The original documents are located in Box 18, folder "Nuclear Fuel Assurance Act: FY 1976 Appropriation Language" of the Loen and Leppert Files at the Gerald R. Ford Presidential Library.

March 4, 1976

Honorable Brock Adams
House of Representatives
Chairman, Committee on the Budget
Washington, D. C. 20515

Dear Mr. Chairman:

The Administration intends shortly to propose to the Congress additional FY 1976 appropriation language for the Energy Research and Development Administration to implement the pending Nuclear Fuel Assurance Act (the NFAA, H.R. 8401 and S. 2035). Action on this appropriation language is the second vital step in a three-step congressional review and approval process to make it possible for private industrial firms to finance, build, own and operate additional uranium enrichment plants needed by the Nation.

- The first step is enactment of the NFAA which provides ERDA a basis for proceeding with the negotiation of cooperative agreements with private firms that wish to build uranium enrichment plants. (Under the proposed NFAA, cooperative agreements could not be signed until steps 2 and 3 below are completed.)

- The second step is the passage of appropriation language which sets an upper limit on the U.S. Government's liabilities in the unlikely event that it were necessary for the Government to assume the domestic assets and liabilities of firms covered by cooperative agreements. The practical effect of this step is to provide a basis for private firms to obtain necessary debt financing in the commercial capital market. It would permit completion of negotiations between ERDA and private firms.

- The third step is the submission of unsigned cooperative agreements to the Congress for final review and approval.

When this three-step process is completed and cooperative agreements are signed a contingent liability would be assumed by the U.S. Government. This contingent liability could amount to $8 billion. Such an amount would cover the domestic portion (40%) of a large gaseous diffusion plant ($1.6 billion) and three smaller centrifuge plants ($3 billion) as well as provide for contingencies ($3.6 billion) including escalation.

I must emphasize that it is the Administration's firm expectation that none of this contingent liability would result in Federal expenditures for the assumption of private ventures because of the high degree of assurance discussed below, that commercial firms will be successful.

The purpose of this letter is to inform you of our plans and to explain why we do not consider the $8 billion contingent liability to be budget authority under provisions of the Congressional Budget Act of 1974. We want to be sure that your Budget Committee accepts this conclusion so that disagreements do not arise at a later date when they might slow up the Congressional approval of the appropriation language mandated by the NFAA.

By way of additional background, uranium enriching--a service essential to the production of nuclear fuel--is now a fully developed production activity carried out in the U.S. solely by ERDA. This large ERDA production activity could be capable of supplying enrichment services to as much as 329,000 MWe of nuclear generating capacity by the early 80's. This capacity, however, is now fully contracted to domestic and foreign utilities. The pending Nuclear Fuel Assurance Act and the proposed appropriation language are intended to assure that: (1) the next increments of uranium enrichment capacity will be built and operating when needed to supply the growing demand for fuel for nuclear powered electricity generating plants; (2) all future capacity increments will be built, financed and operated by private industry, thus ending the current Government monopoly and drain on the Federal Budget; (3) the Government will receive appropriate compensation for the use of its inventions and discoveries; and (4) all necessary domestic and international controls on nuclear materials and classified technologies will be maintained as they would be if the Government itself were to own the new plants.

The construction of new U.S. uranium enrichment plants required by the year 2000 is estimated to cost $30-50 billion (in 1976 dollars). If the Government had to build these plants, the capital costs of the new plants would by 1985 exceed revenues for these plants by about $9 billion (in 1976 dollars, i.e. escalation is not taken into consideration). Even the construction by the Government of only the next increment of new enrichment capacity would have a major budgetary impact for the next ten years.

In contrast, this financial burden would, under the President's proposal outlined above, be borne by the private sector which is ready and willing to do so. Ideally, industry would assume the entire responsibility for building succeeding increments of capacity. without even the limited assurances provided for in the President's Plan. However, it has not been possible for private firms to obtain the necessary debt financing for such ventures because of the special circumstances involving uranium enrichment which are not commonly faced in the business environments.

Specifically: (1) the very large size of an enrichment project; (2) the use of technologies that are classified; (3) regulatory uncertainties associated with a first of a kind venture; and (4) the current financial difficulties of some of the utilities that would be the customers for uranium enrichment services.

The limited cooperation and temporary assurances contemplated in the NFAA are designed specifically to overcome these obstacles and make the risk that is involved for potential lenders of debt money more nearly comparable with the risk associated with other investment opportunities available to them.

Under the President's proposal outlined above, the Federal Government would incur a contingent liablity when a cooperative arrangement is entered into by ERDA pursuant to the Nuclear Fuel Assurance Act. The major Government contingent liability is based on the possible need to acquire the domestic assets and assume liabilities (including debt) of a private enrichment project in the unlikely event that the venture were unable to proceed (Section 2 of the proposed Nuclear Fuel Assurance Act). Again, it must be stressed that we do not expect any expenditure of funds for the assumption of assets and liabilities of a private uranium enrichment venture. We are confident in this view because the technology has been thoroughly demonstrated over the past 30 years and because of the oversight role ERDA will play with respect to these private enrichment firms.

Since it is unlikely that future outlays will be incurred, we believe that the $8 billion to be included in appropriation language should be treated as financial assurances and that the limitation on cooperative arrangements ($8 billion) made by ERDA pursuant to the Nuclear Fuel Assurance Act, should not be considered as new budget authority. We base this interpretation on Section 3(a)(2) and 401(c)(2) of the Congressional Budget Act of 1974 (P.L. 93-344).

Section 3(a)(2) of P.L. 93-344 states:

> "The term "budget authority" means authority provided by law to enter into obligations which will result in immediate or future outlays involving Government funds,.." (emphasis added).

Since the $8 billion to be included in appropriation language pursuant to the NFAA in all likelihood will not result in immediate or future outlays, we believe it does not conform to this definition of budget authority.

In the unlikely event that conditions were to arise in the future where it appeared that contingent liabilities would require liquidation, an appropriate amount of budget authority and outlays would be estimated

in the President's budget for that year. Specifically, the estimate of budget authority would be in the amount of the borrowing from the Treasury needed to cover the necessary liquidation. This is similar to other Federal Programs containing contingent liabilities assumed by the Federal Government (e.g., government insurance programs).

I suggest that it might be desirable for my staff to meet with yours to discuss further the Nuclear Fuel Assurance Act and the appropriations language mandated by the Act. This can be arranged through my office.

I would personally appreciate any comments you may have on this matter.

With best personal regards,

Sincerely yours,

James T. Lynn
Director

P17-5/1

APR 1 1976 FILE NUCLEAR FUEL ASSURANCE ACT

MAR 5 - 1976

Honorable Edmund S. Muskie
United States Senate
Chairman, Committee on the Budget
Washington, D. C. 20510

Dear Mr. Chairman:

The Administration intends shortly to propose to the Congress additional FY 1976 appropriation language for the Energy Research and Development Administration to implement the pending Nuclear Fuel Assurance Act (the NFAA, H.R. 3401 and S. 2035). Action on this appropriation language is the second vital step in a three-step congressional review and approval process to make it possible for private industrial firms to finance, build, own and operate additional uranium enrichment plants needed by the Nation.

- The first step is enactment of the NFAA which provides ERDA a basis for proceeding with the negotiation of cooperative agreements with private firms that wish to build uranium enrichment plants. (Under the proposed NFAA, cooperative agreements could not be signed until steps 2 and 3 below are completed.)

- The second step is the passage of appropriation language which sets an upper limit on the U.S. Government's liabilities in the unlikely event that it were necessary for the Government to assume the domestic assets and liabilities of firms covered by cooperative agreements. The practical effect of this step is to provide a basis for private firms to obtain necessary debt financing in the commercial capital market. It would permit completion of negotiations between ERDA and private firms.

- The third step is the submission of unsigned cooperative agreements to the Congress for final review and approval.

When this three-step process is completed and cooperative agreements are signed a contingent liability would be assumed by the U.S. Government. This contingent liability could amount to $8 billion. Such an amount would cover the domestic portion (40%) of a large gaseous diffusion plant ($1.5 billion) and three smaller centrifuge plants ($3 billion) as well as provide for contingencies ($3.6 billion) including escalation.

I must emphasize that it is the Administration's firm expectation that none of this contingent liability would result in Federal expenditures for the assumption of private ventures because of the high degree of assurance discussed below, that commercial firms will be successful.

The purpose of this letter is to inform you of our plans and to explain why we do not consider the $3 billion contingent liability to be budget authority under provisions of the Congressional Budget Act of 1974. We want to be sure that your Budget Committee accepts this conclusion so that disagreements do not arise at a later date when they might slow up the Congressional approval of the appropriation language mandated by the NFAA.

By way of additional background, uranium enriching--a service essential to the production of nuclear fuel--is now a fully developed production activity carried out in the U.S. solely by ERDA. This large ERDA production activity could be capable of supplying enrichment services to as much as 329,000 MWe of nuclear generating capacity by the early 80's. This capacity, however, is now fully contracted to domestic and foreign utilities. The pending Nuclear Fuel Assurance Act and the proposed appropriation language are intended to assure that: (1) the next increments of uranium enrichment capacity will be built and operating when needed to supply the growing demand for fuel for nuclear powered electricity generating plants; (2) all future capacity increments will be built, financed and operated by private industry, thus ending the current Government monopoly and drain on the Federal Budget; (3) the Government will receive appropriate compensation for the use of its inventions and discoveries; and (4) all necessary domestic and international controls on nuclear materials and classified technologies will be maintained as they would be if the Government itself were to own the new plants.

The construction of new U.S. uranium enrichment plants required by the year 2000 is estimated to cost $30-50 billion (in 1976 dollars). If the Government had to build these plants, the capital costs of the new plants would by 1935 exceed revenues for these plants by about $9 billion (in 1976 dollars, i.e. escallation is not taken into consideration). Even the construction by the Government of only the next increment of new enrichment capacity would have a major budgetary impact for the next ten years.

In contrast, this financial burden would, under the President's proposal outlined above, be borne by the private sector which is ready and willing to do so. Ideally, industry would assume the entire responsibility for building succeeding increments of capacity. without even the limited assurances provided for in the President's Plan. However, it has not been possible for private firms to obtain the necessary debt financing for such ventures because of the special circumstances involving uranium enrichment which are not commonly faced in the business environments.

Specifically: (1) the very large size of an enrichment project; (2) the use of technologies that are classified; (3) regulatory uncertainties associated with a first of a kind venture; and (4) the current financial difficulties of some of the utilities that would be the customers for uranium enrichment services.

The limited cooperation and temporary assurances contemplated in the NFAA are designed specifically to overcome these obstacles and make the risk that is involved for potential lenders of debt money more nearly comparable with the risk associated with other investment opportunities available to them.

Under the President's proposal outlined above, the Federal Government would incur a contingent liablity when a cooperative arrangement is entered into by ERDA pursuant to the Nuclear Fuel Assurance Act. The major Government contingent liability is based on the possible need to acquire the domestic assets and assume liabilities (including debt) of a private enrichment project in the unlikely event that the venture were unable to proceed (Section 2 of the proposed Nuclear Fuel Assurance Act). Again, it must be stressed that we do not expect any expenditure of funds for the assumption of assets and liabilities of a private uranium enrichment venture. We are confident in this view because the technology has been thoroughly demonstrated over the past 30 years and because of the oversight role ERDA will play with respect to these private enrichment firms.

Since it is unlikely that future outlays will be incurred, we believe that the $8 billion to be included in appropriation language should be treated as financial assurances and that the limitation on cooperative arrangements ($8 billion) made by ERDA pursuant to the Nuclear Fuel Assurance Act, should not be considered as new budget authority. We base this interpretation on Section 3(a)(2) and 401(c)(2) of the Congressional Budget Act of 1974 (P.L. 93-344).

Section 3(a)(2) of P.L. 93-344 states:

> "The term "budget authority" means authority provided by law to enter into obligations which <u>will</u> result in immediate or future outlays involving Government funds,...". (emphasis added).

Since the $8 billion to be included in appropriation language pursuant to the NFAA in all likelihood <u>will not</u> result in immediate or future outlays, we believe it does not conform to this definition of budget authority.

In the unlikely event that conditions were to arise in the future where it appeared that contingent liabilities would require liquidation, an appropriate amount of budget authority and outlays would be estimated

in the President's budget for that year. Specifically, the estimate of budget authority would be in the amount of the borrowing from the Treasury needed to cover the necessary liquidation. This is similar to other Federal Programs containing contingent liabilities assumed by the Federal Government (e.g., government insurance programs).

I suggest that it might be desirable for my staff to meet with yours to discuss further the Nuclear Fuel Assurance Act and the appropriations language mandated by the Act. This can be arranged through my office.

I would personally appreciate any comments you may have on this matter.

With best personal regards,

Sincerely yours,

(Signed) Jim

James T. Lynn
Director

Distribution
Official File - DO Records
Director's Chron
Director
Deputy Director
Mr. Mitchell
Mr. Loweth
Mr. Taft
Mr. Kearney
Rtn. Room 8002
Chron
SSET/NP:MY:3/2/76

APR 14 1976

BUDGET IMPACT - ADDITIONAL GOVERNMENT ENRICHMENT PLANTS

Attached are tables which illustrate the impact on the Federal Budget of having the U.S. Government build eleven new uranium enrichment plants which may be required in the U.S.

COMPARISON WITH PREVIOUS TABLES; NEW TABLES BEING PREPARED

These tables differ in several respects from tables previously provided by ERDA to the JCAE and CBO and some explanation is in order:

- The previous tables covered:
  - case outlays only for the capital and operating costs.
  - revenues based on a price of $76 per SWU which, at the time the tables were prepared, was the estimated commercial charge price for existing plants.
- To reflect true Federal budgetary impact, tables would have to include additional considerations -- on both the cost and revenue side. For example:
  - On the revenue side, a substantially higher price would have to be charged for product from new plants and this should be reflected in the revenues.
  - On the cost side, several additional factors should be reflected, including:
    - ... cost of interest on the Federal investment during the construction and operation of each additional plant until the investment is recovered.
    - ... interest on the investment cost of inventories of uranium being processed through the plant.
- ERDA is now preparing revised tables that would show the true budget impact. These will be available in about two weeks.
- In order that some better though still imperfect estimates, would be available in the interim, the attached charts have been prepared. Compared to the previous tables, these charts include:
  - Higher revenues. (SWU charge of $125 compared to $76 in earlier tables).
  - Costs of interest on capital investments.

  They do not yet include other cost factors such as cost of inventories and associated carrying charges.

  Furthermore, when the additional cost factors are included, it may very well be necessary to adjust upward the pricing factors (including $ per SWU) so that impact on the Federal budget is held to a lower level.
- Lines have been included on the tables to show present value of the cash flow (10 percent discount for factor used).

HIGHLIGHTS

Among the points that are highlighted by the attached tables are:

- The large differentials between revenues and costs (even using the $125 SWU price) -- reaching a cumulative maximum of $14 billion in 1988 on an undiscounted basis and $6.9 billion on a discounted basis.
- Costs to the U.S. Government would not be recovered -- and a return on investment shown until 1995 on an undiscounted basis and 1999 on a current value basis.

ASSUMPTIONS

Assumptions reflected in the attached tables include:

- Moderate-low nuclear power growth with full plutonium recycle, and 0.30 percent U-235 enrichment plant tails assay.
- Nominal 8.75 million SWU/year plants constructed to track demand.
- Construction costs for the proposed add-on diffusion plant (New plant 1) are latest estimates, based on a completed conceptual design estimate and are subject to change.
- Construction costs for full size centrifuge facilities (New Plants 2 through 11) are current ERDA estimates of costs for centirfuge plants, assuming that shared sites, maturation of the support industry, and improvements in technology will contribute to capital cost savings over time.
- Power costs at 20 mills/kwhr.
- Operating costs based on latest ERDA estimates.
- Revenues at $125 per SWU, assumed to include capital recovery charges for new plant investment.

SUMMARY

Federal Budget Impact of Government Enrichment Expansion
(Millions of FY 1977 Dollars)

	76	TQ	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	2000
New Plant Operating Costs			10	19	33	46	57	84	336	616	721	846	963	1111	1261	1388	1546	1711	1838	1942	2079	2202	2297	2406	2481	2497
New Plant Capital Costs	4	5	105	349	461	691	1095	1337	1884	1992	2214	2370	2394	2552	2318	2520	2607	2313	2157	2083	2009	1646	1386	1090	473	143
Interest on capital during construction @ 6%	a/	a/	7	28	58	102	174	265	392	535	699	660	546	730	635	561	748	674	587	488	633	510	364	444	239	0
Total Costs	4	5	122	396	552	839	1326	1686	2612	3143	3634	3876	3903	4393	4214	4469	4901	4698	4582	4513	4721	4358	4047	3940	3193	2640
Total Revenues at $113 per SWU			30	130	269	378	387	317	278	308	805	2204	3143	4237	4327	5542	6541	7489	7479	8585	9545	9519	10734	11733	11707	11918
Cash Flow																										
Annual	-4	-5	-92	-266	-283	-461	-939	-1369	-2334	-2835	-2829	-1672	-760	-156	113	1073	1640	2791	2897	4072	4824	5161	6687	7793	8514	9278
Cumulative	-4	-9	-101	-367	-650	-1111	-2050	-3419	-5753	-8588	-11417	-13089	-13849	-14005	-13892	-12819	-11179	-8388	-5491	-1419	3405	8566	15253	23046	31560	40838
Present Valued at 10%																										
Annual	-4	-5	-84	-220	-213	-315	-583	-772	-1197	-1324	-1200	-645	-266	-50	33	282	392	608	574	733	791	769	903	959	954	946
Cumulative	-4	-9	-93	-313	-526	-841	-1424	-2196	-3393	-4717	-5917	-6562	-6828	-6878	-6845	-6563	-6171	-5563	-4989	-4256	-3465	-2696	-1793	-834	120	1066

a/ Less than $1.0 million.

OPERATING COSTS
Millions of Dollars

Fiscal Year

	76	TQ	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	2000
New Plant 1 (GDP)			4	10	10	10	10	10	230	455	467	→														
New Plant 2 (GCP)			6	9	17	21	21	30	49	78	128	187	203	→												
New Plant 3 (GCP)					6	9	17	21	21	30	49	78	128	187	203	→										
New Plant 4 (GCP)						6	9	17	21	21	30	49	78	128	187	203	→									
New Plant 5 (GCP)								6	9	17	21	21	30	49	78	128	187	203	→							
New Plant 6 (GCP)									6	9	17	21	21	30	49	78	128	187	203	→						
New Plant 7 (GCP)										6	9	17	21	21	30	49	78	128	187	203	→					
New Plant 8 (GCP)												6	9	17	21	21	30	49	78	128	187	203	→			
New Plant 9 (GCP)													6	9	17	21	21	30	49	78	128	187	203	→		
New Plant 10 (GCP)															6	9	17	21	21	30	49	78	128	187	203	→
New Plant 11 (GCP)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	9	17	21	21	30	49	78	128	187	203
Total Operating			10	19	33	46	57	84	336	616	721	846	963	1111	1261	1388	1546	1711	1838	1942	2079	2202	2297	2406	2481	2497

PMO:3/30/76

CAPITAL COSTS

MILLIONS OF DOLLARS

NEW PLANT COSTS-CAPITAL ONLY	FY76	TQ	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	2000
New Plant 1 (GDP) 2.8 Billion Construction	4	5	90	244	292	346	460	517	546	236	44	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
New Plant 2 (GCP) 3.9 Billion			15	105	155	235	400	455	662	754	743	403	13	13	13	13	13	13	13	13	13	13	13	13	13	13
New Plant 3 (GCP 3.6 Billion					14	97	143	217	369	420	611	696	686	374	13	13	13	13	13	13	13	13	13	13	13	13
New Plant 4 (GCP) 3.4 Billion						13	92	135	205	349	397	577	658	649	352	13	13	13	13	13	13	13	13	13	13	13
New Plant 5 (GCP) 3.3 Billion								13	89	131	199	338	385	560	639	630	343	13	13	13	13	13	13	13	13	13
New Plant 6 (GCP) 3.3 Billion									13	89	131	199	338	385	560	639	630	343	13	13	13	13	13	13	13	13
New Plant 7 (GCP) 3.3 Billion										13	89	131	199	338	385	560	639	630	343	13	13	13	13	13	13	13
New Plant 8 (GCP) 3.3 Billion												13	89	131	199	338	385	560	639	630	343	13	13	13	13	13
New Plant 9 (GCP) 3.3 Billion													13	89	131	199	338	385	560	639	630	343	13	13	13	13
New Plant 10 (GCP) 3.3 Billion															13	89	131	199	338	385	560	639	630	343	13	13
New Plant 11 (GCP) 3.3 Billion																13	89	131	199	338	385	560	639	630	343	13
CAPITAL COST IN FY 1977 DOLLARS	4	5	105	349	461	691	1095	1337	1884	1992	2214	2370	2394	2552	2318	2520	2607	2313	2157	2083	2009	1646	1386	1090	473	143

MH 3/26/76

REVENUES FROM ENRICHMENT SALES AT $125 PER SWU

Millions of Dollars

	FY 76 / TQ	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	2000
New Plant 1 (GDP) 2.8 Billion Construction		a/30	100	139	109	39				b/457	883	978	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094
New Plant 2 (GCP) 3.9 Billion			30	100	139	109	39				1004	883	978	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094
New Plant 3 (GCP) 3.6 Billion				30	100	139	109	39				1004	883	978	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094
New Plant 4 (GCP) 3.4 Billion					30	100	139	109	39				1004	883	978	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094
New Plant 5 (GCP) 3.3 Billion							30	100	139	109	39				1004	883	978	1094	1094	1094	1094	1094	1094	1094	1094
New Plant 6 (GCP) 3.3 Billion								30	100	139	109	39				1004	883	978	1094	1094	1094	1094	1094	1094	1094
New Plant 7 (GCP) 3.3 Billion									30	100	139	109	39				1004	883	978	1094	1094	1094	1094	1094	1094
New Plant 8 (GCP) 3.3 Billion											30	100	139	109	39				1004	883	978	1094	1094	1094	1094
New Plant 9 (GCP) 3.3 Billion												30	100	139	109	39				1004	883	978	1094	1094	1094
New Plant 10 (GCP) 3.3 Billion														30	100	139	109	39				1004	883	978	1094
New Plant 11 (GCP) 3.3 Billion															30	100	139	109	39				1004	883	978
TOTAL REVENUES		30	130	269	378	387	317	278	308	805	2204	3143	4237	4327	5542	6541	7489	7479	8585	9545	9519	10734	11733	11707	11918

NOTE:

a/ Advance payments based on $3.3 million per 1,000 megawatts payable in three annual installments starting eight years prior to initial withdrawal, assuming each new plant will support about 125,000 megawatts of nuclear power on full plutonium recycle.

b/ New plant revenues based on supplying enrichment services on a schedule consistent with the Moderate/Low nuclear power growth.

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

APR 16 1976

Honorable John O. Pastore
Chairman, Joint Committee on
Atomic Energy
Congress of the United States

Dear Mr. Chairman:

My letter of April 13, 1976, sought to clarify some confusion with respect to the use of revenues from existing uranium enrichment plants to finance a Government add-on plant. After reviewing the testimony presented during your hearings on April 6 and 7, 1976, I am also concerned by what appear to be several other common misconceptions with respect to the Nuclear Fuel Assurance Act, as well as the ERDA backup plan for Government provision of additional enrichment capacity. I would like to take the opportunity to comment in this regard.

Cost of Add-on Plant versus UEA Plant

It has been suggested that the cost of enrichment from a private gaseous diffusion plant would be higher than from a Government built add-on plant by comparing only the capital costs of building these plants. As I have previously noted in my testimony before the Committee on December 2, 1975, there is no solid basis for contending that the add-on plant will result in less costly enrichment services than a private plant. While the capital cost of an add-on plant would be lower, 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 fuels, as now seems likely.

Potential Slippage in UEA Schedule

Concern has been expressed that there is a greater potential for slippage in the Uranium Enrichment Associates' schedule for constructing an enrichment plant than a Government add-on plant, thus implying that a Government add-on plant could be completed earlier. As with any large construction project, these early schedules are subject to some uncertainty. We do not believe that it is possible at this time to conclude definitively that one plant could be available earlier than the other.

Government Risk versus Benefits

Some concern has been expressed that the passage of the Nuclear Fuel Assurance Act would provide guarantees which would result in the U.S. Government's taking risks for private enterprises, both domestic and foreign, without obtaining any of the benefits from these enterprises. The Nuclear Fuel Assurance Act would provide U.S. private enrichment enterprises only temporary assurances which cover portions of the risks associated with building and owning enrichment plants. Part of, and under certain circumstances all of, a private enterprise's equity will be at risk during construction of the plants. When operability is established in a commercial sense private investors will assume all project risks. In the case of UEA it is anticipated that this will occur about one year after the project commences operation. Furthermore, it is our firm belief that these plants will be completed by the private enterprises and, therefore that these temporary assurances would result in no net outlays by the U.S. Government.

In exchange for these assurances significant benefits will be obtained by the U.S. Government under the Nuclear Fuel Assurance Act. The most important benefit is that the Federal Government would avoid spending large sums of taxpayers' dollars on new enrichment facilities - about $8 to $10 billion for just the enrichment capacity which might be assured under the Act. Finally, the U.S. Government would collect royalties and taxes from each future enrichment plant including those new plants built subsequent to plants covered by the Act.

ERDA Support of NFAA

Several witnesses have noted my reservations about the UEA program as it was submitted in December 1974 and discussed during the January-March 1975 period. UEA submitted a new and considerably different proposal in May 1975, which constituted an acceptable basis for commencing negotiations. When negotiations with UEA are completed, I expect to have a proposed cooperative arrangement that I can recommend to the Congress without reservations. As I indicated in my testimony of December 2, 1975, I fully support the Nuclear Fuel Assurance Act proposed by the President and I want to reaffirm that support.

Foreign Access to Enriching Technology

One witness expressed concern that the ". . . NFAA would involve private industry and foreign governments in activities of a sensitive nature. . .". We believe the NFAA has recognized and dealt with this concern. The Bill would not permit foreign access to sensitive or classified matters. All provisions of existing laws and policy respecting classification or technology and export control of fuel-grade enriched uranium would continue to apply. In addition, foreign domination or control of enriching projects would continue to be precluded by the Atomic Energy Act. We are convinced that early enactment of the NFAA and establishment of acceptable private projects will increase the ability of the United States to supply a greater share of the foreign market, and that this will increase our ability to encourage acceptance of controls that are needed to achieve our non-proliferation objectives.

Diffusion versus Centrifuge Technology

On the subject of future capacity, it is my view that a large diffusion plant is needed as the next increment of capacity. However, we expect that the subsequent increments of capacity will utilize the centrifuge process. Our proposed program under the NFAA is structured with that objective in mind.

While it is not yet possible to conclude with absolute certainty that the centrifuge process will be competitive with diffusion, the preponderance of technical judgement is in this direction. Commercialization of both processes, as would be permitted under the NFAA, would provide maximum competitive flexibility to the Nation and hence maximum benefit to customers of electrical energy.

I hope that these comments are useful to the Committee, and I would be pleased to provide any additional information the Committee may require.

Sincerely,

151

Robert C. Seamans, Jr.
Administrator

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

3/1/76

February 23, 1976

1 copy
file QE-PET

Honorable John O. Pastore, Chairman
Joint Committee on Atomic Energy

Dear Mr. Chairman:

During the course of the Joint Committee's recent hearings on the President's proposed Nuclear Fuel Assurance Act of 1975 (S.2035), you and other members of the Committee expressed concern that the proposed Act did not provide sufficient opportunity for Congressional oversight of cooperative agreements negotiated pursuant to the Act. You proposed that additional Congressional review and approval requirements be included in the Act which would be comparable to those provided for in the case of Agreements for Cooperation in Section 123(d) of the Atomic Energy Act, as amended.

Subsequently, ERDA staff met with JCAE staff to review language that would accomplish this objective. We understand that the proposed language would, in brief, provide that each unsigned cooperative arrangement be submitted for a 60-day period of Congressional consideration. The 60-day period would allow 30 days for JCAE review and recommendations to each House of Congress and also require action within an additional 30-day period by each House in the form of a concurrent resolution of approval or disapproval. A comparative draft of the original and the revised S.2035 showing the revisions is attached.

I am pleased to advise you that the amendments you proposed are acceptable. I would like to commend the JCAE staff for their constructive approach to the development of the revised language. They made an important contribution to the removal of the remaining obstacle to action on this bill which is of great importance to the Nation.

We are looking forward to favorable Committee action on the revised bill at the earliest possible date.

Sincerely,

S/
Robert C. Seamans, Jr.
Administrator

Attachment:
Revised Bill

COMPARATIVE DRAFT

S. 2035, REVISED

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 disapproval of proposed arrangements, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, J. 63-057 That this Act may be cited as the "Nuclear Fuel Assurance Act of 1975".

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 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 estimate 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 without passage by the Congress of a concurrent resolution stating in substance that it does not 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 to initiate construction planning and design activities for expansion of an existing uranium enrichment facility. There is are hereby authorized to be appropriated such sums as may be necessary for this purpose.

PY-5/1

MAR 5 - 1976

Honorable Edmund S. Muskie
United States Senate
Chairman, Committee on the Budget
Washington, D. C. 20510

Dear Mr. Chairman:

The Administration intends shortly to propose to the Congress additional FY 1976 appropriation language for the Energy Research and Development Administration to implement the pending Nuclear Fuel Assurance Act (the NFAA, H.R. 3401 and S. 2035). Action on this appropriation language is the second vital step in a three-step congressional review and approval process to make it possible for private industrial firms to finance, build, own and operate additional uranium enrichment plants needed by the Nation.

- The first step is enactment of the NFAA which provides ERDA a basis for proceeding with the negotiation of cooperative agreements with private firms that wish to build uranium enrichment plants. (Under the proposed NFAA, cooperative agreements could not be signed until steps 2 and 3 below are completed.)

- The second step is the passage of appropriation language which sets an upper limit on the U.S. Government's liabilities in the unlikely event that it were necessary for the Government to assume the domestic assets and liabilities of firms covered by cooperative agreements. The practical effect of this step is to provide a basis for private firms to obtain necessary debt financing in the commercial capital market. It would permit completion of negotiations between ERDA and private firms.

- The third step is the submission of unsigned cooperative agreements to the Congress for final review and approval.

When this three-step process is completed and cooperative agreements are signed a contingent liability would be assumed by the U.S. Government. This contingent liability could amount to $8 billion. Such an amount would cover the domestic portion (40%) of a large gaseous diffusion plant ($1.5 billion) and three smaller centrifuge plants ($3 billion) as well as provide for contingencies ($3.6 billion) including escalation.

I must emphasize that it is the Administration's firm expectation that none of this contingent liability would result in Federal expenditures for the assumption of private ventures because of the high degree of assurance discussed below, that commercial firms will be successful.

The purpose of this letter is to inform you of our plans and to explain why we do not consider the $3 billion contingent liability to be budget authority under provisions of the Congressional Budget Act of 1974. We want to be sure that your Budget Committee accepts this conclusion so that disagreements do not arise at a later date when they might slow up the Congressional approval of the appropriation language mandated by the NFAA.

By way of additional background, uranium enriching--a service essential to the production of nuclear fuel--is now a fully developed production activity carried out in the U.S. solely by ERDA. This large ERDA production activity could be capable of supplying enrichment services to as much as 329,000 MWe of nuclear generating capacity by the early 80's. This capacity, however, is now fully contracted to domestic and foreign utilities. The pending Nuclear Fuel Assurance Act and the proposed appropriation language are intended to assure that: (1) the next increments of uranium enrichment capacity will be built and operating when needed to supply the growing demand for fuel for nuclear powered electricity generating plants; (2) all future capacity increments will be built, financed and operated by private industry, thus ending the current Government monopoly and drain on the Federal Budget; (3) the Government will receive appropriate compensation for the use of its inventions and discoveries; and (4) all necessary domestic and international controls on nuclear materials and classified technologies will be maintained as they would be if the Government itself were to own the new plants.

The construction of new U.S. uranium enrichment plants required by the year 2000 is estimated to cost $30-50 billion (in 1976 dollars). If the Government had to build these plants, the capital costs of the new plants would by 1985 exceed revenues for these plants by about $9 billion (in 1976 dollars, i.e. escallation is not taken into consideration). Even the construction by the Government of only the next increment of new enrichment capacity would have a major budgetary impact for the next ten years.

In contrast, this financial burden would, under the President's proposal outlined above, be borne by the private sector which is ready and willing to do so. Ideally, industry would assume the entire responsibility for building succeeding increments of capacity. without even the limited assurances provided for in the President's Plan. However, it has not been possible for private firms to obtain the necessary debt financing for such ventures because of the special circumstances involving uranium enrichment which are not commonly faced in the business environments.

Specifically: (1) the very large size of an enrichment project; (2) the use of technologies that are classified; (3) regulatory uncertainties associated with a first of a kind venture; and (4) the current financial difficulties of some of the utilities that would be the customers for uranium enrichment services.

The limited cooperation and temporary assurances contemplated in the NFAA are designed specifically to overcome these obstacles and make the risk that is involved for potential lenders of debt money more nearly comparable with the risk associated with other investment opportunities available to them.

Under the President's proposal outlined above, the Federal Government would incur a contingent liability when a cooperative arrangement is entered into by ERDA pursuant to the Nuclear Fuel Assurance Act. The major Government contingent liability is based on the possible need to acquire the domestic assets and assume liabilities (including debt) of a private enrichment project in the unlikely event that the venture were unable to proceed (Section 2 of the proposed Nuclear Fuel Assurance Act). Again, it must be stressed that we do not expect any expenditure of funds for the assumption of assets and liabilities of a private uranium enrichment venture. We are confident in this view because the technology has been thoroughly demonstrated over the past 30 years and because of the oversight role ERDA will play with respect to these private enrichment firms.

Since it is unlikely that future outlays will be incurred, we believe that the $0 billion to be included in appropriation language should be treated as financial assurances and that the limitation on cooperative arrangements ($8 billion) made by ERDA pursuant to the Nuclear Fuel Assurance Act, should not be considered as new budget authority. We base this interpretation on Section 3(a)(2) and 401(c)(2) of the Congressional Budget Act of 1974 (P.L. 93-344).

Section 3(a)(2) of P.L. 93-344 states:

> "The term "budget authority" means authority provided by law to enter into obligations which <u>will</u> result in immediate or future outlays involving Government funds,..". (emphasis added).

Since the $0 billion to be included in appropriation language pursuant to the NFAA in all likelihood <u>will not</u> result in immediate or future outlays, we believe it does not conform to this definition of budget authority.

In the unlikely event that conditions were to arise in the future where it appeared that contingent liabilities would require liquidation, an appropriate amount of budget authority and outlays would be estimated

in the President's budget for that year. Specifically, the estimate of budget authority would be in the amount of the borrowing from the Treasury needed to cover the necessary liquidation. This is similar to other Federal Programs containing contingent liabilities assumed by the Federal Government (e.g., government insurance programs).

I suggest that it might be desirable for my staff to meet with yours to discuss further the Nuclear Fuel Assurance Act and the appropriations language mandated by the Act. This can be arranged through my office.

I would personally appreciate any comments you may have on this matter.

With best personal regards,

Sincerely yours,

(Signed) Jim

James T. Lynn
Director

Distribution
Official File - DO Records
Director's Chron
Director
Deputy Director
Mr. Mitchell
Mr. Loweth
Mr. Taft
Mr. Kearney
Rtn. Room 8002
Chron
SSET/NP:MY:3/2/76

THE WHITE HOUSE

WASHINGTON

April 30, 1976

MEMORANDUM FOR: JIM CANNON
JIM CONNOR
BILL KENDALL
CHARLIE LEPPERT
JIM MITCHELL

FROM: GLENN R. SCHLEEDE

SUBJECT: TALKING PAPER - URANIUM ENRICHMENT

Attached is the revised talking paper requested by Charlie and Bill during last Tuesday's meeting. I sent the earlier version of it to Bob Fri and he indicated that he saw no problems with it. I understand that Jim Lynn, Jim Mitchell or OMB staff have discussed with Bob Seamans and others at ERDA the following:

- The FY 1976 and TQ supplemental. The Appropriations Committees were adamant against reprogramming without a supplemental request. ERDA and OMB are preparing a supplemental that requests the reprogramming for the President's signature. Total is $13 million and all is for A-E work except the cost of a temporary building at Oak Ridge to house people working on uranium enrichment (costing about $1 million). Some additional staff for ERDA are involved (about 25) and OMB is making clear that these people are for work ERDA must do in connection with private ventures and for work on the contingency plan.

- The amounts for FY 1977 for work on the contingency plan. The current ERDA-OMB best estimates are $170 million in BA and $70 million in outlays.

- ERDA-UEA agreement to avoid competition for resources and unnecessary duplication of effort. (Point 5 in attachment.) Among other reasons, this is needed to prevent work on the contingency plan from interfering with the mainline effort of allowing the private ventures a clear chance to succeed. I understand that ERDA has assured OMB that this step will be taken.

Attachment

ELEMENTS OF A COMPROMISE ON URANIUM ENRICHMENT

1. Sections 1, 2 and 3 of the NFAA as submitted by the President and then modified as desired by the JCAE to provide that individual contracts shall be subject to a period of 60 days review by each house of Congress and a concurrent resolution of approval or disapproval.

2. Section 4 which authorized design and construction planning could be modified to authorize $170 million for FY 1977 to continue work on a contingency ("hedge") plan which contemplates a Government-owned add-on enrichment facility. This plan would be followed at least until it was clear that a stand-alone diffusion plant could be built. It might also be continued beyond that time if it appeared that additional diffusion plant capacity were necessary before centrifuge technology was available and no private firm proposed to build the additional diffusion capacity.

3. The President would send up a supplemental request calling for reprogramming of $6 million in FY 1976 and $7 million in the Transition Quarter to continue architect-engineering work for the contingency add-on plan.

4. If the authorization for the contingency plan (2 above) is provided in the NFAA, the Administration would send up a supplemental request for FY 1977 funding for the add-on plant. The latest estimate is $170 million in BA and $70 in outlays. A Presidential request would remove from the JCAE and the Appropriations Subcommittee the onus of increasing the President's budget request by $170 million.

5. ERDA and UEA would reach an immediate agreement to work together to assure that planning, additional procurement and other activities undertaken over the next year or so would have as many common elements as possible and not involve competition for resources or unnecessary duplication of effort. For example, there should be no need to place duplicate orders for construction equipment and nickel powder which could be used in either a stand alone plant or an add-on plant. No exchange of funds need be involved.