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THE WHITE HOUSE

WASHINGTON

July 19, 1976

ADMINISTRATIVELY CONFIDENTIAL

MEMORANDUM FOR: BRENT SCOWCROFT  
JAMES M. CANNON  
JAMES T. LYNN

FROM: JAMES E. CONNOR *JEC*

SUBJECT: Nuclear Policy -- Issues and Problems  
Requiring Attention and Potential Policy  
Statement

The President has reviewed your memorandum (undated) on the above subject and has directed that responsibility be assigned jointly to Scowcroft, Cannon and Lynn to develop and carry out a plan to accomplish the necessary work in cooperation with all the agencies concerned.

Please follow-up with the appropriate action.

cc: Dick Cheney

7/19

Note: Since the P. only approved  
the 3rd ~~xx~~ recommendation, Jim C.  
dictated how memo to Scowcroft,  
Cannon and Lynn should be done.

**THE WHITE HOUSE**

**WASHINGTON**

**July 13, 1976**

**MR PRESIDENT:**

**Nuclear Policy - Issues and Problems  
Requiring Attention and Potential Policy  
Statement**

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The attached joint memorandum prepared by Brent Scowcroft, Jim Cannon and Jim Lynn was staffed to Messrs. Buchen, Marsh and Seidman. Additionally a copy was staffed to Elliot Richardson in his capacity as Chairman of ERC Executive Committee. They all concur in the general direction of the memorandum. Their comments are attached at TAB D.

**Jim Connor**

THE WHITE HOUSE

DECISION

WASHINGTON

MEMORANDUM FOR: THE PRESIDENT

FROM: BRENT SCOVROFT  
JIM CANNON  
JIM LYNN

SUBJECT: NUCLEAR POLICY - ISSUES AND PROBLEMS  
REQUIRING ATTENTION AND POTENTIAL  
POLICY STATEMENT

This memorandum:

- Identifies nuclear export and weapons proliferation, reprocessing and waste management problems requiring early attention.
- Summarizes growing Congressional, public and media concern about these problems, including restrictive legislation now moving through the Congress, criticism of the Administration and the potential for more of both in the months ahead.
- Suggests the need for a major effort over the next six weeks to develop and evaluate several potential policy and program actions, followed by a Presidential statement on nuclear policy by mid-September.

ISSUES

The principal issues presented for your consideration are:

- Whether you wish to direct that the necessary effort be undertaken over the next six weeks to develop and evaluate proposals and present them for your consideration;
- Whether you wish to approve, tentatively, the concept of a major nuclear policy statement in September; and
- If so, where to assign responsibility for assuring that all necessary work is carried out and issues and a draft statement are presented for your consideration.



## BACKGROUND AND STATUS - NUCLEAR POLICY

The acceptability of commercial nuclear power passed a major test with the defeat of Proposition 15 in California. Also, we expect that your uranium enrichment proposal will soon be approved by the Congress, paving the way for expansion of capacity and thus resolving the principal remaining uncertainty at the "front end" of the commercial nuclear power cycle. Some questions continue to be raised about the adequacy of uranium supply, mining and milling capacity and nuclear safety, but these appear to be manageable problems -- with primary responsibility in industry and the Nuclear Regulatory Commission (NRC). However, these front-end problems are aggravated by the uncertainties associated with nuclear fuel reprocessing and waste handling and storage as described below. The development of advanced nuclear technologies (e.g., breeder) is adequately funded in your budget proposals.

However, several major interrelated nuclear power and proliferation issues are now facing us and these are drawing increased attention in the Congress, public and media. These involve:

- U.S. policy on nuclear exports and safeguards to reduce the potential for weapons proliferation.
- U.S. policy with respect to reprocessing of spent fuel from commercial power plants to recover plutonium and unused uranium, and the commercial demonstration of technology.
- The adequacy of U.S. plans for the safe handling and storage of nuclear wastes, particularly assurances that repositories will be available for long-term storage of long-lived and high-level wastes.

The potential solutions for these problems are intertwined; e.g., we cannot resolve policy on reprocessing by other nations until we know how we are going to handle the problem in the U.S. The issues involve both domestic and national security considerations and they affect both the continued acceptability of nuclear power in the U.S. and our position as a major free-world supplier of nuclear equipment and fuel for peaceful purposes. Maintaining our strong position as a free-world supplier is one of our best means of controlling proliferation.



PUBLIC, PRESS AND CONGRESSIONAL ACTIONS AND OUTLOOK

While the California Proposition failed, other referenda involving restrictions on commercial nuclear power have qualified for November ballots in Washington, Oregon, and Colorado. These referenda together with three restrictive laws passed in California prior to the moratorium vote, will keep attention focused on unresolved reprocessing, waste management and proliferation issues.

Concern about proliferation has lead to a number of restrictive provisions in bills now moving through the Congress -- most of which require additional Congressional review of nuclear exports. These requirements will introduce more uncertainty and delay, give potential foreign customers new doubts about the reliability of the U.S. as a supplier of nuclear equipment and materials, and thus hamper U.S. efforts to impose rigid safeguards against proliferation.

Congressional developments, including recent strong criticism from Congressman John Anderson is summarized at Tab A.

The number of press articles is increasing and the tone is growing more critical. Press attention focused particularly on the recent actions by the NRC on export licenses involving Spain and India. (The role and activities of the NRC is also summarized at Tab A.)

NATURE OF THE EFFORT NEEDED

ERDA Administrator Seamans has recommended (letter at Tab B) undertaking a major program to provide nuclear fuel reprocessing in the U.S., permitting foreign participation in this activity, and using this program as the centerpiece of a major Presidential statement on non-proliferation.

We agree that actions on reprocessing should be considered but we believe that a more comprehensive approach should be taken when developing proposals and a draft statement for your consideration. The paper at Tab C outlines in more detail the scope of the problems requiring consideration and identifies a number of possible actions, all of which require further development and evaluation before they are presented to you for consideration. We also believe that an effort should be undertaken immediately, particularly in view of the growing concern in the Congress.

In view of the complex nature of the issues involved, a number of agencies will need to be involved and will need to devote resources to the effort. These include: ERDA, State, ACDA, NRC and, to a lesser extent, Interior, EPA, Commerce, FEA and CEQ.



RECOMMENDATIONS

1. That you direct that work begin immediately to develop and evaluate the potential initiatives described briefly in Tab C (and others subsequently identified), with decision papers presented to you by August 30.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

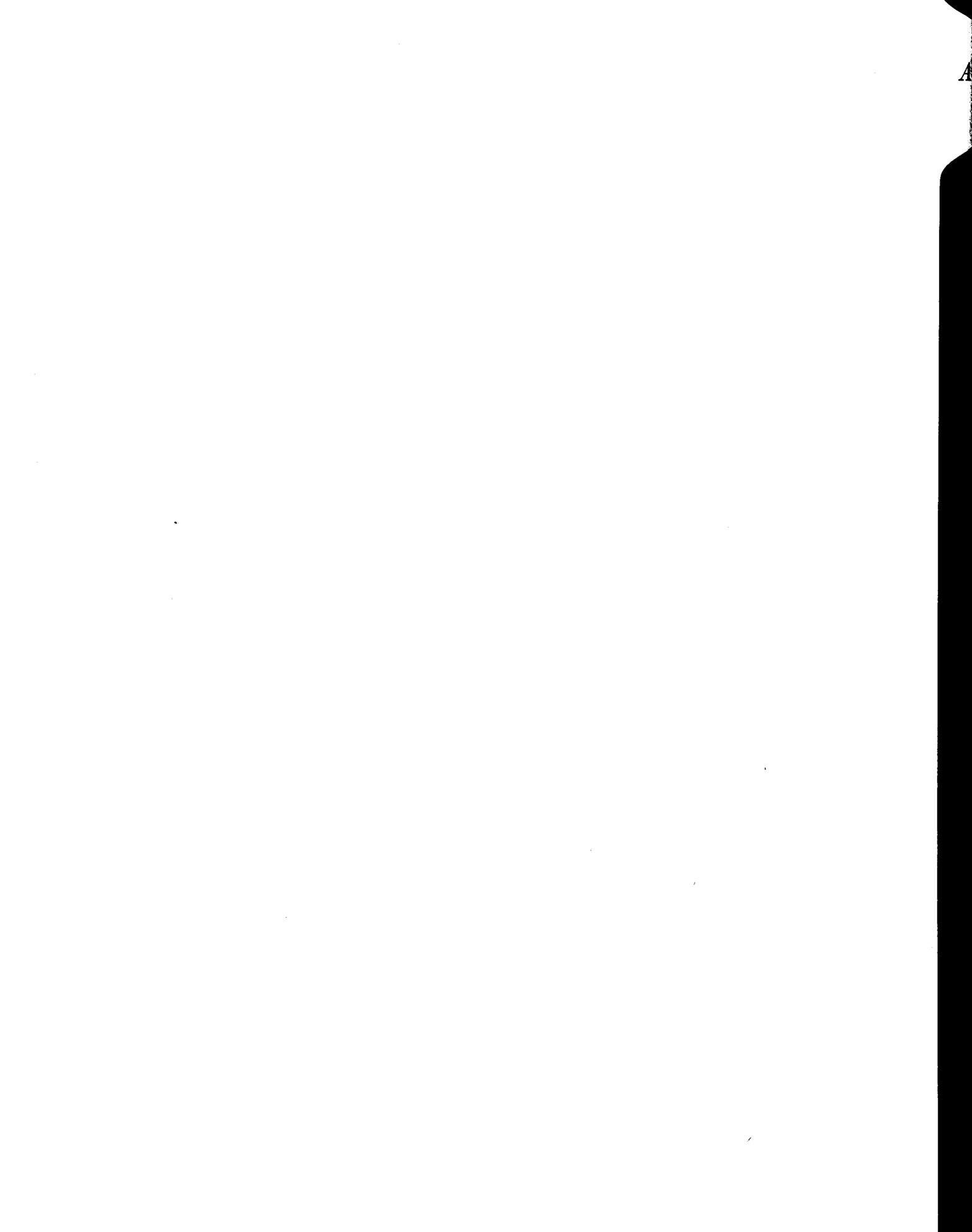
2. That you tentatively decide to issue a major statement on nuclear policy or send a message to Congress in mid-September.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

3. That you assign responsibility jointly to us (Brent Scowcroft, Jim Cannon, and Jim Lynn) to develop and carry out a plan to accomplish the necessary work in cooperation with all the agencies concerned.

APPROVE MEY \_\_\_\_\_ DISAPPROVE \_\_\_\_\_





PRINCIPAL CONGRESSIONAL AND NUCLEAR  
REGULATORY COMMISSIONS (NRC) ACTIONS RELATING  
TO NUCLEAR EXPORTS AND REPROCESSING

- I. CONGRESSIONAL. Principal Congressional actions -- including legislation passed and pending and a sampling of recent criticism -- are as follows:
- A. A 1974 law requires all bilateral "agreements for cooperation" involving significant nuclear exports be submitted to Congress for a 60-day period of review. This was stimulated by concern over Israeli and Egyptian nuclear accords.
  - B. The Military Aid Bill includes a prohibition (the Symington Amendment) against military assistance to countries which furnish or receive nuclear reprocessing or enrichment facilities not under multinational control or IAEA safeguards. Restrictions could be waived by the President in individual cases upon specific findings -- subject to disapproval by a joint resolution of the Congress within 30 days.
  - C. The ERDA 1977 Authorization bill includes an amendment (still subject to final wording in conference after July recess) requiring Congressional approval of the first exports of nuclear fuel or equipment to any country that has not signed the NPT or is not covered by a Congressionally-approved agreement for cooperation.
  - D. The House International Relations Committee is expected to report an amendment to the Export Administration Act which would require prohibitions against reprocessing of fuel exported by U.S. or burned in U.S.-supplied reactors, unless the Secretary of State certifies that there would be at least a 90-day warning before material could be used in a nuclear device.
  - E. The Senate Government Operations Committee reported a bill (S. 1439) on May 14 sponsored by Senators Glenn, Ribicoff and Percy, which (a) shifts additional executive branch nuclear export responsibility to State Department and the independent Nuclear Regulatory Commission from ERDA and Commerce

Department and (b) makes the Congress the referee in disputes between State and NRC over the granting of export licenses. This bill was referred to the JCAE and Foreign Relations for 60 days, which period has now been extended through the end of August. Several Administration witnesses have testified against the bill and Secretary Kissinger was expected to testify on June 29 but his testimony has been delayed. The JCAE is pressing the Administration for alternative proposals.

- F. On June 25, Congressman John Anderson publicly blasted "the White House" for not moving fast enough to resolve problems relating to reprocessing, nuclear exports and proliferation. (This occurred despite our attempts to keep his staff thoroughly informed of Administration efforts.)
- G. Congressman Anderson has since written to JCAE Chairman Pastore urging extensive hearings over the next two months -- with the objective of pressing the Administration for answers on reprocessing, nuclear exports and proliferation issues. (We have been advised informally by Anderson's staff that he probably would agree to urge Senator Pastore to delay hearings if the Administration plans to come forward with new proposals.)
- H. Senator Ribicoff has been a persistent critic for the past two years of what he believes is inadequate executive branch action on reprocessing, nuclear exports and proliferation. Over the past four weeks he has been pressing particularly hard with respect to U.S.-supplied materials (heavy water) in the Indian reactor used to produce material for the device exploded by India in 1974. He will almost certainly use the State Department responses to press his case even more.

II. NUCLEAR REGULATORY COMMISSION. The NRC now plays a major role in nuclear exports and will decide whether, when, and under what conditions reprocessing will be permitted in the U.S. The NRC role has become particularly important because:

- A. Inadvertently, the final responsibility for approving nuclear exports was allowed to be vested in the independent NRC rather than the executive branch. This resulted from the September 1974 law which created ERDA and NRC.
- B. The NRC has just announced decisions on licenses to export a reactor to Spain and an interim supply of fuel for the Tarapur reactor in India. The NRC decisions, including the strong dissent of one Commissioner have been made public. There appears to be agreement within the NRC that additional controls are needed but there is sharp dispute as to whether additional controls -- beyond those in existing agreements -- should now be imposed as a condition of licenses issued under existing agreements. The view of the dissenting Commissioner is getting support in the press and from some members of Congress.
- C. The NRC is now working on an environmental impact statement necessary to its decision -- expected in early 1977 -- as to whether to permit wide scale use of plutonium as reactor fuel. This and subsequent decisions on the licensing of reprocessing facilities will have a major impact on the desirability, feasibility and economics of nuclear fuel reprocessing. (The decision will also have an impact on the viability of the liquid metal fast breeder reactor (LMFBR) which would be fueled with plutonium and which is a major factor in the economic justification for reprocessing of spent fuel elements to recover plutonium and unused uranium.)



ITEM WITHDRAWAL SHEET  
WITHDRAWAL ID 00797

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SUMMARY OF PRINCIPAL NUCLEAR POWER PROBLEMS  
AND POSSIBLE RESPONSES: NUCLEAR EXPORTS,  
REPROCESSING AND WASTE MANAGEMENT

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SUMMARY OF PRINCIPAL NUCLEAR PROBLEMS  
AND POSSIBLE RESPONSES: NUCLEAR EXPORTS AND  
PROLIFERATION, REPROCESSING AND WASTE MANAGEMENT

I. NUCLEAR EXPORTS AND PROLIFERATION

A. Current Problems

1. Growing Congressional, press, and public concern about nuclear weapons proliferation.

Concern is focused primarily upon the greater availability of plutonium which is extracted from "spent" fuel elements (i.e., the process referred to as "reprocessing"). Once separated plutonium is available, very little time -- hours to days -- is needed to make a nuclear weapon. Concern has continued to grow since India exploded a nuclear device in 1974.

2. Growing concern that current U.S. activities to safeguard against diversion of plutonium for weapons purposes is not adequate.

Attention is now focused on exports of nuclear materials and equipment. Some feel that existing controls (detailed below) have been barely adequate for safeguarding reactors and are simply not adequate to guard against diversion of separated plutonium, particularly if it is accumulated in excess amounts.

3. The U.S. position in the foreign market for nuclear equipment and materials is weakening.

This is resulting from (a) the lack of uranium enrichment capacity, (b) growing strength of foreign competition for nuclear equipment and fuels, (c) uncertainty as to U.S. policy on nuclear exports due to our divisive internal debate, and (d) potentially, delays resulting from Nuclear Regulatory Commission (NRC) control of export licenses and growing Congressional review requirements. As the U.S. loses foreign orders to other suppliers, the U.S. also loses its leverage to obtain rigid safeguards agreements.

4. Perception in the media that the Administration is complacent about potential diversion of plutonium from commercial nuclear power plants abroad.

Overall, our controls generally are more rigorous than those applied by most other suppliers, but this has not helped in the current debate. Also, Canada's recent action in cutting off nuclear relationships with India and imposing strong safeguard controls in connection with its exports has set a tough standard of comparison.

B. Principal Existing Measures Affecting Export Policy and the Control of Proliferation.

1. NPT

Approximately 100 nations have signed the Non-Proliferation Treaty (NPT) foreswearing activities leading to the proliferation of weapons. Several important nations have not signed, including France, India, Pakistan, Israel, South Africa and Brazil.

2. Bilateral "Agreements for Cooperation" between the U.S. and about 30 other nations importing nuclear equipment and materials from the U.S.

These agreements specify safeguards that are to be maintained.

3. IAEA

International Atomic Energy Agency establishes safeguards standards and has some inspection capability.

4. Supplier Discussions

State Department is leading negotiations with other supplier nations, seeking agreement to impose more rigid safeguards. There has been some success achieved, but no agreement to defer the export of reprocessing facilities until more effective controls are developed.

5. New International Convention

The U.S. is exploring a new international nuclear physical security convention and other steps to upgrade physical security standards worldwide.

## 6. Pressure on Customer Nations

The U.S. brought pressure on the Government of South Korea to cancel its order with the French for a reprocessing plant and is applying similar pressure on Pakistan to forego acquisition of a reprocessing plant, but with less success.

Congressional and press criticism of export policies of West Germany and France continues strong even though both countries claim they are conforming to guidelines recently developed jointly by supplier nations. Germany still has a commitment to supply enrichment and reprocessing technology to Brazil and France is committed to supply a reprocessing plant to Pakistan. Nature of commitments to others, such as South Africa, are unclear.

## C. Administration Response Thus Far

The Executive Branch has responded to the above in several ways, but the actions (a) have been piecemeal and largely defensive, and (b) appear inadequate in the face of current Congressional and public attitudes. Responses include:

1. Secretary Kissinger summarized U.S. non-proliferation efforts in testimony in opposition to the Glenn-Percy Nuclear Export Reorganization Bill (S. 1439) before the Senate Government Operations Committee. ERDA, ACDA, and other Administration witnesses gave supporting testimony. Administration witnesses have also testified before JCAE, except for Secretary Kissinger who is expected to appear soon.
2. Informal attempts are being made by State, ERDA, and others to limit the scope of restrictions and of Congressional review requirements in pending bills (e.g., Military Aid and ERDA Authorization).
3. An Executive Order was recently issued setting up procedures for getting a coordinated Executive Branch position (State, ERDA, DOD, ACDA, and Commerce) on nuclear export licenses pending before the NRC. (State Department notifies NRC of the coordinated Executive Branch position.)

D. Additional Actions for Development and Evaluation

Several ideas have surfaced for possible alternative responses to the current situation. Each involves significant issues that require development and evaluation before being presented for decision. Possible actions identified thus far include:

1. Significant hardening of U.S. attitude on nuclear exports safeguards required before exports are permitted.

There appears to be divided views on this. Some probably will argue that past and current controls are as good as can be achieved and/or that tougher U.S. positions, taken unilaterally will not be effective recognizing that the requirements we impose are already tougher than those of most other suppliers with whom the U.S. competes for nuclear markets. Others will argue that anything the U.S. can do unilaterally or in cooperation with others that will help reduce the opportunity for proliferation is worth doing, recognizing the threat. Steps that might be considered to achieve a harder and consistent policy include:

- a. Strong public message -- to supplement diplomatic channel efforts now underway -- to other supplier nations (France and Germany) emphasizing the need to curb proliferation and urging them to: (1) stop supplying reprocessing or enrichment technology to other nations, and (2) adopting more rigorous safeguards requirements.
- b. Head of State meetings to carry out (a), above.
- c. Move to renegotiate safeguards controls under existing agreements for cooperation as a condition for further exports, particularly giving the U.S. a veto on whether and where any fuel irradiated in U.S. reactors is reprocessed.

- d. In addition to other actions, but not a substitute for, appoint a panel of experts not now involved in U.S. nuclear export activities to review past and current practices and submit recommendations to you for improvements.
2. Intensify efforts to discourage reprocessing (in the U.S. and abroad) until better controls (technological and institutional) can be worked out. (This needs to be considered in connection with domestic reprocessing issues, discussed in II, below.)

If this policy approach were to be taken, consideration would have to be given to:

- a. Expanding storage for "spent" fuel elements, possibly making storage available to other countries.
  - b. "Buy back" of spent fuel elements.
  - c. Finding ways to replace the energy value of the plutonium and unused uranium in the spent fuel elements (which is in the range of 10-30% of the total energy value if reprocessing and recycle of plutonium was permitted).
  - d. Other incentives to discourage the separation of plutonium through reprocessing.
3. As a means to discourage the spread of reprocessing centers, provide U.S. reprocessing services to foreign countries.

This depends on development of reprocessing in the U.S. since we currently have no commercial reprocessing in operation.

- a. Assist U.S. industry in demonstrating reprocessing and related technology (plutonium conversion, waste handling, safeguards), as discussed in II, below.

- b. Urge or require U.S. firms planning to provide reprocessing services to dedicate a portion of their capacity to serve foreign needs, thereby potentially satisfying foreign needs for many years without the construction of reprocessing plants abroad.
  - c. Go beyond #2 above by offering to allow other governments to participate in the operation of the first expected reprocessing plant (Barnwell, South Carolina) as a demonstration of the concept of a multi-national reprocessing center.
  - d. Determine alternatives to returning plutonium to foreign reprocessing customers -- such as substituting energy equivalent of reprocessed fuel in the form of enriched uranium.
4. Propose international storage for excess plutonium.
- IAEA has authority to establish repositories for excess nuclear materials. The U.S. could propose that this authority be implemented, that all nations store excess plutonium in such repositories and indicate that the U.S. would participate with the deposit of its excess plutonium.
5. Intensify efforts to strengthen IAEA safeguards.
- a. Make available advanced U.S. safeguards technology to other nations and the IAEA.
  - b. Consider further strengthening of IAEA safeguards, expanding the proposal for a \$5 million - 5 year voluntary U.S. contribution announced by the President on February 26, 1976.

## II. NUCLEAR FUEL REPROCESSING AND SPREAD OF REPROCESSING TECHNOLOGY

### A. Background

- 1. The principal driving forces behind the desire to establish a U.S. industry to reprocess "spent" fuel elements from commercial power reactors are to:

- a. recover and reuse the plutonium and unused uranium from elements (with energy value of 10-30% of initial fuel input).
  - b. provide plutonium to fuel liquid metal fast breeder (LMFBR) reactors once they are used commercially.
  - c. reduce irradiated fuel and associated waste products to most manageable forms.
2. Technology for reprocessing has been demonstrated in AEC (now ERDA) operations.
  3. Consistent policy followed that the reprocessing step in the nuclear fuel cycle is the responsibility of industry. Government sponsors R&D.
  4. The principal driving forces behind the spread of reprocessing technology and equipment worldwide are:
    - a. Competition among the suppliers of nuclear energy reactors for sales in third countries;
    - b. Desire on the part of recipients of the technology and equipment to place as large a part of the nuclear fuel cycle as possible under their own national control;
    - c. desire by some for a nuclear weapons capability.

## B. Current Problems

### 1. Demonstrating Technology in Commercial Operations

There is not now any commercial reprocessing capacity in the U.S.:

- a. One plant that was operational (Nuclear Fuel Services) in Western, N.Y., is closed down and probably will not reopen.
- b. A \$70 million plant built at Morris, Illinois by GE is never expected to operate due to technological problems.

- c. A \$260 million plant, including only initial storage and separations stages of reprocessing, has been built in South Carolina by Allied Chemical and General Atomics (AGNES). Its actual operation depends upon:
- obtaining an NRC license;
  - either (a) storage of separated plutonium in liquid form, or (b) construction of a \$150 million conversion facility, for which Government assistance may be needed;
  - construction of a \$350 million waste solidification and packaging facility.

## 2. Licensing

Licensing of reprocessing facility depends upon resolution of a number of issues now pending before the NRC in one major and several other issues. The principal issue is whether to allow widespread recycling of plutonium. This depends upon resolving safety, environmental, economic, and safeguards issues -- which are being covered in a Generic Environmental Impact Statement which should be completed by early 1977, with an NRC decision in mid-1977.

## 3. Alternatives

The NRC statement almost certainly will have to deal with alternatives to reprocessing, some of which (such as indefinite storage of irradiated fuel) have not been fully studied. Also, the extent of the economic advantages of reprocessing depend upon the likelihood and timing of commercial breeder reactors. (The construction of the first demonstration reactor at Clinch River, Tennessee, has not begun, is behind schedule and is growing in cost.) Assuming reprocessing and recycle is permitted, NRC will have to issue complex safety, environmental and safeguards standards and guidelines. A thorough assessment of these factors has not been completed.

4. Decisions needed

Decisions are needed on whether and when to reprocess so that investment decisions can be made by industry to build either: (a) reprocessing facilities, or (b) additional storage facilities for spent fuel elements. One or the other and maybe both are needed to handle spent fuel from plants already in operation. The absence of firm plans is a factor in utility and utility commission decisions on nuclear power and in nuclear moratoria referenda.

5. Barnwell Facility

The consortium building the Barnwell reprocessing facility is experiencing financial problems due to higher costs and uncertainty about the future of reprocessing. Abandonment of the operation is conceivable.

C. Actions Taken or Underway

1. ERDA

a. 1977 Budget. The President's 1977 Budget included funds for additional R&D needed for reprocessing. It also contemplated a supplemental to fund some kind of assistance program to encourage construction of reprocessing facilities, once the right course of action was decided upon. (In practice, it may not be possible to implement a program until NRC decides on recycling of plutonium.)

b. Program Development. In February, ERDA solicited expressions of interest from industry on plans for providing reprocessing and on the types of assistance that might be necessary or appropriate (with emphasis on a minimum Federal role). Over 30 responses were received and ERDA is now considering those in the development of its proposed program.

2. NRC is proceeding with hearings on the completed portions of the plutonium recycle generic impact statement and is completing the remaining portions -- all headed toward a decision in mid-1977.

3. ACDA, ERDA, and State are working to define the concept of a multinational reprocessing center and considering the possibility of some kind of foreign participation in the Barnwell facility. The desire for non-proliferation benefits has already attracted some Congressional support for assisting Barnwell to serve foreign users.

D. Additional Actions for Development and Evaluation. Resolution of questions about domestic reprocessing is key to any major nuclear policy announcements. A major effort will be needed to sort out reprocessing issues.

1. Immediate action to complete the development, analysis, and evaluation of the following:
  - a. The need for, timing of, and alternatives to reprocessing. This should provide a basis for executive branch (non-regulatory) decisions as to whether and when reprocessing should be encouraged. (Note that a decision to defer reprocessing might influence other countries to do the same.)
  - b. Alternative ways for the Government to work with industry to provide reprocessing capacity, assuming that we will proceed domestically with reprocessing.
2. Explore the potential for various forms of foreign involvement in domestic reprocessing facilities -- as outlined in I(D)(3) (pg. 5).

III. NUCLEAR WASTE MANAGEMENT

A. Background

1. Government policy has, since early 1970's, been that the Federal Government would take responsibility for long-term storage of high level wastes. Private industry is responsible (subject to regulation) for handling and packaging of wastes and delivering them in a prescribed form to a Federal repository for long-term storage.

2. Government policy has regarded the handling and storage of lower level radioactive wastes as an industry task, subject to Federal or State regulation. Some problems have emerged but these probably can be resolved within existing arrangements.
3. Approaches to long-term storage have been considered and then rejected: storage in the salt mine in Kansas and a temporary near surface storage facility. The program for developing acceptable approaches and providing a permanent repository heretofore has had relatively low priority.
4. There seems to be general agreement that technology is available to permit safe long-term storage, but there is a long way to go before a repository is in place and ready to receive wastes.
5. International plans and standards for disposal of nuclear wastes have not been adequately addressed.

B. Current Problems

1. The major task facing the Federal Government is finding an acceptable location(s) for a repository, constructing it, and opening it to receive wastes. Current assessments suggest that such a repository should be in place by 1985 and it is not clear that current plans -- which involve at least five Federal agencies -- will result in achieving this objective.
2. Finding a location for a repository acceptable to residents of the region selected will be a difficult task.
3. Related problems involve sorting out the roles and responsibilities of the several agencies involved; particularly, ERDA, NRC, EPA, and Geological Survey, and providing some continuing needs for inter-agency coordination.

4. The absence of convincing plans to have a high-level repository in place are contributing to: (a) the efforts by nuclear power opponents to slow down nuclear power, and (b) questions by utilities and utility commissions as to the desirability of committing to more nuclear plants.
5. Expected increase in nuclear wastes worldwide between now and 1990 will require development of international plans standards.

C. Actions Taken or Underway

1. ERDA

- a. 1977 Budget. The President's 1977 Budget includes \$65 million in outlays (compared to \$12 million in FY 1976) to proceed with a waste management program. A large share of these funds will be used for exploratory drilling of various kinds of geologic formations around the country in order to find a suitable location for a pilot repository and operational repositories.
  - b. Technical Alternatives and Generic Environmental Impact Statement. ERDA has published an extensive technical alternatives document and is proceeding with development of the necessary generic environmental impact statement covering waste management with the objective of issuing a draft statement early in 1977 and a final statement late in 1977.
2. NRC is working on waste handling, packaging, transportation, and storage regulations and an associated environmental impact statement with the objective of completing work in 1978.
  3. Interagency Task Force. An OMB-lead interagency task force is evaluating the schedules and the interagency relationships among the five agencies principally involved: ERDA, NRC, EPA, Geological Survey, and CEQ. This group's work has already identified potential obstacles that would prevent

having a repository available when needed. The problems include: (a) sequencing of each agency's activities so that information will be available to others when needed, (b) overlapping functions between NRC and EPA, and (c) continuing inter-agency coordination.

D. Additional Actions for Development and Evaluation

1. Develop a firm plan setting out all major actions which must be taken over the next ten years and when they will occur -- covering all forms of nuclear waste.
2. Develop a clear statement of roles and responsibilities (including solution of overlap in EPA and NRC functions), and develop arrangements for continuing inter-agency coordination.
3. Consider the extension of our domestic waste management plans and solutions internationally, perhaps through one or more of the following:
  - a. Offer to make waste handling and storage technology available to other nations.
  - b. Offer to investigate international waste disposal sites, either independent of or in conjunction with reprocessing arrangements.

This will require consideration of controversial issues such as the storage in one country of wastes resulting from nuclear energy used in another country.



THE SECRETARY OF COMMERCE

WASHINGTON, D.C. 20230

July 14, 1976

MEMORANDUM FOR JAMES E. CONNOR  
SECRETARY TO THE CABINET

SUBJECT: NUCLEAR POLICY PAPER FOR THE PRESIDENT

Thank you for providing me a copy of the subject memo for the President. Pursuant to our conversation on July 12, I provided copies to members of the ERC Executive Committee on an "Eyes Only" basis for their prompt comment.

As of this point, no significant disagreement with the memorandum for the President has been identified. Attached, for your information, are selected comments from ERC principals.

Frank Zarb and I--along with other members of the ERC--do feel strongly on one bureaucratic point which is relevant to the follow-on work required. That is: given the subject, "Nuclear Policy," and given that the ERC has a working cabinet level committee on nuclear policy, and given that this committee has been dealing specifically with most of the issues raised in the subject memorandum, we feel it would be appropriate, sensible, and in all likelihood more efficient, if the ERC were to be intimately involved in the follow-on analysis. We would hope that the memorandum for the President would be modified to reflect this view.



Elliot L. Richardson

Attachments

THE DEPUTY SECRETARY OF STATE  
WASHINGTON

July 14, 1976

~~SECRET~~

Dear Elliot:

I have reviewed the draft memorandum to the President which you forwarded to ERC members on July 12th.

The Department of State places great importance on strengthening US non-proliferation policies, and both Secretary Kissinger and I have personally sought to move these policies forward. As outlined in Tab C of the Presidential memorandum, the US has underway or planned a wide range of bilateral, multilateral, and international non-proliferation efforts -- not only in response to Congressional concerns, but as initiatives aimed at reducing the dangers and instabilities associated with the further spread of nuclear explosives capabilities.

The prospect of a Presidential nuclear policy statement in mid-September can serve to provide political impetus at the highest level to our non-proliferation efforts. It can also demonstrate the relationship between our domestic nuclear decisions and our international nuclear objectives. We have some concern, however, that the intermingling of domestic and international nuclear policy issues in a Presidential statement could lead to a real or perceived emphasis on domestic issues, thereby weakening the non-proliferation impact of such a statement. We believe, therefore, that we should reserve our judgment, pending further study of concrete ideas, as to whether there should be a single statement covering both areas, separate statements, or some other alternatives.

The Honorable  
Elliot L. Richardson,  
Secretary of Commerce.

~~SECRET~~

DECLASSIFIED

AUTHORITY RAC - nrc - PAF - 1-1-3-3 5/5/08

BY lh NARA, DATE 11/16/09

~~SECRET~~

- 2 -

It should be recognized that not every element of a non-proliferation strategy would be suitable for inclusion in a possible Presidential statement. Many of the elements identified in Tab C of the Presidential memorandum are best pursued through diplomatic channels and could be jeopardized by public discussions, while others may not be ready for the President to surface in September.

One of the central elements for potential inclusion in a Presidential statement is the proposal by Dr. Seamans to provide nuclear fuel reprocessing services for foreign customers in the US and possibly to permit foreign participation in such a facility. While this proposal has a number of positive aspects, there remain key issues which must be resolved before this initiative can be considered for a Presidential statement. In this connection, I have attached for your information my reply to Dr. Seamans' request for comments on his June 9th letter to the President.

Under the arrangements recommended in the Memorandum to the President, the Department of State is therefore prepared to support and participate in the proposed interagency endeavor which would evaluate potential nuclear policy initiatives suitable for inclusion in a possible Presidential statement, with particular attention to exploring the question of how our national reprocessing decisions can support our international non-proliferation objectives. Within this context and working with other interested members of the National Security Council, we would of course continue to take the lead in developing nuclear non-proliferation policy initiatives for consideration by the President.

Personal regards,

Sincerely,



Charles W. Robinson

cc: Brent Scowcroft

~~SECRET~~



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

July 13, 1976

Honorable Elliot L. Richardson  
Secretary of Commerce  
Washington, D. C. 20230

Dear Elliot:

This is with respect to the draft memorandum to the President concerning "Nuclear Policy -- Issues and Problems Requiring Attention and Potential Policy Statement" which you circulated to ERC Executive Committee members for review and comment.

In my judgment, few matters are more essential to the security of this nation and the world than prompt resolution of reprocessing and related nonproliferation issues. At the same time, however, few matters are more complex. For this reason, it is vital that the best possible effort be mounted within the Administration to examine these interrelated issues in the most responsible and effective way. It is not clear from the draft memorandum how such an effort would be managed but, for our part, ERDA fully supports the effort and stands ready to devote whatever resources are necessary to assure its swift and successful completion.

With respect to the language of the draft memorandum, I believe a few changes, set forth in the attachment to this letter, are necessary to correct a possible misunderstanding of my June 9 letter to the President. The draft implies that I recommended a "major program in reprocessing." This is not the case. I recommended that the U.S. undertake a major initiative in this area, listed several possible features of such an initiative, and requested a Presidential direction for a speedy and coordinated study which would become the centerpiece of a truly comprehensive Presidential policy on nuclear power



and nonproliferation, including such matters as nuclear exports and waste management. The language changes set forth in the Tab more accurately reflect my recommendations to the President, and make clear that a policy with respect to reprocessing is essential to -- and interrelated with -- the disposition of related nonproliferation issues.

Sincerely,

A handwritten signature in black ink, appearing to be 'R.C.S.', written in a cursive style.

Robert C. Seamans, Jr.  
Administrator

cc: Honorable James Connor  
Secretary to the Cabinet



Requested Changes in Draft Memorandum  
to the President on Nuclear Policy

---

Page 3, 4th paragraph:

Delete paragraph

Insert: "ERDA Administrator Seamans has recommended (letter at Tab B) undertaking a major study to develop reprocessing and related non-proliferation initiatives to be available to you as soon as possible. Such an initiative could have several features including foreign participation and could be used as the centerpiece of a major Presidential statement on nonproliferation."

Page 3, 5th paragraph:

Delete first sentence

Insert: "We agree that such a study is needed and would recommend a more express inclusion of nuclear exports and other nonproliferation approaches in its scope."



Jim -

Received this after the package went up.

What to do?

Trudy

OBE

COUNCIL OF ECONOMIC ADVISERS  
WASHINGTON

ALAN GREENSPAN CHAIRMAN  
PAUL W. MacAVOY  
BURTON G. MALKIEL

July 16, 1976

MEMORANDUM FOR JAMES E. CONNOR

FROM: Paul W. MacAvoy *pm*

SUBJECT: Cannon-Scowcroft-Lynn Memorandum  
on Nuclear Policy

CEA agrees that a broader approach should be taken to international nuclear power development and security than in the Seamans proposal for an international joint venture in fuel reprocessing. But we do not believe that the draft memo and draft Presidential letter place enough stress on the need for analysis of projected economic effects of proposed alternative fuel handling and storage systems. The economics of costs and benefits have to be evaluated as well as the relative security of one or the other system. Moreover, the tradeoffs of reprocessing for mining of new material and for secure storage of old material have to be made more explicit. CEA and other agencies concerned with benefit-cost analysis should be more involved in the necessary work and CEA should be included as participating (at the bottom of page 3).



THE SECRETARY OF COMMERCE

WASHINGTON, D.C. 20230

July 12, 1976

NOTE FOR MEMBERS OF THE ERC EXECUTIVE COMMITTEE

SUBJECT: Attached Memorandum for the President

The attached is provided for your review and comment to my office by mid-day Wednesday, July 14. Please note that it is "Eyes Only"--we are anxious that there not be leakage on this subject.



Elliot L. Richardson

Attachment

Er

THE WHITE HOUSE

WASHINGTON

DRAFT

DECISION

MEMORANDUM FOR: THE PRESIDENT

FROM: JIM CANNON  
BRENT SCOWCROFT  
JIM LYNN

SUBJECT: NUCLEAR POLICY - ISSUES AND PROBLEMS  
REQUIRING ATTENTION AND POTENTIAL POLICY  
STATEMENT

This memorandum:

- Identifies nuclear export, reprocessing and waste management problems requiring early attention.
- Summarizes growing Congressional, public and media concern about these problems, including restrictive legislation now moving through the Congress, criticism of the Administration and the potential for more of both in the months ahead.
- Suggests the need for a major effort over the next six weeks to develop and evaluate several potential policy and program actions, followed by a Presidential statement on nuclear policy by mid-September.

ISSUES

The principal issues presented for your consideration are:

- Whether you wish to direct that the necessary effort be undertaken over the next six weeks to develop and evaluate proposals and present them for your consideration;
- Whether you wish to approve, tentatively, the concept of a major nuclear policy statement in September; and
- If so, where to assign responsibility for assuring that all necessary work is carried out and issues and a draft statement are presented for your consideration.



## BACKGROUND AND STATUS - NUCLEAR POLICY

The acceptability of commercial nuclear power passed a major test with the defeat of Proposition 13 in California. Also, we expect that your uranium enrichment proposal will soon be approved by the Congress, paving the way for expansion of capacity and thus resolving the principal remaining uncertainty at the "front end" of the commercial nuclear power cycle. Some questions continue to be raised about the adequacy of uranium supply, mining and milling capacity and nuclear safety, but these appear to be manageable problems -- with primary responsibility in industry and the Nuclear Regulatory Commission (NRC). The development of advanced nuclear technologies (e.g., breeder) is adequately funded in your budget proposals.

However, several major nuclear power issues are now facing us and these are drawing increased attention in the Congress, public and media. These involve:

- U.S. policy on nuclear exports and safeguards to reduce the potential for weapons proliferation.
- U.S. policy with respect to reprocessing of spent fuel from commercial power plants to recover plutonium and unused uranium, and the commercial demonstration of technology.
- The adequacy of U.S. plans for the safe handling and storage of nuclear wastes, particularly assurances that repositories will be available for long-term storage of long-lived and high-level wastes.

The potential solution for these problems are intertwined; e.g., we cannot resolve policy on reprocessing with respect to exports until we know how we are going to handle the problem in the U.S. The issues involve both domestic and national security considerations and they affect both the continued acceptability of nuclear power in the U.S. and our position as a major free-world supplier of nuclear equipment and fuel for peaceful purposes.

## PUBLIC, PRESS AND CONGRESSIONAL ACTIONS AND OUTLOOK

While the California Proposition failed, other referenda involving restrictions on commercial nuclear power have qualified for November ballots in Washington, Oregon, and Colorado. These referenda together with three restrictive laws passed in California prior to the moratorium vote, will keep attention focused on unresolved reprocessing, waste management and proliferation issues.



Concern about proliferation has lead to a number of restrictive provisions in bills now moving through the Congress -- most of which require additional Congressional review of nuclear exports. These requirements will introduce more uncertainty and delay, give potential foreign customers new doubts about the reliability of the U.S. as a supplier of nuclear equipment and materials, and thus hamper U.S. efforts to impose rigid safeguards.

Congressional developments, including recent strong criticism from Congressman John Anderson is summarized at Tab A.

The number of press articles is increasing and the tone is growing more critical. Press attention focused particularly on the recent actions by the NRC on export licenses involving Spain and India. (The role and activities of the NRC is also summarized at Tab A.)

#### NATURE OF THE EFFORT NEEDED

ERDA Administrator Seamans has recommended (letter at Tab B) undertaking a major program to provide nuclear fuel reprocessing in the U.S., permitting foreign participation in this activity, and using this program as the centerpiece of a major Presidential statement on non-proliferation.

We agree that actions on reprocessing should be considered but we believe that a more comprehensive approach should be taken when developing proposals and a draft statement for your consideration. The paper at Tab C outlines in more detail the scope of the problems requiring consideration and identifies a number of possible actions, all of which require further development and evaluation before they are presented to you for consideration. We also believe that an effort should be undertaken immediately, particularly in view of the growing concern in the Congress.

In view of the complex nature of the issues involved, a number of agencies will need to be involved and will need to devote resources to the effort. These include: ERDA, State, ACDA, NRC and, to a lesser extent, Interior, EPA, Commerce, FEA and CEQ.



RECOMMENDATIONS

1. That you direct that work begin immediately to develop and evaluate the potential initiatives described briefly in Tab C (and others subsequently identified), with decision papers presented to you by August 30.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

2. That you tentatively decide to issue a major statement on nuclear policy or send a message to Congress in mid-September.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

3. That you assign responsibility jointly to us (Brent Scowcroft, Jim Cannon, and Jim Lynn) to develop and carry out a plan to accomplish the necessary work in cooperation with all the agencies concerned.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_



PRINCIPAL CONGRESSIONAL AND NUCLEAR  
REGULATORY COMMISSIONS (NRC) ACTIONS RELATING  
TO NUCLEAR EXPORTS AND REPROCESSING

- I. CONGRESSIONAL. Principal Congressional actions -- including legislation passed and pending and a sampling criticism -- are as follows:
- A. A 1974 law requires all bilateral "agreements for cooperation" involving significant nuclear exports be submitted to Congress for a 60-day period of review. This was stimulated by concern over Israeli and Egyptian nuclear accords.
  - B. The Military Aid Bill includes a prohibition (the Symington Amendment) against military assistance to countries which furnish or receive nuclear reprocessing or enrichment facilities not under multinational control or IAEA safeguards. Restrictions could be waived by the President in individual cases upon specific findings -- if the waiver is not then overridden by Congress within 30 days.
  - C. The ERDA 1977 Authorization bill includes an amendment (still subject to final wording in conference after July recess) requiring Congressional approval of the first exports of nuclear fuel or equipment to any country that has not signed the NPT or is not covered by a Congressionally-approved agreement for cooperation.
  - D. The House International Relations Committee is expected to report an amendment to the Export Administration Act which would require prohibitions against reprocessing of fuel exported by U.S. or burned in U.S.-supplied reactors, unless the Secretary of State certifies that there would be at least a 90-day warning before material could be used in a nuclear device.
  - E. The Senate Government Operations Committee reported a bill (S. 1439) on May 14 sponsored by Senators Glenn, Ribicoff and Percy, which (a) shifts additional executive branch nuclear export responsibility to State Department and the independent Nuclear Regulatory Commission from ERDA and Commerce Department and (b) makes the Congress the referee in disputes between State and NRC over the granting of export licences. This bill was referred to the SCAC and Foreign Relations for 60 days, which period has now been extended through the end of August. Several

Administration witnesses have testified against the bill and Secretary Kissinger was expected to testify on June 29 but his testimony has been delayed. The JCAE is pressing the Administration for alternative proposals.

- F. On June 25, Congressman John Anderson publicly blasted "the White House" for not moving fast enough to resolve problems relating to reprocessing, nuclear exports and proliferation. (This occurred despite our attempts to keep his staff thoroughly informed of Administration efforts.)
- G. Congressman Anderson has since written to JCAE Chairman Pastore urging extensive hearings over the next two months -- with the objective of pressing the Administration for answers on reprocessing, nuclear exports and proliferation issues. (We have been advised informally by Anderson's staff that he probably would agree to urge Senator Pastore to delay hearings if the Administration plans to come forward with new proposals.)
- H. Senator Ribicoff has been a persistent critic for the past two years of what he believes is inadequate executive branch action on reprocessing, nuclear exports and proliferation. Over the past four weeks he has been pressing particularly hard with respect to U.S.-supplied materials (heavy water) in the Indian reactor used to produce material for the device exploded by India in 1974. He will almost certainly use the State Department responses to press his case even more.

II. NUCLEAR REGULATORY COMMISSION. The NRC now plays a major role in nuclear exports and will decide whether, when, and under what conditions reprocessing will be permitted in the U.S. The NRC role has become particularly important because:

- A. Inadvertently, the final responsibility for approving nuclear exports was allowed to be vested in the independent NRC rather than the executive branch. This resulted from the September 1974 law which created ERDA and NRC.
- B. The NRC has just announced decisions on licenses to export a reactor to Spain and an interim supply of fuel for the Tarapur reactor in India. The NRC decisions, including the strong dissent of one Commissioner have been made public. There appears to be agreement within the NRC that additional

controls are needed but there is sharp dispute as to whether additional controls -- beyond those in existing agreements -- should now be imposed as a condition of licenses issued under existing agreements. The view of the dissenting Commissioner is getting support in the press and from some members of Congress.

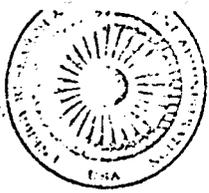
- C. The NRC is now working on an environmental impact statement necessary to its decision -- expected in early 1977 -- as to whether to permit wide scale use of plutonium as reactor fuel. This and subsequent decisions on the licensing of reprocessing facilities will have a major impact on the desirability, feasibility and economics of nuclear fuel reprocessing. (The decision will also have an impact on the viability of the liquid metal fast breeder reactor (LMFBR) which would be fueled with plutonium and which is a major factor in the economic justification for reprocessing of spent fuel elements to recover plutonium and unused uranium.)

SEAMANS LETTER TO THE PRESIDENT

PROVIDED EARLIER. IT'S CLASSIFIED

CONFIDENTIAL

*another copy attached for your convenience*



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

20802

JUN 9 1976

**DECLASSIFIED**

**E.O. 12958 SEC. 3.8**

MR 04-100 #11; DOE JEL 6/23/06

BY del NARA DATE 8/4/06

The President  
The White House

Dear Mr. President:

I believe there is an opportunity and a need for the United States to take a major initiative to resolve uncertainties that now exist in the nuclear fuel cycle and to reduce the risk of international proliferation of special nuclear materials. This opportunity, if successfully pursued, would complete your evolving nuclear policy and could be the central feature of a major Presidential Message.

Background:

Until recently, Federal nuclear policy: (1) stressed Government funding of enrichment plants; (2) assumed that reprocessing of spent nuclear fuel and recycling of plutonium and uranium would be accomplished in the private sector without Government support; and (3) placed less stress on safeguards against theft or diversion of nuclear material than now seems wise.

Your initiatives in the past two years have substantially reformed this policy. Specifically you have:

- Limited the Federal role in enrichment by supporting private entry as the best means for assuring additional enrichment capacity;
- Increased Government research in reprocessing and recycling so that safe and secure private facilities could be demonstrated;
- Sponsored a major Government program to demonstrate the safe management and disposal of nuclear waste; and
- Increased stress on materials and physical safeguards at both Government-owned and private facilities licensed by the Nuclear Regulatory Commission.



NATIONAL SECURITY

SUBJECT TO GENERAL DECLASSIFICATION SCHEDULE OF EXECUTIVE ORDER 11652 AND SPECIALLY DOWNGRADED AT TWO YEAR INTERVALS AND DECLASSIFIED ON DEC. 31

(last year)



These measures will greatly strengthen the nuclear fuel cycle and our controls over the handling and utilization of plutonium in this country. Yet, despite substantial progress, a final and crucial issue remains unresolved -- the need to control carefully the world's supply of plutonium. Among the factors bearing on this issue are:

- A recent court decision most likely will prevent the Nuclear Regulatory Commission from licensing private reprocessing facilities that would produce plutonium for recycled use until approval of the generic environmental statement on mixed oxide fuels, probably years from now.
- Uncertainty is growing among other nations about the United States as a reliable supplier of reactors and fuel because of (1) final decisions on export licenses now rest with the Nuclear Regulatory Commission; and (2) recent amendments to nuclear legislation indicating firm Congressional intent to review individual nuclear initiatives with the private sector.
- Other supplier nations are developing national reprocessing and recycling capabilities, and some are under pressure commercially to sell plants to other countries desiring to build an integrated indigenous nuclear power capability, for example, Iran and Brazil. This trend could multiply the chances of theft or diversion of plutonium and could lead to a dramatic increase in the number of nations with nuclear weapons.
- Multinational regional reprocessing centers have been suggested as a means for minimizing this proliferation. However, the technical, logistical and political feasibility of the idea has yet to be demonstrated.

Recommendation:

I believe the time is at hand for the United States to address this basic issue with a major initiative. Such an initiative might have the following features:



- An offer to supplier and consumer states to join with the United States to demonstrate the viability of a multinational reprocessing approach using the United States as the demonstration site. The question of excess plutonium and disposal of nuclear waste resulting from the reprocessing requires further exploration to optimize the attractiveness to both the host and participating nations.
- A call upon supplier nations to suspend temporarily the export of reprocessing technology until the multinational centers or other effective controls have been agreed to. I have already suggested this to the Secretary of State in a letter dated May 13, 1976.
- A commitment to employ in the multinational centers and to make available advanced United States safeguards and security technology.

The key to the initiative is a willingness of the United States to offer reprocessing and recycling services to other nations and to open our facilities to international inspection. The facility could well be a new plant or a partially completed private plant at Barnwell, South Carolina that was financed by a consortium composed of Allied Chemical, Gulf Oil Corporation and Royal Dutch Shell. Arrangements for serving foreign needs from this facility would, of course, have to be worked out, however, it is anticipated that the consortium will have an interest in a governmentally-encouraged demonstration.

In any event, the United States could provide some funding and appropriate technical assistance and guarantees for the establishment of an international reprocessing facility in the United States and invite those nations which would utilize the services of such a facility to provide a pro rata share of operating expenses. Of course, a successful international demonstration, under the auspices of the United States, would also materially assist in the development of our domestic reprocessing capability over the long run as increasing nuclear power production results in needed new reprocessing facilities.



Such an initiative could become the centerpiece of a truly comprehensive Presidential policy on nuclear power and non-proliferation.

Decision:

If you approve, I will pursue and intensify work with appropriate departments and agencies to develop a recommended nuclear reprocessing initiative to be available to you as soon as possible.

Respectfully yours,



Robert C. Seamans, Jr.  
Administrator

cc: Elliott Richardson



~~CONFIDENTIAL~~

00803

Honorable Robert C. Seamans, Jr.  
Administrator  
Energy Research and Development  
Administration  
Washington, D. C. 20545

Dear Bob:

I agree in principle with the concepts outlined in your letter to me of June 9, 1976, and direct you to proceed on an accelerated basis and in coordination with the Energy Resources Council to review and develop in further detail the policy initiatives that I should undertake with respect to nuclear reprocessing and related non-proliferation matters.

In this regard, you should include in your analyses (1) a re-examination of the validity, necessity, and desirability of reprocessing spent nuclear fuel; (2) further definition of how a multinational reprocessing demonstration center in the United States would be established and operated, including the role of IAEA; and (3) optimum means for handling excess plutonium resulting from the reprocessing.

In addition, it would be well to address other nuclear problems such as waste management which, along with reprocessing initiatives, could provide the framework for a comprehensive nuclear policy to be adopted and enunciated in 2-3 months.

Please strive to complete this review and forward your recommendations to me by August 15, 1976.

Sincerely,

The President

cc: Elliott Richardson

SUMMARY OF PRINCIPAL NUCLEAR POWER PROBLEMS  
AND POSSIBLE RESPONSES: NUCLEAR EXPORTS,  
REPROCESSING AND WASTE MANAGEMENT

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SUMMARY OF PRINCIPAL NUCLEAR POWER PROBLEMS  
AND POSSIBLE RESPONSES: NUCLEAR EXPORTS,  
REPROCESSING AND WASTE MANAGEMENT

I. NUCLEAR EXPORTS

A. Current Problems

1. Growing Congressional, press, and public concern about nuclear weapons proliferation.

Concern is focused primarily upon the greater availability of plutonium which is extracted from "spent" fuel elements removed from nuclear power reactors (i.e., referred to as reprocessing). Concern has continued to grow since India exploded a nuclear device in 1974.

2. Growing concern that current U.S. activities to safeguard against diversion of plutonium for weapons purposes is not adequate.

Attention is now focused on exports of nuclear materials and equipment. Some feel that existing controls (detailed below) have been barely adequate for safeguarding reactors and are simply not adequate to guard against diversion of separated plutonium, particularly if it is accumulated in excess amounts.

3. The U.S. position in the foreign market for nuclear equipment and materials is weakening.

This is resulting from (a) the lack of uranium enrichment capacity, (b) growing strength of foreign competition for nuclear equipment and fuels, (c) uncertainty as to U.S. policy on nuclear exports due to our divisive internal debate, and (d) potentially, delays resulting from Nuclear Regulatory Commission (NRC) control of export licenses and growing Congressional review requirements. As the U.S. loses foreign orders to other suppliers, the U.S. also loses its leverage to obtain rigid safeguards agreements.

4. Perception in the media that the Administration is complacent about potential diversion of plutonium from commercial nuclear power plants abroad.

Overall, our controls generally are more rigorous than those applied by most other suppliers, but this has not helped in the current debate. Also, Canada's recent action in cutting off nuclear relationships with India and imposing strong

safeguard controls in connection with its exports has set a tough standard of comparison.

B. Principal Existing Measures Affecting Export Policy and the Control of Proliferation.

1. NPT

Approximately 100 nations have signed the Non-Proliferation Treaty (NPT) forswearing activities leading to the proliferation of weapons. Several important nations have not signed, including France, India, Pakistan, Israel, South Africa and Brazil.

2. Bilateral "Agreements for Cooperation" between the U.S. and about 30 other nations importing nuclear equipment and materials from the U.S.

These agreements specify safeguards that are to be maintained.

3. IAEA

International Atomic Energy Agency establishes safeguards standards and has some inspection capability.

4. Supplier Discussions

State Department is leading negotiations with other supplier nations, seeking agreement to impose more rigid safeguards. There has been some success achieved, but no agreement to defer the export of reprocessing facilities until more effective controls are developed.

5. New International Convention

The U.S. is exploring a new international nuclear physical security convention and other steps to upgrade physical security standards worldwide.

6. Pressure on Customer Nations

The U.S. brought pressure on the Government of South Korea to cancel its order with the French for a reprocessing plant and is applying similar pressure on Pakistan to forego acquisition of a reprocessing plant, but with less success.

Congressional and press criticism of export policies of West Germany and France continues strong even though both countries claim they are conforming to guidelines recently developed jointly by supplier nations. Germany still has a commitment to supply enrichment and reprocessing technology to Brazil and France is committed to supply a reprocessing plant to Pakistan. Nature of commitments to others, such as South Africa, are unclear.

C. Administration Response Thus Far

The Executive Branch has responded to the above in several ways, but the actions (a) have been piecemeal and largely defensive, and (b) appear inadequate in the face of current Congressional and public attitudes. Responses include:

1. Secretary Kissinger summarized U.S. non-proliferation efforts in testimony in opposition to the Glenn-Percy Nuclear Export Reorganization Bill (S. 1439) before the Senate Government Operations Committee. ERDA, ACDA, and other Administration witnesses gave supporting testimony. Administration witnesses have also testified before JCAE, except for Secretary Kissinger who is expected to appear soon.
2. Informal attempts are being made by State, ERDA, and others to limit the scope of restrictions and of Congressional review requirements in pending bills (e.g., Military Aid and ERDA Authorization).
3. An Executive Order was recently issued setting up procedures for getting a coordinated Executive Branch position (State, ERDA, DOD, ACDA, and Commerce) on nuclear export licenses pending before the NRC. (State Department notifies NRC of the coordinated Executive Branch position.)

D. Possible Additional Responses

Several ideas have surfaced for possible alternative responses to the current situation. Each involves significant issues that require development and evaluation before being presented for decision. Possible actions identified thus far include:

1. Significant hardening of U.S. attitude on nuclear exports safeguards required before exports are permitted.

There appears to be divided views on this. Some probably will argue that past and current controls are as good as can be achieved and/or that tougher U.S. positions, taken unilaterally will not be effective recognizing that the requirements we impose are already tougher than those of most other suppliers with whom the U.S. competes for nuclear markets. Others will argue that anything the U.S. can do unilaterally or in cooperation with others that will help reduce the opportunity for proliferation is worth doing, recognizing the threat. Steps that might be considered to achieve a harder and consistent policy include:

- a. Strong public message -- to supplement diplomatic channel efforts now underway -- to other supplier nations (France and Germany) emphasizing the need to curb proliferation and urging them to: (1) stop supplying reprocessing or enrichment technology to other nations, and (2) adopting more rigorous safeguards requirements.
  - b. Head of State meetings to carry out a, above.
  - c. Move to renegotiate safeguards controls under existing agreements for cooperation as a condition for further exports, particularly giving the U.S. a veto on whether and where any fuel irradiated in U.S. reactors is reprocessed.
  - d. In addition to other actions, but not a substitute for, appoint a panel of experts not now involved in U.S. nuclear export activities to review past and current practices and submit recommendations to you for improvements.
2. Intensify efforts to discourage reprocessing (in the U.S. and abroad) until better controls (technological and institutional) can be worked out. (This needs to be considered in connection with domestic reprocessing issues, discussed in II, below.)

If this policy approach were to be taken, consideration would have to be given to:

- a. Expanding storage for "spent" fuel elements, possibly making storage available to other countries.
  - b. "Buy back" of spent fuel elements from other countries.
  - c. Finding ways to replace the energy value of the plutonium and unused uranium in the spent fuel elements (which is in the range of 10-30% of the total energy value if reprocessing and recycle of plutonium was permitted).
  - d. Other incentives to discourage the separation of plutonium through reprocessing.
3. As a means to discourage the spread of reprocessing centers, provide U.S. reprocessing services to foreign countries.

This depends on development of reprocessing in the U.S. since we currently have no commercial reprocessing in operation.

- a. Assist U.S. industry in demonstrating reprocessing and related technology (plutonium conversion, waste handling, safeguards), as discussed in II, below.
  - b. Urge or require U.S. firms planning to provide reprocessing services to dedicate a portion of their capacity to serve foreign needs, thereby potentially satisfying foreign needs for many years without the construction of reprocessing plants abroad.
  - c. Go beyond #2 above by offering to allow other governments to participate in the operation of the first expected reprocessing plant (Barnwell, South Carolina) as a demonstration of the concept of a multi-national reprocessing center.
4. Promote international storage for excess plutonium.

IAEA has authority to establish repositories for excess nuclear materials. The U.S. could propose that this authority be implemented, that all nations store excess plutonium in such repositories.

and indicate that the U.S. would participate with a deposit of its excess plutonium.

5. Intensify efforts to strengthen IAEA safeguards.
  - a. Make available advanced U.S. safeguards technology to other nations and the IAEA.
  - b. Consider further strengthening of IAEA safeguards, expanding the proposal for a \$5 million - 5 year voluntary U.S. contribution announced by the President on February 26, 1976.

## II. NUCLEAR FUEL REPROCESSING

### A. Background

1. The principal driving forces behind the desire to establish an industry to reprocess "spent" fuel elements from commercial power reactors are to:
  - a. recover and reuse the plutonium and unused uranium from elements (with energy value of 10-30% of initial fuel input).
  - b. provide plutonium to fuel liquid metal fast breeder (LMFBR) reactors once they are used commercially.
  - c. reduce irradiated fuel and associated waste products to most manageable forms.
2. Technology for reprocessing has been demonstrated in AEC (now ERDA) operations.
3. Consistent policy followed that the reprocessing step in the nuclear fuel cycle is the responsibility of industry. Government sponsors R&D.

### B. Current Problems

#### 1. Demonstrating Technology in Commercial Operations

There is not now any commercial reprocessing capacity in the U.S.:

- o One plant that operational (Nuclear Fuel Services) in Western, N.Y., is closed down and probably will not reopen.
- o A \$70 million plant built at Morris, Illinois

by GE is never expected to operate due to technological problems.

- o A \$300 million plant, including only initial storage and separations stages of reprocessing, has been built in South Carolina by Allied Chemical and General Atomics (AGNES). Its actual operation depends upon:
  - obtaining an NRC license;
  - either (a) storage of separated plutonium in liquid form, or (b) construction of conversion facility; for which Government assistance may be needed;
  - construction of waste packaging facilities;
  - resolution of questions and providing facilities for long-term storage of wastes.

## 2. Licensing

Licensing of reprocessing facility depends upon resolution of a number of issues now pending before the NRC in one major and several other issues. The principal issue is whether to allow widespread recycling of plutonium. This depends upon resolving safety, environmental, economic, and safeguards issues -- which are being covered in a Generic Environmental Impact Statement which should be completed by early 1977, with an NRC decision in mid-1977.

## 3. Alternatives

The NRC statement almost certainly will have to deal with alternatives to reprocessing, some of which (such as indefinite storage of irradiated fuel) have not been fully studied. Also, the economics of reprocessing depend upon the likelihood and timing of commercial breeder reactors -- when construction of the first demonstration reactor at Clinch River, Tennessee, has begun, is behind schedule and is growing in cost. Assuming reprocessing and recycle is permitted, NRC will have to issue complex safety, environmental and safeguards standards and guidelines. A thorough assessment of these factors has not been completed.

## 4. Decisions needed

Decisions are needed on whether and when to reprocess so that investment decisions can be made by industry to build either: (a) reprocessing facilities, or (b) additional storage facilities

for spent fuel elements. One or the other is needed to handle spent fuel from plants already in operation. The absence of firm plans is a factor in utility and utility commission decisions on nuclear power and in nuclear moratoria referenda.

5. Barnswell Facility

The consortium building the Barnswell facility is experiencing financial problems due to higher costs and uncertainty about the future of reprocessing. Abandonment of the operation is conceivable.

C. Actions Taken or Underway

1. ERDA

- o 1977 Budget. The President's 1977 Budget included funds for additional R&D needed for reprocessing. It also contemplated a supplemental to fund some kind of assistance program to encourage construction of reprocessing facilities, once the right course of action was decided upon.
- o Program Development. In February, ERDA solicited expressions of interest from industry on plans for providing reprocessing and on the types of assistance that might be necessary or appropriate (with emphasis on a minimum Federal role). Over 30 responses were received and ERDA is now considering those in the development of its proposed program.

2. NRC is proceeding with hearings on the completed portions of the plutonium recycle generic impact statement and is completing the remaining portions -- all headed toward a decision in mid-1977.

3. ACDA, ERDA, and State are working to define the concept of a multinational reprocessing center and considering the possibility of some kind of foreign participation in the Barnswell facility.

D. Possible Additional Actions

1. Complete the development, analysis, and evaluation of the following as soon as possible:
  - o The need for, the timing of and the alternatives to reprocessing. This should provide a basis for executive branch (non-regulatory) decisions as to whether and when reprocessing should be encouraged. (Note that a decision to defer reprocessing might influence other countries to do the same.)
  - o Alternative ways for the Government to work with industry to provide reprocessing capacity, assuming that we will proceed domestically with reprocessing.
2. Explore the potential for various forms of foreign involvement in domestic reprocessing facilities -- as outlined in I(D) (3) (pg. 5).

III. NUCLEAR WASTE MANAGEMENT

A. Background

1. Government policy has regarded the handling and storage of lower level radioactive wastes as an industry task, subject to Federal or State regulation. Some problems have emerged but these probably can be resolved within existing arrangements.
2. Government policy with respect to high level wastes has been based on the concept of industry responsibility (subject to regulation) for handling and packaging of wastes and delivering them in a prescribed form to a Federal repository for long-term storage.
3. Approaches to long-term storage have been considered and then rejected: storage in the salt mine in Kansas and a temporary near surface storage facility. The program for developing acceptable approaches and providing a permanent repository heretofore has had relatively low priority. There seems to be general agreement that technology is available to permit safe long-term storage, but there is a long way to go before a repository is in place and ready to receive wastes.

B. Current Problems

1. The major task facing the Federal Government is finding an acceptable location(s) for a repository, constructing it, and opening it to receive wastes. Current assessments suggest that such a repository should be in place by 1985 and it is not clear that current plans -- which involve at least five Federal agencies -- will result in achieving this objective.
2. Finding a location for a repository acceptable to residents of the region selected will be a difficult task.
3. Related problems involve sorting out the roles and responsibilities of the several agencies involved; particularly, ERDA, NRC, EPA, and Geological Survey, and providing some continuing needs for inter-agency coordination.
4. The absence of convincing plans to have a high-level repository in place for contributing to: (a) the efforts by nuclear power opponents to slow down nuclear power, and (b) questions by utilities and utility commissions as to the desirability of committing to more nuclear plants.

C. Actions Taken or Underway

1. ERDA

- o 1977 Budget. The President's 1977 Budget includes \$65 million in outlays (compared to \$12 million in FY 1976) to proceed with a waste management program. A large share of these funds will be used for exploratory drilling of various kinds of geologic formations around the country in order to find a suitable location for a pilot repository and operational repositories.
- o Technical Alternatives and Generic Environmental Impact Statement. ERDA has published an extensive technical alternatives document and is proceeding with development of the necessary generic environmental impact statement covering waste management with the objective of issuing a draft statement early in 1977 and a final statement late in 1977.

2. NRC is working on waste handling, packaging, transportation, and storage regulations and an associated environmental impact statement with the objective of completing work in 1978.
3. Interagency Task Force. An OMB-lead interagency task force is evaluating the schedules and the interagency relationships among the five agencies principally involved: ERDA, NRC, EPA, Geological Survey, and CEQ. This group's work has already identified potential obstacles that would prevent having a repository available when needed. The problems include: (a) sequencing of each agency's activities so that information will be available to others when needed, (b) overlapping functions between NRC and EPA, and (c) continuing interagency coordination.

D. Possible Additional Actions

1. Develop a firm plan setting out all major actions which must be taken over the next ten years and when they will occur -- covering all forms of nuclear waste.
2. Develop a clear statement of roles and responsibilities (including solution of overlap in EPA and NRC functions), and develop arrangements for continuing interagency coordination.
3. Consider the extension of our domestic waste management plans and solutions internationally, perhaps through one or more of the following:
  - a. Offer to make waste handling and storage technology available to other nations.
  - b. Offer to investigate international waste disposal sites, either independent of or in conjunction with reprocessing arrangements.

This will require consideration of controversial issues such as the storage in one country of wastes resulting from nuclear energy used in another country.

back 7/19/76

July 13, 1976

MR PRESIDENT:

**Nuclear Policy - Issues and Problems  
Requiring Attention and Potential Policy  
Statement**

---

The attached joint memorandum prepared by Brent Scowcroft, Jim Cannon and Jim Lynn was staffed to Messrs. Buchen, Marsh and Seidman. Additionally a copy was staffed to Elliot Richardson in his capacity as Chairman of ERC Executive Committee. They all concur in the general direction of the memorandum. Their comments are attached at TAB D.

Jim Connor

THE WHITE HOUSE  
WASHINGTON

*not sent*

July 13, 1976

MR PRESIDENT:

Nuclear Policy - Issues and Problems  
Requiring Attention and Potential Policy  
Statement

The attached joint memorandum prepared by Brent Scowcroft, Jim Cannon and Jim Lynn was additionally staffed to Messrs. Buchen, Marsh and Seidman.

Phil Buchen had no objections to the recommendation.

Jack Marsh who is on leave declined to comment on the telephone.

Bill Seidman commented: Approved Recommendation #1 and #2, however, on #3 he "believes it would work better if one agency (or at most two) are given responsibility."

Jim Connor

THE WHITE HOUSE

ACTION MEMORANDUM

WASHINGTON

LOG NO.:

Date: July 12, 1976

Time:

FOR ACTION:

cc (for information):

Phil Buchen

✓ Jack Marsh

✓ Bill Seidman

FROM THE STAFF SECRETARY

DUE: Date: Monday, July 12, 1976

Time: C. O. B.

SUBJECT:

Joint memorandum from Brent Scowcroft  
Jim Cannon and Jim Lynn re: Nuclear Policy  
Issues and Problems Requiring Attention  
and Potential Policy Statement

ACTION REQUESTED:

\_\_\_ For Necessary Action

X For Your Recommendations

\_\_\_ Prepare Agenda and Brief

\_\_\_ Draft Reply

X For Your Comments

\_\_\_ Draft Remarks

REMARKS:

*Marsh - declined to comment  
since not in office*  
*Seidman - see comment*  
*Buchen - no objection -*

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

Jim Connor  
For the President

THE WHITE HOUSE  
WASHINGTON

10 July 1976

NOTE FOR JIM CONNOR

Jim:

I discussed with Brent the question of who, at the White House, ought to take the primary responsibility for guiding and overseeing the preparation of the message and its component parts. I indicated that the current thinking was that Lynn (Mitchell) would do it. Brent feels fairly strongly that instead he and Cannon ought to take the responsibility jointly. I understand from Glenn that Cannon agrees.

D. E.

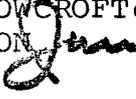
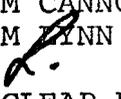
David Elliott

THE WHITE HOUSE

DECISION

WASHINGTON

MEMORANDUM FOR: THE PRESIDENT

FROM: BRENT SCOWCROFT   
JIM CANNON   
JIM LYNN 

SUBJECT: NUCLEAR POLICY - ISSUES AND PROBLEMS  
REQUIRING ATTENTION AND POTENTIAL  
POLICY STATEMENT

This memorandum:

- Identifies nuclear export and weapons proliferation, reprocessing and waste management problems requiring early attention.
- Summarizes growing Congressional, public and media concern about these problems, including restrictive legislation now moving through the Congress, criticism of the Administration and the potential for more of both in the months ahead.
- Suggests the need for a major effort over the next six weeks to develop and evaluate several potential policy and program actions, followed by a Presidential statement on nuclear policy by mid-September.

ISSUES

The principal issues presented for your consideration are:

- Whether you wish to direct that the necessary effort be undertaken over the next six weeks to develop and evaluate proposals and present them for your consideration;
- Whether you wish to approve, tentatively, the concept of a major nuclear policy statement in September; and
- If so, where to assign responsibility for assuring that all necessary work is carried out and issues and a draft statement are presented for your consideration.



BACKGROUND AND STATUS - NUCLEAR POLICY

The acceptability of commercial nuclear power passed a major test with the defeat of Proposition 15 in California. Also, we expect that your uranium enrichment proposal will soon be approved by the Congress; paving the way for expansion of capacity and thus resolving the principal remaining uncertainty at the "front end" of the commercial nuclear power cycle. Some questions continue to be raised about the adequacy of uranium supply, mining and milling capacity and nuclear safety, but these appear to be manageable problems -- with primary responsibility in industry and the Nuclear Regulatory Commission (NRC). However, these front-end problems are aggravated by the uncertainties associated with nuclear fuel reprocessing and waste handling and storage as described below. The development of advanced nuclear technologies (e.g., breeder) is adequately funded in your budget proposals.

However, several major interrelated nuclear power and proliferation issues are now facing us and these are drawing increased attention in the Congress, public and media. These involve:

- U.S. policy on nuclear exports and safeguards to reduce the potential for weapons proliferation.
- U.S. policy with respect to reprocessing of spent fuel from commercial power plants to recover plutonium and unused uranium, and the commercial demonstration of technology.
- The adequacy of U.S. plans for the safe handling and storage of nuclear wastes, particularly assurances that repositories will be available for long-term storage of long-lived and high-level wastes.

The potential solutions for these problems are intertwined; e.g., we cannot resolve policy on reprocessing by other nations until we know how we are going to handle the problem in the U.S. The issues involve both domestic and national security considerations and they affect both the continued acceptability of nuclear power in the U.S. and our position as a major free-world supplier of nuclear equipment and fuel for peaceful purposes. Maintaining our strong position as a free-world supplier is one of our best means of controlling proliferation.



PUBLIC, PRESS AND CONGRESSIONAL ACTIONS AND OUTLOOK

While the California Proposition failed, other referenda involving restrictions on commercial nuclear power have qualified for November ballots in Washington, Oregon, and Colorado. These referenda together with three restrictive laws passed in California prior to the moratorium vote, will keep attention focused on unresolved reprocessing, waste management and proliferation issues.

Concern about proliferation has led to a number of restrictive provisions in bills now moving through the Congress -- most of which require additional Congressional review of nuclear exports. These requirements will introduce more uncertainty and delay, give potential foreign customers new doubts about the reliability of the U.S. as a supplier of nuclear equipment and materials, and thus hamper U.S. efforts to impose rigid safeguards against proliferation.

Congressional developments, including recent strong criticism from Congressman John Anderson is summarized at Tab A.

The number of press articles is increasing and the tone is growing more critical. Press attention focused particularly on the recent actions by the NRC on export licenses involving Spain and India. (The role and activities of the NRC is also summarized at Tab A.)

NATURE OF THE EFFORT NEEDED

ERDA Administrator Seamans has recommended (letter at Tab B) undertaking a major program to provide nuclear fuel reprocessing in the U.S., permitting foreign participation in this activity, and using this program as the centerpiece of a major Presidential statement on non-proliferation.

We agree that actions on reprocessing should be considered but we believe that a more comprehensive approach should be taken when developing proposals and a draft statement for your consideration. The paper at Tab C outlines in more detail the scope of the problems requiring consideration and identifies a number of possible actions, all of which require further development and evaluation before they are presented to you for consideration. We also believe that an effort should be undertaken immediately, particularly in view of the growing concern in the Congress.

In view of the complex nature of the issues involved, a number of agencies will need to be involved and will need to devote resources to the effort. These include: ERDA, State, ACDA, NRC and, to a lesser extent, Interior, EPA, Commerce, FEA and CEQ.



RECOMMENDATIONS

1. That you direct that work begin immediately to develop and evaluate the potential initiatives described briefly in Tab C (and others subsequently identified), with decision papers presented to you by August 30.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

2. That you tentatively decide to issue a major statement on nuclear policy or send a message to Congress in mid-September.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

3. That you assign responsibility jointly to us (Brent Scowcroft, Jim Cannon, and Jim Lynn) to develop and carry out a plan to accomplish the necessary work in cooperation with all the agencies concerned.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_



A

PRINCIPAL CONGRESSIONAL AND NUCLEAR,  
REGULATORY COMMISSIONS (NRC) ACTIONS RELATING  
TO NUCLEAR EXPORTS AND REPROCESSING

- I. CONGRESSIONAL. Principal Congressional actions -- including legislation passed and pending and a sampling of recent criticism -- are as follows:
- A. A 1974 law requires all bilateral "agreements for cooperation" involving significant nuclear exports be submitted to Congress for a 60-day period of review. This was stimulated by concern over Israeli and Egyptian nuclear accords.
  - B. The Military Aid Bill includes a prohibition (the Symington Amendment) against military assistance to countries which furnish or receive nuclear reprocessing or enrichment facilities not under multinational control or IAEA safeguards. Restrictions could be waived by the President in individual cases upon specific findings -- subject to disapproval by a joint resolution of the Congress within 30 days.
  - C. The ERDA 1977 Authorization bill includes an amendment (still subject to final wording in conference after July recess) requiring Congressional approval of the first exports of nuclear fuel or equipment to any country that has not signed the NPT or is not covered by a Congressionally-approved agreement for cooperation.
  - D. The House International Relations Committee is expected to report an amendment to the Export Administration Act which would require prohibitions against reprocessing of fuel exported by U.S. or burned in U.S.-supplied reactors, unless the Secretary of State certifies that there would be at least a 90-day warning before material could be used in a nuclear device.
  - E. The Senate Government Operations Committee reported a bill (S. 1439) on May 14 sponsored by Senators Glenn, Ribicoff and Percy, which (a) shifts additional executive branch nuclear export responsibility to State Department and the independent Nuclear Regulatory Commission from ERDA and Commerce

Department and (b) makes the Congress the referee in disputes between State and NRC over the granting of export licenses. This bill was referred to the JCAE and Foreign Relations for 60 days, which period has now been extended through the end of August. Several Administration witnesses have testified against the bill and Secretary Kissinger was expected to testify on June 29 but his testimony has been delayed. The JCAE is pressing the Administration for alternative proposals.

- F. On June 25, Congressman John Anderson publicly blasted "the White House" for not moving fast enough to resolve problems relating to reprocessing, nuclear exports and proliferation. (This occurred despite our attempts to keep his staff thoroughly informed of Administration efforts.)
- G. Congressman Anderson has since written to JCAE Chairman Pastore urging extensive hearings over the next two months -- with the objective of pressing the Administration for answers on reprocessing, nuclear exports and proliferation issues. (We have been advised informally by Anderson's staff that he probably would agree to urge Senator Pastore to delay hearings if the Administration plans to come forward with new proposals.)
- H. Senator Ribicoff has been a persistent critic for the past two years of what he believes is inadequate executive branch action on reprocessing, nuclear exports and proliferation. Over the past four weeks he has been pressing particularly hard with respect to U.S.-supplied materials (heavy water) in the Indian reactor used to produce material for the device exploded by India in 1974. He will almost certainly use the State Department responses to press his case even more.

II. NUCLEAR REGULATORY COMMISSION. The NRC now plays a major role in nuclear exports and will decide whether, when, and under what conditions reprocessing will be permitted in the U.S. The NRC role has become particularly important because:

- A. Inadvertently, the final responsibility for approving nuclear exports was allowed to be vested in the independent NRC rather than the executive branch. This resulted from the September 1974 law which created ERDA and NRC.
- B. The NRC has just announced decisions on licenses to export a reactor to Spain and an interim supply of fuel for the Tarapur reactor in India. The NRC decisions, including the strong dissent of one Commissioner have been made public. There appears to be agreement within the NRC that additional controls are needed but there is sharp dispute as to whether additional controls -- beyond those in existing agreements -- should now be imposed as a condition of licenses issued under existing agreements. The view of the dissenting Commissioner is getting support in the press and from some members of Congress.
- C. The NRC is now working on an environmental impact statement necessary to its decision -- expected in early 1977 -- as to whether to permit wide scale use of plutonium as reactor fuel. This and subsequent decisions on the licensing of reprocessing facilities will have a major impact on the desirability, feasibility and economics of nuclear fuel reprocessing. (The decision will also have an impact on the viability of the liquid metal fast breeder reactor (LMFBR) which would be fueled with plutonium and which is a major factor in the economic justification for reprocessing of spent fuel elements to recover plutonium and unused uranium.)



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00806



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

June 9, 1976

The President  
The White House

Dear Mr. President:

I believe there is an opportunity and a need for the United States to take a major initiative to resolve uncertainties that now exist in the nuclear fuel cycle and to reduce the risk of international proliferation of special nuclear materials. This opportunity, if successfully pursued, would complete your evolving nuclear policy and could be the central feature of a major Presidential Message.

Background:

Until recently, Federal nuclear policy: (1) stressed Government funding of enrichment plants; (2) assumed that reprocessing of spent nuclear fuel and recycling of plutonium and uranium would be accomplished in the private sector without Government support; and (3) placed less stress on safeguards against theft or diversion of nuclear material than now seems wise.

Your initiatives in the past two years have substantially reformed this policy. Specifically you have:

- Limited the Federal role in enrichment by supporting private entry as the best means for assuring additional enrichment capacity;
- Increased Government research in reprocessing and recycling so that safe and secure private facilities could be demonstrated;
- Sponsored a major Government program to demonstrate the safe management and disposal of nuclear waste; and
- Increased stress on materials and physical safeguards at both Government-owned and private facilities licensed by the Nuclear Regulatory Commission.

NATIONAL SECURITY  
INFORMATION

Unauthorized Disclosure Subject to  
Criminal Sanctions.

SUBJECT TO GENERAL DECLASSIFICATION SCHEDULE OF  
EXECUTIVE ORDER 11652 AUTOMATICALLY DOWNGRADED  
AT TWO YEAR INTERVALS AND DECLASSIFIED ON DEC. 31,

(insert year)

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DECLASSIFIED  
AUTHORITY QAC NUC-046-1-16-D 5/5/08  
BY                      NARA, DATE 11/16/09



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These measures will greatly strengthen the nuclear fuel cycle and our controls over the handling and utilization of plutonium in this country. Yet, despite substantial progress, a final and crucial issue remains unresolved -- the need to control carefully the world's supply of plutonium. Among the factors bearing on this issue are:

- . A recent court decision most likely will prevent the Nuclear Regulatory Commission from licensing private reprocessing facilities that would produce plutonium for recycled use until approval of the generic environmental statement on mixed oxide fuels, probably years from now.
- . Uncertainty is growing among other nations about the United States as a reliable supplier of reactors and fuel because of (1) final decisions on export licenses now rest with the Nuclear Regulatory Commission; and (2) recent amendments to nuclear legislation indicating firm Congressional intent to review individual nuclear initiatives with the private sector.
- . Other supplier nations are developing national reprocessing and recycling capabilities, and some are under pressure commercially to sell plants to other countries desiring to build an integrated indigenous nuclear power capability, for example, Iran and Brazil. This trend could multiply the chances of theft or diversion of plutonium and could lead to a dramatic increase in the number of nations with nuclear weapons.
- . Multinational regional reprocessing centers have been suggested as a means for minimizing this proliferation. However, the technical, logistical and political feasibility of the idea has yet to be demonstrated.

Recommendation:

I believe the time is at hand for the United States to address this basic issue with a major initiative. Such an initiative might have the following features:

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- 3 -

- . An offer to supplier and consumer states to join with the United States to demonstrate the viability of a multinational reprocessing approach using the United States as the demonstration site. The question of excess plutonium and disposal of nuclear waste resulting from the reprocessing requires further exploration to optimize the attractiveness to both the host and participating nations.
- . A call upon supplier nations to suspend temporarily the export of reprocessing technology until the multinational centers or other effective controls have been agreed to. I have already suggested this to the Secretary of State in a letter dated May 13, 1976.
- . A commitment to employ in the multinational centers and to make available advanced United States safeguards and security technology.

The key to the initiative is a willingness of the United States to offer reprocessing and recycling services to other nations and to open our facilities to international inspection. The facility could well be a new plant or a partially completed private plant at Barnwell, South Carolina that was financed by a consortium composed of Allied Chemical, Gulf Oil Corporation and Royal Dutch Shell. Arrangements for serving foreign needs from this facility would, of course, have to be worked out, however, it is anticipated that the consortium will have an interest in a governmentally-encouraged demonstration.

In any event, the United States could provide some funding and appropriate technical assistance and guarantees for the establishment of an international reprocessing facility in the United States and invite those nations which would utilize the services of such a facility to provide a pro rata share of operating expenses. Of course, a successful international demonstration, under the auspices of the United States, would also materially assist in the development of our domestic reprocessing capability over the long run as increasing nuclear power production results in needed new reprocessing facilities.

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-4-

Such an initiative could become the centerpiece of a truly comprehensive Presidential policy on nuclear power and non-proliferation.

Decision:

If you approve, I will pursue and intensify work with appropriate departments and agencies to develop a recommended nuclear reprocessing initiative to be available to you as soon as possible.

Respectfully yours,



Robert C. Seamans, Jr.  
Administrator

cc: Elliott Richardson

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SUMMARY OF PRINCIPAL NUCLEAR POWER PROBLEMS  
AND POSSIBLE RESPONSES: NUCLEAR EXPORTS,  
REPROCESSING AND WASTE MANAGEMENT

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SUMMARY OF PRINCIPAL NUCLEAR PROBLEMS  
AND POSSIBLE RESPONSES: NUCLEAR EXPORTS AND  
PROLIFERATION, REPROCESSING AND WASTE MANAGEMENT

I. NUCLEAR EXPORTS AND PROLIFERATION

A. Current Problems

1. Growing Congressional, press, and public concern about nuclear weapons proliferation.

Concern is focused primarily upon the greater availability of plutonium which is extracted from "spent" fuel elements (i.e., the process referred to as "reprocessing"). Once separated plutonium is available, very little time -- hours to days -- is needed to make a nuclear weapon. Concern has continued to grow since India exploded a nuclear device in 1974.

2. Growing concern that current U.S. activities to safeguard against diversion of plutonium for weapons purposes is not adequate.

Attention is now focused on exports of nuclear materials and equipment. Some feel that existing controls (detailed below) have been barely adequate for safeguarding reactors and are simply not adequate to guard against diversion of separated plutonium, particularly if it is accumulated in excess amounts.

3. The U.S. position in the foreign market for nuclear equipment and materials is weakening.

This is resulting from (a) the lack of uranium enrichment capacity, (b) growing strength of foreign competition for nuclear equipment and fuels, (c) uncertainty as to U.S. policy on nuclear exports due to our divisive internal debate, and (d) potentially, delays resulting from Nuclear Regulatory Commission (NRC) control of export licenses and growing Congressional review requirements. As the U.S. loses foreign orders to other suppliers, the U.S. also loses its leverage to obtain rigid safeguards agreements.

4. Perception in the media that the Administration is complacent about potential diversion of plutonium from commercial nuclear power plants abroad.

Overall, our controls generally are more rigorous than those applied by most other suppliers, but this has not helped in the current debate. Also, Canada's recent action in cutting off nuclear relationships with India and imposing strong safeguard controls in connection with its exports has set a tough standard of comparison.

B. Principal Existing Measures Affecting Export Policy and the Control of Proliferation.

1. NPT

Approximately 100 nations have signed the Non-Proliferation Treaty (NPT) foreswearing activities leading to the proliferation of weapons. Several important nations have not signed, including France, India, Pakistan, Israel, South Africa and Brazil.

2. Bilateral "Agreements for Cooperation" between the U.S. and about 30 other nations importing nuclear equipment and materials from the U.S.

These agreements specify safeguards that are to be maintained.

3. IAEA

International Atomic Energy Agency establishes safeguards standards and has some inspection capability.

4. Supplier Discussions

State Department is leading negotiations with other supplier nations, seeking agreement to impose more rigid safeguards. There has been some success achieved, but no agreement to defer the export of reprocessing facilities until more effective controls are developed.

5. New International Convention

The U.S. is exploring a new international nuclear physical security convention and other steps to upgrade physical security standards worldwide.

## 6. Pressure on Customer Nations

The U.S. brought pressure on the Government of South Korea to cancel its order with the French for a reprocessing plant and is applying similar pressure on Pakistan to forego acquisition of a reprocessing plant, but with less success.

Congressional and press criticism of export policies of West Germany and France continues strong even though both countries claim they are conforming to guidelines recently developed jointly by supplier nations. Germany still has a commitment to supply enrichment and reprocessing technology to Brazil and France is committed to supply a reprocessing plant to Pakistan. Nature of commitments to others, such as South Africa, are unclear.

## C. Administration Response Thus Far

The Executive Branch has responded to the above in several ways, but the actions (a) have been piecemeal and largely defensive, and (b) appear inadequate in the face of current Congressional and public attitudes. Responses include:

1. Secretary Kissinger summarized U.S. non-proliferation efforts in testimony in opposition to the Glenn-Percy Nuclear Export Reorganization Bill (S. 1439) before the Senate Government Operations Committee. ERDA, ACDA, and other Administration witnesses gave supporting testimony. Administration witnesses have also testified before JCAE, except for Secretary Kissinger who is expected to appear soon.
2. Informal attempts are being made by State, ERDA, and others to limit the scope of restrictions and of Congressional review requirements in pending bills (e.g., Military Aid and ERDA Authorization).
3. An Executive Order was recently issued setting up procedures for getting a coordinated Executive Branch position (State, ERDA, DOD, ACDA, and Commerce) on nuclear export licenses pending before the NRC. (State Department notifies NRC of the coordinated Executive Branch position.)

D. Additional Actions for Development and Evaluation

Several ideas have surfaced for possible alternative responses to the current situation. Each involves significant issues that require development and evaluation before being presented for decision. Possible actions identified thus far include:

1. Significant hardening of U.S. attitude on nuclear exports safeguards required before exports are permitted.

There appears to be divided views on this. Some probably will argue that past and current controls are as good as can be achieved and/or that tougher U.S. positions, taken unilaterally will not be effective recognizing that the requirements we impose are already tougher than those of most other suppliers with whom the U.S. competes for nuclear markets. Others will argue that anything the U.S. can do unilaterally or in cooperation with others that will help reduce the opportunity for proliferation is worth doing, recognizing the threat. Steps that might be considered to achieve a harder and consistent policy include:

- a. Strong public message -- to supplement diplomatic channel efforts now underway -- to other supplier nations (France and Germany) emphasizing the need to curb proliferation and urging them to: (1) stop supplying reprocessing or enrichment technology to other nations, and (2) adopting more rigorous safeguards requirements.
- b. Head of State meetings to carry out (a), above.
- c. Move to renegotiate safeguards controls under existing agreements for cooperation as a condition for further exports, particularly giving the U.S. a veto on whether and where any fuel irradiated in U.S. reactors is reprocessed.

- d. In addition to other actions, but not a substitute for, appoint a panel of experts not now involved in U.S. nuclear export activities to review past and current practices and submit recommendations to you for improvements.
2. Intensify efforts to discourage reprocessing (in the U.S. and abroad) until better controls (technological and institutional) can be worked out. (This needs to be considered in connection with domestic reprocessing issues, discussed in II, below.)

If this policy approach were to be taken, consideration would have to be given to:

- a. Expanding storage for "spent" fuel elements, possibly making storage available to other countries.
  - b. "Buy back" of spent fuel elements.
  - c. Finding ways to replace the energy value of the plutonium and unused uranium in the spent fuel elements (which is in the range of 10-30% of the total energy value if reprocessing and recycle of plutonium was permitted).
  - d. Other incentives to discourage the separation of plutonium through reprocessing.
3. As a means to discourage the spread of reprocessing centers, provide U.S. reprocessing services to foreign countries.

This depends on development of reprocessing in the U.S. since we currently have no commercial reprocessing in operation.

- a. Assist U.S. industry in demonstrating reprocessing and related technology (plutonium conversion, waste handling, safeguards), as discussed in II, below.

- b. Urge or require U.S. firms planning to provide reprocessing services to dedicate a portion of their capacity to serve foreign needs, thereby potentially satisfying foreign needs for many years without the construction of reprocessing plants abroad.
  - c. Go beyond #2 above by offering to allow other governments to participate in the operation of the first expected reprocessing plant (Barnwell, South Carolina) as a demonstration of the concept of a multi-national reprocessing center.
  - d. Determine alternatives to returning plutonium to foreign reprocessing customers -- such as substituting energy equivalent of reprocessed fuel in the form of enriched uranium.
4. Propose international storage for excess plutonium.
- IAEA has authority to establish repositories for excess nuclear materials. The U.S. could propose that this authority be implemented, that all nations store excess plutonium in such repositories and indicate that the U.S. would participate with the deposit of its excess plutonium.
5. Intensify efforts to strengthen IAEA safeguards.
- a. Make available advanced U.S. safeguards technology to other nations and the IAEA.
  - b. Consider further strengthening of IAEA safeguards, expanding the proposal for a \$5 million - 5 year voluntary U.S. contribution announced by the President on February 26, 1976.

## II. NUCLEAR FUEL REPROCESSING AND SPREAD OF REPROCESSING TECHNOLOGY

### A. Background

- 1. The principal driving forces behind the desire to establish a U.S. industry to reprocess "spent" fuel elements from commercial power reactors are to:

- a. recover and reuse the plutonium and unused uranium from elements (with energy value of 10-30% of initial fuel input).
  - b. provide plutonium to fuel liquid metal fast breeder (LMFBR) reactors once they are used commercially.
  - c. reduce irradiated fuel and associated waste products to most manageable forms.
2. Technology for reprocessing has been demonstrated in AEC (now ERDA) operations.
  3. Consistent policy followed that the reprocessing step in the nuclear fuel cycle is the responsibility of industry. Government sponsors R&D.
  4. The principal driving forces behind the spread of reprocessing technology and equipment worldwide are:
    - a. Competition among the suppliers of nuclear energy reactors for sales in third countries;
    - b. Desire on the part of recipients of the technology and equipment to place as large a part of the nuclear fuel cycle as possible under their own national control;
    - c. desire by some for a nuclear weapons capability.

B. Current Problems

1. Demonstrating Technology in Commercial Operations

There is not now any commercial reprocessing capacity in the U.S.:

- a. One plant that was operational (Nuclear Fuel Services) in Western, N.Y., is closed down and probably will not reopen.
- b. A \$70 million plant built at Morris, Illinois by GE is never expected to operate due to technological problems.

c. A \$260 million plant, including only initial storage and separations stages of reprocessing, has been built in South Carolina by Allied Chemical and General Atomics (AGNES). Its actual operation depends upon:

- obtaining an NRC license;
- either (a) storage of separated plutonium in liquid form, or (b) construction of a \$150 million conversion facility, for which Government assistance may be needed;
- construction of a \$350 million waste solidification and packaging facility.

## 2. Licensing

Licensing of reprocessing facility depends upon resolution of a number of issues now pending before the NRC in one major and several other issues. The principal issue is whether to allow widespread recycling of plutonium. This depends upon resolving safety, environmental, economic, and safeguards issues -- which are being covered in a Generic Environmental Impact Statement which should be completed by early 1977, with an NRC decision in mid-1977.

## 3. Alternatives

The NRC statement almost certainly will have to deal with alternatives to reprocessing, some of which (such as indefinite storage of irradiated fuel) have not been fully studied. Also, the extent of the economic advantages of reprocessing depend upon the likelihood and timing of commercial breeder reactors. (The construction of the first demonstration reactor at Clinch River, Tennessee, has not begun, is behind schedule and is growing in cost.) Assuming reprocessing and recycle is permitted, NRC will have to issue complex safety, environmental and safeguards standards and guidelines. A thorough assessment of these factors has not been completed.

4. Decisions needed

Decisions are needed on whether and when to reprocess so that investment decisions can be made by industry to build either: (a) reprocessing facilities, or (b) additional storage facilities for spent fuel elements. One or the other and maybe both are needed to handle spent fuel from plants already in operation. The absence of firm plans is a factor in utility and utility commission decisions on nuclear power and in nuclear moratoria referenda.

5. Barnwell Facility

The consortium building the Barnwell reprocessing facility is experiencing financial problems due to higher costs and uncertainty about the future of reprocessing. Abandonment of the operation is conceivable.

C. Actions Taken or Underway

1. ERDA

a. 1977 Budget. The President's 1977 Budget included funds for additional R&D needed for reprocessing. It also contemplated a supplemental to fund some kind of assistance program to encourage construction of reprocessing facilities, once the right course of action was decided upon. (In practice, it may not be possible to implement a program until NRC decides on recycling of plutonium.)

b. Program Development. In February, ERDA solicited expressions of interest from industry on plans for providing reprocessing and on the types of assistance that might be necessary or appropriate (with emphasis on a minimum Federal role). Over 30 responses were received and ERDA is now considering those in the development of its proposed program.

2. NRC is proceeding with hearings on the completed portions of the plutonium recycle generic impact statement and is completing the remaining portions -- all headed toward a decision in mid-1977.

3. ACDA, ERDA, and State are working to define the concept of a multinational reprocessing center and considering the possibility of some kind of foreign participation in the Barnwell facility. The desire for non-proliferation benefits has already attracted some Congressional support for assisting Barnwell to serve foreign users.
- D. Additional Actions for Development and Evaluation. Resolution of questions about domestic reprocessing is key to any major nuclear policy announcements. A major effort will be needed to sort out reprocessing issues.
1. Immediate action to complete the development, analysis, and evaluation of the following:
    - a. The need for, timing of, and alternatives to reprocessing. This should provide a basis for executive branch (non-regulatory) decisions as to whether and when reprocessing should be encouraged. (Note that a decision to defer reprocessing might influence other countries to do the same.)
    - b. Alternative ways for the Government to work with industry to provide reprocessing capacity, assuming that we will proceed domestically with reprocessing.
  2. Explore the potential for various forms of foreign involvement in domestic reprocessing facilities -- as outlined in I(D)(3) (pg. 5).

### III. NUCLEAR WASTE MANAGEMENT

#### A. Background

1. Government policy has, since early 1970's, been that the Federal Government would take responsibility for long-term storage of high level wastes. Private industry is responsible (subject to regulation) for handling and packaging of wastes and delivering them in a prescribed form to a Federal repository for long-term storage.

2. Government policy has regarded the handling and storage of lower level radioactive wastes as an industry task, subject to Federal or State regulation. Some problems have emerged but these probably can be resolved within existing arrangements.
3. Approaches to long-term storage have been considered and then rejected: storage in the salt mine in Kansas and a temporary near surface storage facility. The program for developing acceptable approaches and providing a permanent repository heretofore has had relatively low priority.
4. There seems to be general agreement that technology is available to permit safe long-term storage, but there is a long way to go before a repository is in place and ready to receive wastes.
5. International plans and standards for disposal of nuclear wastes have not been adequately addressed.

B. Current Problems

1. The major task facing the Federal Government is finding an acceptable location(s) for a repository, constructing it, and opening it to receive wastes. Current assessments suggest that such a repository should be in place by 1985 and it is not clear that current plans -- which involve at least five Federal agencies -- will result in achieving this objective.
2. Finding a location for a repository acceptable to residents of the region selected will be a difficult task.
3. Related problems involve sorting out the roles and responsibilities of the several agencies involved; particularly, ERDA, NRC, EPA, and Geological Survey, and providing some continuing needs for inter-agency coordination.

4. The absence of convincing plans to have a high-level repository in place are contributing to: (a) the efforts by nuclear power opponents to slow down nuclear power, and (b) questions by utilities and utility commissions as to the desirability of committing to more nuclear plants.
5. Expected increase in nuclear wastes worldwide between now and 1990 will require development of international plans standards.

C. Actions Taken or Underway

1. ERDA

- a. 1977 Budget. The President's 1977 Budget includes \$65 million in outlays (compared to \$12 million in FY 1976) to proceed with a waste management program. A large share of these funds will be used for exploratory drilling of various kinds of geologic formations around the country in order to find a suitable location for a pilot repository and operational repositories.
  - b. Technical Alternatives and Generic Environmental Impact Statement. ERDA has published an extensive technical alternatives document and is proceeding with development of the necessary generic environmental impact statement covering waste management with the objective of issuing a draft statement early in 1977 and a final statement late in 1977.
2. NRC is working on waste handling, packaging, transportation, and storage regulations and an associated environmental impact statement with the objective of completing work in 1978.
  3. Interagency Task Force. An OMB-lead interagency task force is evaluating the schedules and the interagency relationships among the five agencies principally involved: ERDA, NRC, EPA, Geological Survey, and CEQ. This group's work has already identified potential obstacles that would prevent

having a repository available when needed. The problems include: (a) sequencing of each agency's activities so that information will be available to others when needed, (b) overlapping functions between NRC and EPA, and (c) continuing inter-agency coordination.

D. Additional Actions for Development and Evaluation

1. Develop a firm plan setting out all major actions which must be taken over the next ten years and when they will occur -- covering all forms of nuclear waste.
2. Develop a clear statement of roles and responsibilities (including solution of overlap in EPA and NRC functions), and develop arrangements for continuing inter-agency coordination.
3. Consider the extension of our domestic waste management plans and solutions internationally, perhaps through one or more of the following:
  - a. Offer to make waste handling and storage technology available to other nations.
  - b. Offer to investigate international waste disposal sites, either independent of or in conjunction with reprocessing arrangements.

This will require consideration of controversial issues such as the storage in one country of wastes resulting from nuclear energy used in another country.

THE WHITE HOUSE

ACTION MEMORANDUM

WASHINGTON

LOG NO.:

Date: July 12, 1976

Time:

FOR ACTION:

cc (for information):

Phil Buchen  
Jack Marsh  
Bill Seidman

FROM THE STAFF SECRETARY

DUE: Date: Monday, July 12, 1976

Time: C. O. B.

SUBJECT:

Joint memorandum from Brent Scowcroft  
Jim Cannon and Jim Lynn re: Nuclear Policy  
Issues and Problems requiring Attention  
and Potential Policy Statement

ACTION REQUESTED:

For Necessary Action

For Your Recommendations

Prepare Agenda and Brief

Draft Reply

For Your Comments

Draft Remarks

REMARKS:

*See comment  
p 4  
JCS*

*"Confidential  
attachment"*

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

Jim Connor  
For the President



THE WHITE HOUSE

MEMORANDUM

WASHINGTON

LOG NO.:

Date: July 12, 1976

Time:

FOR ACTION:

cc (for information):

Phil Buchen  
Jack Marsh  
Bill Seidman  
FROM THE STAFF SECRETARY

DUE: Date: Monday, July 12, 1976 Time: C. O. B.

SUBJECT:

Joint memorandum from Brent Scowcroft  
Jim Cannon and Jim Lynn re: Nuclear Policy  
Issues and Problems Requiring Attention  
and Potential Policy Statement

ACTION REQUESTED:

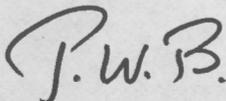
- For Necessary Action
- For Your Recommendations
- Prepare Agenda and Brief
- Draft Reply
- For Your Comments
- Draft Remarks

REMARKS:

CONFIDENTIAL ATTACHMENT

July 12, 1976

No objection.



Philip W. Buchen

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

Jim Connor  
For the President



EXECUTIVE OFFICE OF THE PRESIDENT

OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

MEMORANDUM FOR JIM CONNOR

FROM:

JIM LYNN

SUBJECT:

Draft Cannon/Scowcroft Memorandum on  
Possible Presidential Statement on  
Nuclear Proliferation

I think the draft memorandum is extremely helpful in broadening the issues that the President must address on the proliferation question. Piecemeal approaches such as establishing a single center in Barnwell must be considered as part of a broader strategy.

I would like to raise some questions as to whether the scope suggested in the memorandum is broad enough and some additional questions about staffing resources. I think both of these areas would be best covered in a meeting with you, Brent, Jim Cannon, Glenn Schleede, Jim Mitchell and anyone else you might think appropriate. I would hope that the meeting could be held as promptly as possible.

THE WHITE HOUSE  
WASHINGTON

June 23, 1976

Jim -

Summary of what happened on Staffing of  
Dr. Seamans letter of 6/9/76 re:  
Nuclear Materials

Marsh --- approve sending letter drafted by  
Dr. Seaman

Hartmann -- made some changes in letter  
(editorial)

Seidman - commented: " This ought to be assigned  
to the Energy Resources Council - other  
agencies besides ERDA are involved. Should  
be credited to President before it leaks as an  
agency position. "

Scowcroft & Cannon - now have come in with a  
combined memo --- which is a decision memo.  
?????

No response from OMB although Glen Schleede  
said he talked to them --- about what NSC & DC  
were doing --- they are still working on their  
comments (I checked Jim Jura again today and he  
will get back to me). *Understand Jim Mitchell  
gave you comments last night x*  
Since the subject is one you are so very interested  
in - believe you will want to review at this stage.

Trudy

MEMORANDUM  
OF CALL

TO:

YOU WERE CALLED BY—  YOU WERE VISITED BY—

*Sue Mr Mitchell's*

OF (Organization)

*office*

PLEASE CALL → PHONE NO. CODE/EXT.

WILL CALL AGAIN  IS WAITING TO SEE YOU

RETURNED YOUR CALL  WISHES AN APPOINTMENT

MESSAGE

*did see OMB with Mitchell  
disagreed with JMC!*

*OMB have some problems with OMB + they will put in writing*

RECEIVED BY

DATE

TIME

STANDARD FORM 63  
REVISED AUGUST 1967  
GSA FPMR (41 CFR) 101-11.6

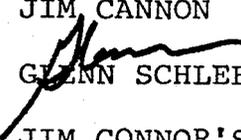
GPO : 1969-048-16-80841-1 832-889

63-108

THE WHITE HOUSE

WASHINGTON

June 29, 1976

MEMORANDUM FOR: JIM CANNON  
FROM:  GLENN SCHLEEDE  
SUBJECT: JIM CONNOR'S 3:30 MEETING ON NUCLEAR  
MATTERS.

I understand that the 3:30 meeting in Connor's office is to discuss:

- . (a) the memo to the President that you and Brent Scowcroft signed (TAB A) -- which has not gone to the President
- . (b) Bob Seaman's letter which is attached to your memo at TAB A, and
- . (c) a memo from Jim Lynn which apparently suggests that the memo from you and Brent Scowcroft not go to the President until there is a plan developed and resources committed and carried out.

In view of the events in the past ten days, I do not believe the memo you signed should go forward. The events are listed on the next page.

Instead, I suggest that the meeting focus on the following questions:

1. Is a major, integrated effort needed to address current nuclear issues, including nuclear export, proliferation and reprocessing?
2. If so, what should be the scope?
3. Should the effort be one dealing with matters requiring Presidential consideration and action?
4. If so, should we be working towards a Presidential statement or message to Congress? If so, what should be the scope?

5. Recognizing that the issues involved cut across domestic and international policy, where should the responsibility be assigned for getting the issues developed, evaluated and presented in decision papers? Who, specifically, should be charged with developing and executing the plan for getting the work accomplished?
6. Is this a critical area for attention now? If so, what should be the target for getting work done?

#### Development Over The Past Ten Days

The following has occurred since the completion of the memo which you and Scowcroft signed:

- . The JCAE has held one set of hearings on the Glenn-Percy Nuclear Export Reorganization Act (S.1439). Secretary Kissinger was scheduled to testify today but this has been postponed. Meanwhile, the ERDA General Counsel has been asked by the JCAE Staff Director (on behalf of Chairman Pastore) to develop an alternative bill. The ERDA General Counsel is desperately seeking guidance.
- . The July 13 deadline for JCAE action on S.1439 is drawing near.
- . The Anderson amendment to the ERDA Authorization Bill has been accepted by the Senate. This means that the first nuclear export to any country that has not signed the NPT or is not covered by a Congressionally approved agreement for cooperation must be submitted to the Congress for approval.
- . John Anderson has publicly blasted the "White House" for not moving on nuclear exports (despite my efforts to keep Dave Swanson informed of our concerns about the matter).
- . The NRC decision to approve the export of a reactor to Spain has become public. The strong dissent by Commissioner Gilinsky has drawn considerable attention.
- . Senator Ribicoff has published an article in Foreign Affairs advocating international nuclear market sharing and proceeding with a multi-national reprocessing facility.
- . Agreements for cooperation with Egypt and Israel are ready for submission for Congressional approval -- if the timing is right.

THE WHITE HOUSE  
WASHINGTON

ACTION

June 22, 1976

MEMORANDUM FOR: THE PRESIDENT

FROM: BRENT SCOWCROFT  
JIM CANNON *Jim Cannon*

SUBJECT: POSSIBLE PRESIDENTIAL STATEMENT AND NEW  
U.S. INITIATIVES TO REDUCE PROLIFERATION  
DUE TO COMMERCIAL NUCLEAR POWER ACTIVITIES

ERDA Administrator Seamans has recommended (letter at Tab A) undertaking a major program to provide nuclear fuel reprocessing in the U.S., permitting foreign participation in this activity, and using this program as the centerpiece of a major Presidential statement on non-proliferation.

The problem of weapons proliferation -- because of greater availability of plutonium from commercial nuclear power plants -- is gaining steadily increasing attention in the Congress, the media, and in the public. There are growing concerns that current U.S. activities to safeguard against diversion of materials from U.S. exports are inadequate. Additional attention will be focused on potential proliferation problems when controversy within the Nuclear Regulatory Commission over exports to Spain and India becomes public next week.

We agree that the time has come for considering new initiatives and, probably, for a major Presidential statement on nuclear export policy and perhaps on nuclear energy. However, we also believe that other aspects of the problem leading to Dr. Seamans' letter need to be considered and that other proposals should also be evaluated as part of a complete response to the current situation.

Tab B provides a broader treatment of the matters raised by Dr. Seamans. It summarizes:

- The current problems;
- Existing measures and activities to control proliferation;
- Recent and upcoming events suggesting the need for action;
- Administration response thus far;
- Possible additional responses.

Tab C is a preliminary outline of the content of a possible Presidential statement.

In view of the complex nature of the issues involved, covering both domestic and foreign policy interests, a number of agencies will need to be involved in developing and evaluating possible initiatives and in drafting a proposed statement. These include: ERDA, State, Defense, NRC, OMB, Commerce, and possibly some other members of the Energy Resources Council.

### RECOMMENDATIONS

1. That you direct that work begin immediately to develop and evaluate the potential initiatives described briefly in Tab B, with decision papers presented to you by mid-July.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

2. That you tentatively decide to issue a statement or send a message to Congress in late July or early August on nuclear matters. Depending on the evaluation of possible initiatives, it could be limited to nuclear exports and non-proliferation or a more general nuclear statement.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

3. That you assign responsibility jointly to us (Brent Scowcroft and Jim Cannon) to develop and carry out a plan to accomplish the necessary work, in cooperation with OMB, the ERC, and all of the agencies concerned.

APPROVE \_\_\_\_\_ DISAPPROVE \_\_\_\_\_

TAB A

## THE WHITE HOUSE

ACTION MEMORANDUM

WASHINGTON

LOG NO.:

Date: June 10, 1976

Time:

## FOR ACTION:

cc (for information):

JIM CANNON

JACK MARSH

JIM LYNN

MAX FRIEDERSDORF

BRENT SCOWCROFT

BOB HARTMANN

BILL SEIDMAN

FROM THE STAFF SECRETARY

DUE: Date: Wednesday, June 16, 1976

Time: 12:00 noon

## SUBJECT:

Letter to the President from Robert Seamans, Administrator, ERDA, recommending accelerated effort on reprocessing and other initiatives concerning special nuclear materials with suggested response to Seamans from the President.

## ACTION REQUESTED:

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

## REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

James E. Connor  
For the President

~~CONFIDENTIAL~~



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

June 9, 1976

The President  
The White House

Dear Mr. President:

I believe there is an opportunity and a need for the United States to take a major initiative to resolve uncertainties that now exist in the nuclear fuel cycle and to reduce the risk of international proliferation of special nuclear materials. This opportunity, if successfully pursued, would complete your evolving nuclear policy and could be the central feature of a major Presidential Message.

Background:

Until recently, Federal nuclear policy: (1) stressed Government funding of enrichment plants; (2) assumed that reprocessing of spent nuclear fuel and recycling of plutonium and uranium would be accomplished in the private sector without Government support; and (3) placed less stress on safeguards against theft or diversion of nuclear material than now seems wise.

Your initiatives in the past two years have substantially reformed this policy. Specifically you have:

- Limited the Federal role in enrichment by supporting private entry as the best means for assuring additional enrichment capacity;
- Increased Government research in reprocessing and recycling so that safe and secure private facilities could be demonstrated;
- Sponsored a major Government program to demonstrate the safe management and disposal of nuclear waste; and
- Increased stress on materials and physical safeguards at both Government-owned and private facilities licensed by the Nuclear Regulatory Commission.

DECLASSIFIED  
AUTHORITY RAC NLF-PHF-1-1-6-0 5/5/2008  
BY MLO  
MRA DATE 8/23/2012



NATIONAL SECURITY  
INFORMATION

Unauthorized Disclosure Subject to  
Criminal Sanctions.



SUBJECT TO GENERAL DECLASSIFICATION SCHEDULE OF  
EXECUTIVE ORDER 11652 AUTOMATICALLY DOWNGRADED  
AT TWO YEAR INTERVALS AND DECLASSIFIED ON DEC. 31

(insert year)

~~CONFIDENTIAL~~

These measures will greatly strengthen the nuclear fuel cycle and our controls over the handling and utilization of plutonium in this country. Yet, despite substantial progress, a final and crucial issue remains unresolved -- the need to control carefully the world's supply of plutonium. Among the factors bearing on this issue are:

- . A recent court decision most likely will prevent the Nuclear Regulatory Commission from licensing private reprocessing facilities that would produce plutonium for recycled use until approval of the generic environmental statement on mixed oxide fuels, probably years from now.
- . Uncertainty is growing among other nations about the United States as a reliable supplier of reactors and fuel because of (1) final decisions on export licenses now rest with the Nuclear Regulatory Commission; and (2) recent amendments to nuclear legislation indicating firm Congressional intent to review individual nuclear initiatives with the private sector.
- . Other supplier nations are developing national reprocessing and recycling capabilities, and some are under pressure commercially to sell plants to other countries desiring to build an integrated indigenous nuclear power capability, for example, Iran and Brazil. This trend could multiply the chances of theft or diversion of plutonium and could lead to a dramatic increase in the number of nations with nuclear weapons.
- . Multinational regional reprocessing centers have been suggested as a means for minimizing this proliferation. However, the technical, logistical and political feasibility of the idea has yet to be demonstrated.

Recommendation:

I believe the time is at hand for the United States to address this basic issue with a major initiative. Such an initiative might have the following features:



- . An offer to supplier and consumer states to join with the United States to demonstrate the viability of a multinational reprocessing approach using the United States as the demonstration site. The question of excess plutonium and disposal of nuclear waste resulting from the reprocessing requires further exploration to optimize the attractiveness to both the host and participating nations.
- . A call upon supplier nations to suspend temporarily the export of reprocessing technology until the multinational centers or other effective controls have been agreed to. I have already suggested this to the Secretary of State in a letter dated May 13, 1976.
- . A commitment to employ in the multinational centers and to make available advanced United States safeguards and security technology.

The key to the initiative is a willingness of the United States to offer reprocessing and recycling services to other nations and to open our facilities to international inspection. The facility could well be a new plant or a partially completed private plant at Barnwell, South Carolina that was financed by a consortium composed of Allied Chemical, Gulf Oil Corporation and Royal Dutch Shell. Arrangements for serving foreign needs from this facility would, of course, have to be worked out, however, it is anticipated that the consortium will have an interest in a governmentally-encouraged demonstration.

In any event, the United States could provide some funding and appropriate technical assistance and guarantees for the establishment of an international reprocessing facility in the United States and invite those nations which would utilize the services of such a facility to provide a pro rata share of operating expenses. Of course, a successful international demonstration, under the auspices of the United States, would also materially assist in the development of our domestic reprocessing capability over the long run as increasing nuclear power production results in needed new reprocessing facilities.



~~CONFIDENTIAL~~

-4-

Such an initiative could become the centerpiece of a truly comprehensive Presidential policy on nuclear power and non-proliferation.

Decision:

If you approve, I will pursue and intensify work with appropriate departments and agencies to develop a recommended nuclear reprocessing initiative to be available to you as soon as possible.

Respectfully yours,



Robert C. Seamans, Jr.  
Administrator

cc: Elliott Richardson

~~CONFIDENTIAL~~



Honorable Robert C. Seamans, Jr.  
Administrator  
Energy Research and Development  
Administration  
Washington, D. C. 20545

Dear Bob:

I agree in principle with the concepts outlined in your letter to me of June 9, 1976, and direct you to proceed on an accelerated basis and in coordination with the Energy Resources Council to review and develop in further detail the policy initiatives that I should undertake with respect to nuclear reprocessing and related non-proliferation matters.

In this regard, you should include in your analyses (1) a re-examination of the validity, necessity, and desirability of reprocessing spent nuclear fuel; (2) further definition of how a multinational reprocessing demonstration center in the United States would be established and operated, including the role of IAEA; and (3) optimum means for handling excess plutonium resulting from the reprocessing.

In addition, it would be well to address other nuclear problems such as waste management which, alongwith reprocessing initiatives, could provide the framework for a comprehensive nuclear policy to be adopted and enunciated in 2-3 months.



Please strive to complete this review and forward your recommendations to me by August 15, 1976.

Sincerely,

The President

cc: Elliott Richardson



TAB B



(Suggested Presidential response  
to letter of June 9, 1976 from  
Robert C. Seamans, Jr.)

Honorable Robert C. Seamans, Jr.  
Administrator  
Energy Research and Development  
Administration  
Washington, D. C. 20545

Dear Bob:

I agree in principle with the concepts outlined in your letter  
to me of June 9, 1976, and direct you to proceed on an accelerated  
basis, ~~and~~ in coordination with the Energy Resources Council, to  
review and develop in further detail the policy initiatives <sup>which</sup> ~~that~~  
should <sup>be</sup> undertaken <sup>on</sup> with respect to nuclear reprocessing and related  
non-proliferation matters.

In this regard, you should include in your analyses (1) a re-  
examination of the validity, necessity, and desirability of  
reprocessing spent nuclear fuel; (2) further definition of how  
a multinational reprocessing demonstration center in the United  
States ~~could~~ <sup>might</sup> be established and operated, including the role of  
IAEA; and (3) optimum means for handling excess plutonium  
resulting from the reprocessing.

In addition, ~~it would be well to address~~ other nuclear problems  
such as waste management, <sup>which might well be addressed.</sup> ~~which, along with~~ <sup>Solutions to these problems</sup> reprocessing initiatives,  
could provide the framework for a comprehensive nuclear policy  
to be adopted and enunciated in <sup>two or three</sup> ~~2-3~~ months.

*Agreed with the*



*I would like to have you*  
Please ~~strive to~~ complete this review and forward your  
recommendations to me by August 15, 1976.

Sincerely,

The President

cc: Elliott Richardson



NEED FOR A PRESIDENTIAL MESSAGE ON NUCLEAR EXPORT POLICY OR NUCLEAR ENERGY IN GENERAL

I. CURRENT PROBLEMS

- A. Growing Congressional, press, and public concern about nuclear weapons proliferation.

Concern is focused primarily upon the greater availability of plutonium which is extracted from "spent" fuel elements removed from nuclear power reactors (i.e., referred to as reprocessing). Concern has continued to grow since India exploded a nuclear device in 1974.

- B. Growing concern that current U.S. activities to safeguard against diversion of plutonium for weapons purposes is not adequate.

Attention is now focused on exports of nuclear materials and equipment. Some feel that existing controls (detailed below) have been barely adequate for safeguarding reactors and are simply not adequate to guard against diversion of separated plutonium.

- C. The U.S. position in the foreign market for nuclear equipment and materials is weakening.

This is resulting from (a) the lack of uranium enrichment capacity, (b) growing strength of foreign competition for nuclear equipment and fuels, (c) uncertainty as to U.S. policy on nuclear exports, and (d) potentially, delays resulting from Nuclear Regulatory Commission (NRC) control of export licenses and growing Congressional review requirements. As the U.S. loses foreign orders to other suppliers, the U.S. also loses its leverage to obtain rigid safeguards agreements.

- D. Perception in the media that the Administration is complacent about potential diversion of plutonium from commercial nuclear power plants abroad.

By contract, Canada recently cut off nuclear relationships with India and appears to be imposing strong safeguards controls in connection with its exports.

- E. Events immediately ahead will exacerbate the above problems, involving NRC and Congress -- particularly with respect to exports to Spain and India. (detailed below.)

## II. EXISTING MEASURES AND ACTIVITIES TO CONTROL PROLIFERATION

### A. NPT

Approximately 100 nations have signed the Non-Proliferation Treaty (NPT) forswearing activities leading to the proliferation of weapons. Several important nations have not signed, including France and India.

### B. Bilateral "Agreements for Cooperation" between the U.S. and about 30 other nations importing nuclear equipment and materials from the U.S.

These agreements specify safeguards that are to be maintained.

### C. IAEA

International Atomic Energy Agency establishes safeguards standards and has some inspection capability.

### D. Supplier Discussions

State Department is leading negotiations with other supplier nations, seeking agreement to impose more rigid safeguards. There has been some success achieved, but no agreement from other suppliers to restrict their export of reprocessing facilities.

### E. New International Convention

The U.S. is leading an attempt to gain agreement on a new international nuclear physical security convention.

### F. Pressure on Customer Nations

The U.S. brought pressure on the Government of South Korea to cancel its order with the French for a reprocessing plant and is applying similar pressure on Pakistan to forego acquisition of a reprocessing plant.

## III. RECENT AND UPCOMING EVENTS SUGGESTING THE NEED FOR ACTION

### A. Nuclear Regulatory Commission (NRC)

The independent NRC now plays a major role in nuclear exports and will attract considerable attention to the international safeguards issue soon.

1. Inadvertently, the final responsibility for approving nuclear exports was allowed to be vested in the independent NRC rather than the Executive Branch. This resulted from the September 1974 law which created ERDA and NRC.
2. The NRC now has before it for approval proposed licenses to export additional fuel for reactors in Spain and India. There appears to be agreement within NRC that additional controls are needed, but there is sharp dispute as to whether additional controls -- beyond those in existing agreements -- should not be imposed as a condition of the exports. The Commission decision apparently will be accompanied by written opinion, making public the strong views of one Commissioner that safeguards in some agreements for cooperation and U.S. vigilance have not been adequate.

B. Congressional

The Congress is asking more questions and tightening controls which will introduce delays and uncertainties. Examples include:

1. In 1974, a law was enacted requiring that all future bilateral "agreements for cooperation" involving significant nuclear exports be submitted to the Congress for a 60-day period of review.
2. Senate Government Operations Committee recently reported a bill (S. 1439) which (a) shifts additional Executive Branch nuclear export responsibility to State Department and the independent Nuclear Regulatory Commission from ERDA and Commerce Department, and (b) makes the Congress the referee in disputes between State and NRC. Bill referred to JCAE and Foreign Relations for 60 days. It could come to a vote this session.
3. The Senate version of the Military Aid Bill includes a prohibition (the "Symington Amendment") against military assistance to countries which furnish or receive nuclear reprocessing or enrichment facilities not under multinational control and which do not have IAEA safeguards on all nuclear facilities. House-Senate Conferees agreed on June 16 to accept the Symington Amendment with a proviso that restrictions could be waived in specific cases upon a finding by the President of overriding national interest, but Congress would then have an opportunity to disapprove.

4. The ERDA 1977 Authorization Bill was amended on the House floor to provide for Congressional review of the first export to any nation that is neither a signer of the NPT nor covered by any agreement for cooperation approved by the Congress under the provisions of the 1974 law listed above.
5. A House International Relations Subcommittee (Zablocki) held hearings on June 10 on an amendment to the Export Administration Act designed to prohibit nuclear exports unless safeguards are tightened.
6. Senator Ribicoff is asking hard questions of the State Department as to whether (a) any U.S. materials were used by India in producing the plutonium used in the device exploded in 1974, and (b) why the U.S. did not respond more vigorously to that event. This whole issue will get even more attention as NRC considers pending export license for India (mentioned in II(a)(1) above).

C. Executive Branch

Dr. Fred Ikle, Director of the Arms Control and Disarmament Agency (ACDA), recently gave a speech revealing his concerns about the adequacy of safeguards to prevent the diversion of plutonium.

D. Other

Presidential Candidate Carter outlined his concerns about nuclear exports and proliferation at the same forum in which Ikle's speech was delivered.

IV. ADMINISTRATION RESPONSE THUS FAR

- A. The Executive Branch has responded to the above in several ways, but the actions (a) have been piecemeal and largely defensive, and (b) appear inadequate in the face of current Congressional and public attitudes. Responses include:
  1. Secretary Kissinger summarized U.S. non-proliferation efforts in testimony in opposition to the Glenn-Percy Bill before the Senate Government Operations Committee. ERDA, ACDA, and other Administration witnesses gave supporting testimony.

2. Informal attempts are being made by State, ERDA, and others to limit the scope of restrictions and of Congressional review requirements in pending bills (e.g., Military Aid and ERDA Authorization).
3. An Executive Order was recently issued setting up procedures for getting a coordinated Executive Branch position (State, ERDA, DOD, ACDA, and Commerce) on nuclear export licenses pending before the NRC. (State Department notifies NRC of the coordinated Executive Branch position.)

V. POSSIBLE ADDITIONAL RESPONSES

Several ideas have surfaced for possible additional responses to the current situation. Each involves significant issues that require evaluation and decision. Possible actions include:

A. Significant hardening of U.S. attitude on nuclear exports safeguards required before exports are permitted.

There appears to be divided views on this. Some probably will argue that past and current controls are as good as can be achieved and/or that tougher U.S. positions, taken unilaterally will not be effective. Others will argue that anything the U.S. can do unilaterally or in cooperation with others that will help reduce the opportunity for proliferation is worth doing, recognizing the threat. Steps that might be considered to achieve a harder and consistent policy include:

1. Strong public message to other supplier nations (France and Germany) emphasizing the need to curb proliferation and urging them to (a) stop supplying reprocessing or enrichment technology to other nations, and (b) adopting more rigorous safeguards requirements.
2. Move to renegotiate safeguards controls under existing agreements for cooperation as a condition for further exports, particularly giving the U.S. a veto on whether and where U.S.-supplied fuel is reprocessed and resulting plutonium retained.
3. Appoint a panel of experts not now involved in U.S. nuclear export activities to review past and current practices and submit recommendations to you for improvements.

- B. Discourage reprocessing (in the U.S. and abroad) until better controls (technological and institutional) can be worked out.

If this policy approach were to be taken, consideration would have to be given to:

1. Expanding storage for "spent" fuel elements, possibly making storage available to other countries.
2. "Buy back" of spent fuel elements from other countries.
3. Finding ways to replace the energy value of the plutonium and unused uranium in the spent fuel elements (which is in the range of 10-30% of the total energy value if reprocessing and recycle of plutonium was permitted).
4. Other incentives to discourage the separation of plutonium through reprocessing.

- C. As a means to discourage the spread of reprocessing centers, provide U.S. reprocessing services to foreign countries.

No U.S. capacity in operation now.

1. Assist U.S. industry in demonstrating reprocessing and related technology (plutonium conversion, waste handling, safeguards). Such a program is contemplated in the President's 1977 Budget for coverage in a 1977 Supplemental Request.
2. Urge or require U.S. firms planning to provide reprocessing services to dedicate a portion of their capacity to serve foreign needs, thereby potentially satisfying foreign needs for many years without the construction of reprocessing plants abroad.
3. Go beyond #2 above by offering to allow other governments to participate in the operation of the first expected reprocessing plant (Barnswell, South Carolina) as a demonstration of the concept of a multi-national reprocessing center.

D. Propose international storage for excess plutonium

IAEA has authority to establish repositories for excess nuclear materials. The U.S. could propose that this authority be implemented, that all nations store excess plutonium in such repositories and indicate that the U.S. would participate with a deposit of its excess plutonium.

E. Strengthen IAEA Safeguards

1. Make available advanced U.S. safeguards technology to other nations and the IAEA.
2. Consider further strengthening of IAEA safeguards, expanding the proposal for a \$5 million - 5 year voluntary U.S. contribution announced by the President on February 26, 1976.

TAB C

DRAFT OUTLINE FOR THE CONTENT OF A STATEMENT ON NUCLEAR  
EXPORTS (WHICH COULD BE EXPANDED TO  
A STATEMENT ON NUCLEAR ENERGY)

A. BASIC OBJECTIVES

1. Prevent further proliferation of nuclear weapons.
2. Make nuclear energy available for peaceful uses particularly to reduce the current excessive, reliance on petroleum.

B. POLICIES WE HAVE FOLLOWED

1. Promote signing of the NPT.
2. Require safeguards in agreements for cooperation with countries seeking nuclear equipment and materials from the U.S.
3. Serve as a reliable and competitive supplier of nuclear reactors and fuel, which provides leverage for imposing rigid safeguards requirements.
4. Urge other supplier nations to impose rigid safeguards as conditions of export.

C. STEPS NOW BEING TAKEN

1. Urging other supplier nations to withdraw from any plans to provide enrichment or reprocessing plants or technology to other countries.
2. Urging nations that have ordered or are seeking to order reprocessing plants to discontinue such activities.
3. Promoting the concept of a "multinational reprocessing center" in a effort to forestall the spread of reprocessing plants, particularly in non-nuclear weapons nations.
4. Ask Congress to approve a \$5 million contribution to IAEA over the next 5 years to strengthen safeguards.



D. RECENT ADVANCES

1. Nuclear Fuel Assurance Act, providing framework for expansion of uranium enrichment capacity in the United States (assuming the bill passes).
2. Agreements by other supplier nations to tighten safeguards.
3. South Korean cancellation of order for a reprocessing plant.
4. Japanese signing of NPT.

E. POSSIBLE NEW INITIATIVES

(Outline in more detail on pages 5 to 7 of the paper describing the need for a Presidential message.)

1. Significant hardening of U.S. attitude on nuclear export safeguards, with a clear statement of U.S. policy.
  - ° Strong message to other supplier nations urging (a) moratorium on reprocessing and enrichment technology exports and (b) more rigorous safeguards.
  - ° Negotiate tighter safeguard controls over existing agreements for cooperation.
  - ° Appoint a panel of experts to review U.S. nuclear export policy.
2. Discourage reprocessing (in the U.S. and abroad) until better controls (technological and institutional) can be worked out.
  - ° Expand storage for spent fuel elements.
  - ° Buy back of spent fuel elements from other countries.
  - ° Replace energy value of plutonium and uranium in spent fuel.
3. As a means to discourage the spread of reprocessing centers, provide U.S. reprocessing services to foreign countries.
  - ° Assist U.S. industry in demonstrating reprocessing.
  - ° Urge or require U.S. reprocessing firms to serve foreign needs.



- Offer to allow other Governments to participate in the operation of U.S. reprocessing facility -- as a multinational reprocessing center.
4. Propose international storage for excess plutonium.
  5. Strengthen IAEA safeguards.
    - Make available advanced U.S. safeguards technology.
    - Further strengthening of IAEA safeguards resources.





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

OFFICE OF THE ADMINISTRATOR

Robert C. Seamans, Jr.  
Administrator

June 9, 1976

NOTE FOR: Jim Connors

Attached is my letter to the President recommending accelerated effort on reprocessing and other initiatives along the lines of our recent discussions. Elliott Richardson has seen and generally concurs with the letter along with the suggested response back to me, also attached.

I would greatly appreciate your assistance in getting this package into the President's hands as soon as possible.

Bob Seamans

Attachment

*next Wednesday  
Cdr Long  
Finn / Seid  
Ames*

Honorable Robert C. Seamans, Jr.  
Administrator  
Energy Research and Development  
Administration  
Washington, D. C. 20545

Dear Bob:

I agree in principle with the concepts outlined in your letter to me of June 9, 1976, and direct you to proceed on an accelerated basis and in coordination with the Energy Resources Council to review and develop in further detail the policy initiatives that I should undertake with respect to nuclear reprocessing and related non-proliferation matters.

In this regard, you should include in your analyses (1) a re-examination of the validity, necessity, and desirability of reprocessing spent nuclear fuel; (2) further definition of how a multinational reprocessing demonstration center in the United States would be established and operated, including the role of IAEA; and (3) optimum means for handling excess plutonium resulting from the reprocessing.

In addition, it would be well to address other nuclear problems such as waste management which, alongwith reprocessing initiatives, could provide the framework for a comprehensive nuclear policy to be adopted and enunciated in 2-3 months.



-2-

Please strive to complete this review and forward your  
recommendations to me by August 15, 1976.

Sincerely,

The President

cc: Elliott Richardson



Date: June 10, 1976

Time:

FOR ACTION:

cc (for information):

✓ JIM CANNON

✓ JACK MARSH

✓ JIM LYNN

✓ MAX FRIEDERSDORF

✓ BRENT SCOWCROFT

✓ BOB HARTMANN

✓ BILL SEIDMAN

FROM THE STAFF SECRETARY

DUE: Date: Wednesday, June 16, 1976

Time: 12:00 noon

SUBJECT:

Letter to the President from Robert Seamans, Administrator, ERDA, recommending accelerated effort on reprocessing and other initiatives concerning special nuclear materials with suggested response to Seamans from the President.

ACTION REQUESTED:

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

REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

*Marsh - approve letter*  
*Hartmann - see changes*  
*Friedersdorf - no comment*  
*Seidman - comments (should go to Energy Resources Council etc)*  
*Cannon + Scowcroft - joint new memo*  
*Lynn - comments asking for printing*

**PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.**

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

James E. Connor  
For the President

## THE WHITE HOUSE

ACTION MEMORANDUM

WASHINGTON

LOG NO.:

Date: June 10, 1976

Time:

## FOR ACTION:

JIM CANNON

JIM LYNN

BRENT SCOWCROFT

BILL SEIDMAN

FROM THE STAFF SECRETARY

cc (for information):

JACK MARSH

MAX FRIEDERSDORF

BOB HARTMANN

M. G.

DUE: Date: Wednesday, June 16, 1976

Time:

12:00 noon

## SUBJECT:

Letter to the President from Robert Seamans, Administrator, ERDA, recommending accelerated effort on reprocessing and other initiatives concerning special nuclear materials with suggested response to Seamans from the President.

## ACTION REQUESTED:

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

## REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

**PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.**

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

Jamés E. Connor  
For the President

~~CONFIDENTIAL~~



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

June 9, 1976

The President  
The White House

Dear Mr. President:

I believe there is an opportunity and a need for the United States to take a major initiative to resolve uncertainties that now exist in the nuclear fuel cycle and to reduce the risk of international proliferation of special nuclear materials. This opportunity, if successfully pursued, would complete your evolving nuclear policy and could be the central feature of a major Presidential Message.

Background:

Until recently, Federal nuclear policy: (1) stressed Government funding of enrichment plants; (2) assumed that reprocessing of spent nuclear fuel and recycling of plutonium and uranium would be accomplished in the private sector without Government support; and (3) placed less stress on safeguards against theft or diversion of nuclear material than now seems wise.

Your initiatives in the past two years have substantially reformed this policy. Specifically you have:

- Limited the Federal role in enrichment by supporting private entry as the best means for assuring additional enrichment capacity;
- Increased Government research in reprocessing and recycling so that safe and secure private facilities could be demonstrated;
- Sponsored a major Government program to demonstrate the safe management and disposal of nuclear waste; and
- Increased stress on materials and physical safeguards at both Government-owned and private facilities licensed by the Nuclear Regulatory Commission.

DECLASSIFIED  
AUTHORITY RAC NLF-PHF-1-1-6-0 5/5/2008  
BY MHO  
NARA DATE 8/23/2012



NATIONAL SECURITY  
INFORMATION

Unauthorized Disclosure Subject to  
Criminal Sanctions.



SUBJECT TO GENERAL DECLASSIFICATION SCHEDULE OF  
EXECUTIVE ORDER 11852 AUTOMATICALLY DOWNGRADED  
AT TWO YEAR INTERVALS AND DECLASSIFIED ON DEC. 31

(insert year)

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

- 2 -

These measures will greatly strengthen the nuclear fuel cycle and our controls over the handling and utilization of plutonium in this country. Yet, despite substantial progress, a final and crucial issue remains unresolved -- the need to control carefully the world's supply of plutonium. Among the factors bearing on this issue are:

- . A recent court decision most likely will prevent the Nuclear Regulatory Commission from licensing private reprocessing facilities that would produce plutonium for recycled use until approval of the generic environmental statement on mixed oxide fuels, probably years from now.
- . Uncertainty is growing among other nations about the United States as a reliable supplier of reactors and fuel because of (1) final decisions on export licenses now rest with the Nuclear Regulatory Commission; and (2) recent amendments to nuclear legislation indicating firm Congressional intent to review individual nuclear initiatives with the private sector.
- . Other supplier nations are developing national reprocessing and recycling capabilities, and some are under pressure commercially to sell plants to other countries desiring to build an integrated indigenous nuclear power capability, for example, Iran and Brazil. This trend could multiply the chances of theft or diversion of plutonium and could lead to a dramatic increase in the number of nations with nuclear weapons.
- . Multinational regional reprocessing centers have been suggested as a means for minimizing this proliferation. However, the technical, logistical and political feasibility of the idea has yet to be demonstrated.

Recommendation:

I believe the time is at hand for the United States to address this basic issue with a major initiative. Such an initiative might have the following features:



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~~CONFIDENTIAL~~

-3-

- . An offer to supplier and consumer states to join with the United States to demonstrate the viability of a multinational reprocessing approach using the United States as the demonstration site. The question of excess plutonium and disposal of nuclear waste resulting from the reprocessing requires further exploration to optimize the attractiveness to both the host and participating nations.
- . A call upon supplier nations to suspend temporarily the export of reprocessing technology until the multinational centers or other effective controls have been agreed to. I have already suggested this to the Secretary of State in a letter dated May 13, 1976.
- . A commitment to employ in the multinational centers and to make available advanced United States safeguards and security technology.

The key to the initiative is a willingness of the United States to offer reprocessing and recycling services to other nations and to open our facilities to international inspection. The facility could well be a new plant or a partially completed private plant at Barnwell, South Carolina that was financed by a consortium composed of Allied Chemical, Gulf Oil Corporation and Royal Dutch Shell. Arrangements for serving foreign needs from this facility would, of course, have to be worked out, however, it is anticipated that the consortium will have an interest in a governmentally-encouraged demonstration.

In any event, the United States could provide some funding and appropriate technical assistance and guarantees for the establishment of an international reprocessing facility in the United States and invite those nations which would utilize the services of such a facility to provide a pro rata share of operating expenses. Of course, a successful international demonstration, under the auspices of the United States, would also materially assist in the development of our domestic reprocessing capability over the long run as increasing nuclear power production results in needed new reprocessing facilities.



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~~CONFIDENTIAL~~

-4-

Such an initiative could become the centerpiece of a truly comprehensive Presidential policy on nuclear power and non-proliferation.

Decision:

If you approve, I will pursue and intensify work with appropriate departments and agencies to develop a recommended nuclear reprocessing initiative to be available to you as soon as possible.

Respectfully yours,



Robert C. Seamans, Jr.  
Administrator

cc: Elliott Richardson



~~CONFIDENTIAL~~

(Suggested Presidential response  
to letter of June 9, 1976 from  
Robert C. Seamans, Jr.)

Honorable Robert C. Seamans, Jr.  
Administrator  
Energy Research and Development  
Administration  
Washington, D. C. 20545

Dear Bob:

I agree in principle with the concepts outlined in your letter to me of June 9, 1976, and direct you to proceed on an accelerated basis and in coordination with the Energy Resources Council to review and develop in further detail the policy initiatives that I should undertake with respect to nuclear reprocessing and related non-proliferation matters.

In this regard, you should include in your analyses (1) a re-examination of the validity, necessity, and desirability of reprocessing spent nuclear fuel; (2) further definition of how a multinational reprocessing demonstration center in the United States would be established and operated, including the role of IAEA; and (3) optimum means for handling excess plutonium resulting from the reprocessing.

In addition, it would be well to address other nuclear problems such as waste management which, alongwith reprocessing initiatives, could provide the framework for a comprehensive nuclear policy to be adopted and enunciated in 2-3 months.



Please strive to complete this review and forward your recommendations to me by August 15, 1976.

Sincerely,

The President

cc: Elliott Richardson



Date: June 10, 1976

Time:

FOR ACTION:

cc (for information):

JIM CANNON  
JIM LYNN  
BRENT SCOWCROFT  
BILL SEIDMAN  
FROM THE STAFF SECRETARY

JACK MARSH  
MAX FRIEDERSDORF  
BOB HARTMANN

DUE: Date: Wednesday, June 16, 1976

Time: 12:00 noon

SUBJECT:

Letter to the President from Robert Seamans, Administrator, ERDA, recommending accelerated effort on reprocessing and other initiatives concerning special nuclear materials with suggested response to Seamans from the President.

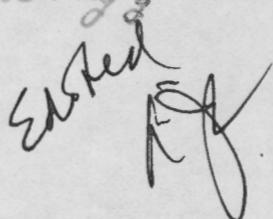
ACTION REQUESTED:

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

REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

*6/10 sent to Gwen for researching. - researched copy attached*



PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

ACTION MEMORANDUM

WASHINGTON

LOG NO.:

Date: June 10, 1976

Time:

*to Res  
6/10 3:47  
GAMS*

FOR ACTION:

cc (for information):

JIM CANNON

JACK MARSH

JIM LYNN

MAX FRIEDERSDORF

BRENT SCOWCROFT

BOB HARTMANN

BILL SEIDMAN

FROM THE STAFF SECRETARY

*JCB to DJS  
6/10 6:14  
GAMS*

DUE: Date: Wednesday, June 16, 1976

Time: 12:00 noon

SUBJECT:

Letter to the President from Robert Seamans, Administrator, ERDA, recommending accelerated effort on reprocessing and other initiatives concerning special nuclear materials with suggested response to Seamans from the President.

ACTION REQUESTED:

For Necessary Action

For Your Recommendations

Prepare Agenda and Brief

Draft Reply

For Your Comments

Draft Remarks

REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

*6/10 sent to GWS for retransmission*

*ok  
MWB*

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

Jame's E. Connor  
For the President

**CLASSIFIED**

LOG NO.

JUN 10 1976

due: 6/16 (Wed)  
12:00

ACTION MEMORANDUM

Date: June 10, 1976

Time:

FOR ACTION:

cc (for information):

JIM CANNON  
JIM LYNN  
BRENT SCOWCROFT  
BILL SEIDMAN  
FROM THE STAFF SECRETARY

JACK MARSH  
MAX FRIEDERSDORF  
BOB HARTMANN

DUE: Date: Wednesday, June 16, 1976 Time: 12:00 noon

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- Draft Reply
- For Your Comments
- Draft Remarks

REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

*Approved  
draft  
letter  
Jm*

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

Date: June 10, 1976

Time:

FOR ACTION:

cc (for information):

JIM CANNON

JACK MARSH

JIM LYNN

MAX FRIEDERSDORF

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For Your Recommendations

Prepare Agenda and Brief

Draft Reply

For Your Comments

Draft Remarks

REMARKS:

(FYI: Seamans reports that Secretary Richardson has seen this letter and generally concurs with it along with the suggested Presidential response to Seamans)

*This subject to be assigned to the Energy Resources Council - other agencies besides ERDA are involved. Should be credited to Pres. before it heads as an agency position*  
JWS

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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

Jame's E. Connor  
For the President