The original documents are located in Box 37, folder "Uranium Enrichment (15)" of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

Energy

California Supplement

Nuclear Fuel Production

Given the still-to-be-determined scope of nuclear power in the nation's total energy picture, it would be ill-advised to permit private industry to take a profit-making role in the production of nuclear fuel.

Congress should reject the Ford administration proposal to open this door to a combine headed by the Bechtel Corp., Goodyear Tire and Rubber Co. and an oil-steel conglomerate.

Although the economics of the matter are arguable and complex, it has all the earmarks of a ripoff of the nation's taxpayers.

For 30 years the federal government — having spent billions in research and capital investment on the process — has produced on a nonprofit basis the enriched uranium used by nuclear power plants.

Thus, the government has an important handle on the rate of growth of the nuclear industry, a control which should be prudently maintained by Washington and not opened to private profit with all the attendant difficulties of regulation and control.

The issue arises because of plans to build a fourth uranium enrichment plant which, along with the three existing plants run by the government, would meet anticipated nuclear fuel needs for the next 10 years or so. A year ago, the U.S. Energy Research and Development Administration (ERDA) urged the plant be built by the government and not private enterprise. That position remains valid and has been reinforced by a recent study by the General Accounting Office.

Yet ERDA, at the Ford administration's urging, has shifted its position and now recommends the fourth plant be built by Bechtel-Goodyear, with big federal subsidies and a guarantee to purchase its early production at a cost of $1 billion.

Why should government subsidize private production of enriched uranium for profit when it can be produced on a nonprofit basis by government?

The fourth plant, and any others in coming years, should remain in government hands. This would above all assure that national energy policy, not profit motive, would regulate the pace of nuclear energy growth.

Sacramento Bee (5/13/76)

ADMINISTRATIVELY ~~CONFIDENTIAL~~

Uranium Enrichment

THE WHITE HOUSE

WASHINGTON

May 13, 1976

MEMORANDUM FOR: JIM CANNON
JIM CONNOR
BILL KENDALL
CHARLIE LEPPERT
JIM MITCHELL
BOB FRI
BARRY ROTH

FROM: GLENN SCHLEEDE

SUBJECT: POSTURE ON THE JCAE VERSION OF NFAA

As I indicated by phone, the JCAE apparently is headed toward filing a report by Saturday. We still do not have access to a copy of the draft. I assume that Bill Kendall is still after one.

In accordance with our discussions yesterday, there are attached:

- Draft options paper. All that can be said for this is that it collects a number of views. It has a long way to go. Most of it has been reviewed by Barry Roth and parts by Hugh Loweth.

- Draft response to the Ohio Republican Delegation which seeks to describe the proposed committment to the add-on facility at Portsmouth. (Loweth has reviewed).

- Two draft Q&A's:

  . Are you committed to build an add-on plant?
  . Will you reopen the Government order book?

Other than described above, these papers haven't been reviewed or cleared with anyone.

Enclosures.

ADMINISTRATIVELY ~~CONFIDENTIAL~~

SUBJECT: Strategy for Dealing With the Nuclear Fuel Assurance Act as Reported by the JCAE on 5/11/76

Briefly, the Joint Committee on Atomic Energy (JCAE) made two significant changes before they ordered reported last Tuesday the Nuclear Fuel Assurance Act:

-- The Congressional review procedures were revised to require specifically a concurrent resolution of approval within 60 days in the case of each proposed contract before it could be signed. Language we had agreed to provided, in effect, that contracts could be signed unless the Congress passed a concurrent resolution of disapproval.

-- The section of the bill authorizing design and construction planning for a Government-owned add-on plant (as a contingency measure) was revised to authorize and direct ERDA to initiate design, construction planning, construction and operation of an add-on facility. An authorization of $230 million was provided.

ISSUES

-- The first issue is whether we should be so concerned about potential challenges on constitutional grounds by others to the new Congressional review procedures to warrant an attempt to obtain changes in the language.

-- The second issue is whether we should be so concerned about feasibility of getting Congressional approval of contracts within 60 days to warrant an attempt to get changes in the bill.

-- the third issue is whether we should be concerned about the change in language with respect to the proposed Government-owned add-on facility.

Constitutionality. The so-called "committee vetoes," "one-House vetoes," "two-House vetoes," and other "coming into agreement" provisions generally raise at least two problems of constitutional dimensions. First, the Executive Branch traditionally argues that these provisions subvert the legislative process which is required by the Constitution. Secondly, we assert that these provisions encroach upon the President's constitutionally based veto powers. In addition to these two bases of objection, a third Constitutional defect on occasion surfaces in the context of Congressional attempts to limit exclusively Executive functions; e.g., the conduct of foreign affairs.

With respect to the current proposal, the White House Counsel advises that:

1. The proposal does not appear to interfere substantially with the President's veto powers since the Congress could require separate legislative authorization for each contract and the proposed power of approval is only permissive and not mandatory in nature;

2. There is not under consideration here any matter which is exclusively Executive in nature; and

3. The principal Constitutional defect raised by the proposal is that subsequently approved contracts based solely on a concurrent resolution would not be authorized as a matter of law.

Although such contracts would not be challenged by the Executive Branch on this last point, this point could be cited by someone opposed to the enrichment program in order to challenge the contract in court. It is unlikely that such a challenge would be successful, but it could cause some delay. This problem would be overcome if the Congress were to approve the contract by a joint resolution.

The Department of Justice has never taken a position on the constitutionality of such concurrent resolutions of approval. However, Justice notes that the present provision is substantially less objectionable on

~~on~~ constitutional grounds than the concurrent resolution of disapproval. It is the opinion of the White House Counsel that the problem is whether acceptance of this review requirement could:

-- raise questions of consistency with your recent veto of the International Security Assistance Arms Exports Control Act of 1976.

-- serve as a precedent for future Congressional encroachment attempts.

Counsel further advises that you have the option of accepting the language without objecting or recommending instead a joint resolution of approval. A joint resolution would have the additional benefit of approving a contract by law even if more than 60 days had elapsed.

There is a potential that signaling acceptability of the JCAE-approved bill could impact negotiations toward an acceptable Arms Support Control bill (NSC staff and Congressional Relations, please check the following.) This potential has been considered and NSC staff and Max Friedersdorf advise that they do not believe that it is a significant problem even though the Assistance bill will not be resolved until early June.

Practicable Problem of Getting Contracts Approved. There is no question but that obtaining Congressional approval will be more difficult than avoiding disapproval. However, your advisers are split as to whether the new review requirement presents insurmountable problems:

-- Some feel that the time allowed on the bill (30 days for action by the JCAE and 30 days for Floor consideration) is not enough time and that disapproval through inaction is a virtual certainty.

-- Others believe that it will be possible to obtain Congressional approval (though more than 60 days may be needed) because the Administration will have an opportunity to make clear the budgetary impact if the Congress fails to approve a contract. Furthermore, any subsequent funding required for building a Government-owned plant in lieu of private plants would have to be accommodated within Congressional budget limitations.

Significance of the Language dealing with a Government add-on plant. Your advisers do not agree fully on the significance of the add-on plant language.

-- Some feel that it is of little significance because there are so many hurdles that must be crossed before the plant could become a reality, including: (a) the need for an environmental impact statement, (b) considerable uncertainty as to the availability of electric power, and (c) the need for additional Congressional authorization and appropriations in future years.

-- Others feel that the language is a problem because:

  . You are, in effect, being forced to make a good faith commitment to proceed with the construction and operation of an add-on plant.

  . Such a commitment can be avoided only by strenuous efforts to deep the commitment unclear.

  . The strong Congressional interest in building an add-on can still lead to some kind of binding requirement -- before Congressional action is completed -- to build the add-on plant before the private diffusion plant goes ahead.

Views of the Prospective Private Enrichment Firms. We have asked the four prospective firms to review the revised bill and give us their views. Of the three responses received thus far (UEA, Exxon Nuclear, Garrett Corporation), the views have been the same:

-- They do not like the new language because it will be more difficult to get approval.

-- The new approval procedure will not deter them from proceeding, or significantly impact their enthusiasm. You should recognize, however, that the incremental costs to the private firms who hold on for another four or five months is not that great.

-- They do not regard the language with respect to the add-on plant as a problem:

  . UEA does not regard it as a problem because they fully expect to have a plant on-line before a Government plant would be available. Further, UEA assumes that the Government will not reopen its order book. Thus, the prospective add-on plant would not be in competition with UEA.

. The two centrifuge firms that have responded have made it clear that they would object strongly if both the UEA plant and an add-on plant were constructed because it would interfere with their markets. However, they do not believe that both plants would get built and have indicated that they would oppose strongly any future appropriations for an add-on plant once the NFAA is approved and they are safely on their way with their own ventures.

ALTERNATIVES

Alt. #1. Work for passage of the bill as ordered reported by the JCAE. Do not attempt to obtain changes in the Congressional approval requirement with the Committee or on the Floor nor signal any Constitutional objections. Assume the add-on plant language is not a serious problem. Plan to sign the bill if it is passed by the Congress.

-- The advantage is that we would be most likely to get the bill passed following this approach.

-- The principal disadvantages are:

. The uncertainty with respect to Congressional approval of individual contracts.

. The potential need for you to make a good faith commitment to build an add-on plant at Portsmouth. (This disadvantage could be mitigated to some extent by an assurance that you would not have to commit to the size of the plant and that it might be satisfactory to proceed with some addition to Portsmouth if: (a) a source of supply for the currently overloaded order book, and (b) as a back up for private plants.)

Alt #2. Immediately notify the JCAE of objections to the Congressional review provision on grounds that: (a) it is an unreasonable requirement that could have the effect of preventing private enrichment and because it leaves too much uncertainty; and (b) it provides the potential for third parties to challenge contracts on Constitutional grounds. Recommend a substition of a joint (rather than concurrent) resolution of approval. Also seek some extension of the 60-day approval. Do not object to the language on the add-on plant. If the Congress makes no changes, plan to approve the legislation in its present form.

-- The advantages of this approach are that it would create the proper record, it maintains consistency in your position on the concurrent resolution, and permits Congress to act after the 60th day. It could conceivably result in a more acceptable approval requirement. The JCAE has come a long way in the whole issue and may now be approachable on this one remaining issue.

-- The disadvantages are that it would have no real impact on the practical problem of getting contracts approved. Further, it appears that Chairman Pastore was fully aware of the implications of the changes and would have no intention of making any changes.

Alt. #3. Notify the JCAE of the objections to the bill on the grounds identified in Alt. #2, plus objections to the add-on plant language.

-- The advantage of this approach is that if the JCAE were responsive, a better bill might result.

-- The principal disadvantage of this approach is that we are, for all practical purposes, already committed to continue work on an add-on plant -- though we are not committed to construction and operation of such a plant.

RECOMMENDATIONS AND DECISIONS

_____ Alt. #1. Raise no objection. Work for passage of the bill as ordered reported.

_____ Alt. #2. Seek changes in approval requirements. Make a record with the JCAE, but plan to sign the bill even if no changes.

_____ Alt. #3. Seek changes in approval requirement and add-on language before the bill is brought to the floor.

CAUTION: THIS LETTER ASSUMES WE WOULD ACCEPT THE BILL AS ORDERED REPORTED.

DRAFT
5/13/76

DRAFT RESPONSE TO OHIO REPUBLICAN DELEGATION - KEY POINT p. 3.

Dear _____:

Thank you very much for your recent letter to the President concerning the critical need to expand the capacity in the United States to provide uranium enrichment servifes that are required to supply fuel for commercial nuclear power plants here and abroad. The Administration agrees fully that this is a matter of utmost importance to the Nation and should be resolved quickly because of its importance for: (a) the continued expansion of nuclear power domestically; (b) the ability of the U.S. to continue to be a reliable supplier of uranium enrichment services to other countries; and (c) the importance of both these factors in achieving our Nation's energy, economic, and non-proliferation objectives.

An early decision on the matter is also important because of its potentially far-reaching implications. By the year 2000, domestic and foreign demand for uranium enrichment services could require the construction in the U.S. of additional capacity equivalent to between 9 and 12 plants roughly the size of each of the three existing plants. If these plants were financed and owned by the Federal Government, the budget outlay would be between $40 and $50 billion. It would take years before the investment made by the taxpayers would be returned through revenues from the enrichment plants.

I am sure that you will agree that it is highly questionable for the Federal Government to follow a path that would maintain the current Government monopoly in providing uranium enrichment services when:

-- The production of enriched uranium is a commercial, industrial process of the type normally provided by private industry -- not the Federal Government, particularly in light of the many competing demands for Federal funds.

-- Private industrial ventures are ready, willing and able to assume responsibility for financing, building, owning, and operating uranium enrichment plants subject only to the need for limited cooperation and temporary assurances by the Federal Government.

The Joint Committee on Atomic Energy (JCAE) conducted exhaustive hearings on the President's proposed Nuclear Fuel Assurance Act (NFAA) which he submitted to Congress on June 26, 1975. We are pleased that the JCAE, on May 11, 1976, ordered reported the NFAA with some changes from the President's proposal, ~~which~~ appear to ~~be a very~~ effective approach for moving ahead, and one which deals in a very effective way with the interests you have expressed on behalf of the people of Ohio.

Briefly, the bill ordered reported by the JCAE provides the frameword for the Energy Research and Development Administration (ERDA) to negotiate cooperative agreements with prospective private enrichment firms and to bring each of those agreements to the Congress for review and approval. This approach would permit us to begin transition to the private, competitive industry. Of even greater importance to you, Section 4 of the bill authorizes and directs the Administrator of ERDA to initiate constructions planning and design, construction and operation activities for the expansion of an existing uranium enrichment facility. As you may know, ERDA already has work underway on the design and construction planning necessary for the construction of a major addition to the uranium enrichment plant located at Portsmouth, Ohio. The President recently asked the Congress to approve $12.6 million to continue this work during the balance of FY 1976 and the Transition Quarter. Section 4 of the bill makes clear that the Congress intends this work to continue. Assuming that the bill passes, I intend to submit to the Congress a budget amendment requesting $170 million for FY 1977 to continue work authorized by Section 4.

I should point out that some of the points made in the letter you signed with other members of the Ohio delegation about the President's proposal and the merits of the alternative approach are apparently based on some misunderstanding of

pertinent information. I am enclosing a brief paper which comments on the points you have made to help assure that there is no continuing misunderstanding that could interfer with prompt action of the legislation.

Sincerely,

Enclosure

MR CANNON'S COPY

94TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
No. 94-1151

NUCLEAR FUEL ASSURANCE ACT OF 1976

REPORT

[Including cost estimate and comparison of the Congressional Budget Office]

BY THE

JOINT COMMITTEE ON ATOMIC ENERGY

TO ACCOMPANY

H.R. 8401

MAY 14, 1976.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE
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NUCLEAR FUEL ASSURANCE ACT OF 1976

MAY 14, 1976.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. PRICE, from the Joint Committee on Atomic Energy, submitted the following

REPORT

[Including cost estimate and comparison of the Congressional Budget Office]
[To accompany H.R. 8401]

The Joint Committee on Atomic Energy, to whom was referred the bill, H.R. 8401, to amend the Atomic Energy Act of 1954, as amended, to provide a procedure for prior congressional review and approval of cooperative arrangements between the Energy Research and Development Administration and private enterprise for the provision of facilities to produce and enrich uranium, and for other purposes, having considered the same report favorably thereon with amendments and recommend that the bill as amended do pass.

COMMITTEE AMENDMENTS

The Joint Committee on Atomic Energy recommends the following amendments to H.R. 8401.

1. On page 1, after the word "therefore," in the title of the bill, add the following: "to provide a procedure for prior congressional review and approval of proposed arrangements,".
2. On page 1, line 4 delete the date "1975" in the enacting clause and substitute therefor the date "1976".
3. On page 2, line 4 insert the words "Administrator of" after the word "The", and on page 2, lines 4 and 5 delete the word "Administration".
4. On page 2, line 5 insert the following after the word "authorized,": "subject to the prior congressional review procedure set forth in subsection b. of this section".
5. On page 2, lines 8 and 9 delete the words "of the Energy Research and Development Administration".
6. On page 3, line 15 delete the word "individuals" and substitute therefor the words "investors or lenders".
7. On page 3, line 16 delete the words "to any" and substitute therefor the words "are a".
8. Delete subsection b which begins on page 4, line 1 and continues through page 5, line 2, and substitute therefor the following: "b. The

Administrator shall not enter into any arrangement or amendment thereto under the authority of this section, modify, or complete and operate any facility or dispose thereof, until the proposed arrangement or amendment thereto which the Administrator proposes to execute, or the plan for such modification, completion, operation or disposal by the Administrator, as appropriate, has been submitted to the Joint Committee on Atomic Energy, and a period of sixty days has elapsed while Congress is in session with passage by the Congress of a concurrent resolution stating in substance that it does favor such proposed arrangement or amendment or plan for such modification, completion, operation, or disposal (in computing such sixty days, there shall be excluded the days on which either House is not in session because of adjournment for more than three days) : *Provided*, That prior to the elapse of the first thirty days of any such sixty-day period the Joint Committee shall submit a report to the Congress of its views and recommendations respecting the proposed arrangement, amendment or plan and an accompanying proposed concurrent resolution stating in substance that the Congress favors, or does not favor, as the case may be, the proposed arrangement, amendment or plan. Any such concurrent resolution so reported shall become the pending business of the House in question (in the case of the Senate the time for debate shall be equally divided between the proponents and the opponents) within twenty-five days and shall be voted on within five calendar days thereafter, unless such House shall otherwise determine".

9. On page 5, line 3 delete the word "the" which appears after the word "of", and on page 5, line 4 delete the word "Administration".

10. On page 5, lines 8 and 9 delete the words "as may be approved in an appropriation Act." and substitute therefore the following: "but in no event to exceed the amount provided therefor in a prior appropriation Act: *Provided*, That the timing, interest rate, and other terms and conditions of any notes, bonds or other similar obligations secured by any such arrangements shall be subject to the approval of the Administrator with the concurrence of the Secretary of the Treasury.".

11. On page 5, line 12 delete the words "of the Energy Research and Development Administration".

12. On page 6, line 16 delete the word "the" which appears after the word "of", and on page 6, line 17 delete the word "Administration".

13. On page 6, line 17 insert the words "and directed" after the word "authorized".

14. On page 6, line 18 insert the following after the word "design": ", construction and operation".

15. On page 6, lines 20 and 21 delete the words "such sums as may be necessary" and substitute therefor the figure "$255,000,000".

Summary of the Committee Amendments

Amendment 1 adds a statement of purpose in the bill's title, namely "to provide a procedure for prior congressional review and approval of proposed arrangements."

Amendment 2 corrects the date in the enacting clause of the bill.

Amendments 3, 5, 9, 11 and 12 place the authority of the bill in the Administrator of Energy Research and Development, rather than in the Energy Research and Development Administration, and correctly state the Administrator's title ("Administrator of Energy Research and Development") to conform to the provisions of the Energy Reorganization Act of 1974, P.L. 93-438, particularly section 102(a) and 104(c) thereof.

Amendment 4 makes the authorization to enter into cooperative arrangements subject to the prior congressional review procedure contained in the new subsection 45b.

Amendments 6 and 7 clarify the intent that any undertaking to acquire equity or pay off debt shall apply only to domestic investors and lenders by removing any implication that such undertaking could apply to foreign investors in or lenders to a domestic enrichment corporation which is owned or effectively controlled by citizens of the United States.

Amendment 8 revises the congressional review procedure, described in detail in the text of this report, to require prior approval of proposed contracts by the Congress prior to the execution of any such contract.

Amendment 10 clarifies the intent that no arrangement may be entered into before an appropriation Act has provided contract authority therefor, and adds a stipulation that the terms and conditions of any money obligations secured by cooperative arrangements are subject to the approval of the Administrator and the concurrence of the Secretary of the Treasury.

Amendments 13 and 14 provide a congressional directive and authorization that the Administrator initiate construction planning and design, construction and operation activities for the expansion of an existing uranium enrichment facility.

Amendment 15 includes an authorization that $255,000,000 be appropriated for the expansion of an existing uranium enrichment facility.

Summary

The bill provides only a framework under which proposed contractual arrangements between the Energy Research and Development Administration and prospective private uranium enrichment firms could be submitted to the Congress of the United States for prior congressional review and approval. Enactment of this bill would not in itself obligate the Government in any way or provide the authority for the consummation of any contractual arrangement. Under the congressional review and approval precedures set forth in the bill, the unexecuted contract would have to be submitted to the Congress of the United States for prior approval. A period of sixty days (excluding the days in which either House is not in session because of adjournment for more than three days) is provided for congressional approval or disapproval. Prior to the elapse of the first thirty days of such sixty-day period, the Joint Committee on Atomic Energy shall submit a report to the Congress of its views and recommendations respecting the proposed arrangement with a proposed concurrent resolution stating in substance that the Congress favors or does not favor the proposed arrangement. Any such concurrent resolution so reported shall become the pending business of the House in question within 25 days and shall be voted on within the five remaining days of

the sixty-day review period, unless such House shall otherwise determine. A favorable passage by the Congress of a concurrent resolution stating in substance that it does favor the proposed arrangement is required before the Energy Research and Development Administration can execute the arrangement. Furthermore, no such arrangement shall be entered into which would impose any contingent liability on the Government in an amount which would exceed the amount provided therefor in a prior appropriation Act.

The bill would authorize the Administrator of Energy Research and Development to enter into contracts which the Congress has approved pursuant to subsection 45b, in an amount not to exceed $8 billion, but in no event to exceed the amount provided therefor in prior appropriation Acts. The $8 billion was arrived at by the Administration as the upper level of contingent liability that the Government could conceivably assume with regard to the domestic assets of up to four proposed private uranium enrichment projects, in the extremely remote possibility that the Government would take over all of the projects at the point of maximum possible liability. The components of the $8 billion include: the domestic share of one diffusion project—$1.4 billion; the domestic share of three centrifuge projects—$3 billion; contingency for the four projects to cover uncertainties of the estimates of the amount of foreign financial participation and inflation—$3.6 billion. The $8 billion amount is based on 40 percent domestic ownership of the diffusion project and 100 percent domestic ownership of each of the centrifuge projects. Under the bill, the Government could incur no contractual liability with regard to any foreign investment in any private enrichment project.

The private diffusion project is estimated to cost approximately $3.5 billion. Of that amount, $1.4 billion is provided from domestic sources. Of the $1.4 billion, $210 million would probably be supplied by the private domestic participants. The remainder of the $1.4 billion would be financed by debt. The foreign share of the private diffusion plant would amount to $2.1 billion.

In view of the considerable controversy concerning the scope of the Government guarantees which would be furnished to private participants, the Joint Committee questioned witnesses at great length in that regard. It is the clear understanding of the Joint Committee that: (1) the Government guarantee would be strictly confined and limited solely to the assurance that the technology which the Government supplies will work; (2) even that guarantee at best would expire after one year of operation of the uranium enrichment facility; and (3) the guarantee is solely for the protection of the domestic investment in the facility and not to any extent for the foreign investment.

The bill also authorizes and directs the Administrator of Energy Research and Development to proceed with the expansion of an existing Government-owned uranium enrichment facility. It is the judgment of the Joint Committee that regardless of the construction of private enrichment facilities, the expansion of the public facility at the Portsmouth, Ohio, site is necessary.

Purpose of the Bill

The bill would provide a basis under which the Energy Research and Development Administration could seek to encourage private enterprise participation in the needed expansion of United States uranium enrichment capacity. The present enrichment capacity in the United States is supplied by three Government-owned plants which are now operated by contractors for the Energy Research and Development Administration. Additional capacity will be needed by the mid-1980's, at the very latest, in order to meet the Nation's growing need for nuclear fuel. Failure to achieve such expansion by that time would inhibit the Nation's ability to meet its need for electric power by removing nuclear energy as an available component of the basic fuel mix used in this country to meet the demand for electricity generation. Such removal would place added strain on domestic coal and oil demands and would potentially increase this country's reliance on foreign oil suppliers.

The current estimates are that the United States will require for domestic needs added enrichment capacity by the year 2000 equal to six to nine plants of a size comparable to any of the three existing plants, and that added capacity for the total market, foreign as well as domestic, served by the United States will equal nine to 12 similar size plants. The estimated cost in 1975 dollars of those nine to 12 plants ranges from $31 billion to $42 billion.

The bill provides an opportunity for private enterprise to demonstrate to the satisfaction of the Executive Branch and to the Congress of the United States that it is capable of providing this vital energy service. The role of private enterprise must be established for the large additions of enriched capacity which will be required in the future. For the next increment of enrichment capacity which is vitally needed to meet enrichment demands, the bill authorizes the expansion of an existing Government-owned uranium enrichment facility and directs that this project be carried out. The procedures of this Act are, of course, available so that private enterprise can propose an additional increment of uranium enrichment capacity by the diffusion process in addition to, but not in lieu of, the Government-owned project authorized and directed in Section 4 of this Act.

Background

On June 26, 1975, President Ford transmitted to the Congress proposed legislation which was entitled "The Nuclear Fuel Assurance Act of 1975". The President's proposal was introduced by request as S. 2035 and H.R. 8401, identical bills. It was the proposal in these bills which received the Joint Committee's attention in the extensive hearings which were conducted on them in 1975 and 1976.

The Joint Committee's consideration of these bills was, however, only the latest in a long series of continuing efforts by the Joint Committee to stimulate action so that the uranium enrichment capacity needs of this country would be met. At least as early as 1969, hearings were held concerning the need to expand enrichment capacity. By the end of calendar year 1974, the Joint Committee had conducted exhaustive hearings at which testimony was received from many witnesses who were interested in this very important problem.

The hearings on the bills being reported are, therefore, an extension of the intense consideration which the Joint Committee has given over the years to the issue of additional uranium enrichment capacity. In

view of the importance of the proposal by the Administration, the Joint Committee conducted nine days of hearings in 1975 and 1976.

Senators John O. Pastore, chairman of the Joint Committee, and Howard H. Baker, Jr., introduced by request the Administration's proposed legislation, S. 2035. A companion bill, H.R. 8401, was introduced by request in the House of Representatives by Representatives Melvin Price, vice chairman of the Joint Committee, and John B. Anderson.

On July 1, 1975, Chairman Pastore asked the Comptroller General of the United States to have the General Accounting Office make an exhaustive, analytical review of the Administration's proposal for Government assistance to private uranium enrichment groups. The Comptroller General's report was completed on October 31, 1975.

Hearings

Subsequently, the Joint Committee received testimony from Government witnesses on December 2, 3, 4, 9 and 10, 1975, on the proposed legislation. The JCAE print covering these hearings was released by Chairman Pastore on January 28, 1976.[1]

Secretary of State Kissinger presented his views on S. 2035 to the Joint Committee on February 6, 1976. The series of hearings concluded on March 23 and April 6 and 7 when testimony was received from nongovernmental witnesses. The JCAE print on the final four days of hearings is being prepared.[2]

WITNESS LISTING

The complete list of witnesses at the uranium enrichment hearings follows:

December 2, 1975

Robert C. Seamans, Jr., Administrator, Energy Research and Development Administration
William A. Anders, Chairman, Nuclear Regulatory Commission

December 3, 1975

Frank G. Zarb, Administrator, Federal Energy Administration
Russell E. Train, Administrator, Environmental Protection Agency
Thomas E. Kauper, U.S. Department of Justice

December 4, 1975

John T. Dunlop, Secretary of Labor, U.S. Department of Labor
William H. Harsha, Member, House of Representatives, State of Ohio
Paul W. MacAvoy, Member, Council of Economic Advisors

[1] S. 2035 and H.R. 8401: Nuclear Fuel Assurance Act of 1975, hearings before the Joint Committee on Atomic Energy, Dec. 2, 3, 4, 9, and 10, 1975. (Referred to as part 1.)
[2] S. 2035 and H.R. 8401: Nuclear Fuel Assurance Act of 1976, hearings before the Joint Committee on Atomic Energy, Feb. 6, Mar. 23, Apr. 6, and 7, 1976–Part 2.

Stephen S. Gardner, Deputy Secretary, U.S. Department of the Treasury

December 9, 1975

James T. Lynn, Director, Office of Management and Budget

December 10, 1975

Elmer B. Staats, Comptroller General, General Accounting Office

February 6, 1976

Henry A. Kissinger, Secretary of State, U.S. Department of State

March 23, 1976

James B. Allen, Member, U.S. Senate, State of Alabama
Gordon R. Corey, Vice Chairman, Commonwealth Edison
Jack Gilleland, Assistant Manager of Power, Tennessee Valley Authority
Don G. Allen, Vice President, New England Electric Systems; President, Yankee Atomic
Bradley R. Koch, National Rural Electric Cooperative Association
Larry Hobart, American Public Power Association
Carl Walske, Atomic Industrial Forum
William L. Dickinson, Member, House of Representatives, State of Alabama
Raymond L. Dickeman, President, Exxon Nuclear Company
Harry Wetzel, President and Chairman, Garrett Corporation
Vincent V. Abajian, Co-Chairman, CENTAR Associates

April 6, 7, 1976

John Glenn, U.S. Senate, State of Ohio
Jerome K. Komes, Chairman, Uranium Enrichment Associates

The Joint Committee met on May 11, 1976, to consider the bill. At that time, the committee voted to amend the bill and to report it favorably as amended. The bill as amended was ordered to be reported by a roll call vote of 15–0.

Committee Comments

In considering the legislation submitted by the Administration, the Joint Committee was concerned that the proposal did not provide adequate opportunity for participation by the Congress of the United States. To remedy this situation, the committee's amendments provided explicitly for a congressional review procedure which is set forth in Section 2 of the bill. Any proposed contract for a cooperative arrangement must be submitted to the Congress for congressional review and approval prior to the execution of the contract. Section 2 of the bill, as amended, explicitly precludes the Administrator of ERDA from executing any such proposed cooperative arrangement

until the Congress has indicated by concurrent resolution that it favors the arrangement.

It should be clearly understood that in reporting out this bill the Joint Committee does not by that action indicate either its approval or disapproval of any proposal which private industry may have pending before the Energy Research and Development Administration. The details of any such arrangements will, before they are consummated, have to be submitted to the Congress for approval. Nevertheless, passage of this Act should enable the conduct of serious and meaningful negotiations between the Energy Research and Development Administration and the organizations which have already made or any make proposals for the construction and operation of uranium enrichment facilities.

Section 3 of the bill differs from the original Administration proposal in two respects. Section 3 of the bill provides the ERDA with the contractual authority to enter into contracts for cooperative arrangements provided such contracts have been approved by the Congress under the procedures in Section 2 of the bill and provided also that the Congress has enacted a prior appropriation Act which provides for the amount of contingent liabilities which the Government could incur under any such contract.

In regard to contingent liabilities, it should be noted that these liabilities are indeed a very remote contingency. The guarantee of the Government would be only with regard to the technology which the Government supplies. In view of the long and successful experience of the Government with this technology, there is no reason to believe that the technology will not work. Moreover, ERDA's supervision and inspection of any use of this technology by private participants should reduce even further the minimal possibility that the technology will not work. Nevertheless, in view of the fact that this technology has been the exclusive monopoly of the Government, the testimony before this committee demonstrates that a guarantee that the technology will work would be essential for the domestic debt financing to be received.

The Joint Committee has not yet received the details of any particular arrangement. If such an arrangement is to be proposed, the procedures provided for under this bill would, of course, require the careful examination by this committee and the Congress of each contractual arrangement and the precise extent of any potential Government liability thereunder. The Joint Committee can now state, however, that under this Act there could be in no instance any guarantee of any foreign investment in a project. It can also now state that any potential Government liability would be a very remote contingency. In view of the Government investment in this technology, reasonable royalties for the private use of the technology will be required. The Joint Committee can also assure, without reservation, that it will insist that such arrangements provide for:

1. Protection against dissemination to foreign investors of classified information.
2. Continued classification and protection of sensitive enrichment technology.
3. Requirements that exports take place pursuant to appropriate international agreements for cooperation and be subjected to safeguards to prevent diversions.

4. Preclusion of control or domination of a private enrichment venture by an alien, a foreign corporation, or a foreign government.
5. Effective domestic safeguards and physical security measures for the plants and their products.

Section 4 of the bill, as submitted by the Administration, has been amended by the Joint Committee. As submitted by the Administration, this Section would have authorized the Administrator of Energy Research and Development to initiate preliminary engineering design and planning for expansion of a Government-owned uranium enrichment facility for contingency purposes. The Joint Committee authorized $25 million for such expansion (Project 76–8–g) in Public Law 94–187, the ERDA authorization bill for fiscal year 1976 and the transition period. That authorization would be amended by the ERDA authorization for fiscal year 1977 to authorize a total of $255 million for an enriched uranium production facility at Portsmouth, Ohio. As revised, Section 4 recognizes that the Joint Committee has authorized a project for an enriched uranium production facility at Portsmouth, Ohio, and directs that this facility be constructed to supply the vitally needed additional enrichment capacity. Thus, the Administration's hedge plan contemplated in the original Section 4 is provided by the authorization and direction that the Government proceed with the project at Portsmouth, Ohio, with the objective of fully constructing it and placing it in operation. The $255 million funding authorization for the project which is in Section 4 is identical to the same figure which is authorized for the identical project (Project 76–8–g) in subsection 101(b)(8) of Public Law 94–187, and the additional authorization recommended for that project for fiscal year 1977. The total amount authorized for funding of that project, assuming the enactment of the ERDA authorization bill for fiscal year 1977, is $255 million. It is understood, of course, that although the project itself has been fully authorized, funds in excess of the $255 million will be needed in succeeding fiscal years to fund the construction and operation of the project.

General Statement

During the course of the hearings on the Nuclear Fuel Assurance Act, as well as during the lengthy period which has been committed to study of expansion of United States uranium enrichment capacity, this committee has been impressed by the nearly unanimous opinion of witnesses that such capacity must be expanded. The reasons supporting these opinions are compelling.

Natural uranium must be enriched before it can be used to make fuel for nuclear-fueled electric power generating plants. Present U.S. enrichment capacity, which, as noted earlier, is provided by three plants operated by ERDA, has been fully committed under long-term contracts since mid-1974. Since that date the Government has been unable to accept contracts for additional enrichment services.

Under this set of circumstances, it is evident than an assured domestic fuel supply is not available for domestic nuclear plants beyond those which have previously obtained commitments from ERDA. If this situation is allowed to continue, it will severely inhibit the growth of generation of electricity with nuclear fuel in this country. The magnitude of this domestic problem can be appreciated when it is recognized

that it was recently estimated that by the year 2000 the Nation could reasonably expect to have 724,000 megawatts of nuclear-fueled powerplants in operation.

The electricity which would be generated by these plants is equivalent to that which would be produced by burning 20.5 million barrels of oil per day or 4.5 million tons of coal per day in conventional powerplants. If additional enrichment capacity is not built, the amount of oil and/or coal necessary to replace the nuclear generation either will have to be obtained or the country will have to make severe economic adjustments. Domestic mining of such vast amounts of coal would severely strain or exceed the capacity of the domestic industry, especially when added to a projected increase in coal demand which will occur even if the additional nuclear plants are built. Since domestic oil production is declining, it is apparent that oil necessary to meet a nuclear shortfall would have to be imported, thereby increasing our dependence on foreign sources and adversely affecting the United States' balance of payments.

Failure to expand domestic enrichment capacity would have an additional adverse impact on U.S. trade. U.S. foreign exchange revenues to date from the sale of enriched uranium and enrichment services have reached $1.1 billion. Moreover, substantial additional revenues have been obtained by U.S. companies through the sale of nuclear reactors overseas which was facilitated by the sale of U.S. enrichment services to provide their fuel. The dollar amount of these sales could reasonably be expected to grow if domestic capacity were available to supply such services. However, the Government has not been able to execute new foreign sales of enrichment services until new capacity is assured. Current uncertainties concerning the construction of new capacity have encouraged foreign customers to accelerate efforts to expand their own ability to enrich uranium or procure it from non-U.S. sources. Thus, these uncertainties have already injured the potential foreign sales of U.S. nuclear reactors and enrichment services to a significant extent.

The ability of the United States to be an effective force in guarding against the proliferation of nuclear weapons will decrease as its proportion of world enrichment capacity decreases. The ability to supply enrichment services provides an opportunity to influence the manner in which the enriched uranium is used and safeguarded against unauthorized uses. Obviously, a country which has its own source of enriched uranium need not heed American counsel concerning the use of such uranium. Failure to expand U.S. enrichment capacity will turn foreign users to other sources, thereby curtailing U.S. influence on nonproliferation objectives and efforts.

Cost of Legislation

In accordance with section 252(a) of the Legislative Reorganization Act of 1970 (Public Law 91-510), the Joint Committee has prepared the following estimate of the costs of carrying out this legislation. In addition, the committee has received from the Congressional Budget Office a five-year cost estimate of the effect of implementing this legislation. An economic analysis forwarded to the

Congress by the Administrator of Energy Research and Development is in the Appendix to this report.

The Administrator of Energy Research and Development could provide assistance and temporary contingent assurances to private enterprise for the construction of uranium enrichment capacity. Should the contingencies not occur there will be no cost to the Government as a result of these assurances. Should all of the contingencies occur, the potential cost to the Government is a maximum of $8 billion. At this date it is not possible to predict the timing and extent of Government costs, if any, as a result of these assurances. The Administration's expectation is that none of these funds would have to be appropriated or expended for the assumption of private ventures, but that the authorization is necessary only to provide assurance to customers and to potential uranium enrichment producers.

In addition, section 4 of the bill authorizes the appropriation of $255,000,000 for the initiation of construction planning and design, construction and operation activities for expansion of an existing Government uranium enrichment facility. This authorization is the same as that already approved by the Joint Committee for Project 76-8-g in the ERDA fiscal year 1977 authorization bills (H.R. 13350 and S. 3105) and in the ERDA authorization act for fiscal year 1976 (P.L. 94-187). Therefore, this section does not represent any additional authorization for this project.

Estimate and Comparison, Congressional Budget Office

Pursuant to section 403 of the Congressional Budget Act of 1974, and to clause 2(i)(3)(C) of rule XI of the Rules of the House of Representatives, the following report has been submitted to the Joint Committee by the Congressional Budget Office:

Congress of the United States,
Congressional Budget Office,
Washington, D.C., May 13, 1976.

Hon. John O. Pastore
Chairman, Joint Committee on Atomic Energy, U.S. Senate, Washington, D.C.

Dear Mr. Chairman: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for S. 2035 and H.R. 8401 (identical), Nuclear Fuel Assurance Act of 1976.

Should the Committee so desire, we would be pleased to provide further details on the attached cost estimate.

Sincerely,

Alice M. Rivlin,
Director.

Congressional Budget Office Cost Estimate

1. Bill number: S. 2035 and H.R. 8401 (identical).
2. Bill title: Nuclear Fuel Assurance Act of 1976.
3. Purpose of bill: The main objectives of this bill are to authorize cooperative arrangements with private enterprise for the provision

of facilities for the production and enrichment of uranium enriched in the isotope—235, to provide for the authorization of contract authority for these cooperative arrangements, and to provide for prior congressional review and potential disapproval of proposed arrangements. This bill does not provide new budget authority.

4. Cost estimate: The important budget effects of this bill result from sections 3 and 4. Section 3 authorizes, subject to prior appropriation action, contingent liabilities of up to $8.0 billion. The question of whether this contingent liability should be considered on or off budget has not yet been resolved. Section 4's budget effects follows:

BUDGET EFFECTS

[In millions of dollars; fiscal years]

	1977	1978	1979	1980	1981
Authorization level	255.0				
Costs	44.6	89.3	89.2	31.9	

5. Basis of estimate: The cooperative arrangements authorized by Section 2 of this bill, subject to prior congressional review, is estimated to have zero net budget impact. This estimate is based on the provision that assistance is to be furnished on the basis of recovery of costs and appropriate royalties.

The $8 billion contingent liabilities authorized (subject to prior appropriations action) by Section 3 of this bill would have no outlay effects on the budget. Outlays would not occur in the time-frame considered in this estimate (through fiscal year 1981) because the contingencies are related to the performance of new enrichment plants. These contingencies would be resolved at a later date.

The $255.0 million authorized in Section 4 of this bill provides for funding already included in the proposed fiscal year 1977 annual authorization legislation for expansion of enrichment capacity at existing facilities. This construction funding is assumed obligated in fiscal year 1977. The spendout pattern for this new construction is assumed to be 17.5 percent in the first fiscal year, 35 percent in the second, 35 percent in the third, and 12.5 percent in the fourth.

This results in the following outlays:

BUDGET EFFECTS

[In millions of dollars; fiscal years]

	1977	1978	1979	1980	1981
Authorization level	255.0				
Costs	44.6	89.3	89.2	31.9	

6. Estimate comparison: None.
7. Previous CBO estimate: None.
8. Estimate prepared by: William F. Hederman (225–5275).
9. Estimate approved by:

R. Scheppach,
(For James L. Blum,
Assistant Director for Budget Analysis).

Section-by-Section Analysis

Section 1 of the bill cites the Act as the "Nuclear Fuel Assurance Act of 1976".

Section 2 of the proposed bill would amend Chapter 5, Production of Special Nuclear Material, of the Atomic Energy Act, as amended, by adding a new Section 45, entitled "Cooperative Arrangement for Private Projects to Provide Uranium Enrichment Services".

Subsection a. of the new Section 45 would authorize the Administrator of Energy Research and Development, subject to prior Congressional review procedures in subsection b., to enter into cooperative arrangements with private industry for the enrichment of uranium to make fuel for nuclear power plants. This subsection would enable the Administrator to encourage private investment in the construction, ownership and operation of uranium enrichment plants by providing such Government cooperation and assurances as are determined to be necessary and in the best interests of the Government after detailed negotiation with selected individual proposers of enrichment services. Such negotiations would be directed toward obtaining arrangements most advantageous to the Government and the public interest and with a degree of risk to the private entrepreneurs consistent with the objective of creating a private competitive uranium enrichment industry.

Cooperative arrangements authorized by Section 45 a. could include such Government cooperation and assurances as enumerated in the bill, including the specific authority provided in subsection 45 a. (5), for the Government to acquire assets or interests and assume the liabilities (including debt) of a private enrichment firm in the event—which is highly unlikely—that private industry could not complete a plant or bring it into operation. It is intended that any undertaking by the Government under subsection 45 a. (5) to acquire assets or interest and to assume liabilities of a private venture would terminate after approximately one year of commercial operation of a plant. The precise period would be defined during the negotiations of definitive agreements. Any obligations to pay off debt and to acquire equity interest would be limited to citizens of the United States. No foreign equity in a plant would be protected by the Government. No contract could be executed under which the Government would be subject to any potential liability until the Congress of the United States has approved the proposed contract under the procedures in subsection 45b. and until the Congress has enacted the necessary prior appropriations.

Subsection b. of the new Section 45 provides procedures for Congressional review and approval of any proposed contract for a cooperative arrangement for private participation in uranium enrichment. The Administrator of Energy Research and Development would be explicitly precluded from signing any proposed contract or amendment thereto until the Congressional review procedures provided for in this subsection had been completed and the Congress has approved the arrangement. The Congressional review procedures would also apply to any plan proposed by the Administrator to modify, complete, operate or dispose of any enrichment facility which the Energy Research and Development Administration may acquire. Any such plan

could, of course, be included as a part of the initial contractual arrangement submitted to the Congress for approval.

Section 3 of the proposed Nuclear Fuel Assurance Act would authorize the Administrator of Energy Research and Development to enter into contracts which the Congress has approved, pursuant to the new Section 45, in an amount not to exceed $8 billion, but in no event to exceed the amount provided therefor in prior appropriation Acts. This amount is an estimate of the total potential cost to the Government in the unexpected event that all private ventures covered by cooperative arrangments were to fail and it was then necessary for the Government to assume assets and liabilities of the ventures, take over plants, and compensate domestic investors. It is not expected that any of these funds would be expended for the assumption of private ventures, but the authorization is necessary to provide assurance, to customers and sources of debt financing for private producers, of the Federal Government's commitment to create a competitive industry.

The $8 billion would be the maximum contingent liability on the part of the Government for four private uranium enrichment projects, one of which would use the gaseous diffusion process and three of which would use the gaseous centrifuge process. The $8 billion would be allocated to these four projects as follows:

	Billion
Domestic share of the one diffusion project	$1.4
Domestic share of the three centrifuge projects	3.0
Contingency to cover uncertainties of estimates of the amount of foreign financial participation and inflation for the four plants	3.6
Total	8.0

The dollar levels assume 40% domestic ownership of the diffusion project and 100% domestic ownership of each of the three centrifuge projects.

The private diffusion project is estimated to cost $3.5 billion. Of that amount, $1.4 billion would be supplied by domestic shares and $2.1 billion by foreign financial participation. None of the $8 billion could be used to protect any of the foreign share in the costs of any plant.

The $1.4 billion domestic share for the private diffusion plant would probably be furnished by 15% equity contribution ($210 million) by the private participant with the balance of the $1.4 billion ($1.2 billion) debt financed. The total domestic share of $1.4 billion could be protected under the $8 billion ceiling, if the Congress approves a contract for the private diffusion plant and if the Congress provides for the incurrence of such contingent liability in an appropriation passed before the contract is executed.

Section 3 would also provide that in the event of Government assumption of the debts, interests and liabilities of a private venture, the Administrator is authorized to secure funds through the Secretary of the Treasury to liquidate contract authority, up to the levels previously provided in an appropriation Act.

Section 4 of the proposed bill would authorize the Administrator of Energy Research and Development to initiate preliminary engineering design and planning, construction and operation activities for expansion of a Government-owned uranium enrichment facility, and would authorize to be appropriated the sum of $255,000,000.

The original intent of this section as submitted by the Administration was to provide a "hedge" plan in the event the private diffusion plant effort was not successful. As amended, the Joint Committee has directed and authorized that an additional Government-owned enriched uranium production facility be constructed and placed in operation. The amended language thus is a direction to the Energy Research and Development Administration that regardless of the construction of private enrichment facilities, the expansion of the public facility at the Portsmouth, Ohio, site is necessary. The project authorized is the same as "project 76–8–g, enriched uranium facility, Portsmouth, Ohio" as authorized in section 101(b)(8) of Public Law 94–187. Funding in the amount of $25,000,000 was authorized in Public Law 94–187 for project 76–8–g and that amount would be increased by $230,000,000 for a total of $255,000,000 in the recommended fiscal year 1977 authorization for the Energy Research and Development Administration.

It is emphasized that the direction and authorization of the project in section 4, and the $255,000,000 authorized is for project 76–8–g, enriched uranium facility, Portsmouth, Ohio, and for no other. The direction and authorization, although for that same project, is separate and apart from the same authorization in the authorizing legislation for the Energy Research and Development Administration. The $255,000,000 funding authorized for project 76–8–g is only for the funding required through fiscal year 1977.

Changes in Existing Law

In accordance with subsection (4) of rule XXIX of the Standing Rules of the Senate, changes in existing law recommended by the bill accompanying this report are shown as follows (deleted matter is shown in black brackets and new matter is printed in italic; and existing law in which no change is proposed is shown in roman):

Public Law 83–703

An Act to amend the Atomic Energy Act of 1946, as amended, and for other purposes.

* * * * * * *

Sec. 45. COOPERATIVE ARRANGEMENTS FOR PRIVATE PROJECTS TO PROVIDE URANIUM ENRICHMENT SERVICES.—

"a. The Administrator of Energy Research and Development is authorized, subject to the prior congressional review procedure set forth in subsection b. of this section without regard to the provisions of section 169 of this Act, to enter into cooperative arrangements with any person or persons for such periods of time as the Administrator may deem necessary or desirable for the purpose of providing such Government cooperation and assurances as the Administrator may deem appropriate and necessary to encourage the development of a competitive private uranium enrichment industry and to facilitate the design, construction, ownership, and operation by private enterprise of facilities for the production and enrichment of uranium en-

riched in the isotope-235 in such amounts as will contribute to the common defense and security and encourage development and utilization of atomic energy to the maximum extent consistent with the common defense and security and with the health and safety of the public; including, inter alia, in the discretion of the Administrator,

"(1) furnishing technical assistance, information, inventions and discoveries, enriching services, materials, and equipment on the basis of recovery of costs and appropriate royalties for the use thereof;

"(2) providing warranties for materials and equipment furnished;

"(3) providing facility performance assurances;

"(4) purchasing enriching services;

"(5) undertaking to acquire the assets or interest of such person, or any of such persons, in an enrichment facility, and to assume obligations and liabilities (including debt) of such person, or any of such persons, arising out of the design, construction, ownership, or operation for a defined period of such enrichment facility in the event such person or persons cannot complete that enrichment facility or bring it into commercial operation: Provided, That any undertaking, pursuant to this subsection (5), to acquire equity or pay off debt, shall apply only to investors or lenders who are citizens of the United States, or are a corporation or other entity organized for a common business purpose, which is owned or effectively controlled by citizens of the United States; and

"(6) determining to modify, complete, and operate that enrichment facility as a Government facility or to dispose of the facility at any time, as the interest of the Government may appear, subject to the other provisions of this Act.

"b. The Administrator shall not enter into any arrangement or amendment thereto under the authority of this section, modify, or complete and operate any facility or dispose thereof, until the proposed arrangement or amendment thereto which the Administrator proposes to execute, or the plan for such modification, completion, operation or disposal by the Administrator, as appropriate, has been submitted to the Joint Committee on Atomic Energy, and a period of sixty days has elapsed while Congress is in session with passage by the Congress of a concurrent resolution stating in substance that it does favor such proposed arrangement or amendment or plan for such modification, completion, operation, or disposal (in computing such sixty days, there shall be excluded the days on which either House is not in session because of an adjournment for more than three days): Provided, That prior to the elapse of the first thirty days of any such sixty-day period the Joint Committee shall submit a report to the Congress of its views and recommendations respecting the proposed arrangement, amendment or plan and an accompanying proposed concurrent resolution stating in substance that the Congress favors, or does not favor, as the case may be, the proposed arrangement, amendment or plan. Any such concurrent resolution so reported shall become the pending business of the House in question (in the case of the Senate the time for debate shall be equally divided between the proponents and the opponents) within twenty-five days and shall be voted on within five calendar days thereafter, unless such House shall otherwise determine.".

Oversight Findings and Recommendations

No oversight findings and recommendations pursuant to clause 2(1)(3)(A), rule XI, under the authority of rule X, clause 2(b)(1) of the Rules of the House of Representatives are included inasmuch as the Joint Committee is not subject to rule X, clause 2(b)(1) and no relevant oversight findings in addition to those reflected or referenced in the body of this report have been prepared by the Joint Committee since the convening of the 94th Congress.

Oversight Findings and Recommendations, Committee on Government Operations

No findings or recommendations on oversight activity pursuant to clause 2(b)(2), rule X, and clause 2(1)(3)(D), rule XI, of the Rules of the House of Representatives have been submitted by the Committee on Government Operations for inclusion in this report.

Effect of Legislation on Inflation

In accordance with rule XI, clause 2(1)(4) of the Rules of the House of Representatives, this legislation as reported by the Joint Committee on Atomic Energy should reduce the impact of inflation on prices and costs in the operation of the national economy. See ERDA's analysis of inflationary impact contained in Appendix I to this report.

APPENDIX

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,
Washington, D.C. June 26, 1975.

Hon. CARL ALBERT,
Speaker of the House of Representatives.

DEAR MR. SPEAKER: Enclosed is an analysis of the inflationary impact of a proposed action to expand U.S. uranium enrichment capacity. The analysis indicates that the plan the President is sending to Congress today for this purpose will reduce domestic inflationary pressures.

Sincerely,

ROBERT C. SEAMANS, Jr.,
Administrator.

Enclosure As stated.

ANALYSIS OF INFLATIONARY IMPACT OF LEGISLATION AUTHORIZING COOPERATIVE ARRANGEMENTS WITH PRIVATE ENTERPRISE FOR THE PROVISION OF FACILITIES FOR PRODUCTION AND ENRICHMENT OF URANIUM

In accordance with the provisions of (1) Executive Order 11821 requiring an evaluation of the inflationary impact of major proposals for legislation, (2) OMB Circular A–107, which implements Executive Order 11821, and (3) the draft regulations of ERDA, the following analysis and evaluation was made of the inflationary impact of the proposed legislation (to authorize cooperative arrangements with private enterprise for the provision of facilities for the production and enrichment of uranium enriched in the isotope 235).

The sustaining capacity of the Government's gaseous diffusion plants has been fully contracted for by foreign and domestic customers. There is an urgent need for definitive commitments to build and operate new enrichment facilities which will be required to service the rapidly growing nuclear power industries in the United States and abroad.

The purpose of the proposed legislation is to provide necessary Government cooperation and certain temporary assurances to private enterprises to finance, build, own and operate the required plants. Additional uranium enrichment capacity will permit utilities to proceed with long-term plans to expand nuclear electric generating capacity. Failure to provide the facilities for the vital enrichment phase of the nuclear fuel cycle is likely to lead either to an inability to meet future energy demand or to heavier reliance on alternative fuels and power sources that could be more costly, and less secure.

Either case would add much more to inflationary pressures than could be attributed to the nuclear expansion programs. The first case would result in general shortages in the economy and add directly to

inflationary pressures from the demand side for a less-than-adequate energy supply. The second would push up energy costs by fostering an unnecessarily large reliance on fossil fuels including high-priced foreign petroleum.

At the present time, the overall cost of electricity from nuclear power is significantly less than fossil-fired plants. Studies projecting future costs for coal, oil, and nuclear power plants indicate that the margin in favor of nuclear is likely to continue or even increase. Utilities with operating nuclear capacity reported sizeable savings in costs following the recent escalation in prices of fossil fuels. Since added fuel costs to utilities have tended to be passed on readily to consumers under fuel adjustment provisions, the benefit of lower costs from nuclear represent real savings to the consumer. ERDA has estimated that the 110 billion kWh of nuclear generated electricity in 1974 represent savings in fuel costs of over $500 million relative to the cost of fuel for coal-fired plants and over $1.5 billion relative to the cost of fuel for oil-fired plants. Further, if the nuclear generation had been replaced by oil plants dependent on imported oil, the additional balance of payments outlays would have been about $1.8 billion at the average cost of imported oil.

The following sections deal successively with several economic or inflationary aspects of the proposed legislation. The objective is to analyze and evaluate the probable effects of expansion programs fostered by the legislation compared to the consequences, if no such programs are implemented.

1. COST IMPACTS ON CONSUMERS

If the objectives of the proposed legislation are realized, we foresee the establishment of a competitive private industry providing enrichment services on reasonable terms. This would facilitate the utilization of nuclear power to supplement production from other energy sources and result in a larger domestic energy supply at lower cost to the public.

Utilities planning to proceed with nuclear expansion programs require reliable commitments for the provision of enrichment services. ERDA is no longer in a position to make such commitments with its existing gaseous diffusion capacity, and unless utilities can contract abroad for such services, they will have to postpone plans to construct new light water reactors (LWR's).

This means that domestic nuclear capacity would possibly be limited to plants now under construction and/or already holding commitments for enriching services in the Government's existing gaseous diffusion plants. As indicated in Table I, U.S. nuclear capacity would be limited to a maximum of about 218 million kilowatts which would be reached by 1990. Nuclear electric power generation would peak at about 1.3 trillion kilowatt hours in 1990 and gradually decline thereafter as the older plants were phased out or operated at lower capacity factors.

If the objectives of the legislation are realized and enrichment capacity no longer limits utilities' nuclear expansion, we would assume a growth pattern as estimated in the second section of Table I. In this projection, U.S. nuclear capacity would continue to grow, reaching 800 million kilowatts by the year 2000, and nuclear electrical generation would rise to nearly 2.0 trillion kilowatt hours in 1990 and over 4½ trillion in 2000.

The economic effects, and the potential inflationary consequences, are suggested by the calculations in part 3 of Table I. The direct effects of the enrichment expansion programs are reflected in the need for 10 new plants before the year 2000, each requiring an investment of $3.5 billion (in estimated 1976 dollars).

Enrichment, like other nuclear power operations, is highly capital-intensive, and there will be associated impacts on the construction industries, on requirements for materials and specialized equipment, and on manpower and employment. The economic impacts of these factors warrant separate analysis, but they must be evaluated in toto relative to the expected benefits of nuclear power as a major domestic energy source.

Table I indicates some of the overall results of the level of nuclear power expansion projected. Foremost is the additional nuclear capacity supported by the enrichment facilities, allowing the generation of some 3.4 trillion kilowatt hours in the year 2000 above the level permitted with existing enrichment plants. This additional domestic energy supply would save the equivalent of some one billion barrels annually of oil in 1990 and over 5 billion barrels annually by the year 2000. In comparison, domestic liquid fuels production was about 3.8 billion barrels in 1974 and oil imports were about 2.2 billion barrels. Given the growing scarcity value attached to domestic oil and the rising extraction costs for coal, it is concluded that the domestic inflationary pressures would be reduced by the projected expansion of nuclear power as shown in Table I.

Further, if all or a significant portion of the fuels needed to generate equivalent power should have to be imported, the balance of payments effects would be extremely serious. On the other hand, proceeding with the expansion of enrichment could improve balance of payments prospects not only by limiting fuel imports but by continued export of additional enrichment services.

In absence of the proposed legislation, it is unlikely that enrichment capacity would be provided by private enterprises. Unless the advantages of nuclear power, described above, are to be forgone, the only other feasible alternative would be for the Government to build additional enrichment facilities. The effects of such a course of action would be reflected directly in the Federal budget. It would necessitate appropriations in the billion dollar range almost immediately, and a cumulative expenditure of at least $35 billion (in constant 1976 dollars) before the year 2000. The potential consequences of adding this burden to the Federal budget could be serious for other urgent national programs, and inflationary effects may be pronounced if budget deficits increased as a result.

If the Government were to expand its enrichment operations to provide the additional enrichment services required, the costs of such services might appear lower if no recognition were given to the taxes, insurance, risk, and other costs normally considered in private business operations. The indicated savings, however, may prove highly illusory from a social standpoint in light of the budgetary influences

of Federal financing and potential offsetting advantages of private operations.

TABLE I.—IMPLICATIONS OF AN ADEQUATE URANIUM ENRICHMENT PLANT EXPANSION

	Units	1980	1985	1990	1995	200
1. Without expansion beyond existing plants:						
Domestic requirements for separative work.	10^6 SWU/yr	9.5	16.3	14.9	15.1	15.6
Foreign requirements (for contracted reactors).	10^6 SWU/yr	9.1	10.0	9.5	11.0	9.4
U.S. nuclear capacity	10^6 kW(e)	76.0	182.0	218.0	218.0	218.0
U.S. nuclear power generation	10^9 kWh/yr	433.0	1,072.0	1,323.0	1,278.0	1,173.0
2. With expansion to serve U.S. utilities' growth and expected foreign requirements:						
U.S. SWU requirements	10^6 SWU/yr	9.5	18.5	31.9	46.4	60.7
Foreign SWU requirements	10^6 SWU/yr	9.1	13.7	20.4	32.8	53.3
U.S. nuclear capacity	10^6 kW(e)	76.0	185.0	340.0	545.0	800.0
U.S. nuclear electrical production	10^9 kWh/yr	433.0	1,085.0	1,977.0	3,173.0	4,597.0
3. Effects of expanding enrichment capacity:						
Enrichment plants (9,000,000 SWU each)	Number	0	1.0	3.0	7.0	10.0
Cumulative investment *	10^9 dollars	0	3.5	10.5	24.5	35.0
Added SWU exports	10^6 SWU/yr	0	3.7	10.9	21.8	43.9
Added foreign revenue (at $76/SWU)	10^9 $'s/yr	0	.3	.8	1.7	3.3
Added U.S. sales of SWU's	10^6 SWU/yr	0	2.2	17.0	31.3	45.1
Added U.S. nuclear capacity	10^6 kW(e)	0	3.0	122.0	327.0	582.0
Added U.S. nuclear electrical production	10^9 kWh/yr	0	13.0	654.0	1,895.0	3,421.0
Fuel needed to generate equivalent power**.	10^6 bbl**/yr	0	21.0	1,040.0	3,010.0	5,430.0

*In constant 1976 dollars.
**In oil or oil-equivalents to replace the additional nuclear power. Assuming: (1) 0.30 percent tails assay; (2) U and Pu recycled; (3) breeders included late in campaign period; (4) U.S. firms capture ½ of SWU market outside of Communist regions; (5) U.S. utilities' nuclear growth reflects ERDA's moderate/low case (1975).

Note: SWU=separative work units. 10^6 kW(e)=millions of kilowatts electrical capacity.

A private uranium enrichment industry would generate substantial revenues to the Federal Treasury in the form of corporate income taxes and other payments. Such revenues could reduce inflationary pressures by reducing deficits and the Government's need to borrow funds to carry on operations. Dividends and interest received by stockholders and investors would also be subject to income taxes.

These matters were extensively discussed in a report to the Council of Economic Advisers of July 1969 prepared by Arthur D. Little, Inc. The report noted:

"Economic welfare theory contends that the cost of capital to the Government should be the same as to private indusrties for the same project, if misallocation of the nation's investment resources is to be avoided."

2. EFFECTS ON PRODUCTIVITY

Inflationary impacts via productivity effects of nuclear expansion need to be carefully defined for meaningful analysis. Shifts toward capital-intensive technologies normally tend to increase the output-per-manhour type of productivity measurement. In relation to conventional energy technologies, nuclear power introduces processes that by their nature involve less demand on bulk resources, less transportation requirement, and less utilization of unskilled manpower. Thus, the nuclear technology, itself, is in the tradition of doing more-and-more with less-and-less which is an essential feature of productivity.

The more important productivity effects are those resulting from continued advances in nuclear technology. The potential for technological improvements in nuclear power is extremely great when one

considers the relatively low effectiveness of present converter reactors in utilization of uranium resources. As reactor types are improved, and eventually when an acceptable breeder technology is introduced, the productivity effects will exert a continuing moderating influence on energy and on general price levels. Further, there is scope for continuing improvement in other phases of nuclear industry operations. In the enrichment phase, itself, technological improvements are continuing to improve productivity of the operations.

If the legislation leads to the establishment of an effective private enrichment industry, we would expect productivity gains to continue and hopefully even accelerate. There is a vast potential for improvement through eventual use of the newest centrifuge technology. Under either private or public operation, we can expect to see further improvement in an already highly effective enrichment technology.

3. EFFECTS ON COMPETITION

The most important general effects on competition are likely to be through a meaningful exercise of the nuclear option as a major new energy source. The more diversity that can be built into the energy system by expansion of all meaningful energy alternatives, the greater the potential for competitive energy price results.

Competition within the enrichment phase of the nuclear fuel cycle is highly complicated by the need to move from the existing Government monopoly to a competitive structure. Meaningful competition will not be possible without special efforts to facilitate entry (as proposed in the legislation). As a result of the legislative approach, several firms are expected to enter the industry using centrifuge technology and thus enhancing competition.

4. EFFECTS ON MATERIALS

The addition of large-scale gaseous diffusion plants, probably in increments of 8.75 million Separative Work Units (SWU) yearly would require sizeable amounts of important construction materials and process equipment. The major quantities, however, are for concrete, steel, pipe, etc., that are standard construction items. Specialized equipment, instrumentation, gas diffusers, compressors, etc., have special requirements in terms of materials and manufacturing capability.

The large-scale expansion of capital-intensive technologies as exemplified by both nuclear power plants and their attendant facilities place demands on resources and manufacturing capacity that must be carefully assessed. The ability of the economy to respond without inflationary pressures is dependent upon the general tempo of alternative activities competing for like resources.

The material problems have been studied extensively. In general, the cost and demands for one large enrichment plant (gaeous diffusion of 9 million SWU) are roughly equivalent to those of four large nuclear power stations. The single enrichment plant, however, would service approximately 100 such nuclear power plants.

If bottlenecks are allowed to develop in specific materials or equipment, adverse inflationary effects may be associated with expansion of the nuclear industry. It is difficult to quantify such potentialities

and assess their probabilities of occurring. In the present economic situation, these appear less important, but they require careful continuing analysis. Given the availability of existing capacity and opportunity to expand to meet future needs, we would not expect continued problems of this type.

5. EFFECTS ON EMPLOYMENT

Expansion of nuclear power in general and the design and construction of enrichment plants will create jobs. The need is especially great for highly skilled workers and for technically trained personnel including engineers and scientists. This is, in effect, the counterpart of the productivity effects, discussed previously.

The demand for construction labor is large relative to the continuing work force to operate the plant. It would require some 280,000 man-months of construction labor to build a 9 million SWU plant while some 1100 people would be permanently employed in its operation.

6. EFFECTS ON ENERGY SUPPLY/DEMAND

The crucial issues on energy supply relate to several features of nuclear power as an energy source. These include the advantages, and problems, of continued electrification of the energy economy, and the institutional and social adjustments required to accommodate this change. The public regulation of the energy supply from nuclear utilities also has important implications for energy pricing as electric power becomes a major portion of total energy supply. On the surface, this would tend to assure lower costs than might otherwise occur, but it is by no means obvious that competitive non-regulated alternative sources could not provide even cheaper energy.

There are sizeable energy demands associated with the operation of nuclear enrichment plants. In a gaseous diffusion plant, it requires about 2,500 kilowatt hours to produce one unit of separative work. Consequently, operation of a 9 million SWU plant would require the electrical output of 2 to 3 large nuclear power plants. At the same time, it would be able to provide the enrichment needs of approximately 10 such plants.

The net energy contribution of the nuclear power operations has been well-documented, and the important result of the proposed legislation will be to facilitate continued expansion of the nuclear industry and result in a larger domestic energy supply at lower cost to the public.

○

Union Calendar No. 591

94TH CONGRESS
2D SESSION

H. R. 8401

[Report No. 94–1151]

IN THE HOUSE OF REPRESENTATIVES

JULY 8, 1975

Mr. PRICE (for himself and Mr. ANDERSON of Illinois) (by request) introduced the following bill; which was referred to the Joint Committee on Atomic Energy

MAY 14, 1976

Reported with amendments, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Omit the part struck through and insert the part printed in italic]

A BILL

To authorize cooperative arrangements with private enterprise for the provision of facilities for the production and enrichment of uranium enriched in the isotope-235, to provide for authorization of contract authority therefor, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Nuclear Fuel Assurance Act of ~~1975".~~ *1976".*

SEC. 2. Chapter 5 (production of special nuclear material) of the Atomic Energy Act of 1954, as amended, is amended by adding at the end thereof the following section.

"SEC. 45. COOPERATIVE ARRANGEMENTS FOR PRIVATE PROJECTS TO PROVIDE URANIUM ENRICHMENT SERVICES.—

"a. The *Administrator of* Energy Research and Development ~~Administration~~ is authorized, *subject to the prior congressional review procedure set forth in subsection b. of this section* without regard to the provisions of section 169 of this Act, to enter into cooperative arrangements with any person or persons for such periods of time as the Administrator ~~of the Energy Research and Development Administration~~ may deem necessary or desirable for the purpose of providing such Government cooperation and assurances as the Administrator may deem appropriate and necessary to encourage the development of a competitive private uranium enrichment industry and to facilitate the design, construction, ownership, and operation by private enterprise of facilities for the production and enrichment of uranium enriched in the isotope-235 in such amounts as will contribute to the common defense and security and encourage development and utilization of atomic energy to the maximum extent consistent with the common defense and security and with the health and safety of the public; including, inter alia, in the discretion of the Administrator,

"(1) furnishing technical assistance, information, inventions and discoveries, enriching services, materials,

and equipment on the basis of recovery of costs and appropriate royalties for the use thereof;

"(2) providing warranties for materials and equipment furnished;

"(3) providing facility performance assurances;

"(4) purchasing enriching services;

"(5) undertaking to acquire the assets or interest of such person, or any of such persons, in an enrichment facility, and to assume obligations and liabilities (including debt) of such person, or any of such persons, arising out of the design, construction, ownership, or operation for a defined period of such enrichment facility in the event such person or persons cannot complete that enrichment facility or bring it into commercial operation: *Provided*, That any undertaking, pursuant to this subsection (5), to acquire equity or pay off debt, shall apply only to ~~individuals~~ *investors or lenders* who are citizens of the United States, or ~~to any~~ *are a* corporation or other entity organized for a common business purpose, which is owned or effectively controlled by citizens of the United States; and

"(6) determining to modify, complete, and operate that enrichment facility as a Government facility or to dispose of the facility at any time, as the interest of the

Government may appear, subject to the other provisions of this Act.

~~"b. Before the Administrator enters into any arrangement or amendment thereto under the authority of this section, or before the Administrator determines to modify, or complete and operate any facility or to dispose thereof, the basis for the proposed arrangement or amendment thereto which the Administrator proposes to execute (including the name of the proposed participating person or persons with whom the arrangement is to be made, a general description of the proposed facility, the estimated amount of cost to be incurred by the participating person or persons, the incentives imposed by the agreement on the person or persons to complete the facility as planned and operate it successfully for a defined period, and the general features of the proposed arrangement or amendment), or the plan for such modification, completion, operation, or disposal by the Administrator, as appropriate, shall be submitted to the Joint Committee on Atomic Energy, and a period of forty-five days shall elapse while Congress is in session (in computing such forty-five days, there shall be excluded the days on which either House is not in session because of adjournment for more than three days) unless the Joint Committee by resolution in writing waives the conditions of, or all or any portion of, such forty-five day period: *Provided, however,* That any~~

~~such arrangement or amendment thereto, or such plan, shall be entered into in accordance with the basis for the arrangement or plan, as appropriate, submitted as provided herein.".~~

"b. The Administrator shall not enter into any arrangement or amendment thereto under the authority of this section, modify, or complete and operate any facility or dispose thereof, until the proposed arrangement or amendment thereto which the Administrator proposes to execute, or the plan for such modification, completion, operation, or disposal by the Administrator, as appropriate, has been submitted to the Joint Committee on Atomic Energy, and a period of sixty days has elapsed while Congress is in session with passage by the Congress of a concurrent resolution stating in substance that it does favor such proposed arrangement or amendment or plan for such modification, completion, operation, or disposal (in computing such sixty days, there shall be excluded the days on which either House is not in session because of adjournment for more than three days): Provided, That prior to the elapse of the first thirty days of any such sixty-day period the Joint Committee shall submit a report to the Congress of its views and recommendations respecting the proposed arrangement, amendment or plan and an accompanying proposed concurrent resolution stating in substance that the Congress favors, or does not favor, as the case may be, the proposed arrangement, amendment or plan. Any such

concurrent resolution so reported shall become the pending business of the House in question (in the case of the Senate the time for debate shall be equally divided between the proponents and the opponents) within twenty-five days and shall be voted on within five calendar days thereafter, unless such House shall otherwise determine.

SEC. 3. The Administrator of ~~the~~ Energy Research and Development ~~Administration~~ is hereby authorized to enter into contracts for cooperative arrangements, without fiscal year limitation, pursuant to section 45 of the Atomic Energy Act of 1954, as amended, in an amount not to exceed in the aggregate $8,000,000,000 ~~as may be approved in an appropriation Act.~~ *but in no event to exceed the amount provided therefor in a prior appropriation Act: Provided, That the timing, interest rate, and other terms and conditions of any notes, bonds, or other similar obligations secured by any such arrangements shall be subject to the approval of the Administrator with the concurrence of the Secretary of the Treasury.* In the event that liquidation of part or all of any financial obligations incurred under such cooperative arrangements should become necessary, the Administrator ~~of the Energy Research and Development Administration~~ is authorized to issue to the Secretary of the Treasury notes or other obligations up to the levels of contract authority approved in an appropriation Act pursuant to the first sentence of this

section in such form and denomination, bearing such maturity and subject to such terms and conditions as may be prescribed by the Administrator with the approval of the Secretary of the Treasury. Such notes or other obligations shall bear interest at a rate determined by the Secretary of the Treasury, taking into consideration the current average market yield on outstanding marketable obligations of the United States of comparable maturity at the time of issuance of the notes or other obligations. The Secretary of the Treasury shall purchase any notes or other obligations issued hereunder and, for that purpose, he is authorized to use as a public debt transaction the proceeds from the sale of any securities issued under the Second Liberty Bond Act, as amended, and the purposes for which securities may be issued under that Act, as amended, are extended to include any purchase of such notes and obligations. The Secretary of the Treasury may at any time sell any of the notes or other obligations acquired by him under this section. All redemptions, purchases, and sales by the Secretary of the Treasury of such notes or other obligations shall be treated as public debt transactions of the United States. There are authorized to be appropriated to the Administrator such sums as may be necessary to pay the principal and interest on the notes or obligations issued by him to the Secretary of the Treasury.

SEC. 4. The Administrator of ~~the~~ Energy Research and Development ~~Administration~~ is hereby authorized *and directed* to initiate construction planning and design, *construction and operation* activities for expansion of an existing uranium enrichment facility. There is hereby authorized to be appropriated ~~such sums as may be necessary~~ *$255,000,000* for this purpose.

Amend the title so as to read: "A bill to authorize cooperative arrangements with private enterprise for the provision of facilities for the production and enrichment of uranium enriched in the isotope–235, to provide for authorization of contract authority therefor, to provide a procedure for prior congressional review and approval of proposed arrangements, and for other purposes.".

Union Calendar No. 591

94TH CONGRESS
2D SESSION

H. R. 8401

[Report No. 94–1151]

A BILL

To authorize cooperative arrangements with private enterprise for the provision of facilities for the production and enrichment of uranium enriched in the isotope-235, to provide for authorization of contract authority therefor, and for other purposes.

By Mr. PRICE and Mr. ANDERSON of Illinois

JULY 8, 1975

Referred to the Joint Committee on Atomic Energy

MAY 14, 1976

Reported with amendments, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

IS THE ADMINISTRATION FIRMLY COMMITTED TO BUILD AN ADD-ON ENRICHMENT PLANT AT PORTSMOUTH

Question

We still cannot tell whether the Administration is really committed to build an add-on enrichment plant at Portsmouth or whether you are regarding the add-on as a contingency -- to be built only if private ventures don't succeed. Which is it?

Answer

The President has indicated that he will accept the requirements of Section 4 of the Nuclear Fuels Assurance Act, as reported by the JCAE, which deals with the Portsmouth add-on. Thus, if the bill is passed, the President and the Congress appear to be in agreement.

I should point out that design work for such an add-on plant has been underway for some time. On May 5, 1976, the President asked the Congress to approve $12.6 million to continue the work during the remainder of FY1976 and the Transition Quarter.

If the Congress passes the NFAA, the President is committed to request $170 million to continue the work during FY1977 that is necessary to the construction of the plant.

I should also point out that, as a practical matter no one can make an irrevocable commitment at this time that either the prospective privately owned plants or the add-on plant will be completed an operated, for a number of reasons. For example:

- A final decision to construct any enrichment plant would have to be proceeded by compliance with the National Environmental Policy Act(NEPA), including the preparation of a final environmental impact statement(EIS). Even an appearance of a firm commitment at this time to build or permit building a plant might provide grounds for later challenge as to whether NEPA had been observed.

- There are remaining uncertainties that have to be resolved. For example, in the case of the add-on plant:

  - There is some uncertainty about the availability of electrical power because it apparently will be necessary to build two or more coal-fired or nuclear plants. Whether, when and where such plants could be built is unresolved.

  - The use of a substantially larger compressor-converter system,which has not yet been demonstrated or produced, must be preceded by construction of test facilities and by testing of the system.

5/15/76

WILL THE GOVERNMENT'S ORDER BOOK FOR URANIUM ENRICHMENT SERVICES BE REOPENED?

Question

Now that you are committed to proceed with work necessary for a Government-owned add-on enrichment plant at Portsmouth, Ohio, will ERDA begin accepting orders against that plant?

Answer

The four private firms that wish to finance, build, own and operate enrichment plants are already negotiating with prospective foreign and domestic customers, so the order books are already open.

Furthermore, the President made clear when he submitted his proposal in June 1975 that the Government would take the actions necessary to assure that customers placing orders with private ventures would have the services available when they are needed.

There is no need for ERDA to begin accepting orders again. If fact, such action would be directly contrary to the spirit and intent of the NFAA -- which has as a major purpose the creation of a private competitive uranium enrichment industry. If ERDA began taking orders:

- ERDA would be in direct competition for customers with the four private ventures that are prepared to finance, build, own and operate enrichment plants under the arrangements provided for in the NFAA.

- Competition from ERDA probably would lead potential customers of the private ventures to hold-off on orders -- on the assumption that the Government would be available to provide enrichment services at a lower, subsidized cost as in the case of existing plants. Customers might hold off even though ERDA current estimates that the cost of product from the proposed add-on plant will be equal to or higher than that of the proposed private diffusion plant.

Also, there has been substantial change in uranium markets over the past year or two which may mean that it will be more efficient and economical for ERDA to have more enrichment capacity -- and to use less uranium -- in filling contracts it already has signed. In addition, the capacity from an add-on plant could also be used to increase the national stockpile of enriched uranium to assure that it will be available when needed by both domestic and foreign customers, and thus serve as a backup, for example, if centrifuge plants do not come on line as early as expected.

5/15/76

THE WHITE HOUSE

WASHINGTON

May 17, 1976

WEEKLY DOMESTIC ACTIVITIES REPORT
FOR THE PRESIDENT

1. Uranium Enrichment

Last June you decided an important principle--that future U.S. production of enriched uranium will be done by private enterprise--and you asked Congress to write that principle into law.

The bill that the Joint Committee on Atomic Energy has ordered to be reported does adopt that principle. There is a price, however:

a) Each ERDA contract with a private company must be approved in 60 days by a concurrent resolution of Congress to be a valid contract.

b) The JCAE bill and committee report imply a commitment to build a $3 billion Portsmouth, Ohio add-on plant; but the limited authorization ($255 million) implies the opposite.

After weighing all elements of the JCAE bill, OMB, NSC, ERDA, Congressional Relations, the White House Counsel, Jim Connor and I all agree that this is a victory for you, we ought to proclaim it, and go all out to get Congress to pass it as quickly as we can.

_____APPROVE _____DISAPPROVE

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

May 17, 1976

MEMORANDUM FOR: JIM CANNON

FROM: JIM CONNOR

RE: Your request for possible comments on the Uranium Enrichment Legislation

"I was pleased to note the action of the Joint Committee on Atomic Energy last week in approving, with certain modifications, the Nuclear Fuel Assurances Act. The fact that the bill deals with both a private and a public approach to meeting future needs for nuclear fuel is both necessary and wise.

As I have said previously, this Nation intends to be a reliable supplier of nuclear fuel both at home and abroad. The best way to do that is to move ahead vigorously on two fronts. First, by establishing conditions whereby we can bring into being under suitable safeguards a vigorous private uranium enrichment industry which can take the enormous expenditure burden for supplying future increments of enrichment capacity off the back of the American taxpayer and at the same time can return to the taxpayer in terms of royalties and taxes a reasonable payment for technology that was developed with government funds.

Secondly, by proceeding ahead vigorously with a hedge plan for additional government capacity at one of the existing enrichment plants, this will enable us to operate the present government complex more economically in view of the recent increases in uranium prices and will permit us to back up our commitments to those who contract with American suppliers of enriched uranium. It is important as we go ahead in the next steps of this bill we we remember that both aspects of it are linked together."

THE WHITE HOUSE

WASHINGTON

May 17, 1976

WEEKLY DOMESTIC ACTIVITIES REPORT
FOR THE PRESIDENT

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RC 7 APPROVE _____ DISAPPROVE

THE WHITE HOUSE

WASHINGTON

May 17, 1976

MEMORANDUM TO: GLENN SCHLEEDE

FROM: JIM CANNON

SUBJECT: Uranium Enrichment

The President approved our recommendation that he support the JCAE bill on uranium enrichment.

As to his public statement on this matter, he wants to see on paper these three options:

1. Portsmouth is only a hedge plan against the possibility that UEA may fail.

2. We are committed to the plan whereby we will simultaneously proceed with the design and planning for the construction and operation of Portsmouth, while at the same time assisting private enterprise bidders in proceeding with ~~Apache~~ gaseous diffusion plant and centrifuge plants.

3. We will go ahead and build the Portsmouth plant as soon as possible.

cc: Schleede

THE WHITE HOUSE

WASHINGTON

May 18, 1976

ADMINISTRATIVELY ~~CONFIDENTIAL~~

MEMORANDUM FOR: JIM CANNON

FROM: JIM CONNOR JEC

SUBJECT: The Uranium Enrichment Bill Reported by the JCAE

The President reviewed your memorandum of May 15, 1976 on the above subject and approved the following:

> "Consider the Nuclear Fuel Assurance Act as ordered reported by the JCAE on May 11, 1976 to be acceptable."

Please follow-up with appropriate action.

cc: Dick Cheney

THE WHITE HOUSE

WASHINGTON

DECISION

May 15, 1976

MEMORANDUM FOR THE PRESIDENT

FROM: JIM CANNON

SUBJECT: The Uranium Enrichment Bill Reported by the JCAE.

PURPOSE

The purpose of this memorandum is to assess the Nuclear Fuel Assurance Act ordered reported on May 11 by the Joint Committee on Atomic Energy.

THE JCAE BILL

Briefly, the JCAE made two significant changes from the bill we had previously agreed to:

- The JCAE bill specifies that ERDA cannot enter into contracts with private ventures unless the Congress passes a concurrent resolution of approval within 60 legislative days after receiving the contract. Previously, the bill had provided that ERDA could sign the contract if the Congress had not passed a concurrent resolution of disapproval.

- The JCAE bill and Committee Report states that ERDA "is hereby authorized and directed to initiate construction planning and design, construction and operation activities for expansion" at Portsmouth.

THE ISSUES

The three principal issues raised by the JCAE bill are:

1. Is the Congressional review procedure constitutional?

White House Counsel (Barry Roth), after consulting with the Justice Department, has concluded that the

review procedure does not raise significant questions of constitutionality, and that you have the option of accepting the bill as written. Counsel further advises that the principal question is whether your acceptance of this bill might be perceived as inconsistent with your veto of the International Security Assistance Arms Exports Control Act of 1976. Counsel, Congressional Relations and NSC staff concluded that this was not a significant problem.

2. Can we expect Congress to approve proposed contracts within the 60 days allowed?

Clearly, the requirement for positive Congressional approval action is a more difficult requirement than absence of disapproval. However, your advisers believe the new requirement is, on balance, acceptable because:

a. The bill itself sets up a timetable for Congressional action (30 days for JCAE; bill must become pending business in each House within 25 additional days and be voted upon within 5 days), though the bill also provides this could be changed.

b. We believe that Chairman Pastore and Committee Members are pursuing the matter in good faith and would work to get contracts considered within the time provided.

c. If Congress does not approve a contract, the implication that Congress will have to appropriate more Federal dollars instead will be clear.

d. Informal checks with prospective private enrichment firms indicate they think this is the best they are going to get out of Congress.

3. Is the requirement to initiate work on an add-on plant at Portsmouth acceptable?

Clearly, the bill and the Report imply a commitment to build a $3 billion Portsmouth add-on. However,

the Budget Committee Staff Report accompanying the Committee Report implies the opposite.

On balance, OMB and your other advisers believe the provision is acceptable because:

a. There will be future opportunities to evaluate the feasibility and desirability of proceeding with the add-on plant as (1) the need for higher authorizations and appropriations are considered; (2) the environmental impact is evaluated; and (3) uncertainties concerning electrical power supply and advanced diffusion technology are clarified.

b. There may in fact be a need for the add-on plant (in addition to the expected private plants) because:

   (1) Existing Government plants may now be over-committed in contracts already signed.

   (2) The additional Government owned capacity, if built, could be used to add enriched uranium to the national stockpile, to back up your commitment that services will be available when needed by foreign and domestic customers, and as a hedge against delays in centrifuge plants or unexpected failure of private ventures.

c. The provision could be accepted <u>without</u> re-opening the Government's "order book." Reopening the Government's order book would be in direct competition with the private ventures and probably prevent them from going ahead.

d. ERDA believes work necessary to an add-on plant could be sequenced so that it would not compete excessively for talent and resources needed for private plants. Thus the add-on work would not prevent private ventures from going ahead.

<u>RECOMMENDATION</u>

That you consider the Nuclear Fuel Assurance Act as ordered reported by the JCAE on May 11, 1976, to be acceptable. OMB, NSC, ERDA, Congressional Relations, White House Counsel, Jim Connor and I concur.

APPROVE _____ DISAPPROVE _____