

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



B-159687

AUG 23 1976

The Honorable Melvin Price  
Vice Chairman, Joint Committee  
on Atomic Energy  
Congress of the United States

**REFERENCE COPY**

*Do not remove from the Report  
Distribution Section, unless  
charged out. Return promptly.*

Dear Mr. Vice Chairman:

*Comments on the*  
During the July 30, 1976, House of Representatives debate on the proposed Nuclear Fuel Assurance Act of 1976 (H.R. 8401), there was an unfortunate misunderstanding of our views on the proposed bill. This letter seeks to clarify that misunderstanding. Also, because questions and inquiries have been received by us about the amendment proposed by Congressman Anderson of Illinois which attempts to limit the types of Government assurances that could be given to private uranium enrichers, we have enclosed our views on the effect of that amendment in the hope that they might be helpful to you.

*62*  
In the July 30, 1976, House floor debate, you quoted our May 10, 1976, report to you entitled "Comments on Selected Aspects of the Administration's Proposal for Government Assistance to Private Uranium Groups" (RED-76-110) in support of the bill as reported out by the Joint Committee on Atomic Energy on May 14, 1976. The section you quoted was part of a response to your question about the possibility of basing enabling legislation on individual arrangements entered into between the Energy Research and Development Administration (ERDA) and potential private enrichers. Our May 30, 1976, report said that

"In our view, if private ownership is desirable, the present course of action being taken by the Joint Committee of providing broad legislative authority with the right to approve or disapprove any resulting cooperative agreement is more desirable than basing legislation on the USA or some similar proposal and perhaps requiring changes to that legislation whenever other agreements containing new and different conditions are proposed for the gas centrifuge process."

~~108975~~  
108975  
094729

When quoting that section of the report, you added that the course of action taken by the Joint Committee in providing the framework for private ownership of the enrichment process was the course recommended by GAO.

While we still hold to the belief that, assuming private ownership is desirable, the framework provided by the Joint Committee is more desirable, your use of that section of the report in the floor debate has unfortunately raised questions as to whether we have changed our position as presented in our October 31, 1975, report entitled "Evaluation of the Administration's Proposal for Government Assistance to Private Uranium Enrichment Groups" (RED-76-36).

In that report, we focused on the guarantees which were to be provided and risks which were to be assumed by the Government under a proposal by Uranium Enrichment Associates (UEA) to build a gaseous diffusion plant. From our analysis, we concluded that, among other things, (1) this type of legislation would be needed for advanced technologies (e.g., centrifuge and laser isotope separation) and (2) the UEA proposal was not acceptable. We expressed the view that the assurance provisions provided by the bill in effect insulated the potential private owner of gaseous diffusion enrichment facilities from the competitive market the bill seeks to create. We testified in support of these views at hearings held by the Joint Committee on December 10, 1975.

Our position has not changed since our earlier report and testimony. Specifically, we still believe that:

- A decision is required on the next increment of uranium enrichment capacity if it is to come on line in the early 1980s when it is expected to be needed.
- The next increment of enrichment capacity using gaseous diffusion technology should be provided by additions to the Government's existing enrichment plants. Gaseous diffusion is a proven technology. An add-on to existing plants can be constructed at less cost than a new stand-alone plant and an add-on can be phased in increments, thereby keeping additional gaseous diffusion capacity at the minimum consistent with the development of more advanced technologies.
- Management of Government enrichment facilities could be accomplished more effectively by a

Government corporation having a self-financing authority to borrow funds from the Treasury or the public. Such a corporation could operate on a business-like basis and would not be subject to possible conflicts with other programs in the agency for funds and management attention. Moreover, a self-financing proposal would free the corporation from the budgetary requirements to seek congressional approval of appropriations, thereby achieving a major goal sought by the present legislation.

--ERDA should seek and encourage private industry to continue efforts in advanced technologies through explicit programs. Such programs may require Government assistance and assurances; however, the Government should seek an equitable sharing of risk by the private enrichers and the Government.

As indicated earlier, we have received a number of informal inquiries regarding the significance of the amendment to the Nuclear Fuel Assurance Act of 1976 as proposed by Congressman Anderson and adopted by the House. On the basis of our evaluation, we conclude that, notwithstanding the legislative history, the amendment does not clearly and unambiguously supersede or nullify those provisions of the bill that allow ERDA to agree to purchase enriching services from private owners and to agree to take over enrichment plants that such owners are unable to complete or bring into commercial operation. The ambiguities in the language of the amendment are such that we are unable to say precisely what the limitations might be on the authority of the agency to enter particular arrangements. Such ambiguities might give the agency much wider discretion in operating under the proposed bill than may be intended. We believe that, if the Congress wishes to clearly limit any warranties to the technology involved, clarifying language would be desirable.

If the Congress decides to pass such legislation, in our view, the language which clearly limits guarantees to a warranty of Government furnished equipment and technology should be sufficient assurance for private enrichers using the proven gaseous diffusion process to enter the enrichment field.

We have discussed the amendment with officials of ERDA's Office of General Counsel. They told us that, as the bill

has not yet been finally acted upon by the Congress, any formal conclusions on their part with respect to the amendment would be premature.

A more detailed discussion of the basis of our views and the possible effect of the amendment on advanced technologies, such as centrifuge and laser isotope operation, is presented in appendix I.

3-6  
Several people have expressed interest in our views on this bill and the Anderson amendment. We are furnishing copies of this letter to Congressman John Anderson; to Senators Clifford Case, Alan Cranston, John Glenn, and Harrison Williams; and to others who may request it.

We are, of course, available to discuss our views with you or members of your staff.

Sincerely yours



Comptroller General  
of the United States

OUR COMMENTS ON THE HOUSE VERSION  
OF THE NUCLEAR FUEL ASSURANCE ACT OF 1976  
(H.R. 8401)

During discussions of the Nuclear Fuel Assurance Act of 1976 in the House of Representatives, Congressman John Anderson of Illinois proposed the following amendment which was adopted and incorporated before the bill's passage. The Anderson amendment may be seen as an attempt to limit the assurances that the Government may provide to prospective owners of uranium enrichment plants.

"Provided, however, That the guarantees under any such cooperative arrangement which would subject the Government to any future contingent liabilities for which the Government would not be fully reimbursed shall be limited to the assurance that the Government-furnished technology and equipment will work as promised by the Government over a mutually-agreed-to and reasonable period of initial commercial operation. Consistent with the foregoing, such cooperative arrangements may include, inter alia, in the discretion of the Administrator, \* \* \*"

In the floor debate on the amendment, the following exchange took place.

"Mr. QUIE \* \* \* \* \*

"In listening to the motion to recommit, am I right that the gentleman's motion to recommit in effect negates subsections 4 and 5 on page 3 of the bill?" 1/

"Mr. ANDERSON of Illinois. The gentleman is correct."

Mr. Anderson went on to state that his amendment was intended to clarify that what was contemplated was "a

---

1/ Subsection 4 authorizes the ERDA Administrator to purchase enriching services from a private enricher. Subsection 5 authorizes the ERDA Administrator to acquire the assets and liabilities of the private owners of an enrichment facility.

warranty of technology and nothing more." 122 Cong. Rec. H8282 (Daily ed., August 4, 1976).

The question is whether the amendment succeeds in its announced purpose. In our opinion, it is not sufficiently clear that the wording of the limitation would necessarily restrict the guarantees as the Congressman apparently intended.

The key to the amendment is the concept of "future contingent liabilities for which the Government would not be fully reimbursed." Thus, under the amendment, ERDA is forbidden to give only guarantees involving such liabilities. Congressman Anderson agreed with Congressman Quie's statement that the amendment would in effect negate subsections 4 and 5 of new section 45 of the Atomic Energy Act, as added by the bill.

Under subsection 4 of the bill, the Administrator could agree to purchase enriching services from prospective private owners. Such an agreement would undoubtedly result in a future liability of the Government, depending on the exact nature of the promised purchase. However, the liability could be neither contingent nor unreimbursed. For example, in one instance, the Government might simply promise to purchase, and a private enricher to sell, a given quantity of enriching services over a period of time. If the agreement to purchase set the price of the services at present day values, the Government could actually come out ahead if it requested such services during a period of high demand or when inflation had increased the prevailing price for them. In this situation, in effect a fixed-price procurement of services, there is no contingency and the Government receives services. Indeed, it is difficult to see any guarantee in such a transaction.

An alternative arrangement might find the Government giving the private owner the right to require it to purchase excess enriching capacity during periods of low demand. Such an arrangement was provided for in the UEA proposal. This type of agreement sounds more like a guarantee; that is, the government could provide a market for services at a particular base price. The exercise of the owner's option to require Government purchases would be a contingency. However, the government would presumably acquire enriched uranium that it could later sell when market conditions improved. Since "fully reimbursed" as used in the amendment is also undefined, we cannot say whether such future sales in which the government recovered the cost of the services it purchased under the "guarantee" could constitute reimbursement. On the other hand, an agreement based on a price calculated today may or

may not enable the Government to recover its purchase price more than a decade in the future. Advancements in technology could greatly reduce the cost of enrichment services from other sources, and the Government would be unable to recover the full cost of the services it purchased under the agreement.

It seems clear that the amendment did not, in effect, write subsection 4 out of the bill since the first of the foregoing examples clearly would not be precluded by the amendment, and the effect of the amendment on the second example is unclear.

Under subsection 5 of the bill, the Administrator could agree to acquire the assets and liabilities of the private owners of an enrichment plant if such owners cannot complete the plant or bring it into commercial operation. If the Government acquired the plant under this subsection, the assets of such a plant and any future profits derived by the Government either through sales or operation thereof may "fully reimburse" the Government for its liability to purchase the assets and liabilities of the private owners. On the other hand, the Government may take a loss in the transaction, either short-term or long-term.

We are unable to conclude from the language of the bill what standard is to be applied in determining whether a particular arrangement constitutes a guarantee and whether a contingent future liability will be "fully reimbursed." The courts might well have similar problems in construing the amendment. Such ambiguities in language may give ERDA broader discretion in operating under the proposed act than intended. For example, ERDA would have substantial latitude in determining whether a particular arrangement would result in the Government's being "fully reimbursed" for a contingent future liability.

Thus, we conclude there is substantial doubt that the amendment wrote subsection 5 out of the bill. Notwithstanding the legislative history, the amendment does not clearly and unambiguously supersede or nullify those provisions of the bill that allow ERDA to agree to purchase enriching services from private owners and to agree to take over enrichment plants that such owners are unable to complete or bring into commercial operation. The ambiguities in the language of the amendment are such that it may not accomplish the Congressman's intended purpose.

In summary, we believe that to achieve the objectives of the amendment as stated on the floor of the House,

clearer guidance in the bill on such matters as what constitutes a "guarantee" and what is meant by "fully reimbursed" is needed. If the Congress wishes to clearly limit any warranties to the technology involved, then clarifying language would be desirable. In that respect, we would be glad to work with interested members of the Congress or committees to develop legislative language which would more clearly spell out the congressional intent.

We have discussed the amendment with ERDA's Office of General Counsel. They told us that, as the bill has not yet been finally acted on by the Congress, any formal conclusions on their part with respect to the amendment would be premature.

#### POSSIBLE EFFECT ON ADVANCED ENRICHMENT TECHNOLOGIES

If passed, the legislation will apply equally to all future private uranium enrichment plant owners with whom ERDA enters a cooperative arrangement. In our October 31, 1975, report, however, we deliberately separated the issues of the next enrichment plant using the gaseous diffusion process from future enrichment plants using centrifuge and other advanced technologies because of the technologies' varying stages of development. The diffusion process has been working successfully in the three Government-owned plants for over 30 years, whereas the centrifuge process, which is expected to be economically and operationally superior to gaseous diffusion, has not yet progressed beyond the pilot plant stage and the laser isotope separation process is still in the laboratory research stage.

If the Congress decides to pass such legislation, in our view, the language which clearly limits guarantees to a warranty of Government furnished equipment and technology should be sufficient assurance for private enrichers using the proven gaseous diffusion process to enter the enrichment field. Because centrifuge and other advanced technologies are not as developed, however, some additional forms of Government assistance may be necessary through the demonstration stage. The nature and extent of such assurances that will be required including the need for warranties beyond those regarding the technology is presently unclear but should become clearer as ERDA continues to evaluate proposals from the centrifuge enrichers. In any event, the Government should seek equitable sharing of risk by the private enrichers and the Government in any arrangement involving the private ownership of enrichment capacity.