

The original documents are located in Box 61, folder “1976/09/14 - General Scowcroft, Jim Lynn, Bob Fri, and Jim Connor” of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

Copyright Notice

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Gerald Ford donated to the United States of America his copyrights in all of his unpublished writings in National Archives collections. Works prepared by U.S. Government employees as part of their official duties are in the public domain. The copyrights to materials written by other individuals or organizations are presumed to remain with them. If you think any of the information displayed in the PDF is subject to a valid copyright claim, please contact the Gerald R. Ford Presidential Library.

THE WHITE HOUSE

WASHINGTON

September 13, 1976

MEMORANDUM FOR: ✓ JIM CANNON
JIM CONNOR
FROM: *Glenn Schleede*
GLENN SCHLEEDE
SUBJECT: ~~NUCLEAR~~ POLICY PAPER

Here is draft #3, minus the tabs which deal with the substantive backup initiatives which are still being worked on by OMB and NSC.

The reactions to draft #2 were uniformly bad. It seems to me that we can't go much further on the main decision paper until you have time to give us some reactions.

Meanwhile, I'm getting this version around to others to see if they have suggestions.

cc: Bob Fri
Jim Mitchell
Dave Elliott

CLEARANCE SHEET

DATE: 9/13/76

JMC ACTION

Required by: ASAP

STAFF RESPONSIBILITY Schleede

SUBJECT: NUCLEAR POLICY

RECEIVED FROM: Cannon

DATE RECEIVED: 9/9/76

C

STAFF COMMENTS:

See memo attached.

QUERN/MOORE RECOMMENDATION:

 APPROVE

 REVIEW & COMMENT

 DISCUSS

CANNON ACTION:

DATE:

Material Has Been:

 Signed and forwarded

 Changed and signed

 Returned per conversation

 Noted

JIM CANNON

Comment:

NUCLEAR POLICY PROBLEMS

This paper outlines outstanding substantive problems involving:

- . Nuclear proliferation
- . U.S. Nuclear Exports
- . Domestic Reprocessing
- . Nuclear Waste Management

and outlines the perceptions of nuclear problems of the various parties at interest, including:

- . The general public
- . Nuclear critics
- . Congress
- . The Nuclear Regulatory Commission
- . Utilities and State Utility Commissions
- . Reactor manufacturers
- . Domestic reprocessors
- . Foreign suppliers of reactors and fuel
- . Foreign customers

OUTSTANDING SUBSTANTIVE PROBLEMS

. Nuclear Proliferation

- "Spent" fuel elements removed from commercial nuclear power plants and small research reactors contain plutonium which can be separated out in a step called "reprocessing" and, once separated, can be used quite quickly to make nuclear explosives. (Plutonium is inaccessible when in spent fuel form.)
- As the use of nuclear power has grown abroad, additional countries have acquired or plan to acquire the capability to reprocess spent fuel. This spread increases the potential for theft or diversion for weapon use of separated plutonium.

. U.S. Nuclear Exports

U.S. leverage to deter foreign decisions to reprocess is declining. Specifically:

- In the past, the U.S. has dominated the market for nuclear reactors and fuel and has used this influence to impose restraints on customers. We have (a) promoted nuclear materials accounting and physical security measures -- through the IAEA and bilateral agreements, (b) induced signing of the NPT and acceptance of safeguards restrictions, (c) convinced other suppliers to agree on common conditions that would be imposed on customers to limit potential for proliferation. Also, since 1972, we have refused to distribute information on reprocessing technology.
- However, several key countries remain outside the NPT, including France. And we have remaining differences with other suppliers on how far to go in restraints. France, FRG and Iran believe we have already been too rigorous.
- For the future, our ability to use our supplier role to gain more restraint is weakened because (a) our order book for enrichment services has been closed since mid-1974; (b) our share of the foreign reactor market has dropped from 80% to 55% -- with no significant

-2-

sales in the last year, (c) we do not now offer reprocessing services to other countries and (d) the capacity to reprocess non-U.S. spent fuel is or will be available in other countries.

- U.S. competitiveness and reliability as a supplier is being called further into question by export restrictions added by NRC or the Congress. Normally, a contract will cover a reactor and the fuel required for many years into the future. Customers are unwilling to sign up with U.S. companies when fuel deliveries are subject to export decisions made years later. (For example, a customer could buy a \$1 billion reactor and end up with no fuel.)

. Domestic Reprocessing

- Domestically, we have encouraged creation of a commercial reprocessing industry and assumed large scale recycling of plutonium in present generation nuclear power plants and particularly for use as fuel for breeder reactors expected in the 1990's. Despite this policy we have no commercial reprocessing capability now, and industry may not be able to proceed without government help.
- Our current policy of encouraging domestic reprocessing and recycling of plutonium is open to question because:
 - . of uncertainties regarding economics, safeguards and waste handling -- which have not been demonstrated on a commercial scale.
 - . our encouragement for domestic reprocessing may be a major factor stimulating other countries to seek reprocessing capability.
 - . our domestic policy is inconsistent with our efforts to discourage the spread of reprocessing capability.
 - . recycling cannot occur unless the Nuclear Regulatory Commission (NRC) so decides -- after considering safety, safeguards and economics. (Decision expected in late 1977.)

. Waste Management

- We have not yet demonstrated that the Government can fulfill its responsibility to provide for safe, long-term storage or disposal of nuclear wastes from commercial nuclear power. While technology seems to be available, there are siting and other uncertainties. Many are unconvinced that our programs will in fact provide the necessary demonstration facility when it is desired around 1985.

PREVAILING PERCEPTIONS ABOUT NUCLEAR PROBLEMS

Perceptions vary widely depending upon ones' understanding and point of view. Briefly, the various parties at interest seem to reflect the views described below:

- . General public. There is serious concern about the "safety" of nuclear energy among a sizeable minority (perhaps 30%) of the general public -- and a lower level of concern among others. Those in the general public concerned about "safety" generally do not distinguish among concerns about:
 - matters such as nuclear reactor safety, theft of nuclear weapons, emissions of radiation from power plants -- which we do not believe are serious problems;
 - nuclear waste management, safeguarding weapons-grade nuclear materials (plutonium and highly enriched uranium) from theft or diversion, reprocessing of spent fuel, and recycling of plutonium in this country -- which we believe are manageable problems, even though we have not so demonstrated; and
 - theft or diversion of separated plutonium in certain foreign countries -- which we believe is a serious problem.
- . Nuclear critics. Persistent nuclear critics who intervene in regulatory cases and push state restrictions on nuclear power (six initiatives will appear on state ballots in November) normally charge that there are serious problems of (a) nuclear reactor safety, (b) safeguarding against theft or diversion of plutonium, (c) waste management, and (d) nuclear proliferation abroad.
- . Congress. Concern is currently focused almost exclusively on the threat of proliferation from reprocessing activities abroad -- as reflected in the current drive for legislation to restrict exports with the hope of forcing other countries to adopt more rigorous safeguards. (Concern was initially stimulated by India's explosion of a nuclear device, and the French and FRG sale of enrichment and reprocessing plants.)



- . Nuclear Regulatory Commission. NRC is responsible for assuring safety, safeguards, environmental acceptability and reliability of nuclear power, and is now focusing major attention on:
 - the acceptability in this country of widescale recycling of plutonium from reprocessing activities, and
 - the proliferation threat abroad which might be reduced by controls on U.S. exports of nuclear reactors and fuels. (NRC has had final approval authority on export licenses since creation of the agency in 1974.) NRC decisions on exports to Spain and India have attracted major attention.
- . Utilities and State Utility Commissions. Primary concern is with reducing nuclear power uncertainties -- particularly with respect to domestic uranium resources, enrichment services, reprocessing and waste management -- which uncertainties make it difficult to commit to nuclear plants even though nuclear plants have economic advantages. Utilities have backed reprocessing but they probably would not reject other alternatives (e.g., "throw away" fuel elements) as long as they know they will have a way of getting rid of spent fuel without a significant economic penalty.
- . Reactor manufacturers. These firms are anxious to see resolution of outstanding domestic reprocessing and waste management questions so that utilities will buy more plants. They are concerned about tightening export controls because they are losing out in foreign markets to other suppliers.
- . Domestic reprocessors. One firm has invested \$270 million on a spent fuel separations plant in South Carolina and would like to begin operations but cannot do so until reprocessing issues are resolved (mainly by the NRC), and related facilities costing \$.8 to \$1 billion are committed. Other firms are interested in commercial ventures but are not making investments. (Some Government assistance almost certainly will be needed -- contrary to long-standing policy that reprocessing would be handled entirely by industry.)
- . Foreign Suppliers of Reactors and Fuel. Our principal competitors -- France and FRG -- seem to regard reprocessing and proliferation as inevitable and are thus less concerned than the U.S. -- as shown by the sale of enrichment and/or reprocessing plants to such countries as South Korea, Pakistan, Brazil and South Africa.



. Foreign Customers. Nuclear energy has become more attractive since the oil embargo and price increases. Most customer nations seem unwilling to accept more rigorous safeguards. They suspect U.S. restrictions are designed to keep them from capturing economic and energy benefits that the U.S. will gain, since the U.S. is committed to reprocessing. Undoubtedly, some nations want nuclear power plants and reprocessing in order to develop nuclear weapons.



State
 Defense (Ellsworth)
 ACDA

10:30	ERDA	- Sedunas
8 AM.	FEA	- FE Zorb (Hall)
	Commerce	- Richardson (Gunn)
✓	EPA	- Train (
9 AM.	CEQ	- Peterson (Gunn)
	Interior	- Kloppe (NO)?
	NRC	- Rowden (Gunn)
	OSTP	- Stever (Gunn)

Train wants to
 Plan August
 with the
 The paper further.



1. Have a
 draft paper
 on
 the nuclear
 ? with
 which you are
 familiar -
2. options
 slightly changes -
3. want you
 yourself to
 come to White
 House and
 look at options,
 and see which
 one you prefer.
 If you have
 any ^{additional} comments
 relating to
 option, write
 them down
4. Before P. leaves,
 expect you a
 meeting with him
 at which time you
 can explain your views

- B. Actions on domestic reprocessing would be as in paragraph B under Alt. #2 except we would no longer assume reprocessing and recycle would be acceptable. However, planning would proceed in a way that would permit bringing reprocessing facilities on line when needed if a decision to proceed with reprocessing is made.

Alt #4 is fully described in the cover memo.

9/13/76

MEMORANDUM FOR:

FROM:

SUBJECT: NUCLEAR POLICY

The Nuclear Policy Review Group that you created on July 14 has completed its assignment and submitted a report (Appendix I) which has been reviewed and commented upon by agencies (Appendix II) and your senior advisers.

Problems Requiring Attention

Briefly, the following major problems (described in more detail in TAB A) require attention:

- . There is a growing threat of nuclear proliferation abroad because of the spread of the capability to recover plutonium from "spent" fuel elements from nuclear power and research reactors in a step called "reprocessing." The plutonium can be stolen or clandestinely diverted and used quite quickly to make nuclear explosives.
- . The system of controls to prevent such uses is not adequate for dealing with the growing threat. This system includes IAEA safeguards and inspections, physical security programs, and various bilateral and multilateral agreements.
- . Concern in the public and Congress about proliferation abroad is leading toward legislation designed to force our foreign customers to agree to forego reprocessing and accept rigorous controls against the theft and diversion of plutonium -- as a condition for receiving nuclear fuel and equipment from U.S. suppliers.
- . US leverage for insisting upon rigorous controls is declining along with our role as the dominant supplier of nuclear fuel and equipment.

- . Efforts by industry to proceed with commercial scale reprocessing in the U.S. are stalled because of uncertainties concerning economics, safeguards and regulatory requirements. Also, domestic reprocessing is strongly opposed by some who believe that energy and economic benefits are outweighed by the problems resulting from large quantities of separated and recycled plutonium.
- . Uncertainties about reprocessing and long-term nuclear waste management (a Federal responsibility) are being used by opponents of expansion of nuclear power in the U.S. (Six more states will have anti-nuclear initiatives on their November ballots.)

Recommended Response

There is general agreement among heads of agencies concerned and your senior advisers on a recommendation that you issue a major statement on nuclear policy which:

- . Reaffirms U.S. intent to increase the use of nuclear power.
- . Recognizes that other countries will do the same regardless of U.S. position.
- . Reflects U.S. intent to be a reliable and competitive supplier to nuclear fuel and equipment in international markets.
- . Reflects great concern about the spread of reprocessing abroad because of the potential for theft or diversion of separated plutonium.
- . Announces policy changes to deal with this concern, backed up by a series of specific proposals to tighten controls, offer incentives to those who cooperate in restricting reprocessing, and impose sanctions on those who violate agreements.
- . Announces the Administration's attitude toward reprocessing in the U.S. and a course of action to carry out that position.
- . Commits the Administration to assure the availability of a nuclear waste disposal facility when desired in 1985.

However, with respect to reprocessing here and abroad, there is disagreement among your advisers on:

- . Whether and when reprocessing should be used.
- . The desirability and probable effectiveness of U.S. attempts to get other nations to forego reprocessing.

Issues Requiring Your Attention

If you agree that a Presidential response is warranted to deal with outstanding nuclear policy problems, your decisions are needed on the following issues:

1. U.S. policy on the issue of reprocessing here and abroad. (Pages ____ to ____ of this memo.)
2. Specific initiatives in support of the general policy decision that you select. (Page ____ and Tabs ____ to ____.)
3. Steps you may wish to take before making final decisions (e.g., meet with agency heads, Congressional leaders) and steps to implement your decisions (e.g., consultations with other countries; format for announcement). (Pages ____ to ____ of this memo.)

Principal Issue - Policy on Acceptability of Reprocessing Here and Abroad And The Control of Separated Plutonium

All of your advisers agree that some change of current policies on reprocessing and the control of separated plutonium are needed. They appear to disagree largely because of different views on:

- . The relative weight given to non-proliferation, energy and economic objectives.
- . The chances of changing significantly the course of events worldwide which is leaning towards growing proliferation.
- . The probably effectiveness of U.S. attempts to use its diminishing supplier role to deter other nations from proceeding with reprocessing.
- . The impact, here and abroad, of a change in U.S. policy which now assumes that we will proceed with reprocessing and recycle of plutonium.

Four principal positions on domestic and foreign reprocessing and alternatives are identified and described below. Each is described in more detail at TAB B. The principal variables among the four alternatives are:

- . the toughness of our stand against the spread of reprocessing abroad.
- . our attitude toward reprocessing in the U.S. and the Government role in bringing about reprocessing.
- . the extent of the consistency between our domestic and foreign policy on reprocessing.
- . Alt. #1. Continue resisting the spread of reprocessing abroad but with no significant change in policy or significant new initiatives. Continue current policy on domestic reprocessing, which assumes reprocessing, and recycle of plutonium, encourages the development of a private reprocessing industry, and provides limited Government assistance on reprocessing R&D

Your statement announcing this position would stress concern about the spread of international reprocessing, stress the need to work cooperatively with other nations, take credit for past U.S. actions and limited efforts now underway or planned.

In effect, we would be accepting the inevitability of spread of reprocessing and not make a major effort to halt that spread.

o Principal arguments for this approach are that:

- other nations who view us as overreacting would be reassured of our steadiness.
- there would be little additional Federal involvement in reprocessing now.

o Principal arguments against this approach are that:

- it does not deal with the currently perceived threat of proliferation and would be unacceptable to Congress and the public.
- Differences in NRC and Executive Branch attitude would be obvious since NRC almost certainly will deny some exports that our trading partners expect export under existing agreements for cooperation.
- Uncertainties about domestic reprocessing would continue

- . Alt. #2. Significantly strengthening of our efforts to control the spread of reprocessing abroad (but accept its inevitability) and to prevent theft and diversion of separated plutonium -- hopefully in cooperation with other nations, but with unilateral moves when necessary. Continue current policy of encouraging development of a domestic reprocessing industry.

Your statement announcing this policy would stress concern about the spread of international reprocessing, highlight the need for major new steps to avoid this spread and to strengthen safeguards, and offer incentives to customers and suppliers to cooperate. It will also include a greater Federal role in demonstrating commercial scale reprocessing in this country and justify domestic reprocessing plans on the grounds that capacity is needed to understand economics and safeguards and to provide reprocessing services for both U.S. and foreign needs.

In effect, you would be accepting the inevitability of reprocessing but would be moving vigorously to limit its spread in other countries. Many nations probably would go along with this position but (a) Brazil and perhaps Pakistan would proceed with plans for major reprocessing plants, and (b) Germany and France would continue a more liberal posture. Reactor manufacturers in the U.S. would be concerned about impact on foreign sales but they, and others in the U.S. nuclear industry would welcome the commitment to reprocessing and the plan to resolve uncertainties.

o Principal arguments for this approach are:

- it is a reasonable compromise with other suppliers: Canada favors tougher stand against reprocessing; the FRG and France a somewhat more liberal one.
- would help resolve some uncertainties restraining the growth of nuclear energy in the U.S.
- consistent with current domestic policy on reprocessing.
- compatible with plans for developing breeder reactor (which requires plutonium as fuel).

o Principal arguments against this approach are:

- It does not go far enough to meet the expectations of some critics in Congress and those who believe that proliferation risks of reprocessing outweigh energy and economic advantages.
- involves the government more deeply in reprocessing -- in contrast to the long standing policy that reprocessing was the responsibility of industry.

- leaves some inconsistency between our attitude towards reprocessing by others and our own intentions.
 - involves significant government cost (for domestic reprocessing, demonstration and buy back of foreign fuel.)
 - commits the U.S. government to supply reprocessing and recycle while NRC's decision on this issue is still pending.
 - commits the government to assist in starting up a \$270 million existing privately owned spent fuel separations facility at Barnwell, South Carolina, with the potential charge of "bailing out" a private venture owned by Allied Chemical, Gulf Oil, and Royal Dutch Shell.
 - commits the U.S. to offer incentives (e.g., fuel buy back from risky countries) that could have a cumulative cost of \$200 million by 1985 and \$2-\$5 billion through 2000.
- . Alt #3. Take strong stand that reprocessing should go ahead domestically and internationally only if safety, safeguards, and economic benefits can be demonstrated clearly. No longer assume that reprocessing and recycle would be acceptable, but proceed with planning and design activities necessary to bring reprocessing facilities on line when needed if a decision to proceed with reprocessing is made. Significantly strengthen our efforts to control the spread of reprocessing abroad. Provide government assistance in a commercial scale demonstration of reprocessing to resolve uncertainties. Launch a significant program to develop alternative ways of getting energy and economic benefits from spent fuel.

Your statement would make clear that non-proliferation goals take precedence over energy and economics. The attitude would be sharply different from Alt. #2. It would not accept inevitability of reprocessing and place burden of proof on those who want to proceed with reprocessing. It would also stress strongly your concern about spread of international reprocessing and announce steps to avoid this spread.

The chance of getting other nations -- customers and suppliers -- to take concerns about reprocessing more seriously would be greater than in Alt. #2.

o Principal arguments for this alternative are:

- it recognizes clearly the uncertainties with respect to reprocessing, including the need for NRC decision on acceptability of plutonium recycling.
- Reduces the inconsistency between our plans for going ahead with reprocessing and our opposition to spread of reprocessing abroad, thus strengthening our position with supplier and customer nations.
- it would be more favorably received by U.S. critics of reprocessing than would Alt. #2.
- provides utilities assurance that either reprocessing or spent fuel storage will be available when needed.

o Principal arguments against this alternative are:

- industry (other than utilities) may regard it as a reversal of position on reprocessing thus adding to current nuclear industry uncertainties (but they may accept it as inevitable in the current atmosphere of concern over reprocessing and consider the demonstration and planning activities to be a good way of preventing further delays if and when reprocessing is approved).
- industry will withhold further investment in reprocessing.
- adds uncertainty to the viability of the breeder, but a decision on breeder commercialization will not be made until 1986.
- general public may view it as a signal that the government is less sure about safety of nuclear energy.

. Alt. #4. Strongly oppose the use of reprocessing here and abroad.

- Commit the government to a major program to develop alternative technologies for getting energy value from spent fuel without separating the plutonium.
- If unsuccessful, prepare to dispose of spent fuel without regard to the energy value

o Principal arguments for this approach are:

- would improve our ability to persuade sensitive countries such as Korea, Pakistan, Republic of China and Iran not to acquire reprocessing facilities by our removing the argument that we were seeking to deprive them of capabilities and benefits that we were exploiting ourselves.
- would be quite popular with a few members of Congress, the press and the public.

o Principal arguments against this approach are:

- would forego the use of known reprocessing technology in return for alternatives whose feasibility and economics have not been demonstrated.
- would be unlikely to dissuade France, FRG, United Kingdom, and possibly others from proceeding with current reprocessing plans.
- U.S. private sector reprocessing interests would fold, utilities might slow down nuclear reactor orders.
- the breeder would have to be dropped as a long term energy option.
- government costs for developing alternative technologies may be as great or greater than those for demonstrating reprocessing under Alt. #2 and #3.

RECOMMENDATIONS AND DECISION ON MAJOR POLICY DIRECTION ON REPROCESSING

_____ Alt. #1 - Continue current policy of resisting spread of reprocessing abroad; Continue current policy on domestic reprocessing.

_____ Alt. #2 - Significantly strengthen efforts to control reprocessing abroad; Continue assuming and encouraging domestic reprocessing, including the provision of Federal demonstration assistance.

_____ Alt. #3 - Take stand that reprocessing should go ahead domestically and abroad only if safety, safeguards and economic benefits can be demonstrated clearly. Strengthen efforts to control reprocessing spread abroad. Assist in domestic commercial scale reprocessing demonstration.

_____ Alt. #4 - Strongly oppose the use of reprocessing here and abroad. Mount major program to develop alternative technologies.

In addition to the broad issue of your policy on reprocessing, decisions are needed on specific initiatives which are presented in Tabs C -

- . There is sharp disagreement among the agencies and your advisers on two of these:
 - The extent to which the U. S. should move unilaterally to impose additional restrictions against national reprocessing under existing bilateral agreements for nuclear cooperation. (Decision needed if you select major alternative 2, 3 or 4, above.) -- Tab C
 - Government actions to move ahead with reprocessing. (Decision needed if you select major alternative 1, 2 or 3, above.) -- Tab D
- . Nearly all agencies and advisers recommend that you announce a number of specific initiatives in support of your policy ^{reprocessing} if you select major alternative 2, 3 or 4. These are presented for your decision in TABS E -
- . In addition all your advisers recommend that you announce the Government's program to have available a nuclear waste disposal facility by 1985. Presented for decision at Tab F.

The Secretary of State has recommended advance consultation with foreign suppliers and/or customers on several of the specific initiatives.

In addition, your advisers believe that agencies concerned should spell these proposals out in more detail before you commit finally to them. This can be done while a statement or message is being prepared.

IMPLEMENTING ACTIONS -- BEFORE AND AFTER DECISIONS

In addition to substantive aspects of your nuclear policy decisions, a number of actions are either necessary or desirable before and after you make your decisions. Such actions are listed and described briefly below for your consideration and decision:

- A. Meeting with heads of agencies and senior staff. All of your advisers recommend that you meet with Bob Fri, the heads of the ten agencies effected by the review and your senior advisers before you announce final decisions. Such a meeting would be useful in providing an opportunity for direct expression of views and for gaining support for your decisions. We also recognize that you may wish additional information before making decisions.

Meeting _____ No Meeting _____

- B. Meeting with Congressional leaders. Your advisers recommend that you meet with key members of the House and Senate who are concerned with nuclear policy matters, including the leadership, selected members of the JCAE, Foreign Relations Committee and Senate Government Operations Committee. If you wish such a meeting, you have the option of scheduling it before making the decisions (which would probably be most effective in gaining support for your decisions) or meeting after your decisions but before any public announcements.

No Meeting _____ Meet before Decisions _____ Meet after Decisions _____

- C. Consultations with other Nations. The Secretary of State has recommended strongly that time be allowed for prompt consultations with other nations -- both suppliers and customers -- on some of the initiatives before public announcement. Some changes in decisions may be necessary and after such consultations/^{may} have to be dropped. Those initiatives where the Secretary has recommended advance consultations are identified on the various implementing initiative papers on Tabs A-P.

Consultations Authorized _____ No Consultations _____

- D. Announcing your decisions. You have several alternatives for announcing your nuclear policy decisions, including:

-- A message to Congress -- which would be appropriate in view of the strong interest on the Hill and the need for Congressional support for your decisions, provided that the message (and advance consultations) could be ready before October 2.

- An address to the United Nations General Assembly -- which is opposed by the Secretary of State because it would be viewed by the majority of the members as restrictive, discriminating, and targeted against the countries they represent.
- Public Statement -- which is a possibility if announcement is delayed until after October 2.

Message _____ UNGA _____ Public Statement _____

- E. Drafting message or statement. Your advisers recommend that the lead responsibility for drafting statements be assigned jointly to the Domestic Council and the National Security Council with the usual participation in and consultations with agencies and your senior advisers.

Domestic Council/NSC _____ Other _____

- F. Implementing the decisions you announce. The Nuclear Policy Review Group and the agencies involved have expressed strong concern that special steps are needed to assure effective implementation of your substantive policy decisions. These concerns appear to be based upon:

- Recognition that both domestic and international considerations are involved in most actions.
- The need for participation, cooperation, and coordination of two or more agencies in nearly all actions.
- The significance of the changes in policy that have been recommended -- which are more likely than usual to encounter opposition or delaying actions by people at lower levels in the agencies.
- Potential opposition from the leadership of some agencies because of the sharp division of opinion on some issues.

The review group and the agencies have recommended a variety of special organizational arrangements to assure that decisions are implemented, including (a) a new nuclear policy council, new assignment to the NSC undersecretaries group, or an ERC subcommittee, (2) a specially designated coordinator for waste management activities, (3) arrangements for advice from the interagency Federal Coordinating Council on Science, Engineering and Technology. Agencies disagree on membership; who should in fact be in control; reporting relations; and the need for some proposed arrangements.

Your advisers recommend that you (1) establish no organizational arrangements at this time, and (2) direct that the need for new organizational arrangements be presented to you for decision later, if existing arrangements prove unsatisfactory.

No new organiza-		Development and present
tional arrangements now	_____	alternatives now for
		consideration _____

G. Legislation. The need for legislation to implement the initiatives outlined in this paper include:

- Restrictions on reprocessing abroad as conditions of exports. Legislation is now pending and may still be enacted this session which includes stringent new guidelines and criteria. Efforts are underway to make this legislation acceptable. Essentially it would include: (a) requirements that the Executive Branch must seek to include in existing and new agreements for cooperation, (b) criteria or guidelines to be used by NRC in passing on export licenses, and (c) authority for the President to override NRC denials of export licenses under certain circumstances. If legislation is not enacted this session, we should develop our own bill.
- Authorization for reprocessing demonstration program. Depending upon your decision, authorizing legislation may be needed.
- Authorization for an alternative technology program. Legislation may also be needed in this area.
- Strengthening IAEA. While not critical, legislation in this area may be helpful to highlight the proposals that you decide upon.

No decision on proposed legislation is needed now.

Draft 4

9/14/76

MEMORANDUM FOR:

FROM:

SUBJECT: NUCLEAR POLICY

The Nuclear Policy Review Group that you created on July 14 has completed its assignment and submitted a report (~~Appendix I~~) which has been reviewed by agencies (~~Appendix II~~) and your senior advisers.

Problems Requiring Attention

Briefly, the following major problems (described in more detail in TAB A) require attention:

- There is a growing threat of nuclear proliferation abroad because of the spread of the capability to recover plutonium from "spent" fuel elements from nuclear power and research reactors in a step called "reprocessing." The separated plutonium is intended to be recycled as reactor fuel. However, the plutonium can also be stolen or clandestinely diverted and used quite quickly to make explosives.
- The system of controls to prevent such uses is not adequate for dealing with the growing threat. This system includes IAEA safeguards and inspections, physical security programs, and various bilateral and multilateral agreements.
- Concern in the public and Congress about proliferation abroad is leading toward legislation designed to force our foreign customers to agree to forego reprocessing and the accumulation of plutonium stockpiles -- as a condition for receiving nuclear fuel and equipment from U.S. suppliers.
- U.S. leverage for insisting upon rigorous controls is declining along with our role as the dominant supplier of nuclear fuel and equipment.



Example?

*like
Nikhaldin
and*

*notori
that
they
couldn't
won't*

- What is the word?*
- Efforts by industry to proceed with commercial scale reprocessing in the U.S. are stalled because of uncertainties concerning economics, safeguards and regulatory requirements. Also, domestic reprocessing is strongly opposed by some who believe that energy and economic benefits are outweighed by the problems resulting from significant quantities of separated and recycled plutonium. (It should be noted that reprocessing is useful but not crucial to the pursuit of the nuclear power option, at least for the next 10 to 20 years.)
 - Uncertainties about reprocessing and long-term nuclear waste management (a Federal responsibility) are being used by opponents of expansion of nuclear power in the U.S. (Six more states will have anti-nuclear initiatives on their November ballots.)

Recommended Response

There is general agreement among heads of agencies concerned and your senior advisers on a recommendation that you issue a major statement on nuclear policy which:

- ✓ • Reaffirms U.S. intent to increase the use of nuclear power.
- Recognizes that other countries will do the same regardless of U.S. position.
- Reflects U.S. intent to be a reliable and competitive international supplier of nuclear fuel and equipment.
- Reflects great concern about the spread of reprocessing abroad because of the potential for theft by terrorists or diversion by nations of separated plutonium. *11*
- Announces policy changes to deal with this concern, backed up by a series of specific proposals to tighten controls, offer incentives to those who cooperate in restricting reprocessing, and impose sanctions on those who violate agreements. *? (confidential)*
- Announces Administration position on reprocessing in the U.S. and a course of action to carry out that position.
- Commits the Administration to assure the availability of a nuclear waste disposal facility when needed about in 1985.

However, with respect to reprocessing here and abroad, there is disagreement among your advisers on:



- ✓ Whether and when reprocessing should be used.
- ✓ The desirability and effectiveness of U.S. attempts to get other nations to forego reprocessing.

Issues Requiring Your Attention

If you agree that a Presidential response is warranted to deal with outstanding nuclear policy problems, (your decision is needed on the critical issue of U.S. policy on reprocessing here and abroad. Discussed below.)

In addition, your decision [will be] [is] needed on specific initiatives in support of the general policy decision that you make.

[Those specific initiatives will be developed in greater detail and presented for your approval while the statement is being developed.]

[The specific initiatives are described briefly at TAB A. Your agreement in principle to these initiatives is needed now so that advance consultations can be undertaken with other foreign countries.]

Principal Issue - Policy on Acceptability of Reprocessing Here and Abroad and the Control of Separated Plutonium

All of your advisers agree that some change of current policies (summarized in Alt. #1, below) on reprocessing and the control of separated plutonium are needed. They disagree as to the nature of the change -- largely because of different views on:

- The relative weight given to non-proliferation, and other foreign policy considerations, on energy and economic objectives.
- The chances of changing significantly the course of events worldwide moving ahead with reprocessing which creates the capability for proliferation.
- The probable effectiveness of U.S. attempts to use its diminishing supplier role to deter other nations from proceeding with reprocessing.
- The impact, here and abroad, of a change in U.S. policy which now assumes that we will proceed with reprocessing and recycle of plutonium.

Four principal positions on domestic and foreign reprocessing and alternatives are identified and described below. The principal variables among the four alternatives are:



- . The toughness of our stand against the spread of reprocessing abroad.
- . Our attitude toward reprocessing in the U.S. and the government role in bringing about reprocessing.
- . The extent of the consistency between our domestic and foreign policy on reprocessing.
- . The importance attached to the breeder reactor -- which is dependent upon reprocessing and plutonium recycle (though a decision on breeder commercialization is not scheduled by ERDA until 1986).
- . Alt. #1. Continue to resist the spread of reprocessing abroad but with no significant change in policy or significant new initiatives. Continue current policy on domestic reprocessing, which assumes reprocessing, and recycle of plutonium, encourages the development of a private reprocessing industry, and provides limited government assistance on reprocessing R&D.

Your statement announcing this position would stress concern about the spread of international reprocessing, stress the need to work cooperatively with other nations, take credit for past U.S. actions and limited efforts now underway or planned.

In effect, we would be accepting the inevitability of the spread of reprocessing and not make a major effort to halt that spread.

- o Principal arguments for this approach are that:
 - Other nations who view us as overreacting to the risk of proliferation would be reassured of our steadiness.
 - There would be little additional Federal involvement in reprocessing now.
- o Principal arguments against this approach are that:
 - It does not deal with the currently perceived threat of proliferation and would be unacceptable to Congress and the public.
 - Differences in NRC and Executive Branch attitude would be obvious since NRC almost certainly will deny some exports that our trading partners expect under existing agreements for cooperation.
 - Uncertainties about domestic reprocessing would continue.



- . The toughness of our stand against the spread of reprocessing abroad.
- . Our attitude toward reprocessing in the U.S. and the government role in bringing about reprocessing.
- . The extent of the consistency between our domestic and foreign policy on reprocessing.
- . The importance attached to the breeder reactor -- which is dependent upon reprocessing and plutonium recycle (though a decision on breeder commercialization is not scheduled by ERDA until 1986).
- . Alt. #1. Continue to resist the spread of reprocessing abroad but with no significant change in policy or significant new initiatives. Continue current policy on domestic reprocessing, which assumes reprocessing, and recycle of plutonium, encourages the development of a private reprocessing industry, and provides limited government assistance on reprocessing R&D.

Your statement announcing this position would stress concern about the spread of international reprocessing, stress the need to work cooperatively with other nations, take credit for past U.S. actions and limited efforts now underway or planned.

In effect, we would be accepting the inevitability of the spread of reprocessing and not make a major effort to halt that spread.

- o Principal arguments for this approach are that:
 - Other nations who view us as overreacting to the risk of proliferation would be reassured of our steadiness.
 - There would be little additional Federal involvement in reprocessing now.
- o Principal arguments against this approach are that:
 - It does not deal with the currently perceived threat of proliferation and would be unacceptable to Congress and the public.
 - Differences in NRC and Executive Branch attitude would be obvious since NRC almost certainly will deny some exports that our trading partners expect under existing agreements for cooperation.
 - Uncertainties about domestic reprocessing would continue.

- . Alt. #2. Significantly strengthen efforts to limit the spread of reprocessing abroad (but accept its inevitability) and to prevent theft and diversion of separated plutonium -- hopefully in cooperation with other nations, but with unilateral moves when necessary. Continue current policy of encouraging development of a domestic reprocessing industry, with a commitment to assist with a Federal commercial scale demonstration.

Your statement announcing this policy would stress concern about the spread of international reprocessing, highlight the need for major new steps to avoid this spread and to strengthen safeguards, tighten our export restrictions, and offer incentives to customers and suppliers to cooperate. It will also include a greater Federal role in demonstrating commercial scale reprocessing in this country and justify domestic reprocessing plans on the grounds that capacity is needed to understand economics and safeguards and to provide reprocessing services for both U.S. and foreign needs.

In effect, you would be accepting this inevitability of reprocessing but would be moving vigorously to limit its spread in other countries. Many nations probably would go along with this position but (a) Brazil and Pakistan would proceed with plans for major reprocessing plants, and (b) Germany and France would continue a more liberal policy toward assisting others to build reprocessing facilities. Reactor manufacturers in the U.S. would be concerned about impact on foreign sales but they, and others, in the U.S. nuclear industry would welcome the commitment to reprocessing and the plan to resolve uncertainties.

o Principal arguments for this approach are:

- Offers the basis for a reasonable compromise with other suppliers: Canada favors tougher stand against reprocessing; the FRG and France a somewhat more liberal one.
- Would help resolve some uncertainties restraining the growth of nuclear energy in the U.S.
- Consistent with current domestic policy on reprocessing.
- Compatible with plans for developing breeder reactor (which requires plutonium as fuel).

o Principal arguments against this approach are:

- It does not go far enough to meet the expectations of some critics in Congress and those who believe that proliferation risks of reprocessing outweigh energy and economic advantages.
- Leaves some inconsistency between our negative attitude towards reprocessing by others and our own intentions to proceed.
- Further commits the Administration to reprocessing and recycle while NRC's decision on this issue is still pending.
- Calls for significant increase in government role in reprocessing and also involves government costs for a domestic reprocessing demonstrations (upwards of \$1 billion through 1985) and buy back of foreign fuel (upwards of \$200 million through 1985 and \$3 billion through 2000).
- In effect, it would commit the government to assist in starting up a \$270 million existing privately owned spent fuel separations facility at Barnwell, South Carolina, with the potential charge of "bailing out" a private venture owned by Allied Chemical, Gulf Oil, and Royal Dutch Shell.

- . Alt. #3. Significantly strengthen our efforts to control the spread of reprocessing abroad, as in Alt. #2, but also take strong stand that reprocessing should go ahead domestically and internationally only if safety, safeguards, and economic benefits can be demonstrated clearly. No longer assume that reprocessing and recycle would be acceptable, but proceed with planning and design activities necessary to bring reprocessing facilities on line when needed if a decision to proceed with reprocessing is made. Provide government assistance in a commercial scale demonstration of reprocessing to resolve uncertainties. Launch a significant program to explore and develop alternative ways of getting energy and economic benefits from spent fuel, if feasible.

Your statement would make clear that non-proliferation goals take precedence over energy and economics. The attitude would be sharply different from Alt. #2. and place burden of proof on those who want to proceed with reprocessing. It would also stress strongly your concern



about the spread of international reprocessing and announce steps to avoid this spread. The reprocessing demonstration would be justified primarily as an experiment to develop and demonstrate safeguards.

The potential of getting other nations -- customers and suppliers -- to take concerns about reprocessing more seriously would be greater than in Alt. #2. The budget impact would be about the same as Alt. #2.

- o Principal arguments for this alternative are:
 - Could improve our ability to persuade sensitive countries such as Korea, Pakistan, Republic of China and Iran not to acquire reprocessing facilities by our removing the argument that we were seeking to deprive them of capabilities and benefits that we were exploiting ourselves.
 - It recognizes clearly the uncertainties with respect to reprocessing, including the need not to commit to reprocessing before an NRC decision on plutonium recycling.
 - Reduces the inconsistency between our plans for going ahead with reprocessing and our opposition to spread of reprocessing abroad, thus strengthening our position with supplier and customer nations.
 - It would be more favorably received by U.S. critics of reprocessing than would Alt. #2.
 - Provides utilities assurance that either reprocessing or spent fuel storage will be available when needed.
- o Principal arguments against this alternative are:
 - Industry (other than utilities) may regard it as a reversal of position on reprocessing thus adding to current nuclear industry uncertainties (but they may accept it as inevitable in the current atmosphere of concern over reprocessing and consider the demonstration and planning activities to be a good way of preventing further delays if and when reprocessing is approved).
 - Industry will withhold further investment in reprocessing.
 - Adds uncertainty to the viability of the breeder, but a decision on breeder commercialization will not be made until 1986.

- General public may view it as a signal that the government is less sure about safety of nuclear energy.
- . Alt. #4. Strongly oppose the use of reprocessing here and abroad. Commit the government to a major program to explore and evaluate the feasibility of alternative technologies for getting energy value from spent fuel without separating the plutonium. If unsuccessful, prepare to dispose of spent fuel without regard to the energy value or possibly reactivate reprocessing at some later date.

Your statement would make clear that we view reprocessing as a serious danger, that we are forswearing reprocessing and urge others to do so as well. You could offer to share our results from developing new technologies with others and work with industry to assure that spent fuel storage is available, possibly on an international basis.

o Principal arguments for this approach are:

- Could improve our ability to persuade sensitive countries such as Korea, Pakistan, Republic of China and Iran not to acquire reprocessing facilities by our removing the argument that we were seeking to deprive them of capabilities and benefits that we were exploiting ourselves.
- Would be quite popular with a few members of Congress, the press and the public.

o Principal arguments against the approach are:

- Would forego the use of known reprocessing technology in return for alternatives whose feasibility have not been demonstrated.
- Would be unlikely to dissuade France, FRG, United Kingdom, and possible others from proceeding with current reprocessing plans.
- U.S. private sector reprocessing interests would fold, utilities might slow down nuclear reactor orders.
- This would signal antipathy toward a plutonium economy and the breeder might have to be dropped as a long term energy option.

- Government costs for developing alternative technologies may be as great or greater than those for demonstrating reprocessing under Alt. #2 and #3.

RECOMMENDATIONS AND DECISION ON MAJOR POLICY DIRECTION ON
REPROCESSING

- _____ Alt. #1 - Continue current policy of resisting spread of reprocessing abroad; Continue current policy on domestic reprocessing.
- _____ Alt. #2 - Significantly strengthen efforts to control reprocessing abroad; Continue assuming and encouraging domestic reprocessing, including the provision of Federal demonstration assistance.
- _____ Alt. #3 - Take stand that reprocessing should to ahead domestically and abroad only if safety, safeguards and economic benefits can be demonstrated clearly. Strengthen efforts to control reprocessing spread abroad. Assist in domestic commercial scale reprocessing demonstration.
- _____ Alt. #4 - Strongly oppose the use of reprocessing here and abroad. Mount major program to develop alternative technologies.

DETAILS OF THE FIRST THREE OF THE FOUR
ALTERNATIVE POSITIONS ON DOMESTIC AND FOREIGN REPROCESSING

- . Alt. #1. Continue resisting the spread of reprocessing abroad but with no significant change in policy or significant new initiatives. Continue current policy on domestic reprocessing. Specifically:
 - A. Efforts to control reprocessing abroad:
 - . Would be within the framework of existing agreements with consumers and suppliers.
 - . No unilateral actions.
 - . Seek more rigorous restraints from customers when the 30 existing agreements are amended or when new agreements are negotiated.
 - . Continue diplomatic efforts to get other suppliers to adopt more rigorous stance in insisting on restraints by their customers.
 - . Continue previously announced efforts to strengthen IAEA roll in international safeguards, perhaps with increased US funding and technical assistance.
 - . Continue previously announced efforts to get higher standards for physical security to prevent theft of plutonium.
 - . Selectively tighten our stand with countries like India, Pakistan and Brazil.
 - B. On domestic reprocessing, continue current policies and program which:
 - . Assumes reprocessing and recycle of plutonium will be acceptable.
 - . Encourages the development of a private reprocessing industry.
 - . Provides limited Government assistance, focusing on reprocessing R&D and on demonstrating long term nuclear waste storage or disposal.
- . Alt. #2. Significantly strengthen our efforts to control the spread of reprocessing abroad (but accept its inevitability) and to prevent theft and diversion of separated plutonium -- hopefully in cooperation with other nations, but with unilateral moves when necessary. Continue current policy of encouraging development of a domestic reprocessing industry. Specifically:

A. Actions to control foreign reprocessing would include:

1. Development, with heavy U.S. backing, more rigorous international control over plutonium inventories, more effective safeguards against diversion of plutonium, and tighter security to prevent theft:
 - . Promote internationally a new regime under which spent fuel or excess plutonium would be placed under IAEA control and announce that the U.S. is prepared to place its excess plutonium under such control (TAB E).
 - . Strengthen IAEA capabilities (personnel, equipment, and technology) to apply safeguards (TAB F).
 - . Tighten IAEA physical security standards for safeguarding plutonium (TAB G).
 - . Strengthen IAEA ability to get timely information on diversions (TAB H).
2. Improve U.S. proliferation intelligence (TAB I).
3. Negotiate actively to persuade our nuclear customers to defer or forswear national reprocessing and to accept more rigorous safeguards and inventory control.
 - . Set more rigorous restraints against reprocessing in new agreements for cooperation with customers (TAB C).
 - . Negotiate actively to get agreement to accept these requirements in existing 30 agreements (TAB A).
 - . Announce intent of applying sanctions to violators of agreements against reprocessing (TAB D).
 - . Offer incentives such as U.S. buy back of spent fuel, replacement of energy value, and assured fuel supply (TAB K).
 - . Offer incentives to other suppliers in helping halt the spread of reprocessing, such as joint fuel supply agreements, investment in U.S. plants and joint sponsoring of reprocessing plants (TAB L).
4. Restate pledge to stand behind enrichment contracts signed with private U.S. uranium enrichment firms (TAB L).
5. Strengthen cooperation with other nations in developing non-nuclear energy technologies (TAB M).

6. Launch U.S. program to develop technology for recovering energy value of spent fuel without reprocessing (TAB N).
7. Step up actions to head off reprocessing in Pakistan and Brazil (TAB P).

B. In the case of Domestic reprocessing, program would include the following (details in TAB B):

- . Continue assuming reprocessing and recycle will be acceptable and continue encouraging the development of a reprocessing industry.
- . Announce intention (or commit) to a major Federal program to demonstrate reprocessing economics and safeguards on a commercial scale. Cost would be about \$1 million through 1985 (but about 1/2 of this would be for a waste conversion facility that may be necessary in any event as a part of recognized responsibility to demonstrate waste disposal technology).
- . Invite international participation and inspection of the domestic reprocessing demonstration; use facility to understand and demonstrate necessary safeguards.
- . Plan to use part of this capacity to serve foreign customer reprocessing needs.

C. Encourage industry to construct spent fuel storage capability (TAB D).

- . Alt #3. Take strong stand that reprocessing should go ahead domestically and internationally only if safety, safeguards, and economic benefits can be demonstrated clearly. Significantly strengthen our efforts to control the spread of reprocessing abroad. Provide Government assistance in a commercial scale demonstration of reprocessing to resolve uncertainties. Specifically:

- A. Actions to control foreign reprocessing as in paragraph A under Alt. #2. except for a more vigorous program to develop alternative ways of getting energy benefits from spent fuel.

- B. Actions on domestic reprocessing would be as in paragraph B under Alt. #2 except we would no longer assume reprocessing and recycle would be acceptable. However, planning would proceed in a way that would permit bringing reprocessing facilities on line when needed if a decision to proceed with reprocessing is made.

Alt #4 is fully described in the cover memo.

MEETING WITH GENERAL SCOWCROFT,
JIM LYNN, ROBERT FRI, JIM
CONNOR
Tuesday, September 14, 1976
4:00 p.m.
Scowcroft's Office

What hammer
open P device

1) Full
Porton - Porton on bri

2) Assign drafting msg - schedule
with India, Hawaii, Israel, Egypt

3) ERDA - State Department
to work on msg written
on msg.

4) State - advance consultation
before msg is given

5) Get on w/ implementation
over next 2-3 yrs.

6) open only book NFAT.



Brin
10 - Smt ✓
Nisi

