prescribed by OMB. The committee of conference emphasized the permissive nature of this transfer authority.

NASA's Position on H.R. 11864

In my testimony on H.R. 11864, I stated my belief in the two assumptions underlying the Bill: first, that the use of solar energy for heating and cooling has great potential in our era of fuel shortages and environmental concern, and secondly, that this potential will be realized only after practical solar heating and combined solar heating and cooling systems have been demonstrated to be economically competitive with conventional systems. I thus agreed with the purposes of the Bill, and expressed my view that the technology is either in hand or could be developed readily to carry out successfully the demonstration programs envisaged in the Bill.

At the same time, consistent with the Administration's position on solar energy programs, I urged the establishment of ERDA as the first priority on the energy R&D front and noted that the programs envisaged in the Bill would come within the scope of ERDA's broad responsibilities. I pointed out that it was the Administration's position that until ERDA is established, existing funding channels for work in solar heating and cooling, principally through NSF, should be maintained.

I stated, however, that if NASA were to be assigned the responsibility for solar heating and cooling equipment development and procurement, it would draw upon the extensive experience NASA has developed in a number of relevant discipline areas including materials, thermal control coatings, heating and cooling technology, and thermal analysis techniques. I also identified in my testimony on the Bill on-going NASA programs in solar heating and cooling, carried out under existing authority. These include technology work and standardized tests of promising solar collectors at the Lewis Research Center; the use of a 50,000 square-foot office building now under construction at the Langley Research Center as a "test bed" in which solar energy will
provide a significant part of the building's heating and cooling load; and a solar heating and cooling test and demonstration project at the Marshall Space Flight Center. In that latter demonstration a solar collector, using a thermal coating invented in the Skylab program, has been installed as a "roof" over three trailers which simulate a typical living area.

In the hearing on H.R. 11864, I was asked whether $50 million was a realistic amount to support the demonstration. I stated that although we had not studied the matter in detail, that was a good "ball-park figure" for the development and procurement of the solar heating and combined solar heating and cooling equipment itself, that is, to carry out NASA's responsibilities under the Bill. We have since done some preliminary work, including discussions with HUD and GSA, and we still believe that such an estimate for NASA's portion of the work is realistic. I should emphasize, however, that if the Bill is approved, detailed and reliable cost estimates would constitute a key portion of the comprehensive program plan required to be submitted to the President and the Congress within 120 days of the enactment of the Bill.

Notwithstanding the Administration's position in opposition to the Bill, it was, as you know, passed by the House of Representatives by a vote of 253 to 2, and was passed by the Senate after having been referred to five committees: Aeronautical and Space Sciences; Labor and Public Welfare; Banking, Housing and Urban Affairs; Commerce; and Interior and Insular Affairs.

Given this Congressional support for the Bill--and the fact that our preliminary discussions with HUD and GSA lead us to conclude that if sufficient resources were made available to NASA, we could effectively carry out our responsibilities under the Bill--NASA recommends that the Bill be approved. Assigning to NASA the hardware development and procurement portion of the demonstration programs would, in my view, be an appropriate utilization of NASA's technical and management capability to achieve technical program goals on time and within available resources.

No funds for the NASA functions under the Enrolled Bill are provided either in the Special Energy Research and Development Appropriations Act of 1974 (P.L. 93-322) or the 1975 HUD, Space, Science, Veterans appropriations bill.
which has just been enacted by the Congress. Thus, NASA would require supplemental FY 1975 appropriations to provide the first year funding increment. We believe that the amount authorized for NASA for FY 1975, i.e., $5 million, would be sufficient to permit initiation of a program which reasonably would permit the achievement of the three-year target for solar heating and the five-year goal for combined solar heating and cooling.

As I have noted above, the first effort to be undertaken following approval of the Bill would be the development of a comprehensive program plan. Until that is formulated, precise estimates on funding beyond FY 1975 are not possible. If the targets specified in the Bill are to be achieved, however, the peak funding requirements would undoubtedly occur early in the program. Our current budget planning for FY 1976 and our projections for subsequent years do not include resources which would be required to perform NASA's functions under the Enrolled Bill.

In view of the foregoing, NASA recommends, if resources can be made available to carry out the functions envisaged in the Enrolled Bill, that the Bill be approved.

James C. Fletcher
Administrator
MEMOANDUM FOR: Wilfred H. Rommel  
Assistant Director for  
Legislative Reference  
Office of Management and Budget  

ATTN: James McCullough  

FROM: Robert E. Montgomery, Jr.  
General Counsel  

SUBJECT: Enrolled Bill, the "Solar Heating and Cooling Demonstration Act of 1974."

This is in response to your request for the views of the Federal Energy Administration on the subject enrolled bill.

The Solar Heating and Cooling Demonstration Act would establish demonstration programs for the practical uses of solar heating and combined solar heating and cooling technologies. We believe the Act will provide an important impetus for developing potential uses for solar energy.

In developing the comprehensive program definition required by Section 7 of the Act, NASA and HUD should coordinate with FEA.

The Federal Energy Administration therefore recommends that the President sign the Act into law.
August 23, 1974

Mr. Wilfred H. Rommel
Assistant Director for
Legislative Reference
Office of Management and Budget
Washington, D.C. 20503

Attention: Mrs. Louise Garziglia BY MESSENGER

Dear Mr. Rommel:

This is in response to your request of August 22, 1974 for a report of the Board's views on the enrolled bill H.R. 11864, the "Solar Heating and Cooling Demonstration Act of 1974". The purpose of the act is to provide for the demonstration within a three year period of the practical use of solar heating technology and to provide for the development and demonstration within five years of the practical use of combined solar heating and cooling technology. Primary authority to implement the act would be placed in the National Aeronautics and Space Administration, the Department of Housing and Urban Development, and the National Science Foundation. Other agencies, such as this Board, would be expected to cooperate with the lead agencies to implement the act. Home lending institutions regulated by the Board would be authorized under section 13 of the bill to make loans on residential buildings in amounts which exceed statutory maxima by the amount by which the price or cost of such a structure is increased by the installation of solar heating or combined solar heating and cooling equipment as determined by HUD to be appropriate.

The Board supports enactment of this bill and recommends that it be signed by the President.

Sincerely,

Henry L. Judy
Deputy General Counsel
Mr. Wilfred H. Rommel  
Assistant Director for  
Legislative Reference  
Office of Management and Budget  
Washington, D. C. 20503

Dear Mr. Rommel:

This is in reply to your request of August 22, 1974 for the views of the National Science Foundation on Enrolled Bill H. R. 11864, the "Solar Heating and Cooling Demonstration Act of 1974."  

The National Science Foundation has no objection to approval of this legislation by the President.  

I am attaching for such use as you care to make of it a draft statement concerning this bill which could be used by the President at a signing ceremony or adapted for use as a written comment when the signature is announced.

Sincerely yours,

Lowell J. Paige  
Acting Director

Enc.
STATEMENT BY THE PRESIDENT

ON SIGNING

H.R. 11864 - SOLAR HEATING AND COOLING DEMONSTRATION ACT of 1974

H.R. 11864, the Solar Heating and Cooling Demonstration Act of 1974, is an example of the kind of positive action the Federal Government -- the Congress and the Executive -- can take to help the nation meet the goals of Project Independence. The solutions to our nation's energy problems will ultimately result from the continued partnership between the Government and private enterprise, and H.R. 11864 is the first of what I hope will be many steps in that direction. The aim of the bill is to move solar heating and cooling systems into the market place where they can be seen, used, and accepted by the American people. It builds on and extends work now being done by the Federal Government, especially by the National Science Foundation.

The Solar Heating and Cooling Demonstration Act of 1974 is the result of much hard work and thoughtful action by many members of the Congress. In the House, the Science and Astronautics Committee, and especially the Energy Subcommittee, have spent long hours developing this innovative legislation. Chairman Olin Teague and Subcommittee Chairman Mike McCormack, ably supported by the Ranking Minority Members Charles Mosher and Barry Goldwater, Jr., have taken the lead in perfecting this legislation. On the other side of the Capitol, five Senate Committees have had a hand in shaping this bill. Whenever any piece of legislation is scrutinized by so many committees -- and survives -- you know it has to have great strength and substance.
H. R. 11864 is, in my opinion, a sound bill. A detailed analysis of its strengths goes well beyond the scope of this statement, but let me outline a few of the bill's major strong points:

- First, it recognizes the potential of solar energy as a future energy source. In Chairman Teague's words, solar energy is "clean, plentiful, and renewable." Unlike fuels that come from the ground, solar energy knows no national boundary or geographic constraints; it cannot be shut off nor has it a price which can be manipulated. In short, it is available to all who are willing to use it, and I assure you that the United States will use it. As an energy source, solar energy has the potential of supplying 30 percent of our nation's needs as we move into the next century.

- Second, the bill selects a single use of solar energy -- heating and cooling of buildings. As the one element of the solar energy research programs closest to commercial application, solar heating and cooling of buildings is ready to move from the research stage to the development and demonstration phase. The framers of H. R. 11864 were wise in their assessment of the potential that solar heating and cooling presents.
Another strength of the bill is its utilization of the special expertise present in a number of Federal Agencies. Adopting the concept that mission agencies are best suited to handle those responsibilities that fall within their jurisdiction, H.R. 11864 is designed to bring to bear the special skills of the Department of Housing and Urban Development, National Science Foundation, National Aeronautics and Space Administration, and the National Bureau of Standards on this aspect of solar energy utilization.

At the same time, the bill recognizes the need for a central coordinating agency and provides for the transfer of function to the Energy Research and Development Administration at the appropriate time. The creation of ERDA remains high on the list of the Administration's priorities, and I am pleased to note that the Congress is moving forward in that direction.

H.R. 11864 provides Federal initiation to introduce solar heating and cooling units to the American people throughout the country. Once the building industry, manufacturing concerns, and the American people realize the tremendous advantages that solar power offers, I am confident that the private sector will do as it always has done: step in to provide the American consumers with the quality systems they will soon demand.
Finally, the foresight of the framers of H.R. 11864 is evidenced by their emphasis on both residential and commercial buildings. To have its greatest potential impact, the versatility of solar energy must be demonstrated in many different embodiments. H.R. 11864 encourages installation of solar equipment on single and multi-family dwellings, and large commercial establishments such as factories, enclosed shopping centers, and Government buildings.

H.R. 11864, however, does not freeze technology at today's state. It encourages continued research by the NSF, ERDA, and the other Federal Agencies directed to continued improvement of solar systems.

I am confident that the Executive and Legislative branches of the Government can and will work together to insure that the Solar Heating and Cooling Demonstration Act will succeed. This bill is just the beginning of a new era in America's energy future.

Just as the heating and cooling of buildings program is one important element of our total solar energy effort, so too is solar energy only one alternative energy source for our nation's future. By simultaneous vigorous development of solar, geothermal, nuclear, fossil fuel, and perhaps presently unknown sources of energy, the ingenuity and creativity of American science and industry will help make Project Independence a reality. With encouragement from the Congress by means of bills such as H.R. 11864, the time when alternative energy sources will become a reality can be brought rapidly closer.
Honorable Roy L. Ash
Director, Office of Management and Budget
Washington, D. C. 20503

Attention: Assistant Director for Legislative Reference

Dear Mr. Ash:

This is in reply to your request for the views of this Department concerning the Solar Heating and Cooling Demonstration Act of 1970, H. R. 11864, an enrolled enactment

"To provide for the early development and commercial demonstration of the technology of solar heating and combined heating and cooling systems."

This bill declares it to be the policy of the United States to provide for the demonstration within a three-year period of the practical use of solar heating technology, and to provide for the development and demonstration within a five-year period of the practical use of combined heating and cooling technology.

Under this bill, the Administrator of the National Aeronautics and Space Administration (NASA) and the Secretary of Housing and Urban Development (HUD) are assigned the responsibility to initiate and carry out the programs for the development and demonstration of solar heating systems for use in the residential dwellings. The Administrator, in consultation with the Secretary, the Director of the National Bureau of Standards (NBS), the Administrator of the General Services Administration, and the Director of the National Science Foundation (NSF) is assigned the responsibility for the early development and demonstration of solar heating and combined solar heating and cooling systems for use in commercial buildings.

The Act specifically requires that the Secretary of HUD, utilizing the services of the Director of NBS, and in consultation with the Administrator of NASA and the Director of NSF, shall determine, prescribe,
and publish, within 120 days of the date of enactment of this Act, interim performance criteria for solar heating components and systems to be used in residential dwellings and interim performance criteria (relating to suitability for solar heating) for such dwellings themselves.

Moreover, as soon as possible after the date of enactment of this Act, the Secretary, utilizing the services of the Director of NBS, and in consultation with the Administrator of NASA and the Director of NSF, shall determine, prescribe, and publish interim performance criteria for combined solar heating and cooling components and systems to be used in residential dwellings, and interim performance criteria (relating to suitability for solar heating and cooling) for such dwellings themselves.

We interpose no objection to the enactment of H.R. 11864. However, if there is to be a Presidential signing statement, we request that it be clearly indicated in that statement that all the functions vested in NASA and the NSF under this Act, and as many of the functions as possible vested in the Secretary of HUD under this act, be transferred to the Energy Research and Development Administration or such other permanent Federal organization or agency having jurisdiction over the energy research development functions of the United States as Congress may, by law, create. It should be noted that Section 18 does not mandate a transfer of the functions vested in NASA and NSF but only provides that such transfer may occur. We believe it should be clearly indicated that such transfer shall occur.

More critically, as noted above, the Act provides that the National Bureau of Standards undertake various activities to support the Demonstration Program and in certain cases mandates a time schedule (such as 120 days subsequent to enactment of the legislation) for completion of a task.

H.R. 11864 will not require an expenditure of NBS funds. The legislation provides that NBS be reimbursed for its activities through appropriations to be made available to HUD. However, in order for
NBS to accomplish the legislated activities and to meet the established schedules, it is imperative that funds be made available to HUD for transfer to NBS as soon as possible.

A rough estimate of the amount of funds that will be required from HUD to carry out the NBS tasks is as follows:

- **Fiscal Year 1975** - $750,000 to $1,000,000
- **Fiscal Year 1976** - $1,000,000

Furthermore, it will be necessary for NBS to acquire additional staff for this project as soon as possible. In this connection, we will also require 14 additional positions.

Sincerely,

*Karl F. Babke*

General Counsel
AUG 23 1974

Honorable Roy L. Ash
Director
Office of Management and Budget
Washington, DC  20503

Dear Mr. Ash:

By referral dated August 22, 1974, from the Assistant Director for Legislative Reference, your office requested the views of the General Services Administration on enrolled bill H.R. 11864, 93rd Congress, an act "To provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems."

The bill directs the National Aeronautics and Space Administration to initiate, support, and carry out research, development, demonstrations, and other related activities in solar heating and cooling technologies. Under section 9 of the bill, the Administrator of the National Aeronautics and Space Administration, in carrying out such projects and activities with respect to commercial buildings, shall consult with the Administrator of General Services, among others. The Administrator of General Services also will be consulted with respect to the prescribing of regulations to carry out the Act (section 16).

GSA has no objection to Presidential approval of the enrolled bill.

Sincerely,

[Signature]

Arthur F. Sampson
Administrator

Keep Freedom in Your Future With U.S. Savings Bonds
Reference is made to your request for the views of this Department on the enrolled enactment of H.R. 11864, "To provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems."

The enrolled enactment would authorize to be appropriated for the fiscal years 1976-1979, $50,000,000 in the aggregate to carry out programs for the development and demonstration of solar heating and combined solar heating and cooling systems for use in residential and commercial buildings.

The Department would have no objection to a recommendation that the enrolled enactment be approved by the President.

This Department should be among the Federal agencies consulted during the preparation of the comprehensive plan required by section 7 of the enrolled enactment.

Sincerely yours,

[Signature]
General Counsel
Honorable Roy L. Ash  
Director, Office of Management and Budget  
Executive Office Building  
Washington, D. C. 20503

Dear Mr. Ash:

Reference is made to your request for the views of the Department of Defense with respect to the enrolled enactment of H. R. 11864, 93d Congress, the "Solar Heating and Cooling Demonstration Act of 1974."

This Act is intended to stimulate research and development in the technology of solar heating and combined solar heating and cooling. It provides for sponsorship of research, development and demonstration programs by the National Aeronautics and Space Administration and the Department of Housing and Urban Development in cooperation with the National Science Foundation and other Federal Agencies. It establishes residential and commercial demonstration projects. The Act provides that the Department of Defense will cooperate with the named agencies in furnishing, on a reimbursable basis, facilities that would be used to test and demonstrate the techniques developed by solar energy research.

There is one provision of the Act that may cause some concern for this Department, depending upon the interpretation which is given to it. Section 13(a)(1) provides for modification of dollar limitations on federally-assisted or federally-constructed housing. Buildings constructed by this Department are subject to strict limitations on cost, either by unit of housing or per square foot of floor space. The Act recognizes that use of solar technology will result in increased costs. However, the language of this provision could be construed to require that the solar equipment replace conventional equipment if the cost ceilings are to be increased. It is the understanding of this Department, based upon the hearings and Committee reports, that the Congress recognized that conventional equipment will continue to be necessary and will be installed, notwithstanding the fact that most of the heating (or combined heating and cooling) service will be furnished by the solar equipment in the demonstration projects. If
this interpretation is not correct, it may not be possible for the Depart-
ment of Defense to support the demonstration projects without exceeding
statutory limitations.

The Department of Defense supports the purpose of the Act and is pre-
pared to cooperate with the appropriate agencies in the demonstration
projects. However, as to the merits of the Act, the Department of
Defense defers to the interested Federal agencies.

Sincerely,

[Signature]

Martin R. Hoffmann
Mr. Wilfred H. Rommel  
Assistant Director  
Legislative Reference  
Office of Management and Budget  
Washington, D. C. 20503

Attention: Mrs. Garziglia

Dear Mr. Rommel:

Subject: H. R. 11864, 93d Congress  
Enrolled Enactment

This is in response to your request for our views on the enrolled enactment of the proposed "Solar Heating and Cooling Demonstration Act of 1974."

The enrolled bill would mandate the undertaking of coordinated inter-agency solar energy research and development efforts involving HUD, NASA, NSF, NBS, DoD, and other agencies. These efforts would be designed primarily to (1) develop and test extensively in residential and non-residential structures solar heating and combined heating and cooling components and systems, (2) determine, prescribe, and publish interim performance criteria for such components and systems and for the buildings in which they are installed, and (3) maintain and disseminate widely data on development, testing and related activities.

This Department would be given responsibility for installing and monitoring the performance and suitability of components and systems for residential use, for promulgating criteria for such components and systems (and for the structures they service), and for maintaining and disseminating program information.

Overall authorization for the contemplated five year effort would be set at $60 million, with $5 million authorized to be appropriated for FY 1975 for NASA and a similar amount authorized
for HUD for carrying out its own functions and for transfer to other specified agencies for carrying out their respective functions.

This Department strongly endorses the primary objective of this enactment, which is to develop and demonstrate the feasibility and practicality of heating and combined heating/cooling systems utilizing solar energy. Solar heating systems technology already offers sufficient promise of a non-polluting, convenient and economical alternate heat source to warrant measured confidence as to the success of a concerted research and development effort involving government and private resources. The development and testing of such systems would be an appropriate component of the Project Independence Blueprint now being developed for the President.

We would note that the existing basic research authority of this Department is sufficiently broad to encompass comprehensive demonstrations of the use of solar energy systems in residential buildings. In addition, Congress has specifically authorized solar energy demonstrations under section 814 of the recently enacted Housing and Community Development Act of 1974. As a matter of general principle, we do not favor the rigidity of a legislatively imposed requirement for a specific type of demonstration or activity. However, we do not feel that our concern in this regard would justify our recommending that the President withhold approval of the enactment.

Sincerely,

Robert R. Elliott
MEMORANDUM FOR THE PRESIDENT

Sponsors - Rep. McCormack (D) Washington and 20 others

Last Day for Action
September 3, 1974 - Tuesday

Purpose
Provides for the early development and demonstration of both solar heating and combined solar heating and cooling systems.

Agency Recommendations

Office of Management and Budget Approval
National Aeronautics and Space Administration Approval
Federal Energy Administration Approval
Federal Home Loan Bank Board Approval
National Science Foundation No objection (signing statement attached)
Department of Commerce No objection
General Services Administration No objection
Department of the Treasury No objection
Department of Defense Defers to interested agencies
Department of Housing and Urban Development Would not recommend disapproval
Discussion

H.R. 11864 would establish a demonstration program to test and demonstrate the feasibility of solar energy as a partial substitute for conventional heating and cooling systems. It would respond to the need for development of alternatives to increasingly limited fossil fuel supplies.

The bill would provide for an interagency program to demonstrate within a three year period the practical use of solar heating technology and to provide for the development and demonstration within a five year period of the practical use of combined solar heating and cooling technology.

H.R. 11864 provides in effect for a two-stage demonstration program. First, NASA would be responsible for research, development and procurement of solar heating and combined solar heating and cooling equipment, meeting performance criteria prescribed by HUD, utilizing the services of the National Bureau of Standards. Second, HUD and Defense would be responsible for arranging for the installation of equipment in residential dwellings and NASA for installation in commercial buildings through arrangements with other Federal agencies.

More, specifically, agency responsibilities would be as follows:

**NASA** would

--- conduct a program of applied research

--- work with HUD to develop performance criteria for projects

--- procure equipment

--- enter into arrangements with appropriate Federal agencies to carry out research and development and to install demonstration projects in commercial types of buildings

**HUD** would

--- determine and publish interim suitability criteria for residential dwellings and performance criteria for solar heating and as soon as possible combined solar heating and cooling systems
-- install equipment procured by NASA in a "substantial" number of residential dwellings

-- provide for the satisfactory operation of such installations during the demonstration period

-- prescribe terms and conditions under which title and ownership of any dwellings constructed or solar heating systems installed may be conveyed to purchasers or owners of such dwellings

-- monitor the performance and operation of solar energy equipment

-- establish and operate a Solar Heating and Cooling Information Data Bank for the purpose of collecting, reviewing and disseminating solar heating and cooling information to Federal, State and local authorities, the building industry, the scientific and technical community, and the public

-- from time to time conduct studies and make appropriate special reports to the Congress evaluating the effectiveness of combined programs

Defense would be responsible to arrange for the installation of solar heating and combined heating and cooling systems procured by NASA in a "substantial" number of residential dwellings which are located on Federal or federally administered property.

NSF would be responsible to conduct a program of applied research relevant to the improvement and practical application of combined solar heating and cooling systems.

NASA and HUD, in consultation with NSF, Defense, the National Bureau of Standards, and other agencies, would be directed to submit to the Congress within 120 days of enactment a comprehensive program plan for carrying out the residential demonstration program.

Within 60 days after the effective date of legislation creating an Energy Research and Development Administration (ERDA), or similar organization, all energy research and development functions vested in NASA and NSF under this Act could be transferred to such Federal agency. Furthermore, any funds
Replaces pp. 4 x 5 of Enr. bill memo on HR 11864.
appropriated under this Act could also be transferred -- to the extent appropriate -- to ERDA. Legislation to establish ERDA is now in conference.

The bill authorizes appropriations of $5 million each to HUD and NASA for fiscal year 1975 and $50 million in the aggregate for fiscal years 1976 through 1979. Because activities authorized by this bill could be funded out of existing agency appropriations for solar energy activities, or through reprogramming actions, the bill would not require an increase over the 1975 budget.

As in the case of another enrolled bill now pending before you, H.R. 14920, the "Geothermal Energy Research, Development, and Demonstration Act of 1974," we do not believe that this bill is essential to the conduct of a Federal research and development program in the solar energy area. However, we are recommending approval of H.R. 11864 for reasons basically similar to those set out in our enrolled bill memorandum recommending approval of the geothermal energy bill. In addition, we note the strong Congressional support for this bill (passed the House 253-2 and the Senate by voice vote after having been referred to five Senate committees).

H.R. 11864 provides an interim basis for demonstrating the feasibility of solar energy and accelerating development of practical application of solar energy technology with whatever environmental, economic, and energy conserving implications that would have and provides for a prototype demonstration program as opposed to a large-scale, expensive operation. The provision authorizing transfer of most functions and funding to ERDA should make it possible to minimize a number of the problems raised by the bill. Remedial legislation can be proposed to deal with other problems if this is later deemed appropriate.

In summary, while the organizational and funding provisions of the bill are imprecise, most of the relationships can be worked out if NASA and HUD exercise effective leadership. The overall purposes of accelerating development of solar energy applications are commendable. Accordingly, we recommend approval of the bill.

Assistant Director for Legislative Reference

Enclosures
appropriated under this Act could also be transferred -- to the extent appropriate -- to ERDA. Legislation to establish ERDA is now in conference.

The bill authorizes appropriations of $5 million each to HUD and NASA for fiscal year 1975 and $50 million in the aggregate for fiscal years 1976 through 1979. Because activities authorized by this bill could be funded out of existing agency appropriations for solar energy activities, or through reprogramming actions, the bill would not require an increase over the 1975 budget.

As in the case of another enrolled bill now pending before you, H.R. 14920, the "Geothermal Energy Research, Development, and Demonstration Act of 1974," we do not believe that this bill is essential to the conduct of a Federal research and development program in the solar energy area. However, we are recommending approval of H.R. 11864 for reasons basically similar to those set out in our enrolled bill memorandum recommending approval of the geothermal energy bill. In addition, we note the strong Congressional support for this bill (passed the House 253-2 and the Senate by voice vote after having been referred to five Senate committees).

H.R. 11864 provides an interim basis for demonstrating the feasibility of solar energy and accelerating development of practical application of solar energy technology with whatever environmental, economic, and energy conserving implications that would have and provides for a prototype demonstration program as opposed to a large-scale, expensive operation. The provision authorizing transfer of most functions and funding to ERDA should make it possible to minimize a number of the problems raised by the bill. Remedial legislation can be proposed to deal with other problems if this is later deemed appropriate.

In summary, while the organizational and funding provisions of the bill are imprecise, most of the relationships can be worked out if NASA and HUD exercise effective leadership. The overall purposes of accelerating development of solar energy applications are commendable. Accordingly, we recommend approval of the bill.
It is our understanding that White House staff is preparing a draft of a signing statement for your consideration covering both the present bill and the geothermal bill.

Enclosures

H. H. Kornblau
Assistant Director for Legislative Reference

Alfred E. Rommel

$28/74
This is an Enrolled Enactment report on H.R. 11864, "An Act to provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems." It is submitted pursuant to Mr. Wilfred H. Rommel's request.

The Enrolled Bill declares that it is "the policy of the United States and the purpose of this Act to provide for the demonstration within a three-year period of the practical use of solar heating technology, and to provide for the development and demonstration within a five-year period of the practical use of combined heating and cooling technology."

To carry out this policy, the Bill would authorize and direct an interagency program involving the National Aeronautics and Space Administration (NASA), the Department of Housing and Urban Development (HUD), the Department of Defense (DOD), the General Services Administration (GSA), the National Science Foundation (NSF), and the Department of Commerce (DOC), with specific responsibilities given to the National Bureau of Standards (NBS).

**Summary of Agency Responsibilities**

NASA would have the responsibility under the Bill for the research, development and procurement of solar heating and combined solar heating and cooling equipment, meeting performance criteria prescribed by HUD, utilizing the services of NBS and in consultation with NSF and NASA.

HUD would install in residential dwellings the equipment procured by NASA, with authority to convey title thereto to purchasers or owners of the dwellings, and DOD would install the equipment in military residential dwellings. HUD would
2. establish priorities for the program in accordance with criteria set forth in the Bill, monitor performance of the equipment, disseminate information on the projects, and generally coordinate the demonstrations with the building industry and professional societies.

The equipment would be installed "in a substantial number of residential dwellings," defined in the conference report on the Bill as "adequate to assure sufficient numbers of demonstration units, but at the same time to avoid the risk of mass failures which could cause a serious setback to the acceptance of solar energy systems." There was an agreement between the House and Senate conferees "that a massive program is not required," but that the equipment used is not to be "one of a kind."

NASA and HUD, in consultation with NSF, NBS, DOD and other agencies, would be directed to prepare and submit to the President and to Congress, within 120 days after enactment of the Bill, a comprehensive program plan for carrying out the residential demonstration program.

NASA would be charged with the primary responsibility, concurrently with the conduct of the residential program, to enter into arrangements with appropriate Federal agencies to carry out solar heating and cooling demonstration projects with respect to commercial buildings, i.e., office buildings, factories, apartment buildings, public buildings, etc. In these efforts NASA would act in consultation with HUD, GSA, NSF and NBS.

The Bill would amend the National Aeronautics and Space Act of 1958, as amended, specifically to authorize NASA to carry out its functions under the Bill.

NSF would be directed to conduct a program of applied research in support of the demonstration program and to apprise HUD and NASA of the results of that research.

The Bill would authorize an appropriation of $5 million for NASA for FY 1975 to remain available until expended. It would authorize $5 million for HUD for FY 1975 to remain available until expended to carry out its responsibilities under the Bill and for transfer to DOD, NBS and GSA to enable them to carry out their functions under the Bill. The Bill further would authorize to be appropriated for FY 1976, 1977, 1978, and 1979, $50 million "in the aggregate to carry out the programs established by this Act."
The Bill would permit the transfer to the Energy Research and Development Administration (ERDA), within 60 days after its creation, of all "energy research and development" functions vested in NASA and NSF by the Bill and any funds appropriated pursuant to the authorization provided in the Bill, in accordance with regulations prescribed by OMB. The committee of conference emphasized the permissive nature of this transfer authority.

**NASA's Position on H.R. 11864**

In my testimony on H.R. 11864, I stated my belief in the two assumptions underlying the Bill: first, that the use of solar energy for heating and cooling has great potential in our era of fuel shortages and environmental concern, and secondly, that this potential will be realized only after practical solar heating and combined solar heating and cooling systems have been demonstrated to be economically competitive with conventional systems. I thus agreed with the purposes of the Bill, and expressed my view that the technology is either in hand or could be developed readily to carry out successfully the demonstration programs envisaged in the Bill.

At the same time, consistent with the Administration's position on solar energy programs, I urged the establishment of ERDA as the first priority on the energy R&D front and noted that the programs envisaged in the Bill would come within the scope of ERDA's broad responsibilities. I pointed out that it was the Administration's position that until ERDA is established, existing funding channels for work in solar heating and cooling, principally through NSF, should be maintained.

I stated, however, that if NASA were to be assigned the responsibility for solar heating and cooling equipment development and procurement, it would draw upon the extensive experience NASA has developed in a number of relevant discipline areas including materials, thermal control coatings, heating and cooling technology, and thermal analysis techniques. I also identified in my testimony on the Bill on-going NASA programs in solar heating and cooling, carried out under existing authority. These include technology work and standardized tests of promising solar collectors at the Lewis Research Center; the use of a 50,000 square-foot office building now under construction at the Langley Research Center as a "test bed" in which solar energy will
provide a significant part of the building's heating and cooling load; and a solar heating and cooling test and demonstration project at the Marshall Space Flight Center. In that latter demonstration a solar collector, using a thermal coating invented in the Skylab program, has been installed as a "roof" over three trailers which simulate a typical living area.

In the hearing on H.R. 11864, I was asked whether $50 million was a realistic amount to support the demonstration. I stated that although we had not studied the matter in detail, that was a good "ball-park figure" for the development and procurement of the solar heating and combined solar heating and cooling equipment itself, that is, to carry out NASA's responsibilities under the Bill. We have since done some preliminary work, including discussions with HUD and GSA, and we still believe that such an estimate for NASA's portion of the work is realistic. I should emphasize, however, that if the Bill is approved, detailed and reliable cost estimates would constitute a key portion of the comprehensive program plan required to be submitted to the President and the Congress within 120 days of the enactment of the Bill.

Notwithstanding the Administration's position in opposition to the Bill, it was, as you know, passed by the House of Representatives by a vote of 253 to 2, and was passed by the Senate after having been referred to five committees: Aeronautical and Space Sciences; Labor and Public Welfare; Banking, Housing and Urban Affairs; Commerce; and Interior and Insular Affairs.

Given this Congressional support for the Bill--and the fact that our preliminary discussions with HUD and GSA lead us to conclude that if sufficient resources were made available to NASA, we could effectively carry out our responsibilities under the Bill--NASA recommends that the Bill be approved. Assigning to NASA the hardware development and procurement portion of the demonstration programs would, in my view, be an appropriate utilization of NASA's technical and management capability to achieve technical program goals on time and within available resources.

No funds for the NASA functions under the Enrolled Bill are provided either in the Special Energy Research and Development Appropriations Act of 1974 (P.L. 93-322) or the 1975 HUD, Space, Science, Veterans appropriations bill
which has just been enacted by the Congress. Thus, NASA would require supplemental FY 1975 appropriations to provide the first year funding increment. We believe that the amount authorized for NASA for FY 1975, i.e., $5 million, would be sufficient to permit initiation of a program which reasonably would permit the achievement of the three-year target for solar heating and the five-year goal for combined solar heating and cooling.

As I have noted above, the first effort to be undertaken following approval of the Bill would be the development of a comprehensive program plan. Until that is formulated, precise estimates on funding beyond FY 1975 are not possible. If the targets specified in the Bill are to be achieved, however, the peak funding requirements would undoubtedly occur early in the program. Our current budget planning for FY 1976 and our projections for subsequent years do not include resources which would be required to perform NASA's functions under the Enrolled Bill.

In view of the foregoing, NASA recommends, if resources can be made available to carry out the functions envisaged in the Enrolled Bill, that the Bill be approved.

James C. Fletcher
Administrator
MEMOANDUM FOR: Wilfred H. Rommel  
Assistant Director for  
Legislative Reference  
Office of Management and Budget

ATTN: James McCullough

FROM: Robert E. Montgomery, Jr.  
General Counsel

SUBJECT: Enrolled Bill, the "Solar Heating and Cooling Demonstration Act of 1974."

This is in response to your request for the views of the Federal Energy Administration on the subject enrolled bill.

The Solar Heating and Cooling Demonstration Act would establish demonstration programs for the practical uses of solar heating and combined solar heating and cooling technologies. We believe the Act will provide an important impetus for developing potential uses for solar energy.

In developing the comprehensive program definition required by Section 7 of the Act, NASA and HUD should coordinate with FEA.

The Federal Energy Administration therefore recommends that the President sign the Act into law.
August 23, 1974

Mr. Wilfred H. Rommel  
Assistant Director for  
Legislative Reference  
Office of Management and Budget  
Washington, D.C.  20503  

Attention: Mrs. Louise Garziglia  

Dear Mr. Rommel:

This is in response to your request of August 22, 1974 for a report of the Board's views on the enrolled bill H.R. 11864, the "Solar Heating and Cooling Demonstration Act of 1974". The purpose of the act is to provide for the demonstration within a three year period of the practical use of solar heating technology and to provide for the development and demonstration within five years of the practical use of combined solar heating and cooling technology. Primary authority to implement the act would be placed in a National Aeronautics and Space Administration, the Department of Housing and Urban Development, and the National Science Foundation. Other agencies, such as this Board, would be expected to cooperate with the lead agencies to implement the act. Home lending institutions regulated by the Board would be authorized under section 13 of the bill to make loans on residential buildings in amounts which exceeds statutory maxima by the amount by which the price or cost of such a structure is increased by the installation of solar heating or combined solar heating and cooling equipment as determined by HUD to be appropriate.

The Board supports enactment of this bill and recommends that it be signed by the President.

Sincerely,

Henry L. Judy  
Deputy General Counsel
August 27, 1974

Mr. Wilfred H. Rommel  
Assistant Director for  
Legislative Reference  
Office of Management and Budget  
Washington, D.C. 20503

Dear Mr. Rommel:

This is in reply to your request of August 22, 1974 for the views of the National Science Foundation on Enrolled Bill H.R. 11864, the "Solar Heating and Cooling Demonstration Act of 1974."

The National Science Foundation has no objection to approval of this legislation by the President.

I am attaching for such use as you care to make of it a draft statement concerning this bill which could be used by the President at a signing ceremony or adapted for use as a written comment when the signature is announced.

Sincerely yours,

Lowell J. Paige  
Acting Director

Enc.
STATEMENT BY THE PRESIDENT

ON SIGNING

H. R. 11864 - SOLAR HEATING AND COOLING DEMONSTRATION ACT of 1974

H. R. 11864, the Solar Heating and Cooling Demonstration Act of 1974, is an example of the kind of positive action the Federal Government -- the Congress and the Executive -- can take to help the nation meet the goals of Project Independence. The solutions to our nation's energy problems will ultimately result from the continued partnership between the Government and private enterprise, and H. R. 11864 is the first of what I hope will be many steps in that direction. The aim of the bill is to move solar heating and cooling systems into the market place where they can be seen, used, and accepted by the American people. It builds on and extends work now being done by the Federal Government, especially by the National Science Foundation.

The Solar Heating and Cooling Demonstration Act of 1974 is the result of much hard work and thoughtful action by many members of the Congress. In the House, the Science and Astronautics Committee, and especially the Energy Subcommittee, have spent long hours developing this innovative legislation. Chairman Olin Teague and Subcommittee Chairman Mike McCormack, ably supported by the Ranking Minority Members Charles Mosher and Barry Goldwater, Jr., have taken the lead in perfecting this legislation. On the other side of the Capitol, five Senate Committees have had a hand in shaping this bill. Whenever any piece of legislation is scrutinized by so many committees -- and survives -- you know it has to have great strength and substance.
H.R. 11864 is, in my opinion, a sound bill. A detailed analysis of its strengths goes well beyond the scope of this statement, but let me outline a few of the bill's major strong points:

- First, it recognizes the potential of solar energy as a future energy source. In Chairman Teague's words, solar energy is "clean, plentiful, and renewable." Unlike fuels that come from the ground, solar energy knows no national boundary or geographic constraints; it cannot be shut off nor has it a price which can be manipulated. In short, it is available to all who are willing to use it, and I assure you that the United States will use it. As an energy source, solar energy has the potential of supplying 30 percent of our nation's needs as we move into the next century.

- Second, the bill selects a single use of solar energy -- heating and cooling of buildings. As the one element of the solar energy research programs closest to commercial application, solar heating and cooling of buildings is ready to move from the research stage to the development and demonstration phase. The framers of H.R. 11864 were wise in their assessment of the potential that solar heating and cooling presents.
Another strength of the bill is its utilization of the special expertise present in a number of Federal Agencies. Adopting the concept that mission agencies are best suited to handle those responsibilities that fall within their jurisdiction, H.R. 11864 is designed to bring to bear the special skills of the Department of Housing and Urban Development, National Science Foundation, National Aeronautics and Space Administration, and the National Bureau of Standards on this aspect of solar energy utilization.

At the same time, the bill recognizes the need for a central coordinating agency and provides for the transfer of function to the Energy Research and Development Administration at the appropriate time. The creation of ERDA remains high on the list of the Administration's priorities, and I am pleased to note that the Congress is moving forward in that direction.

H.R. 11864 provides Federal initiation to introduce solar heating and cooling units to the American people throughout the country. Once the building industry, manufacturing concerns, and the American people realize the tremendous advantages that solar power offers, I am confident that the private sector will do as it always has done: step in to provide the American consumers with the quality systems they will soon demand.
Finally, the foresight of the framers of H.R. 11864 is evidenced by their emphasis on both residential and commercial buildings. To have its greatest potential impact, the versatility of solar energy must be demonstrated in many different embodiments. H.R. 11864 encourages installation of solar equipment on single and multi-family dwellings, and large commercial establishments such as factories, enclosed shopping centers, and Government buildings.

H.R. 11864, however, does not freeze technology at today's state. It encourages continued research by the NSF, ERDA, and the other Federal Agencies directed to continued improvement of solar systems.

I am confident that the Executive and Legislative branches of the Government can and will work together to insure that the Solar Heating and Cooling Demonstration Act will succeed. This bill is just the beginning of a new era in America's energy future.

Just as the heating and cooling of buildings program is one important element of our total solar energy effort, so too is solar energy only one alternative energy source for our nation's future. By simultaneous vigorous development of solar, geothermal, nuclear, fossil fuel, and perhaps presently unknown sources of energy, the ingenuity and creativity of American science and industry will help make Project Independence a reality. With encouragement from the Congress by means of bills such as H.R. 11864, the time when alternative energy sources will become a reality can be brought rapidly closer.
Honorable Roy L. Ash  
Director, Office of Management and Budget  
Washington, D. C. 20503  

Attention: Assistant Director for Legislative Reference  

Dear Mr. Ash:  

This is in reply to your request for the views of this Department concerning the Solar Heating and Cooling Demonstration Act of 1970, H. R. 11864, an enrolled enactment  

"To provide for the early development and commercial demonstration of the technology of solar heating and combined heating and cooling systems."

This bill declares it to be the policy of the United States to provide for the demonstration within a three-year period of the practical use of solar heating technology, and to provide for the development and demonstration within a five-year period of the practical use of combined heating and cooling technology.

Under this bill, the Administrator of the National Aeronautics and Space Administration (NASA) and the Secretary of Housing and Urban Development (HUD) are assigned the responsibility to initiate and carry out the programs for the development and demonstration of solar heating systems for use in the residential dwellings. The Administrator, in consultation with the Secretary, the Director of the National Bureau of Standards (NBS), the Administrator of the General Services Administration, and the Director of the National Science Foundation (NSF) is assigned the responsibility for the early development and demonstration of solar heating and combined solar heating and cooling systems for use in commercial buildings.

The Act specifically requires that the Secretary of HUD, utilizing the services of the Director of NBS, and in consultation with the Administrator of NASA and the Director of NSF, shall determine, prescribe,
and publish, within 120 days of the date of enactment of this Act, interim performance criteria for solar heating components and systems to be used in residential dwellings and interim performance criteria (relating to suitability for solar heating) for such dwellings themselves.

Moreover, as soon as possible after the date of enactment of this Act, the Secretary, utilizing the services of the Director of NBS, and in consultation with the Administrator of NASA and the Director of NSF, shall determine, prescribe, and publish interim performance criteria for combined solar heating and cooling components and systems to be used in residential dwellings, and interim performance criteria (relating to suitability for solar heating and cooling) for such dwellings themselves.

We interpose no objection to the enactment of H.R. 11864. However, if there is to be a Presidential signing statement, we request that it be clearly indicated in that statement that all the functions vested in NASA and the NSF under this Act, and as many of the functions as possible vested in the Secretary of HUD under this act, be transferred to the Energy Research and Development Administration or such other permanent Federal organization or agency having jurisdiction over the energy research development functions of the United States as Congress may, by law, create. It should be noted that Section 18 does not mandate a transfer of the functions vested in NASA and NSF but only provides that such transfer may occur. We believe it should be clearly indicated that such transfer shall occur.

More critically, as noted above, the Act provides that the National Bureau of Standards undertake various activities to support the Demonstration Program and in certain cases mandates a time schedule (such as 120 days subsequent to enactment of the legislation) for completion of a task.

H.R. 11864 will not require an expenditure of NBS funds. The legislation provides that NBS be reimbursed for its activities through appropriations to be made available to HUD. However, in order for
NBS to accomplish the legislated activities and to meet the established schedules, it is imperative that funds be made available to HUD for transfer to NBS as soon as possible.

A rough estimate of the amount of funds that will be required from HUD to carry out the NBS tasks is as follows:

**Fiscal Year 1975** - $750,000 to $1,000,000

**Fiscal Year 1976** - $1,000,000

Furthermore, it will be necessary for NBS to acquire additional staff for this project as soon as possible. In this connection, we will also require 14 additional positions.

Sincerely,

Karl C. Banker

General Counsel
Honorable Roy L. Ash
Director
Office of Management and Budget
Washington, DC 20503

Dear Mr. Ash:

By referral dated August 22, 1974, from the Assistant Director for Legislative Reference, your office requested the views of the General Services Administration on enrolled bill H.R. 11864, 93rd Congress, an act "To provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems."

The bill directs the National Aeronautics and Space Administration to initiate, support, and carry out research, development, demonstrations, and other related activities in solar heating and cooling technologies. Under section 9 of the bill, the Administrator of the National Aeronautics and Space Administration, in carrying out such projects and activities with respect to commercial buildings, shall consult with the Administrator of General Services, among others. The Administrator of General Services also will be consulted with respect to the prescribing of regulations to carry out the Act (section 16).

GSA has no objection to Presidential approval of the enrolled bill.

Sincerely,

[Signature]
Arthur F. Sampson
Administrator
Director, Office of Management and Budget
Executive Office of the President
Washington, D. C. 20503

Attention: Assistant Director for Legislative Reference

Sir:

Reference is made to your request for the views of this Department on the enrolled enactment of H.R. 11864, "To provide for the early development and commercial demonstration of the technology of solar heating and combined solar heating and cooling systems."

The enrolled enactment would authorize to be appropriated for the fiscal years 1976-1979, $50,000,000 in the aggregate to carry out programs for the development and demonstration of solar heating and combined solar heating and cooling systems for use in residential and commercial buildings.

The Department would have no objection to a recommendation that the enrolled enactment be approved by the President.

This Department should be among the Federal agencies consulted during the preparation of the comprehensive plan required by section 7 of the enrolled enactment.

Sincerely yours,

[Signature]
General Counsel
Honorable Roy L. Ash  
Director, Office of Management and Budget  
Executive Office Building  
Washington, D. C. 20503

Dear Mr. Ash:

Reference is made to your request for the views of the Department of Defense with respect to the enrolled enactment of H. R. 11864, 93d Congress, the "Solar Heating and Cooling Demonstration Act of 1974."

This Act is intended to stimulate research and development in the technology of solar heating and combined solar heating and cooling. It provides for sponsorship of research, development and demonstration programs by the National Aeronautics and Space Administration and the Department of Housing and Urban Development in cooperation with the National Science Foundation and other Federal Agencies. It establishes residential and commercial demonstration projects. The Act provides that the Department of Defense will cooperate with the named agencies in furnishing, on a reimbursable basis, facilities that would be used to test and demonstrate the techniques developed by solar energy research.

There is one provision of the Act that may cause some concern for this Department, depending upon the interpretation which is given to it. Section 13(a)(1) provides for modification of dollar limitations on federally-assisted or federally-constructed housing. Buildings constructed by this Department are subject to strict limitations on cost, either by unit of housing or per square foot of floor space. The Act recognizes that use of solar technology will result in increased costs. However, the language of this provision could be construed to require that the solar equipment replace conventional equipment if the cost ceilings are to be increased. It is the understanding of this Department, based upon the hearings and Committee reports, that the Congress recognized that conventional equipment will continue to be necessary and will be installed, notwithstanding the fact that most of the heating (or combined heating and cooling) service will be furnished by the solar equipment in the demonstration projects. If
this interpretation is not correct, it may not be possible for the Department of Defense to support the demonstration projects without exceeding statutory limitations.

The Department of Defense supports the purpose of the Act and is prepared to cooperate with the appropriate agencies in the demonstration projects. However, as to the merits of the Act, the Department of Defense defers to the interested Federal agencies.

Sincerely,

[Signature]

Martin R. Hoffmann
Mr. Wilfred H. Rommel  
Assistant Director  
Legislative Reference  
Office of Management and Budget  
Washington, D. C. 20503

Attention: Mrs. Garziglia

Dear Mr. Rommel:

Subject: H. R. 11864, 93d Congress  
Enrolled Enactment

This is in response to your request for our views on the enrolled enactment of the proposed "Solar Heating and Cooling Demonstration Act of 1974."

The enrolled bill would mandate the undertaking of coordinated inter-agency solar energy research and development efforts involving HUD, NASA, NSF, NBS, DoD, and other agencies. These efforts would be designed primarily to (1) develop and test extensively in residential and non-residential structures solar heating and combined heating and cooling components and systems, (2) determine, prescribe, and publish interim performance criteria for such components and systems and for the buildings in which they are installed, and (3) maintain and disseminate widely data on development, testing and related activities.

This Department would be given responsibility for installing and monitoring the performance and suitability of components and systems for residential use, for promulgating criteria for such components and systems (and for the structures they service), and for maintaining and disseminating program information.

Overall authorization for the contemplated five year effort would be set at $60 million, with $5 million authorized to be appropriated for FY 1975 for NASA and a similar amount authorized
for HUD for carrying out its own functions and for transfer to other specified agencies for carrying out their respective functions.

This Department strongly endorses the primary objective of this enactment, which is to develop and demonstrate the feasibility and practicality of heating and combined heating/cooling systems utilizing solar energy. Solar heating systems technology already offers sufficient promise of a non-polluting, convenient and economical alternate heat source to warrant measured confidence as to the success of a concerted research and development effort involving government and private resources. The development and testing of such systems would be an appropriate component of the Project Independence Blueprint now being developed for the President.

We would note that the existing basic research authority of this Department is sufficiently broad to encompass comprehensive demonstrations of the use of solar energy systems in residential buildings. In addition, Congress has specifically authorized solar energy demonstrations under section 814 of the recently enacted Housing and Community Development Act of 1974. As a matter of general principle, we do not favor the rigidity of a legislatively imposed requirement for a specific type of demonstration or activity. However, we do not feel that our concern in this regard would justify our recommending that the President withhold approval of the enactment.

Sincerely,

Robert R. Elliott
THE WHITE HOUSE
WASHINGTON

RUSH

LOG NO.: 554

Date: August 29, 1974
Time: 3:30 p.m.

FOR ACTION: Michael Duval
Tod Hullin
NSC/S
Phil Buchen
Bill Timmons

cc (for information): Warren K. Hendriks
Jerry Jones

FROM THE STAFF SECRETARY

DUE: Date: Friday, August 30, 1974
Time: 2:00 p.m.

SUBJECT: Enrolled Bill H. R. 11864 - Solar Heating and Cooling
Demonstration Act of 1974

ACTION REQUESTED:

--- For Necessary Action
XX For Your Recommendations
--- Prepare Agenda and Brief
--- Draft Reply
--- For Your Comments
--- Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

No objection
D.C.

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Warren K. Hendriks
For the President