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File

August 18, 1975

MEMORANDUM FOR:

VERN LOEN

FROM:

CHARLES LEPPERT, JR.

SUBJECT:

Joint Economic Committee

Glenn Schleede asked me to find out if the Joint Economic Committee is going to or is planning hearings on uranium enrichment and if so, when.

I was not able to make that call. Will you find out this information and call Glenn Schleede.

(typed but not read)



[ca. 11/21/75]

ACTION

THE WHITE HOUSE  
WASHINGTON

MEMORANDUM FOR: JIM CANNON  
FROM: *Glenn Schleede*  
SUBJECT: URANIUM ENRICHMENT  
HEARINGS

I'm having difficulty in putting together a schedule and lining up witnesses. Attached is progress so far and neither the schedule nor the commitments from officials is satisfactory at this point.

Can we discuss this soon?

cc: Pat O'Donnell  
*Charlie Leppert*

THE WHITE HOUSE

WASHINGTON

November 21, 1975

MEMORANDUM FOR: JIM CANNON  
FROM: GLENN SCHLEEDE  
SUBJECT: Administration Witnesses for JCAE  
Hearings on the President's Uranium  
Enrichment Proposal

George Murphy, Staff Director for the Joint Committee on Atomic Energy (JCAE) has asked for the Administration's proposed list of witnesses, together with the days on which they would be available. Murphy indicates that the Chairman expects principals.

This memo is to:

- . Seek your help in lining up some witnesses.
- . Seek your approval of the proposed schedule.

I have talked with agencies to determine tentative availability, and with Jim Connor and the Congressional Relations staff to come up with a logical order. A tentative schedule with principal areas of emphasis is attached.

Steps still to be completed are:

- . Press for commitments of witnesses.
- . Get the list to Murphy.
- . Get formal notice out to the Administration officials involved.

I am relatively certain that those marked with an asterik are available. Others are uncertain. With respect to scheduling and availability, here are some of the problems:

- . Frank Zarb will be in London on December 2, now set for December 3.
- . Jim Lynn will be out of the country the entire week of December 1 but could appear on December 9.

- . Bill Simon's participation could conceivably cause problems because of his former connections with Solomon Brothers, which firm is involved in UEA's financing. The former relationship might provide the basis for a perceived conflict of interest and he would prefer that Ed Yoh appear for Treasury.
- . John Dunlop, according to his Executive Assistant John Reed has doubts as to whether he should be a witness.
- . Tom Kauper may have a conflict with commitments to testify before other committees.
- . Rogers Morton does not want to appear. Will submit written comments.
- . Henry Kissinger - Congressional Relations at State doesn't believe there is much chance of his appearing.

Attachment

December 2

- . Dr. Seamans and Bob Fri - covering the entire proposal and the justification for it.
- . JCAE plans to call Bill Anders of NRC, but we are not involved in this arrangement.

December 3

- . Frank Zarb - covering principally the importance of the proposal to energy independence.
- . Russell Train - covering (a) environmental considerations and (b) environmental consideration affecting the power supply for a possible Portsmouth add-on.
- . Ed Yoh covering the capital considerations.

December 4

- . John Dunlop - on economic and job implications of expanded enrichment capacity in the U.S.
- . Assistant Attorney General Kauper - at the Committee's request, on anti-trust considerations.

December 9

- . Secretary Kissinger - on international aspects of uranium enrichment, including balance of trade, contribution to balance of trade and non-proliferation objectives; potential for foreign investment.
- . Jim Lynn - Budget and fiscal considerations, feasibility and desirability of a government corporation.

THE WHITE HOUSE

WASHINGTON

November 30, 1975

NOTE FOR: JIM CANNON  
JIM CAVANAUGH  
JIM CONNOR  
BILL KENDALL  
PAT O'DONNELL  
CHARLIE LEPPERT

FROM: *Glenn*  
GLENN SCHLEEDE

SUBJECT: DR. SEAMANS' OPENING  
STATEMENT FOR URANIUM  
ENRICHMENT HEARINGS

Here is a copy of the near-final version of Dr. Seamans' prepared statement for hearings which open at 10 A.M. Tuesday.

The statement must be delivered to the JCAE by 10 A. M. Monday, December 1, 1975.



UNITED STATES  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
WASHINGTON, D.C. 20545

*New  
final*

STATEMENT OF  
DR. ROBERT C. SEAMANS, JR., ADMINISTRATOR  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
BEFORE THE JOINT COMMITTEE ON ATOMIC ENERGY  
ON THE PROPOSED NUCLEAR FUEL ASSURANCE ACT OF 1975  
December 2, 1975

Mr. Chairman and Members of the Committee:

I welcome this opportunity to appear before you today to present and discuss the President's program for expanding U.S. uranium enrichment capacity through the involvement of private enterprise in the ownership and operation of future enrichment facilities.

NEED FOR ADDITIONAL ENRICHMENT CAPACITY

Mr. Chairman, it is my strong conviction that expansion of our present capacity for enriching uranium has become a critical national need that must be met if

- nuclear electrical power is to continue in the decades ahead to contribute a growing share of the energy requirements of this country; and if





- ° the U.S. is to retain its leadership as a world supplier of uranium enrichment services and technology for the peaceful uses of nuclear power.

ERDA's analyses clearly support the view that nuclear electrical power must expand, along with use of coal, if our country is to reach and maintain energy independence and in the long term, regain our ability to prevent control over energy supply and prices by a few foreign nations.

As you know, the process of utilizing uranium to generate electric power involves a number of steps. The enrichment of uranium is a vital step in the nuclear fuel cycle. The problem is that the current capacity for enriching uranium has been fully committed since mid-1974 under long-term contracts. The next increment of enrichment capacity must be ready by 1983-1984 to meet the growing domestic and foreign demand for nuclear fuel. Beyond that, it is estimated that the U.S. will need 3-5 full-size enrichment facilities to supply fuel for the domestic nuclear power plants expected to be completed in the 1984-2000 period. Another 5-7 plants will be needed in the same timeframe to meet the foreign market that we can and should supply. The U.S. must continue to be a major and reliable supplier of uranium enrichment services, or potential foreign customers will look elsewhere, including the Soviet Union, for satisfying

their nuclear fuel requirements. This would be contrary to our energy, balance of payments, and non-proliferation objectives, and would lead to foregoing the opportunity to create more jobs in the U.S. More specifically the U.S. needs to be a major force in meeting foreign needs in order to exert a significant influence on the safeguarding of nuclear materials to prevent diversion for weapons use.

Because these enrichment facilities require long lead-times of 7-8 years to construct and reach operational capability, a decision must be made now on how to add the next increment of capacity if that facility is to be in service by 1983-84.

#### INVOLVING PRIVATE ENTERPRISE

The essential issue, then, is not whether we should expand enrichment capacity -- it is how we should expand it. Up to the present time, U.S. enrichment capacity has been provided exclusively by three Government plants operated under ERDA control. These plants were built over the period 1943-1958 to meet the military needs of World War II and the ensuing "cold war." In view of the all-pervasive secrecy of these activities at that time, it was necessary for the Government to do the job. These military needs, with minor exceptions, have now been fully met. The major alternatives for expanding this capacity are

- ° Government financing and ownership of new plants and thus a continuation of the long-standing Government monopoly in this area; or
- ° Involvement of private enterprise in the financing, building, ownership and operation of future facilities.

Now that major new plants are needed we have a unique opportunity to involve private industry in providing a commercial or industrial type activity that would, under normal circumstances, have originally been provided by the private sector.

The President's plan calls for providing the next and ensuing increments of enrichment capacity through cooperative arrangements with private firms that wish to finance, build, own, and operate enrichment plants. This policy is based on the conviction that it is absolutely essential to commercialize our major alternative sources of energy as soon as they are ready for transfer to the private sector. This policy also underpins ERDA's current synthetic fuels commercialization efforts and will apply fully to its solar, geothermal, fusion and other energy technologies as they reach commercially viable stages of development.

We have now reached the point where it is neither essential nor desirable for the Government to continue its exclusive role in the production of enriched uranium.

- ° It is not essential because the technology has matured to the point where private industry can do the job;
- ° It is not desirable because the heavy demands for enrichment services anticipated for the future would entail many billions in additional direct Federal outlays. Government construction of the enrichment plants needed by the year 2000 would cost U.S. taxpayers \$30-50 billion - an enormous strain on the budget even though these costs would be re-couped in about 20 years after construction of the plants has begun.

Moreover, it is clear that private industry is willing to enter the enrichment field. ERDA has received proposals from several corporations or consortia that are seriously interested in financing, building, owning and operating enrichment plants. Industry can proceed with its plans if the Government supplies certain forms of technical assistance and assurances during a temporary transition period, lasting until project operability has been established.

Private industrial interest to date has resulted in proposals to ERDA for four enrichment projects:

- One full-scale gaseous diffusion plant by Uranium Enrichment Associates (UEA) which could begin production in 1981 or 1982 and reach full production (9 million SWU's) by 1983 or 1984.
- Three smaller sized centrifuge plants proposed by Garrett, CENTAR, and EXXON Nuclear which could begin production on a demonstration basis in 1981 to 1983 and reach full production (3 million SWU's each) in the 1986 to 1987 time period.

ERDA is actively negotiating a cooperative agreement with UEA along the lines envisioned in the Nuclear Fuel Assurance Act of 1975. Evaluation of the three centrifuge proposals should be completed by the end of the year.

#### NEED FOR FEDERAL ASSISTANCE

When the Atomic Energy Commission embarked on its program several years ago to bring private industry into the enrichment business, it hoped that, given access to the technology, industry would be able to enter the enrichment field without further Government involvement. After months of study, however, all prospective private enrichers and their financial advisors, concluded that initial entrants into this activity are confronted by abnormally high business risks which, if not mitigated to

some extent, would preclude entry. During last year's Phase III Hearings on Uranium Enrichment before this Committee, representatives of industry -- both potential enrichers and customers -- and financial institutions provided extensive testimony to this effect.

The risks are embodied in the unprecedented undertaking of investing one to three or more billion dollars in single ventures that have never been carried on by the private sector, are based on classified technology, and face uncertainties beyond the investor's control such as licensing requirements, possible nuclear moratoriums in certain states, or the long term financial stability of the project's utility customers upon whose orders these ventures must depend for their revenues.

#### THE NUCLEAR FUEL ASSURANCE ACT OF 1975

The cornerstone of the President's plan is the Nuclear Fuel Assurance Act of 1975. Briefly, the proposed legislation authorizes ERDA to negotiate and enter into cooperative arrangements with industrial firms on a basis deemed most advantageous to the Government and the public interest, and with an appropriate degree of risk to the industrial firms. Specifically, the legislation would authorize

- Making government-owned technology available and warranting that it will work, for which the Government would receive royalties;
- Selling and providing warranties on certain materials and equipment available only from the Government on a full-cost recovery basis;
- Technical assistance also on a full-cost recovery basis;
- Purchase of enrichment services from private producers or selling such services to producers from the Government stockpile to accommodate plant startup and loading problems;
- Assumption of domestic assets and project liabilities in the unlikely event that the Government must take over the project; and
- Design and construction planning for a government-owned enrichment plant as a backup measure to assure that the Nation will have uranium enrichment capacity on line when needed.

It is especially important to note that your approval of the proposed Nuclear Fuel Assurance Act would not constitute approval of any specific proposal that has been submitted to ERDA or any contract that might be negotiated. Instead, the

legislation specifically provides that each contract, once negotiated, cannot be executed until the Joint Committee on Atomic Energy had been notified and a period of 45 days had elapsed to allow Congressional review of the basis for ERDA's arrangements with the private firms. To reiterate, passage of this legislation is not tantamount to approving contracts still under negotiation or yet to be negotiated. This procedure is well established in the Atomic Energy Act and has worked well in providing added assurance to the Congress and the public that major contracts by ERDA (and the AEC before it) are fully protective of the public interest.

It also is important to understand that no actual Federal outlays are expected for the construction and operation of the plants. The legislation would authorize \$8 billion as a contingency to cover the most adverse circumstances; that is, if all projects were to be taken over by the Government. Again, it is highly unlikely that any actual expenditures will be required. Close cooperation between industry and ERDA during construction and initial operation of projects will assure the technical soundness of projects to be undertaken. The legislation is requested only to provide a basis for permitting contracts to be signed, to provide the confidence necessary for obtaining private financing, and to demonstrate the Government's



resolve to commercialize this activity. Moreover, it should be stressed that if private entry were to fail, any costs to the Government would be reimbursed by the private projects or eventually recovered by the Government.

ANTICIPATED USE OF THE PROPOSED AUTHORITY

The authority sought in the legislation would be used to commercialize two technologies for enriching uranium:

- The 30-year old gaseous diffusion process which most agree must be used for the next increment of capacity because it is a proven technology currently operating at commercial-scale;
- The newer gas centrifuge process which, although it appears to offer advantages over the diffusion process, has not yet been demonstrated to be economically competitive on a commercial scale.

Utilizing the authorities in the proposed Nuclear Fuel Assurance Act, negotiations would proceed virtually simultaneously on contracts for enrichment plants employing both the diffusion and centrifuge processes. This would permit an early start on a full-scale diffusion plant and the initiation and build-up of several smaller centrifuge plants. This plan offers the best assurance of providing the additional capacity needed

while establishing a broad private enrichment base which can then develop into a vigorous, competitive enrichment industry -- all at little or no cost to the U.S. taxpayer and with all necessary controls and safeguards.

GAO STUDY - AREAS OF AGREEMENT

This legislation reflects an innovative approach to commercialization of technology, and the Administration fully appreciates that your review must be thorough and exhaustive. We are fully prepared to provide the information you need to assure the Congress and the public that the proposed legislation is in the public interest.

In this connection, we have sought to work and cooperate closely with the General Accounting Office (GAO) in its examination of the President's proposal that was undertaken for your committee.

I am pleased to note several areas in the GAO report of October 31, 1975, where we are in complete or substantial agreement. For example:

- We agree that the future enriching service market is substantial and that an early decision is needed on how the new capacity is to be supplied;

- We agree that the U.S. should strive to maintain a significant position in the foreign market for enrichment services;
- We agree that safeguards, technology protection, and other security factors can be provided equally well whether the Government or private industry undertakes the enrichment of uranium;
- We agree that private industry should be brought into centrifuge enriching; we note that GAO also states that legislation similar to the Nuclear Fuel Assurance Act is required to provide Government assurance and guarantees for the centrifuge enrichers; and
- We agree that the next increment of capacity should utilize the gaseous diffusion process.

#### AREAS OF DISAGREEMENT WITH GAO REPORT

There are, however, three critical areas of disagreement with the GAO report:

- GAO recommends that the diffusion plant be a Government-owned "add-on" to be built at an existing enrichment facility rather than a privately-owned and operated plant as proposed in the President's plan;
- GAO rejects the opportunity to involve private industry in the next increment of capacity by concluding that

the UEA proposal is not acceptable fundamentally because it shifts too much risk to the Federal Government; and

- GAO proposes that a new Government corporation should be established to manage the Government's enrichment facilities.

I would like to address each of these matters briefly:

Government "Add-on" vs. Private Diffusion Plant

GAO maintains that the Government add-on plant would be

- less costly;
- more likely to provide needed capacity in a timely manner; and
- better able to adjust capacity to meeting changing market needs.

With regard to costs, there is no solid basis for contending that the add-on plant will produce a less costly product than a private plant. While the add-on plant's construction costs would be lower if located at an existing Government enrichment site such as Portsmouth, Ohio, the cost of uranium enrichment services sold to utilities could be as high or higher if the add-on plant is powered by electricity generated by fossil fuel, as ERDA's contingency plans now

contemplate. This is because only a coal plant could be built quickly enough to meet the add-on plant's need for power. A higher cost of 5 mills per kilowatt hour for electrical power at Portsmouth would add more than \$100 million a year in operating costs for the add-on plants as compared to nuclear electric power, if it were available.

Furthermore, even though ERDA believes such fossil fueled plants could be built, the Government may have to guarantee securities for them. And, they would also have to meet clean air requirements which add major uncertainties. Furthermore, restrictions on strip mining may limit the availability of low sulfur coal that would certainly be needed if the plants did not use scrubbers.

With respect to timeliness, the present schedule of the private diffusion plant could slip as much as 18 months before it would fall behind the present Government add-on plant schedule, which itself is subject to slippage. Neither project can be scheduled with absolute certainty to be completed ahead of the other, and again the point is that there is no solid basis for contending that an add-on plant could be provided in a more timely manner than the private plant.

With respect to flexibility for responding to changing market needs, the question is rapidly becoming moot due to

- The increased near-term enrichment market requirements anticipated as a result of the uranium and plutonium recycle delays; and
- The rapidly increasing cost of natural uranium which strongly suggests that enrichment plants should operate at lower tails assays thus increasing the enrichment market.

Therefore, it is becoming increasingly clear that both enrichment alternatives require construction of a full-scale, or 9-million SWU capacity, diffusion plant in addition to the centrifuge plants. Thus, the half-sized add-on plant, considered earlier as a possible option, no longer appears to be an acceptable approach. The best way of providing "flexibility" is to proceed with both the diffusion and centrifuge processes in a commercial environment.

Another reason cited by GAO for urging that private industry not be involved until centrifuge technology is used is the GAO assumption that private firms using centrifuge technology could assume more risk. I want to make it clear that gas centrifuge technology, being less fully developed, is inherently riskier than diffusion from the private sector's standpoint. It is not reasonable to expect that less Government support will be required for centrifuge than is required for diffusion technology.

Furthermore, for the Government to build the next increment of capacity:

- ° it would cost the taxpayer about \$2.8 billion to construct and initially operate the plant through 1985; these costs could not be recouped until well after 1990. Such large direct outlays would also reduce the monies available for other pressing nuclear energy problems such as fuel reprocessing and storage of radioactive wastes; and
- ° it would cast doubt on the long-term intentions of the Government and thus increase the difficulties for prospective centrifuge enrichers in obtaining financing, customers, and the necessary manufacturing industry in time to add capacity when needed in the mid-1980's.

On the other hand, if private industry provides the next increment of capacity, the savings to the Government between now and 1985 would include the \$2.8 billion for construction of the diffusion plant and the Government would gain revenues of as much as \$550 million in taxes and royalties from the private uranium enrichment firm assuming its schedule would be met.

Thus, it is clearly in the Nation's interest to have private industry supply the next and ensuing increments. Both processes must be demonstrated in a commercial environment.

But it is important to pave the way for private uranium enrichment with the proven gaseous diffusion technology. It would be most unfortunate and short-sighted for this Nation to attempt to embark upon commercial uranium enrichment via the centrifuge process and thus, in effect, tie its proven technological arm behind its back.

Risk to UEA

The GAO has also taken the position in its report that the UEA proposal, on which negotiations have not been completed, is essentially "riskless" to the UEA participants and therefore should be rejected. However, the proposal, in fact, involves several areas of risk to UEA.

First, UEA would be risking the loss of as much as \$200 million (and more in future dollars) in private domestic equity over the 8-9 year transition period in which Government takeover could become necessary. While this risk is mitigated by Government technical assistance, it is nonetheless real.

Second, UEA risks loss of return on equity during the transition period and the subsequent 20 to 25 year period of expected operation if it fails to meet its commitments to customers for reasons within the reasonable control of UEA.



Third, UEA foregoes returns on investments in alternative business opportunities during the eight to ten year period before the project achieves full-scale commercial operation. Even if the project proceeds perfectly, a return on owners' investment does not commence until the project becomes operational.

In any event, negotiations are still underway with UEA, and there are still some unresolved issues. We are not yet satisfied on all the issues nor would we expect the Congress to be satisfied until we complete our negotiations and come before you with assurances that the public interest is fully protected. It bears repeating that we are not seeking approval at this time for the UEA proposal -- only the authority to provide the means for completing these and other negotiations in order to present the basis of those cooperative arrangements for your review for the proposed statutory period of 45 days.

Government Corporation

We have several concerns with respect to GAO's recommendation to establish a new Government corporation to manage the Government's enrichment facilities including the add-on plant, if constructed.

First, there is no need to separate these activities from ERDA. In fact, there are several reasons why they should not

be taken from ERDA. ERDA performs related technology development crucial to continuing improvement of existing enriching technologies, and also conducts advanced research in promising new enrichment technologies such as laser isotope separation. ERDA also is actively engaged in solving problems encountered in reprocessing spent nuclear fuels and developing natural uranium resources which in turn directly affect the output capacities of U.S. enrichment plants. A separation of these functions would be disruptive to the processes and manpower both transferred and left behind, would create administrative problems over the long run, and would not be in keeping with the present urgent need to mount the most effective program possible to expand our enrichment capacity and to integrate the entire nuclear fuel cycle.

Second, placing the enriching activities in an independent Government corporation could remove from the Federal budget as much as \$9.3 billion in net revenues for enrichment services between now and 1990. The loss of these funds would require the Government to raise additional revenues, either by taxes or borrowing, to meet Federal expenditures already anticipated in other nuclear areas such as reprocessing of spent nuclear fuel and storage of wastes.

Third, establishment of a new Federal agency for enrichment seems contrary to GAO's apparent endorsement -- which we share --

of commercializing uranium enrichment. Why establish a new corporation to manage the Federal facilities when we agree that the trend must be toward private enrichment? Establishment of a new enriching agency would most certainly leave the impression that the Federal Government is hardly serious about industrializing future enrichment ventures. This could prevent the entire private enrichment program from succeeding.

In short, given the time constraints and the importance of creating a private competitive enrichment industry, establishment of a Government corporation to manage Government facilities is not only unnecessary but would be counterproductive.

#### CONCLUSION

In summary, Mr. Chairman it is my strong conviction that additional uranium enrichment capacity should be available prior to the mid-1980's, and that we need a national commitment to achieve this objective. I also recommend that private industry finance, own and operate all new enrichment facilities in a manner similar to other major U.S. industrial operations. I believe that centrifuge technology for uranium enrichment, now in the final stages of development, should be commercialized as soon as feasible in order to improve the efficiency of the uranium enrichment process.

Decisive action is needed to assure the expanded production of enriched uranium if nuclear-generated electric power is to realize its potential in the decades ahead as a major contributor to the energy independence of the Nation and as a reliable and significant supplier of enrichment services for foreign markets. Passage of the President's Nuclear Fuel Assurance Act of 1975 will permit the nuclear fuel needs of this growing industry to be met aggressively through the involvement of private enterprise in the production of enriched uranium.

Passage of this legislation will give ERDA the chance to develop private diffusion and centrifuge proposals for review by the Congress. In the meantime, ERDA would continue the contingency planning for an add-on plant in case the private diffusion plant proposal is disapproved. And, we urge that this critical program not be reorganized into a Government corporation. ERDA should be permitted to proceed in a smooth and efficient manner to discharge the responsibilities that Congress mandates for expanding our enrichment capacity.

This innovative program, which is essentially riskless to the taxpayer, will result in the establishment of a strong, competitive private enriching industry. We believe strongly that this program is in the National interest. The question

of Government vs. private financing and ownership has been debated for several years. It has now become critical that the Congress move swiftly and decisively to meet the need for additional enrichment capacity by enacting the President's program.

Thank you, Mr. Chairman. At this time, I would like to introduce into the record an ERDA brochure entitled "Uranium Enrichment - A Vital New Industry" which contains additional information and illustrations related to the major points covered in my remarks this morning. I will now be glad to respond to any questions that you or members of the Committee may have.

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UNITED STATES  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
WASHINGTON, D.C. 20545  
December 2, 1975

MEMORANDUM FOR THE RECORD

FROM: H. Hollister Cantus, Director  
Office of Congressional Relations

SUBJECT: Nuclear Fuel Assurance Act Hearings (JCAE), Morning Session  
of December 2, 1975

The JCAE held the first day of hearings on the Nuclear Fuel Assurance Act (S. 2035 and H.R. 8401) today. ERDA witnesses at the morning session were Dr. Robert Seamans, Robert Fri, Richard Roberts, R. Tenney Johnson, and Mel Greer. Members of the JCAE present were Senators Case, Symington, Pastore, and Congressmen Young, Anderson, Roncalio and Horton.

Several major issues and areas of Committee concern were repeatedly raised at the morning session. These included:

1. The language of Sections 2 & 3 of S. 2035.

Chairman Pastore expressed concern that the current language offered ERDA 'carte blanche,' and that the Congressional review period of 45 days is merely a courtesy. Under the present wording, the Congress has no power to approve or disapprove an ERDA-negotiated contract.

Dr. Seamans replied that Congress does have the opportunity to enact legislation within that period prohibiting final action on the contract; and in addition, because of the relationship between the JCAE and ERDA with regard to funding of future programs, it would be almost impossible, and surely foolhardy, for an ERDA Administrator to proceed on a contract of which the Committee disapproved. ERDA agreed to discuss this issue further with the Joint Committee.

Pastore felt that the vague wording of Section 3 was open for interpretation. His concern is that in its present form, the bill morally binds the Congress to a future appropriations action at the NFAA's authorization level. He suggested that the wording "subject to approval by an appropriation by the Congress" be inserted on page 5, line 8 of H.R. 8401.

For purpose of clarification, Pastore suggested that the proposed legislation contain language, subject to the budget resolution mandate and Congressional approval, stating that the decision to enter into a



contract is subject to the approval by the Congress through an appropriation action. (Section 3 of Senate Bill). Essentially, the legislation would permit the Administrator to implement the contract notwithstanding the JCAE's objections, provided he had funding available for the purpose. The Administrator agreed to have ERDA's General Counsel discuss remedial language in this area with the Committee staff counsel.

2. Why emphasis is being placed on Gaseous Diffusion Plants (rather than Centrifuge Plants) for the next increment of capacity.

Congressman Roncalio stated that the gaseous diffusion process was obsolete and a waste of taxpayers' money. The efforts should be directed toward rapid development of the centrifuge.

Dr. Seamans stated that since the diffusion process is proven and the centrifuge is not, it is essential to move out on both tracks in order to expand the enrichment capacity of the United States in a timely fashion. Diffusion is not obsolete but is, admittedly, more expensive to operate than centrifuge promises to be.

3. Earlier letters from Seamans and OMB to President.

Congressman Horton and George Murphy, Executive Director of JCAE, raised the questions regarding letters Dr. Seamans sent to OMB and the President earlier this year expressing the view that the UEA proposal was unacceptable; and that the centrifuge and add-on route was more favorable. Dr. Seamans stated that this was eight months ago and that since then, UEA has come to terms with ERDA on a number of discrepancies and issues, allowing ERDA to render continuing consideration of their proposal.

Congressman Young expressed the view that there should be no derogatory inference on the fact that Dr. Seamans is now advocating the President's NFA Act proposal. He said that this is merely procedural with respect to how responsible and open-minded government functions.

4. The practical and philosophical wisdom of guarantees to the private sector.

There is no visible financial risk on the part of UEA. Dr. Seamans replied that there is at least \$200 million at risk by UEA and, while there are areas still under negotiation, Dr. Seamans believes there is considerable room for the adoption of even more risk by UEA.

5. Concern over the findings of the GAO Report.

Committee concern over "the unsolicited" nature of the UEA proposal and what the Committee perceived to be the lack of competition with the UEA gaseous diffusion program. Have no other consortia expressed an interest in competing? The response was that, in fact, there was an invitation to the industry to come in with unsolicited proposals. ERDA has received four: three centrifuge and one gaseous diffusion.

Committee concern that UEA is not compelled to take more substantial risks. ERDA recognized the Committee's concern and indicated that the co-operative arrangements ultimately negotiated with all potential participants will contain an appropriate private risk level.

6. The Committee expressed interest in the power plans of both UEA and ERDA for its add-on plan in Ohio.

It was especially interested in any possibility of using nuclear power for the add-on facility and also what interim power arrangements might be possible. Congressman Horton was especially interested in this point. ERDA will provide such information for the record.

7. The Committee requested clarification as to the government's role in assuring the financial viability of the UEA power supply.

ERDA will provide such information for the record.

8. The Committee asked for a number of items to be supplied for the record. These included:

Dr. Roberts volunteered detailed figures for the Alabama nuclear plant; the time needed to build it; when they will be on line; what are the operating costs?

Congressman Horton requested an update of ERDA's contingency plans (he referred to correspondence of Sept. 1973 with Baranowski).

A list of Chemical companies making a 20-23% return on investment.

Information relating to who pays the costs of supplying electricity during the interim period.

Could American Electric Power utility supply interim power for an add-on plant in the same way that the Alabama utility company will supply interim power for proposed UEA plant.

9. Key Point. Pastore concluded the hearings by stating that as adversaries we will get nowhere, but that as partners we may--so we should get together--and resolve our differences.





UNITED STATES  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
WASHINGTON, D.C. 20545  
December 2, 1975

MEMORANDUM FOR THE RECORD

FROM: H. Hollister Cantus, Director  
Office of Congressional Relations

SUBJECT: Nuclear Fuel Assurance Act Hearings (JCAE), Afternoon  
Session of December 2, 1975

During this afternoon session, Mr. W. Anders, NRC, summarized his statement, which referred to Section 101 of the Atomic Energy Act which requires that NRC license nuclear material production and utilization facilities as NRC's authority for involvement with uranium enrichment facilities.

Their program to prepare for licensing of commercial enrichment facilities began in 1973. After NRC was formed, NRC set up a Task Force and Management Overviews Committee to develop an Action Plan assuring proper priority to enrichment. The Task Force identified 4 potential regulatory problem areas:

- Foreign Ownership.
- Export of enriched uranium to foreign owners
- Incremental enrichment plant startup
- Information classification

Questions, concerns, and issues were raised as follows:

1. Status of reactors in Alabama -- are they related to UEA proposal?

Clarify which reactors are being licensed on basis of UEA "need for power" for the proposed diffusion plant.

2. Concern about foreign ownership.

Is NRC checking to assure that foreign involvement does not get control--Anders assured that NRC is looking into this.

3. Anderson inquired if NRC licensing procedures would have to be changed and/or slowed down by change from public to private venture --Anders answered that he did not foresee any change or slowdown.



4. Case was concerned that time schedule might not be met by UEA proposal.

Will time required for getting plant operational be longer under UEA proposal--Anders suggested that time might be longer with government ownership because of time required in annual appropriations processes.

5. Is NRC to be involved with negotiation of contracts?

Anders answered that NRC is not to be involved in contract negotiation.

Hearing adjourned by Chairman Pastore about 2:45 P.M. -- until 1:00 P.M. on December 3.

The witnesses scheduled for December 3 hearings are as follows:

Frank Zarb, Administrator, FEA

Russell Train, Administrator, EPA

Thomas Kauper, Anti-Trust Division, Justice Dept.



UNITED STATES  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
WASHINGTON, D.C. 20545

December 3, 1975

MEMORANDUM FOR THE RECORD

FROM: H. Hollister Cantus, Director  
Office of Congressional Relations *H. Cantus*

SUBJECT: Nuclear Fuel Assurance Act Hearings (JCAE), of Dec. 3, 1975

The JCAE continued its hearings on the Nuclear Fuel Assurance Act (S. 2035 and H.R. 8401) today. Members of the JCAE present were Senators Pastore, Buckley, Baker and Congressmen Young, Horton and Lujan.

Frank Zarb, Administrator, FEA

Statement Summary:

The bill would help assure viability of the Nation's nuclear power capacity; should provide also the means toward participating strongly in foreign markets and for exerting desirable international influence.

The bill would make it easier to support energy needs that actually require federal funding.

Expressed concern about the need under the "hedge plan" for coal-fired power plants with their attendant uncertainties of environmental technology and coal supply.

Significant Questions Raised:

Role of Congress in Approvals --

Pastore. JCAE doesn't want to be presented with a fait accompli. Only authority is to reject. Congress wants to be partner, not an adversary. The JCAE may accept the entire contract or want to modify only several parts. Congress should not be put in position of having to reject the whole contract.



Horton. JCAE is unable to have an impact on contracts authorized by this bill. No opportunity for disapproval short of legislative action.

Zarb. Expressed view that procedure can be worked out under which the views of the Committee can be accommodated. He suggested that the staffs of ERDA, FEA, and JCAE get to work on the proposed bill modification immediately and that the Committee call Seamans and Zarb back within ten days. \*

Baker. Legislation should authorize ERDA to negotiate but not enter into a contract without additional Congressional action.

#### Commitments of Participants

Baker. The question is how do we deal with the transition to private ownership? It is encouraging that Administration witnesses are of the view that bill language modification is possible. Felt urgent need of getting information about commitments of participants to the JCAE.

#### Public vs. Private

Pastore. No disagreement as far as the JCAE is concerned about the need for expanding nuclear enrichment capacity. But what is the motivation behind this proposed legislation--better financing, industry can do it more efficiently, or what?

Zarb. It is interesting that the question is being asked as it is. At any other time, it would have been the other way around. Now we have to justify placing an activity into the private sector. There is need to capture the vitality that industry has traditionally provided and to allow industry to pick up the extensive financial commitment required over the next ten years.

Pastore. "How private is an arrangement under which the Government's guarantees would keep a consortium whole under almost any circumstance?"

#### UEA Proposal Provisions

Pastore. Quoted a letter from Zarb to Seamans dated February 7, 1975, in which Zarb highlighted concerns about the UEA proposal. Pastore said he agreed with all the questions (whether foreign investors would have control, etc.) raised by Zarb.

Zarb. The questions raised then have since been answered satisfactorily.

\* Subsequent conversation with JCAE staff indicated no desire to recall witnesses and that on-going discussions between ERDA-JCAE counsel would remain primary contact on this issue.

Russell E. Train, Administrator, EPA.

Statement Summary:

The National Environmental Policy Act of 1969 (NEPA) will apply to the licensing of new electrical power plants and provide the opportunity for site-specific analysis and an additional means of ensuring that plants meet applicable environmental regulations.

There will be no environmental differences between public and private ownership of enrichment capacity, and therefore, EPA takes no position on this issue. Those environmental problems that may arise can be addressed under existing authorities.

Significant Questions Raised:

No questions were raised.

Thomas E. Kauper, Assistant Attorney General, Department of Justice.

Statement Summary:

The bill would provide the government with effective and flexible tools to promote the development of a competitive private enrichment industry.

He saw no anticompetitive implications to the Administration's proposal. However, Justice is not in a position at this time to anticipate the competitive problems, if any, of the various specific private proposals which are currently being developed.

Significant Questions Raised:

None.



UNITED STATES  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
WASHINGTON, D.C. 20545

December 4, 1975

MEMORANDUM FOR THE RECORD

FROM: H. Hollister Cantus, Director  
Office of Congressional Relations

SUBJECT: Nuclear Fuel Assurance Act Hearings (JCAE), of Dec. 4, 1975

The JCAE continued its hearings on the Nuclear Fuel Assurance Act (S.2035 and H.R. 8401) today. Members of the JCAE present were Senator Pastore, and Congressmen Young, Horton and Anderson.

John T. Dunlop, Secretary, Department of Labor

Statement Summary:

- Presented tabulated information on the employment and manpower implications (250,000 people to be employed by 1990 with enrichment expansion vs. 198,000 without expansion) in the U.S. associated with expanded utilization of nuclear power here and abroad.
- Stressed that his estimates were moderate and conservative.
- Brought up the serious problem of training and developing the quality of manpower required for such an undertaking, emphasizing the long lead-time necessary.

Significant Questions Raised:

- Questions revolved around the manpower estimates in the prepared statement. There were no contentions with the figures.
- Pastore cautioned that this legislation was under consideration to uranium to meet energy needs, not to create jobs--"not a give-away program."
- Pastore recapitulated for the Secretary his major concerns with the proposed legislation.
- Young expressed concern over what he considered the general lack of understanding on the interrelationship between an adequate energy supply and its effect on employment, thanking the Secretary for helping to bring this point to light.



- Horton inquired if the employment estimates were based on all energy factors or limited to the President's proposal.
- Dunlop replied that the figures "relate solely to direct employment consequences" of the President's proposal (to expand with a gaseous diffusion plant to be operational by 1985, 1 centrifuge plant by 1987, a 2nd centrifuge plant by 1989, and a 3rd centrifuge plant by 1990).
- Dunlop noted that his figures did not reflect comparison between effects (on employment) of public vs. private approach.

Honorable William H. Harsha, R-Ohio, 6th District (Portsmouth)

Statement Summary:

- Congressman Harsha argued strongly for the add-on route for the existing Portsmouth Facility. His major supporting points for add-on were similar to those of the GAO Report; based on local letters of support for the add-on; pledge of cooperation from Labor's statement by the Public Utility Commission of Ohio that sufficient power will be available; local population support and environmental acceptability.
- Representative Anderson challenged certain aspects of Harsha's statements, particularly his contention that the government guarantees make the UEA venture risk-free and essentially negate the point of private participation, and that the Committee at this stage is considering a "principle and not a contract."
- Representative Horton asked if Harsha could get a clarification on availability of power from local utilities--asked for written commitment for the record if possible. Horton also pointed out that new air quality requirements might inhibit use of coal-fired plants for generation of this power.

Paul W. MacAvoy, Member, Council of Economic Advisers

Statement Summary:

- The proposed introduction into the enrichment industry of a single private gaseous diffusion plant in the next few years would not likely have a significant effect on the cost and consumption of energy in the United States. But this is a turning point in the maturation of an exceedingly large and important domestic energy industry.

- A private enrichment industry is likely to be effectively competitive given that there will be more than 8 to 10 large new plants, and there will be a substantial additional source of inventory from existing government operations.
- Private corporations have distinct advantages for the economy when operating competitively.
- Private corporations on the whole are more sparing in their use of resources than government enterprise.
- A public enterprise in uranium enrichment might not replicate this pattern of high cost, low priced public operation in power plant construction.
- The private sector development of uranium enrichment plants should be encouraged to establish competitive conditions, because competition in the long run uses scarce resources most efficiently.
- The most important reason for federal help in all these cases has been to reduce the costs of transfer to the private sector.

Significant Questions Raised:

None.

Stephen S. Gardner, Deputy Secretary of the Treasury

Statement Summary:

- We do not anticipate that the proposed \$8 billion assistance contemplated by the Nuclear Fuel Assurance Act will strain our capital markets or have a major impact on the general cost or availability of capital.
- Given the need for additional uranium enrichment capacity in the early 1980's, our strong belief that a transition must be made to a private uranium enrichment industry and the difficulties in arranging completely private financing for these projects, the Treasury supports the President's proposed Nuclear Fuel Assurance Act of 1975.



Significant Questions Raised:

- . George Murphy inquired about a March 4, 1975 letter from Ed Snyder, Treasury, to Fred Hiser, OC, ERDA regarding the 12/23/74 UEA Proposal. (The contingent loan guarantee in this proposal has since been replaced by a government take-over provision in case of financial failure).
- . Gardner said he would submit a response for the record.
- . George Murphy also asked if Treasury "went along with the 15% profit after taxes" (from UEA's own statement in their May 30, 1975 proposal).
- . Gardner replied that it was a fine goal in the private sector, but that he was unaware that it was a mandated goal.

Clarification of the Record:

Congressman Young brought out the fact that Zarb had indicated that construction permits for the 2 Alabama plants had already been issued, whereas, Anders had indicated that licensing of these plants was contingent upon acceptance of the UEA proposal. The latter is correct.

Hearings Schedule:

Next hearing is scheduled for Tuesday, Dec. 9, at 10:00 a.m. Expected witnesses include:

Department of State - Secretary Kissinger is expected, but Assistant Secretary may have to appear instead.

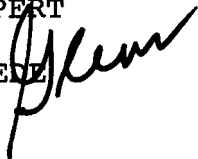
OMB - Director James Lynn

GAO - Controller General Elmer Staats

THE WHITE HOUSE  
WASHINGTON

February 6, 1976

TO: CHARLIE LEPPERT  
FROM: GLENN SCHLEEDER

A handwritten signature in black ink, appearing to read "Glenn", written over the printed name "GLENN SCHLEEDER".

From the Office of the  
Joint Congressional  
Committee on Atomic Energy

Press Release No. 839  
For Immediate Release  
January 28, 1976

JOINT COMMITTEE ON ATOMIC ENERGY ANNOUNCES RELEASE  
OF HEARING PRINT ON NUCLEAR FUEL ASSURANCE ACT

Senator John O. Pastore, Chairman of the Joint Committee on Atomic Energy, announced today the release of a hearing print entitled, "Nuclear Fuel Assurance Act of 1975". The print contains the testimony and twenty-two appendices from five days of extensive Committee hearings held last December on the Administration's proposed plan for assuring the construction of additional uranium enrichment plants in the United States.

Testimony was received from the following witnesses:

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, Department of Justice

December 4, 1975

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

The Committee plans to receive testimony in early February from the Secretary of State on the Nuclear Fuel Assurance Act, thus completing the Governmental phase of these hearings.

It is anticipated that additional hearings will be held in the near future to receive testimony from industrial firms interested in building enrichment facilities, utilities involved in buying the output of such facilities, and other interested parties.

Until the supply is exhausted, this Committee print is available by writing to the Joint Committee on Atomic Energy, Room H-403, U.S. Capitol Building, Washington, D.C., 20510. Thereafter, the print may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

