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Nuclear Policy

THE WHITE HOUSE

WASHINGTON

August 13, 1976

File

INFORMATION

MEMORANDUM FOR: The President

THROUGH: Brent Scowcroft
James Cannon
James Lynn
James Connor

FROM: Robert Fri *RF*

SUBJECT: Nuclear Policy Review - Progress Report

The purpose of this memorandum is to inform you of our progress on the nuclear policy review, and to acquaint you with my tentative views on the major issues being studied.

Progress To Date

The nuclear policy review is progressing satisfactorily. The subject matter is, however, complex. As an illustration, the review group recently prepared a 27-page outline simply enumerating the various issues and options to be considered.

Cooperation from the participating agencies is good. Because the issues being studied are controversial, I anticipate some disagreement among the agency staffs on the results of the study. However, my private conversations with top officials reveal a reasonable consistency of opinion on the major outlines of a revised nuclear policy. I am therefore hopeful that this review can be successfully concluded.

The Issues

I have attached summaries of my own tentative views on the issues being considered in this review. Alternative



views are also indicated, where appropriate. The attachments cover:

1. The problems to be solved (Tab A) -
2. The overall nuclear policy goals for the U.S. (Tab B)
3. The long-term result we believe our policy should produce (Tab C)
4. The initiatives the U.S. could undertake now to move toward the long-term result (Tab D).

A large number of detailed options are now being studied by experts. This detailed study may result in some modifications to my current views, and especially to the nature of the specific initiatives open to us now. However, the broad policy outlines are less likely to change; and, of course, if the broad policies are desirable, we can work to overcome the problems of implementing detail.

Your review of the attachments will acquaint you with the substantial policy questions we are reviewing, and will suggest the scope of a possible message or speech on nuclear policy.



THE NUCLEAR POLICY PROBLEM

The U.S. has, over the years, taken numerous steps to promote the nuclear option domestically, and to support our nonproliferation goals internationally. These steps, however successful, have been largely incremental and have been taken in the absence of a well-articulated policy framework.

As a result, the U.S. and the Administration have received substantial criticism from a variety of sources--other countries, industry, Congress, and the public. Congress in particular has advocated and, in some cases, has passed its own "tough" non-proliferation measures. These, too, have been incremental and have lacked policy focus.

Briefly, U.S. nuclear policy presents four major problems.

1. The central nonproliferation issue is the recycling of plutonium as a fuel for nuclear power reactors. The U.S. position on plutonium recycle internationally, and the U.S. program for advancing recycle technology domestically, should be mutually reinforcing. This consistency does not now exist, or has at least been blurred badly. For example, the Arms Control and Disarmament Agency (ACDA) tends to resist any plutonium recycle at all, while the Energy Research and Development Administration (ERDA) is mounting programs to build rapidly our domestic industry. These apparently conflicting actions reduce public confidence domestically, and decrease our leverage in advancing our non-proliferation goals internationally.
2. The U.S. role as a credible supplier of nuclear materials and technology has eroded, largely because of the long delay in bringing new enrichment capacity on line. This erosion has reduced our influence with consumers and with other supplier nations in furthering our nonproliferation goals.
3. The U.S. demands certain nonproliferation assurances in return for exporting nuclear materials or technology. Some view these demands as too weak, others as too strong. In any case, we are viewed as deviating too frequently from our policies, and hence public and international confidence in our export policies is undermined.

In a related development, when the Atomic Energy Commission was broken up, the Nuclear Regulatory Commission (NRC) was inadvertently given control over the licensing of exports of nuclear reactors and fuel. As a result, the NRC is forced to determine if an export is in line with our foreign policy. This situation not only poses serious Constitutional problems, but also disturbs our foreign customers, who feel that the NRC can effectively abrogate Presidential commitments to them.

4. We have yet to persuade the public that we can dispose of nuclear waste. This problem is a major part of moves like the anti-nuclear initiative in California.

In my judgment, strong policy initiatives are needed to resolve these problems convincingly. Unless the problems are resolved, public and investor confidence in the nuclear option will continue to wane domestically. Internationally, our influence on nonproliferation will continue to decline.



NUCLEAR POLICY GOALS

Our nuclear policy goals are the following:

1. Our overall objective is to meet legitimate domestic and foreign needs for peaceful nuclear power, while eliminating the risk of plutonium (or other weapons grade material) being diverted for a national weapons capability, falling into the hands of terrorist or subnational groups, or damaging public health.
2. This overall objective importantly contains an affirmative goal--to meet legitimate needs for peaceful nuclear power. Meeting this goal is prerequisite to attaining agreement on controls that minimize or eliminate the risks associated with plutonium.
3. To control the risks of plutonium, our goals are to:
 - a. Secure commitments from all countries to engage only in the nonexplosive use of nuclear power;
 - b. Slow down the growth of nationally held stocks of plutonium;
 - c. Limit the number of countries able to recycle plutonium;
 - d. Safeguard against diversion of weapons material through:
 - 1) Making plutonium stocks inaccessible except for nonexplosive uses,
 - 2) providing timely warning of diversion;
 - e. Provide adequate physical security of dangerous materials.



There does not appear to be significant disagreement on these goals, except from those who oppose nuclear power outright. It should be noted, however, that the goals do not necessarily call for plutonium recycle. This fact helps make the goals acceptable to those who oppose recycle.



THE LONG-TERM RESULT OF
U.S. NUCLEAR POWER

The nuclear world is characterized by very long lead times--ten years to construct a reactor, agreements for cooperation running for forty years, and the like. As a result, it takes years to revamp everything needed to bring a new nuclear policy regime into being. Thus, agreement on the long-term result of U.S. nuclear policy is essential to guide today's initiatives and our subsequent actions. The following sections describe my current thinking on the long-range results we should seek in resolving the problems discussed in Tab A.

I believe that the U.S. stand on the use of plutonium recycle should rest on the policy that our purely economic interests will never dominate our nonproliferation goals. On the international front, I believe that this policy is essential to our success in persuading other countries to adopt stringent controls over the proliferation of plutonium. Domestically, relatively little is at stake, at least in the short run. For example:

1. The economic benefits of plutonium recycle are relatively small. A fully developed recycle capability would reduce electric power bills from 0 - 2%. Even this benefit is quite uncertain at this point.
2. While the absence of plutonium recycle could help persuade domestic utilities not to buy nuclear plants, the economics of recycle are probably less important to a utility than are the tradeoffs between coal and nuclear costs, the cost of money, and the like.
3. Plutonium recycle effectively extends our limited uranium resource for existing reactors, and is essential to the breeder. Failure to recycle could constrain the ultimate number of nuclear power reactors and/or the introduction of the breeder. However, it appears we have 5-10 years before this constraint is binding, and perhaps longer.



Assuming this basic policy is acceptable, I believe that the U.S. should adopt the following stance on plutonium recycle:

1. Plutonium recycle should not go ahead unless demonstrably safe means to do so are available, or unless acceptable alternate technologies can be developed.
2. Until these conditions are satisfied, the U.S. opposes the further spread of recycle technology or services. Specifically, the U.S. intends to undertake the necessary technology demonstrations before committing itself to recycle.
3. In the interim, the U.S. recognizes legitimate national interests in civil nuclear power and will, with other supplier nations, seek to assure these interests are met through means other than plutonium recycle.

There are two alternative views to these guidelines.

1. Decide now never to use recycle. This view seems premature. The most responsible version of this approach is to rely on substitute technologies for harnessing the energy in plutonium contained in spent fuel rods. Although attractive, U.S. reliance on a yet unproved technology is not likely to be a credible basis for our policy.
2. Decide now that recycle is satisfactory, and proceed to develop it aggressively. This view is widely held among nuclear advocates, in other nations, and in industry. It is attractive because it produces a firm decision on recycle. However, I believe that:
 - a. It is unnecessary on economic grounds. The economics of recycle are at best marginal for 5-10 years in the U.S.
 - b. It will stimulate, rather than retard, foreign reprocessing in the short run.
 - c. It is opposed by major segments of the public.



Assured Supply

In the long run, both suppliers and consumers must have access to an assured supply of nuclear fuel.

1. Suppliers need to guarantee fuel for reactors they sell. Even if a reactor supplier lacks indigenous fuel services, he should have access to a supply source. Otherwise, he is tempted to sell enrichment and reprocessing technology along with his reactor to provide his customer assured fuel.
2. Consumers need an assured source of fuel for reliable power.

With this in mind, and recognizing that safe plutonium recycle has yet to be demonstrated, the U.S. should seek arrangements that will in the future guarantee fuel services to all consumers and suppliers. The possible supply sources are:

1. Existing supplier nations, possibly through supplier-consumer ownership of enrichment and reprocessing plants.
2. Third-country facilities with consumer ownership, possibly regionally located.
3. In-country facilities, binationally or multi-nationally financed.
4. In rare cases, national ownership of facilities that do not require reprocessing.

In cases 1 and 2, above, the consumer would contract for a fuel supply, and would return spent fuel to the supplier. The supplier would compensate the consumer for the energy value of the spent fuel, and would reprocess the fuel (or, if a non-recycle technology was used, handle it accordingly). The supplier would also dispose of the waste.

Alternative views would stress one of the above options (suppliers only, multinational only, national only) over the others. A suppliers only policy might be desirable, but it would be difficult to apply it uniformly. Therefore, I believe a series of options should be available to us.



Export Policy

All suppliers should have uniform export policies; that is, uniform constraints applied to all supply contracts. A degree of uniformity has already been achieved through our efforts with other suppliers. We should continue our work with the suppliers, and should upgrade our export agreements to bring them into line with the agreed-upon constraints.

Although uniform application of these constraints is a desirable goal, I believe that the key to our export policy must be the control of plutonium. Therefore, we should tolerate some flexibility in applying constraints, provided adequate control over plutonium is secured. For example, an assured supply arrangement that removed spent fuel from the consumer nation could dispel much of the plutonium risk, and could permit tailoring our export constraints somewhat.

However, the constraints should apply in any location where plutonium is stored. Thus, all constraints should apply to supplier nations and multinational fuel centers. In addition, I believe that we should seriously consider putting plutonium stocks under custody of the International Atomic Energy Agency (IAEA).

There are two alternative views, in broad terms:

1. All constraints should apply in all cases, without exception. This as a desirable end, but an unlikely outcome. Some countries, whose motives are also suspect, will resist. To avoid driving them to a national recycle capability, we must offer alternatives that remove plutonium from their hands--even though all the constraints do not apply.
2. Rely on whatever constraints can be negotiated. This is a view conducive to commercial interests. It is not enough, however, to control the spread of plutonium.

Waste Disposal

There is no disagreement that the U.S. should demonstrate waste disposal techniques by 1985.



In addition, there seems to be no disagreement that the U.S. can and should demonstrate the key components of a waste disposal facility by 1978. Public confidence and California law make this early component demonstration highly desirable.

A major issue involves licensing of the demonstration facility. I believe the facility should be licensed. The counteragreement is that licensing would produce delay. However, it appears that:

1. Court action to force licensing is at least as likely a source of delay.
2. As a practical matter, a delay of one or two years is acceptable.

A second waste disposal issue is local political opposition to construction of a disposal site. I believe we should consider a policy of locating recycle facilities with the disposal site. Colocation has significant safety and security benefits. The local economic benefit of this policy might also temper opposition to the disposal site.



U.S. INITIATIVES IN NUCLEAR POLICY

The U.S. should be prepared to take specific initiatives that will lead toward the long-term results discussed in Tab C. These steps are under detailed study by the nuclear policy review group. However, certain key initiatives appear desirable now, and are discussed below.

Plutonium Technology

To demonstrate safe plutonium recycle, the U.S. should:

1. Conduct a recycle demonstration at the Barnwell site in South Carolina, placing certain elements of the demonstration at the adjacent ERDA Savannah River site. This demonstration would:
 - a. Be a model of a safe and secure plant, serving as a prototype for plants elsewhere.
 - b. Determine the economics of recycle.
 - c. Demonstrate physical security measures.
2. Study the feasibility of, and demonstrate if necessary, alternative technologies to plutonium recycle.
3. Involve other suppliers and the IAEA in the demonstration, in order to foster international acceptance of the results.
4. Publicly decide on recycle following this demonstration.

Alternative views are to:

1. Do nothing. This simply postpones a recycle decision.

2. Design the program explicitly to lead to expansion of U.S. recycle capacity. We believe this would make the demonstration appear purely a commercial ploy, and would not improve our influence with other suppliers.

It should be noted that this is a costly program, totalling in the neighborhood of \$1 billion over a 6-8 year period. Part of the cost would be in storing domestic spent fuel (possibly by the government) until it could be reprocessed or disposed.

Assured Supply

The U.S. can take steps prototypical of the assured supply arrangements we envision over the long term. The demonstration effort discussed above should be designed to further this goal. In addition the U.S. could:

1. Promptly offer to accept some spent fuel for later recycle or disposal, possibly as a part of the recycle demonstration.
2. Commit portions of our new enrichment capacity to foreign customers and suppliers.
3. Tie assistance in nonnuclear technology to our nuclear fuel contracts.
4. Explore with other suppliers arrangements for access to fuel services.
5. Place U.S. plutonium separated at Barnwell under IAEA control.

Many such initiatives are now being explored, and it is too early to assess alternatives. However, it should be noted that two potentially controversial points are U.S. acceptance of foreign spent fuel and IAEA storage of U.S. owned plutonium.

Export Policy

The U.S. can begin now to renegotiate its agreements to bring them into line with our desired export policy. The difficulties--now being studied--include:



1. Procedures for reopening these long-term agreements without creating excessive disruption of our international relationships.
2. Enunciating a policy flexible enough to be applied to all cases, yet tough enough to advance our non-proliferation goals. The key here is likely to be the return of spent fuel by countries unwilling to accept the full range of controls.

Most urgently, we must clarify the role of the NRC in export licensing. We are now concentrating on an arrangement that would require:

1. The Secretary of State to recommend licensing based on foreign policy considerations.
2. The NRC to accept the Secretary's determination and review the license for conformance to safeguards requirements of the underlying Agreement for Cooperation.
3. The President to determine if the license should issue on policy grounds, should the NRC refuse to license.

Waste Disposal

Initiatives are now being examined to ensure EPA and NRC regulatory actions do not prevent us from meeting the 1978 target date for component demonstration.

Other Initiatives

In support of the foregoing steps, I believe you might:

1. Call on the supplier nations for a moratorium on the export of recycle technology or services. During this time further consensus on the U.S. technology demonstration, assured supply arrangements, waste disposal, and export controls could be worked out.



2. Take affirmative action on the Indian situation to demonstrate your intent to apply the new nuclear policy.



*file -
Energy Council*

THE WHITE HOUSE
WASHINGTON

Non-Proliferation

August 26, 1976

MEMORANDUM FOR: MAX FRIEDERSDORF
BILL KENDALL
CHARLIE LEPPERT
✓ JIM CANNON

FROM: GLENN SCHLEEDE

Attached is a copy of a memo that Bob Friedersdorf
dined to Brent Scowcroft earlier today.

Attachment



THE WHITE HOUSE

WASHINGTON

August 26, 1976

INFORMATION

MEMORANDUM TO: The President

FROM: Bob Fri

SUBJECT: Congressional Action on Non Proliferation Act

The Congress is rapidly moving ahead on an unacceptable bill to control nuclear proliferation. The likelihood of passage is very high in the Senate, and is quite possible in the House. The Joint Committee on Atomic Energy (JCAE) is likely to report the bill at a 1:30 meeting today, August 26.

Background

In late July, Chairman Pastore of the JCAE decided to kill an unacceptable Senate Government Operations bill on nuclear export reorganization by drafting a substitute JCAE bill, entitled "Nuclear Weapons Nonproliferation Act of 1976." He offered to work with the Administration on this substitute. We expressed our willingness to do so, with reservations that we complete the nuclear policy review that I am conducting before committing to major policy decisions.

Until now, we have provided drafting assistance and comments on several drafts of the JCAE bill. We decided not to negotiate actively on policy questions.

Current Situation

In the last two days, an unacceptable JCAE bill was drafted, largely in negotiations among Senators Pastore, Symington, Javits, Percy and others. The bill has been introduced in the Senate by Senators Pastore and Baker with cosponsors. Representatives Price and Anderson introduced it, by request, in the House.



In our view, the bill would severely disrupt, if not stop our nuclear export program by imposing unreasonable requirements on exports. For example, the bill would preclude U.S. cooperation with Canada, the Euratom nations, and the International Atomic Energy Agency.

We are sending the JCAE a letter over Bob Seamans' signature expressing our opposition to the bill.

Secretary Kissinger is considering a call to Chairman Pastore on this subject.

Supporters of the bill can make appealing arguments that, in my judgment, will probably lead to its passage in the Senate. House passage is less assured, but likely. Tab A describes the bill and arguments for and against it.

We have been told that requests for delay of the bill until our policy review is complete would be considered dilatory, that no fundamental changes are acceptable, and that perfecting amendments might be considered.

I do not believe we should be a party to a bill of such importance that has been developed in this unusual way without open debate. Accordingly, I intend to express our dissatisfaction with this situation, and I recommend we endeavor to stop the bill and consider a veto, if necessary.

In the meantime, I will conclude the policy review and attempt to recover the time already lost in dealing with these developments in Congress.

JCAE BILL SUMMARY

The most objectionable provisions of the JCAE bill are:

1. Immediate imposition of six mandatory export licensing criteria. The President could, by Executive Order, change four of the criteria for a specific export license.
2. Imposition in 18 months of stiffer criteria. The President could delay imposition of all or some of these criteria for one year, and could impose any number of subsequent one year delays.

In our judgment:

1. The bill would disrupt the export program severely during the first 18 months. It is possible exports would stop entirely. Even if broad interpretation were given to the criteria, agreements with 12 countries would be affected. Under the most optimistic circumstances, our agreements with Canada, IAEA, and Euratom would be seriously hurt.
2. The more stringent criteria, if ever applied, would be seriously hurt.
3. Even if the bill could be administered to permit exports, our credibility would be severely eroded and our customers would go to other suppliers.

However, proponents of the bill could be expected to make the following arguments that could lead to passage:

1. It is time for the Congress to come down hard on proliferation. The Administration has not.
2. The bill clearly expresses the intent of Congress as to the conditions of export.
3. Since the U.S. is still the world's major nuclear supplier, it had better come down hard on proliferation now; we may have no other chance.

4. The bill gives the President flexibility to deviate from Congressional criteria, but requires him to do so publicly and with oversight.
5. The alternative to passage is to allow the Administration to permit proliferation in the interests of profits for U.S. corporations like GE, Westinghouse and Bechtel.

Dec. 8, 1953

WAR ON SEGREGATION

We have used the power of the Federal Government, wherever it clearly extends, to combat and erase racial discrimination and segregation—so that no man of any color or creed will ever be able to cry, "This is not a free land."

These, then, are some of the things we have been doing—and the reasons why.

They all total—I repeat—only a little more than a beginning.

I know of no official of this Administration so foolish as to believe that we, who in January came to Washington, have seen and conquered all the problems of our nation.

The future, both immediate and distant, remains full of trial and hazard.

The end of our staggering economic burden is not yet in sight.

The end of the peril to peace is not clearly in view.

There is only this in sight: A firm and binding purpose that guides all our objectives—our every deed.

This purpose is to serve and to strengthen our people, all our people, in their faith in freedom and in their quest of peace; and to strengthen all other peoples who share with us that faith and that quest.

In this short summary of the record, you can see how this single, supreme purpose rules and relates foreign relations; world trade; defense appropriations; reorganization of Government departments; domestic programs affecting agriculture, labor and industry; taxes; debts; tariffs.

This ruling purpose inspires all the men who are your servants in Government—men from the professions, the trades, from business, from farm and factory—each representing a part of America in such a way as to make a united America.

The men and women in the Congress, the men and women in the Executive Departments, in both appointive and Civil Service offices—all are working together to serve you in this common purpose.

I know no other purpose, no other toil, worthy of America.

And now, a good night to each of you.

THE ATOM FOR PROGRESS AND PEACE

An address by Dwight D. Eisenhower, President of the United States, before the General Assembly of the United Nations, December 8, 1953

“ . . . to find the way by which the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life.”

MADAME PRESIDENT, MEMBERS OF THE GENERAL ASSEMBLY:

When Secretary General Hammarskjöld's invitation to address this General Assembly reached me in Bermuda, I was just beginning a series of conferences with the Prime Ministers and Foreign Ministers of Great Britain and of France. Our subject was some of the problems that beset our world.

During the remainder of the Bermuda Conference, I had constantly in mind that ahead of me lay a great honor. That honor is mine today as I stand here, privileged to address the General Assembly of the United Nations.

At the same time that I appropriate the distinction of addressing you, I have a sense of exhilaration as I look upon this Assembly.

Never before in history has so much hope for so many people been gathered together in a single organization. Your deliberations and decisions during these somber years have already realized part of those hopes.

But the great tests and the great accomplishments still lie ahead. And in the confident expectation of those accomplishments, I would use the office which, for the time being, I hold, to assure you that the Government of the United States will remain steadfast in its support of this body. This we shall do in the conviction that you will provide a great share of the wisdom, the courage, and the faith which can bring to this world lasting peace for all nations, and happiness and well being for all men.

Clearly, it would not be fitting for me to take this occasion to present to you a unilateral American report on Bermuda. Nevertheless, I assure you that in our deliberations on that lovely island we sought to invoke those same great concepts of universal peace and human dignity which are so clearly etched in your Charter.

Neither would it be a measure of this great opportunity merely to recite, however hopefully, pious platitudes.

A DANGER SHARED BY ALL

I therefore decided that this occasion warranted my saying to you some of the things that have been on the minds and hearts of my legislative and executive associates and on mine for a great many months—thoughts I had originally planned to say primarily to the American people.

I know that the American people share my deep belief that if a danger exists in the world, it is a danger shared by all—and equally, that if hope exists in the mind of one nation, that hope should be shared by all.

Finally, if there is to be advanced any proposal designed to ease even by the smallest measure the tensions of today's world, what more appropriate audience could there be than the members of the General Assembly of the United Nations?

I feel impelled to speak today in a language that in a sense is new—one which I, who have spent so much of my life in the military profession, would have preferred never to use.

That new language is the language of atomic warfare.

The atomic age has moved forward at such a pace that every citizen of the world should have some comprehension, at least in comparative terms, of the extent of this development, of the utmost significance to every one of us. Clearly, if the peoples of the world are to conduct an intelligent search for peace, they must be armed with the significant facts of today's existence.

My recital of atomic danger and power is necessarily stated in United States terms, for these are the only incontrovertible facts

Sept. 1976



that I know. I need hardly point out to this Assembly, however, that this subject is global, not merely national in character.

THE FEARFUL POTENTIALS

On July 16, 1945, the United States set off the world's first atomic explosion.

Since that date in 1945, the United States of America has conducted 42 test explosions.

Atomic bombs today are more than 25 times as powerful as the weapons with which the atomic age dawned, while hydrogen weapons are in the ranges of millions of tons of TNT equivalent.

Today, the United States' stockpile of atomic weapons, which, of course, increases daily, exceeds by many times the explosive equivalent of the total of all bombs and all shells that came from every plane and every gun in every theatre of war in all of the years of World War II.

A single air group, whether afloat or land-based, can now deliver to any reachable target a destructive cargo exceeding in power all the bombs that fell on Britain in all of World War II.

In size and variety, the development of atomic weapons has been no less remarkable. The development has been such that atomic weapons have virtually achieved conventional status within our armed services. In the United States, the Army, the Navy, the Air Force, and the Marine Corps are all capable of putting this weapon to military use.

But the dread secret, and the fearful engines of atomic might, are not ours alone.

In the first place, the secret is possessed by our friends and allies, Great Britain and Canada, whose scientific genius made a tremendous contribution to our original discoveries, and the designs of atomic bombs.

The secret is also known by the Soviet Union.

The Soviet Union has informed us that, over recent years, it has devoted extensive resources to atomic weapons. During this period, the Soviet Union has exploded a series of atomic devices, including at least one involving thermo-nuclear reactions.

NO MONOPOLY OF ATOMIC POWER

If at one time the United States possessed what might have been called a monopoly of atomic power, that monopoly ceased to exist several years ago. Therefore, although our earlier start has permitted us to accumulate what is today a great quantitative advantage, the atomic realities of today comprehend two facts of even greater significance.

First, the knowledge now possessed by several nations will eventually be shared by others—possibly all others.

Second, even a vast superiority in numbers of weapons, and a consequent capability of devastating retaliation, is no preventive, of itself, against the fearful material damage and toll of human lives that would be inflicted by surprise aggression.

The free world, at least dimly aware of these facts, has naturally embarked on a large program of warning and defense systems. That program will be accelerated and expanded.

But let no one think that the expenditure of vast sums for weapons and systems of defense can guarantee absolute safety for the cities and citizens of any nation. The awful arithmetic of the atomic bomb does not permit of any such easy solution. Even against the most powerful defense, an aggressor in possession of the effective minimum number of atomic bombs for a surprise attack could probably place a sufficient number of his bombs on the chosen targets to cause hideous damage.

Should such an atomic attack be launched against the United States, our reactions would be swift and resolute. But for me to say that the defense capabilities of the United States are such that they could inflict terrible losses upon an aggressor—for me to say that the retaliation capabilities of the United States are so great that such an aggressor's land would be laid waste—all this, while fact, is not the true expression of the purpose and the hope of the United States.

To pause there would be to confirm the hopeless finality of a belief that two atomic colossi are doomed malevolently to eye each other indefinitely across a trembling world. To stop there would be to accept helplessly the probability of civilization destroyed—the annihilation of the irreplaceable heritage of mankind handed down to us from generation to generation—and the condemnation of mankind to begin all over again the age-old struggle upward from savagery toward decency, and right, and justice.

Surely no sane member of the human race could discover victory in such desolation. Could anyone wish his name to be coupled by history with such human degradation and destruction.

Occasional pages of history do record the faces of the "Great Destroyers" but the whole book of history reveals mankind's never-ending quest for peace, and mankind's God-given capacity to build.

It is with the book of history, and not with isolated pages, that the United States will ever wish to be identified. My country wants to be constructive, not destructive. It wants agreements, not wars, among nations. It wants itself to live in freedom, and in the confidence that the people of every other nation enjoy equally the right of choosing their own way of life.

NO IDLE WORDS OR SHALLOW VISIONS

So my country's purpose is to help us move out of the dark chamber of horrors into the light, to find a way by which the minds of men, the hopes of men, the souls of men everywhere, can move forward toward peace and happiness and well being.

In this quest, I know that we must not lack patience.

I know that in a world divided, such as ours today, salvation cannot be attained by one dramatic act.

I know that many steps will have to be taken over many months before the world can look at itself one day and truly realize that a new climate of mutually peaceful confidence is abroad in the world.

But I know, above all else, that we must start to take these steps—*now*.

The United States and its allies, Great Britain and France, have over the past months tried to take some of these steps. Let no one say that we shun the conference table.

On the record has long stood the request of the United States, Great Britain, and France to negotiate with the Soviet Union the problems, of a divided Germany.

On that record has long stood the request of the same three nations to negotiate an Austrian State Treaty.

On the same record still stands the request of the United Nations to negotiate the problems of Korea.

Most recently, we have received from the Soviet Union what is in effect an expression of willingness to hold a Four Power Meeting. Along with our allies, Great Britain and France, we were pleased to see that this note did not contain the unacceptable pre-conditions previously put forward.

As you already know from our joint Bermuda communique, the United States, Great Britain, and France have agreed promptly to meet with the Soviet Union.

The Government of the United States approaches this conference with hopeful sincerity. We will bend every effort of our minds to the single purpose of emerging from that conference with tangible results toward peace—the only true way of lessening international tension.

We never have, we never will, propose or suggest that the Soviet Union surrender what is rightfully theirs.

We will never say that the peoples of Russia are an enemy with whom we have no desire ever to deal or mingle in friendly and fruitful relationship.

On the contrary, we hope that this Conference may initiate a relationship with the Soviet Union which will eventually bring about a free intermingling of the peoples of the East and of the West—the one sure, human way of developing the understanding required for confident and peaceful relations.

Instead of the discontent which is now settling upon Eastern Germany, occupied Austria, and the countries of Eastern Europe, we seek a harmonious family of free European nations, with none a threat to the other, and least of all a threat to the peoples of Russia.

Beyond the turmoil and strife and misery of Asia, we seek peaceful opportunity for these peoples to develop their natural resources and to elevate their lives.

These are not idle words or shallow visions. Behind them lies a story of nations lately come to independence, not as a result of war, but through free grant or peaceful negotiation. There is a record, already written, of assistance gladly given by nations of the West to needy peoples, and to those suffering the temporary effects of famine, drought, and natural disaster.

These are deeds of peace. They speak more loudly than promises or protestations of peaceful intent.

FOR THE BENEFIT OF MANKIND

But I do not wish to rest either upon the reiteration of past proposals or the restatement of past deeds. The gravity of the time is such that every new avenue of peace, no matter how dimly discernible, should be explored.

There is at least one new avenue of peace which has not yet been well explored—an avenue now laid out by the General Assembly of the United Nations.

In its resolution of November 28th, 1953, this General Assembly suggested—and I quote—"that the Disarmament Commission study the desirability of establishing a sub-committee consisting of representatives of the Powers principally involved, which should seek in private an acceptable solution . . . and report on such a solution to the General Assembly and to the Security Council not later than 1 September 1954."

The United States, heeding the suggestion of the General Assembly of the United Nations, is instantly prepared to meet privately with such other countries as may be "principally involved," to seek "an acceptable solution" to the atomic armaments race which overshadows not only the peace, but the very life, of the world.

We shall carry into these private or diplomatic talks a new conception.

The United States would seek more than the mere reduction or elimination of atomic materials for military purposes.

It is not enough to take this weapon out of the hands of the soldiers. It must be put into the hands of those who will know how to strip its military casing and adapt it to the arts of peace.

The United States knows that if the fearful trend of atomic military buildup can be reversed, this greatest of destructive forces can be developed into a great boon, for the benefit of all mankind.

The United States knows that peaceful power from atomic energy is no dream of the future. That capability, already proved, is here—now—today. Who can doubt, if the entire body of the world's scientists and engineers had adequate amounts of fissionable material with which to test and develop their ideas, that this capability would rapidly be transformed into universal, efficient, and economic usage.

To hasten the day when fear of the atom will begin to disappear from the minds of people, and the governments of the East and West, there are certain steps that can be taken now.

PROPOSAL FOR ATOMIC CONTRIBUTIONS

I therefore make the following proposals:

The Governments principally involved, to the extent permitted by elementary prudence, to begin now and continue to make joint contributions from their stock piles of normal uranium and fissionable materials to an International Atomic Energy Agency. We would expect that such an agency would be set up under the aegis of the United Nations:

The ratios of contributions, the procedures and other details would properly be within the scope of the "private conversations" I have referred to earlier.

The United States is prepared to undertake these explorations in good faith. Any partner of the United States acting in the same good faith will find the United States a not unreasonable or ungenerous associate.

Undoubtedly initial and early contributions to this plan would be small in quantity. However, the proposal has the great virtue that it can be undertaken without the irritations and mutual suspicions incident to any attempt to set up a completely acceptable system of worldwide inspection and control.



The Atomic Energy Agency could be made responsible for the impounding, storage, and protection of the contributed fissionable and other materials. The ingenuity of our scientists will provide special safe conditions under which such a bank of fissionable material can be stored.

The more important responsibility of this Atomic Energy Agency would be to devise methods whereby this fissionable material would be allocated to serve the peaceful pursuits of mankind. Experts would be mobilized to apply atomic energy to the needs of agriculture, medicine, and other peaceful activities. A special purpose would be to provide abundant electrical energy in the power-starved areas of the world. Thus the contributing powers would be dedicating some of their strength to serve the needs rather than the fears of mankind.

The United States would be more than willing—it would be proud to take up with others “principally involved” the development of plans whereby such peaceful use of atomic energy would be expedited.

Of those “principally involved” the Soviet Union must, of course, be one.

OUT OF FEAR AND INTO PEACE

I would be prepared to submit to the Congress of the United States, and with every expectation of approval, any such plan that would:

First—encourage world-wide investigation into the most effective peacetime uses of fissionable material, and with the certainty that they had all the material needed for the conduct of all experiments that were appropriate;

Second—begin to diminish the potential destructive power of the world's atomic stockpiles;

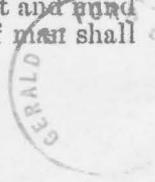
Third—allow all peoples of all nations to see that, in this enlightened age, the great powers of the earth, both of the East and of the West, are interested in human aspirations first, rather than in building up the armaments of war;

Fourth—open up a new channel for peaceful discussion, and initiate at least a new approach to the many difficult problems that must be solved in both private and public conversations, if the world is to shake off the inertia imposed by fear, and is to make positive progress toward peace.

Against the dark background of the atomic bomb, the United States does not wish merely to present strength, but also the desire and the hope for peace.

The coming months will be fraught with fateful decisions. In this Assembly; in the capitals and military headquarters of the world; in the hearts of men everywhere, be they governors or governed, may they be the decisions which will lead this world out of fear and into peace.

To the making of these fateful decisions, the United States pledges before you—and therefore before the world—its determination to help solve the fearful atomic dilemma—to devote its entire heart and mind to find the way by which the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life.



[Sept. 1976]

Domestic Reprocessing Initiatives Work Program

Background

The Fri Task Force on Nuclear Energy Policy reviewed many initiatives in the area of domestic nuclear fuel reprocessing and recycling. It was intended that these initiatives be made more specific, that various options for carrying out these initiatives, and that detailed program plans for them be prepared, reviewed and approved in the context of the FY 1978 budget review. Although the President's decision on the Task Force recommendations is not yet clear, work must commence now on the evaluation of options for carrying out many of the proposed Task Force initiatives and the development of detailed implementation plans if these are to be addressed during the FY 78 budget review.

General Work Program Schedule

The following proposed programs must be more fully developed including the evaluation of implementation options for each and this must be completed by the indicated dates:

	<u>Ref. in Fri Task Force Report</u>	<u>Completion Date</u>
I. Program to remove the economic, safety, and safeguards uncertainties associated with domestic reprocessing and recycle	pp. 29-31 H 1-2	10/18/76
<i>activity steps required</i> II. Program to encourage the development by the private sector of spent nuclear fuel storage capacity	---	10/16/76
III. Program to investigate the feasibility of alternative methods for extracting energy from spent nuclear fuel	---	10/16/76
IV. Program to assist development abroad of non nuclear energy technologies	pp. 34-34	10/16/76
V. Program of International participation in domestic reprocessing activities	p. 39	12/31/76



I. Work Plan for Removing the Uncertainties Associated with Domestic Reprocessing

ERDA will evaluate potential programs which could achieve the general goal of removing the economic, safeguards and waste solidification technology uncertainties and thus permit an early Administration decision on whether reprocessing and recycle should be pursued in the U.S. Listed below are the issues which must be evaluated and a minimum set of options which should be reviewed for each issue:

- (A) Issue: What criteria should be used in the making of a final Administration decision on whether to pursue reprocessing and recycle in the U.S.?

If the Administration is, at some future date, going to decide whether reprocessing and Pu recycle are appropriate there must be a set of criteria established now for this decision.

ERDA should evaluate the following and arrive at an appropriate set of criteria that the Administration could use in making a future decision on reprocessing and recycle.

- ° Economic Uncertainty - In order to remove the majority of the economic uncertainties associated with reprocessing and recycle what degree of Pu conversion, waste solidification and MOX facility design construction and operation would be required and why:
 - Completed conceptual design of large scale waste solidification and plutonium conversion plants.
 - Completed Title I designs.
 - Completed Title I designs with construction permits from NRC for both facilities.
 - Completed facility construction.
 - Facility operation for one year.
- ° Safeguards Technology and Safeguards Methods performance -- In order to remove the major uncertainties about the effectiveness of safeguards technologies and methods as they would be used in large reprocessing complex, what degree of demonstration would be required and why:
 - computerized model demonstrations of large plant material flows.

- small scale pilot line demonstrations of new safeguards techniques.
- A design of, and a construction permit from NRC for, a full scale (1500 MT) Pu conversion facility.
- Construction and operation of a full scale (1500 MT) Pu conversion facility.
- o Waste Solidification Technology -- In order to remove the majority of the uncertainties associated with scaling up existing waste solidification technologies to full commercial size (1500 MT) what must be accomplished and why:
 - Detailed Title I plant design.
 - Detailed Title I design and a construction permit from NRC.
 - Construction of a commercial size plant.
 - Operation of commercial size plant.

(B) Issue: When can the Administration make a determination that reprocessing and recycle are acceptable?

Based on the criteria established above evaluate the following alternative future dates for an administration decision on processing and recycle:

- Immediately after NRC's G.E.S.M.O. decision.
- After operation of a commercial scale reprocessing complex.

In evaluating these dates consider:

- the ability to meet the decision criteria selected above by each date.
- the impacts on the LWR reprocessing industry due to decisions delayed to each date.
- the impacts on utilities, especially those in California, due to decisions delayed to each date.
- the impacts on the future development of reprocessing capacity, especially as it is required for the breeder reactor in the mid 1990's for each decision date.



- (C) Issue: What type of U.S. Government reprocessing and recycle program is required to remove the economic, safety and safeguards uncertainties associated with reprocessing and to thus permit an Administration decision on the appropriateness of reprocessing in the U.S.?

Based on the criteria discussed above and the date on which an Administration decision should be made, evaluate the following program options:

1. Small scale demonstrations designed, constructed and operated by 1979.
 - Spent fuel separation and waste solidification by Battelle at Hanford, Washington.
 - Pu Safeguards at large throughput facilities at Los Alamos, New Mexico.
2. Commit to complete design only of full scale solidification and Pu conversion facility at AGNS and submit applications for construction permits for these to NRC.
 - Decide on commitment to construct these facilities after GESMO and construction permit received.
 - Negotiate with AGNS for satisfactory cost/sharing on these facilities between now and then.
3. Commit now to design, construct and operate a full scale plutonium conversion facility and small scale (750 MT) waste solidification facility at AGNS.
4. Commit now to design, construct and operate full scale Pu conversion and waste solidification facilities at AGNS.
 - o In comparing these options list and evaluate for each program:
 - Its total estimated cost.
 - Its cost by year.
 - Its impact on the AGNS complex and its future plans.
 - Its impact on the reprocessing and utility industries.
 - The Public reaction to it.
 - The impacts of having or not having NRC licenses for the facilities included in each.
 - Its impact on Pu availability for breeder reactors.

Reprocessing

*Ask
design
what to
do.
on
back
page.*



IA. What Answers Beyond Lessons are Needed
IB. Licensing for Demonstration.

II. Work Plan to determine approach to encouraging private sector development of spent fuel storage capacity:

If there were a delay in a decision to proceed with reprocessing and recycle in the U.S., additional spent fuel storage capacity must be made available in the U.S. This capacity would also be needed to support any U.S. initiative to buy or store foreign spent fuel. ERDA will evaluate the following alternative approaches to encouraging private spent fuel storage:

1. Announce intention to help plan with industry their additional storage sites.
2. Announce intention to help industry plan for new storage sites and suggest willingness to consider the leasing of some U.S. Government sites for these.
3. Announce intention to help industry plan for new storage sites and volunteer to lease small amounts of U.S.G. land for these.
 - Three potential sites, Savannah River, South Carolina; Los Alamos, New Mexico; and Oak Ridge, Tennessee.

III. Work Plan to investigate the feasibility of alternative technologies to reprocessing and recycle.

ERDA will develop a program plan for FY 1978 to initiate this investigation which should consider:

- Need and timing for any detailed physics and economic performances evaluations of these alternatives.
- Overall impacts on utility systems and nuclear industrial structure in U.S. due to implementation of these.
- Need and timing for any fuel irradiation studies.

IV. Program Plan to assist development abroad of non nuclear energy technologies

ERDA in consultation with State Department will develop a plan for FY 78 that will achieve this. In doing so ERDA will address the following questions:

- What technologies or analyses would be most appropriate to exchange with other countries?



- How would this be done and at what cost?
- Would this help other countries and how?
- Which countries should be involved?

V. Work Plan for developing International participation in Domestic reprocessing program

ERDA and State Department will initiate negotiations with other countries to determine their interest in financial or management participation in any U.S.G. programs. ERDA will also establish acceptable criteria for any such participation prior to these negotiations.



Sept. 1976
DRAFT

NON-PROLIFERATION MESSAGE

The promise of nuclear power is great indeed. Nuclear power is central to the energy independence of many countries. Its wise use can afford all people an unprecedented opportunity for economic well being, and protection from those who would use their energy resources for political purposes.

But we know that we cannot realize the promise of nuclear power unless we are prepared to deal forthrightly and effectively with its risks. The risks, like the promise, are great.

Nuclear fuel, once it has been burned to produce power, contains plutonium. By the relatively simple technique of chemical reprocessing, this plutonium can be separated and made available to generate additional power. But the same plutonium, when separated in its pure form, is the stuff of nuclear explosives. The world community simply cannot afford to let this dangerous material fall into irresponsible hands.

We must face both the promise and risk of nuclear power. We must strive to satisfy each nation's legitimate interest in nuclear power production. But we must also realize that we are all in danger unless we can insure that nations renounce the explosive uses of the atom, place adequate controls over the generation and storage of plutonium, and secure this dangerous material against the threat of theft and diversion.



During the past two years, no issue has been of greater concern to me, nor the subject of more intense effort on the part of my Administration. And we have made remarkable progress in reducing the threat of nuclear proliferation.

We have taken vigorous steps to slow the spread of plutonium reprocessing. Our stands in opposing reprocessing in Taiwan and Korea have been firm and successful. We have negotiated agreements for nuclear cooperation with Israel and Egypt that are models of restraint in nuclear cooperation. We have offered to buy back spent nuclear fuel from India to ensure against its unwise use, and I believe this offer will be accepted.

Early in my Administration I became concerned that some nuclear supplier countries were becoming tempted to offer less rigorous safeguards requirements to potential customers in order to increase their competitive advantage. I directed the Secretary of State to explore ways of limiting this dangerous form of competition. The first nuclear suppliers conference was convened quietly in London in April 1975. Since then there have been five more meetings plus a host of bilateral sessions. The results have been gratifying.

We have developed tighter new guidelines to govern nuclear exports -- the first undertaking of its kind. I have adopted these guidelines as U. S. policy for nuclear exports.



I have met repeatedly with Members of Congress to hammer out new legislation on nuclear proliferation. With the particular help of Senators Percy and Pastore, and Representatives Anderson and Price, we have agreed on realistic, constructive and imaginative proposals.

I have proposed legislation that would allow the United States to retain its position as a reliable supplier of nuclear fuel without imposing enormous burdens on the taxpayers. The House passed, but the Senate did not act on this legislation and, in so doing, contributed to a weakening of our nonproliferation policies. I will continue to press for this proposal. ✓

We have also shaped our domestic program with a careful eye to nuclear safety and nonproliferation. We have deferred for ten years a decision to place the breeder reactor in commercial operation, in part because we must prove its safety.

Similarly, I have increased by four fold my budget for our program to dispose of nuclear waste. We expect to demonstrate a full size waste depository by 1985. I have recently directed, however, a speed up of the program to demonstrate the components of waste disposal technology by the end of 1978. I have also directed that the first repository be submitted for licensing by the Nuclear Regulatory Commission to ensure its safety and acceptability to the public.



Despite the steps already taken -- steps that give us the strongest nonproliferation stance this country has ever had -- I recently ordered a fullscale review of our entire policy in this area. I received the results of this review before Labor Day, and I have considered its recommendations carefully.

I particularly directed this review to examine the central issue of chemical reprocessing, and to evaluate the risks and benefits of its use.

I have concluded that our interests do not lie in the early development of plutonium reprocessing. Many have long believed that this technology is a natural and desirable part of nuclear power. Some day it may be, because it may extend our energy supply and reduce the cost of generating nuclear power. That day may come, but it is not here now.

We must banish from our thinking the belief that plutonium reprocessing is inevitable. Our policy must rather be this -- that our nonproliferation goals must always dominate our economic interests, and that the burden of proof falls on those who advocate plutonium reprocessing.

Accordingly, it is the policy of the United States that plutonium reprocessing should proceed only if its safety, security, and economic benefits can be clearly demonstrated. This is the policy that we will follow at home, and the policy we strongly urge on other nations.

By adopting this policy, we gain the time to make a sober examination of the wisdom of plutonium reprocessing. Fortunately, there is little urgency in developing plutonium reprocessing, and we can take the time we need with little injury to anyone.

But this cannot be an empty policy.

For more than a year the United States has privately urged supplier nations to stop the export of sensitive nuclear technology.

It is now time for all supplier nations to cease the export of enrichment and reprocessing facilities and technology for a least three years. During this time, we can work out the details of a program to examine carefully the wisdom of plutonium use. During this time, our efforts should not be influenced by pressures to approve the export of these sensitive facilities.

If we can gain the time to act wisely, we must use the time well. The United States is prepared to do so. And, in this spirit, I am prepared to commit now to an unprecedented series of initiatives, as evidence of our commitment to a policy of nonproliferation and as an earnest for all other nations of the world to join with us.



Our first task must be to strengthen the system of international controls over nuclear exports.

Like all parties to the NPT, the United States has a special responsibility to share the benefits of peaceful nuclear energy with non-nuclear states. We have long given highest priority to being a reliable supplier of nuclear fuel and equipment. We recognize that this is in the interest of all nations.

However, given the choice between commercial advantage and promoting our nonproliferation goals, we are readily prepared to sacrifice the former. There should, however, be no incompatibility if common nuclear export policies are developed worldwide, and if all suppliers show common restraint and responsibility.

I believe the supplier nations must adhere to even more rigorous controls in their export policies, and they should favor those nations that accept responsible nonproliferation policies. I also believe that consuming states are fully entitled to understand our ground rules for nuclear supply, certain in the knowledge that, if they meet our tests, equipment and materials will be provided on a timely basis.

In the course of the last 18 months, the progress we made in discussions with other supplier nations leads me to conclude that they will be responsive to our leadership in establishing new and more rigorous criteria for international nuclear agreements.

Accordingly, I have directed that the U.S. Government henceforth adhere to the following criteria in judging whether to enter into new or expanded nuclear cooperation with a nonnuclear weapon state.

Above all, the U. S. will consider whether a nation is party to the Treaty on the Nonproliferation of Nuclear Weapons, or is in the process of adhering to that Treaty, or whether it is prepared to have its entire civil nuclear program subject to a safeguards arrangement with the International Atomic Energy Agency.

The U. S. will seek clear evidence that the cooperating nation is prepared to forego, or substantially delay, the establishment of further national reprocessing or enrichment activities, or to delay and shape these activities to satisfy the needs of others through the establishment of appropriate international arrangements. Furthermore, we will determine whether the nation is prepared in principle to participate in an international regime for protecting and storing excess civil plutonium pending actual use and need in civil programs.

I realize that there may be occasions when proliferation interests would be best served by cooperating with states not yet meeting these tests. However, before approving any such new cases, I would expect to make a personal determination that procedures to be followed would advance our nonproliferation interests.

I believe that these principles should apply to all agreements for cooperation in nuclear matters. I have therefore directed the Secretary



State to enter into negotiations to insure that the United States conforms to these principles in all its relationships with other countries. I have also directed the Secretary to open discussions with other nuclear suppliers to shape our common principles along these lines.

The U.S. will strive to implement these new arrangements during the moratorium on exports of sensitive nuclear technology.

Such arrangements will protect the world from the threat of nuclear proliferation while we take up the crucial task of testing the wisdom of plutonium reprocessing.

If plutonium reprocessing is to prove acceptable, we must answer three questions:

First, we must know whether we can develop the system of international controls that will ensure against the diversion or theft of plutonium, if and when it is used as a fuel.

Above all, we need to turn our attention to the control of the plutonium itself. No nation or group can have easy access to it. To this end, the United States will, in the immediate future, undertake urgent discussions aimed at the establishment of a new international regime to place under international custody and control spent reactor fuels and civil plutonium, We believe

that such a regime could provide additional assurance to the world at large that the growing accumulation of spent fuel and plutonium can be stored safely pending reentry into the nuclear fuel cycle or other disposition.



We urge the International Atomic Energy Agency, which is empowered to establish such a repository, promptly to elaborate and implement this concept. We are prepared to work cooperatively with other nations in developing this idea, and we are willing to pledge additional resources, including U.S. facilities, to the International Atomic Energy Agency for this specific purpose.

Also, once a broadly representative regime is in force, the United States is prepared to commit to place our own excess civil spent fuel and plutonium under IAEA auspices pending a need in our civilian nuclear power program.

A second element of the international control system is an effective procedure to safeguard plutonium against diversion, and to secure it against theft by terrorist groups, when it is outside an international repository. It is of central importance that our procedure for safeguards and security be developed to the fullest before we can make a responsible determination on the safety of reprocessing throughout the world.

For this reason, the inspection system of the International Atomic Energy Agency remains a key element in our entire nonproliferation strategy. I ascribe the highest importance to seeing that this system broadly applies to nuclear power programs throughout the world.



It is crucial for the world community to insure that the Agency has the requisite technical and human resources to keep pace with its expanding responsibility. Accordingly, I have directed a major commitment of additional financial resources to the IAEA, and also a mobilization of our best scientific talent. Two of our principal national laboratories have been directed to provide support, on a continuing basis, to the IAEA Secretariat.

In the same vein, the terrible increase in violence and terrorism throughout the world has accentuated our awareness to the need to assure that sensitive nuclear materials and equipment are rigorously protected. Fortunately, there is broad awareness of this problem, and many nations are materially strengthening physical security by taking into account the guidelines already prepared by the IAEA. Compliance with adequate physical security measures is also becoming



a normal condition of supply, and this is an area where all suppliers and consumers share a common interest.

However, the United States strongly believe that steps are needed to upgrade physical security systems to meet the international norms, and to assure timely international collaboration in the recovery of lost or stolen materials. This is an area that we plan to pursue diligently both on a bilateral and multilateral level, including the exploration of an international convention and other techniques.

To build a system of international controls that I have just outlined is an enormous task, and one on which the U.S. is prepared to embark with all its resources. However, no system of controls is likely to be successful if a potential violater judges that his acquisition of a nuclear explosive will be received with indifference by other nations.

For its part, the United States will act to dispel any such notion. We would regard any violation of a nuclear safeguards agreement, such as diversion of nuclear material to be an extremely serious affront to the world community and to all peace-loving nations throughout the world.

Accordingly, if any state violated a safeguards agreement to which we are a party, we would, as a minimum, immediately cut off our nuclear fuel supply and cooperation. Even more adverse effects



would undoubtedly occur in our relationship with the state concerned.

Moreover, regardless of whether we ourselves are party to the safeguards agreement, we would judge the material violation of any safeguards agreement, particularly one with the IAEA, to be of such grievous concern to warrant immediate reexamination and broad consultation with all suppliers and consumers to discuss the nature of the punitive or remedial action that should be taken collectively.

spec?
✓

There is a second major question to be resolved before we can judge the wisdom of plutonium reprocessing. We must determine if the nations of the world can adapt to a pattern in which not every nation - indeed, not many nations - have reprocessing facilities.

This is a difficult issue, for it requires nations to balance their national interest and their international obligations.

On the one hand, the international system of control that I have just described would be eroded if every nation that uses nuclear power also engages in plutonium reprocessing. However effective our international controls, they will not work if we stretch them over a multitude of national reprocessing facilities. It thus remains the policy of the United States to oppose the spread of national reprocessing and it remains our objective to encourage other nations to join us in this policy.



But there is another side to the nuclear coin. Nations that have nuclear power or may require it have a legitimate interest in the residual value of spent fuel, and in its ultimate disposal as waste. We recognize our obligation to honor these interests. I believe, therefore, that if reprocessing is to prove acceptable, we must seek a world in which all nations have equal and assured access to both reprocessing and enrichment services, but in which few nations have such facilities within their borders and in which few nations possess plutonium.

I believe we can develop such a system. As a first step, the nations that export nuclear fuel should shoulder the responsibility for it. The United States is prepared to shoulder this responsibility.

Accordingly, I now offer an alternative to national reprocessing to nations that adopt responsible restraints on their nuclear power industry. The U.S. is prepared through 1985 to acquire their spent fuel, and to compensate them in cash or in fresh low-enriched nuclear fuel. The amount of compensation will be determined at the time the fuel is ready to be reprocessed, and will ensure against any economic disadvantage.

I am also prepared to offer to the same nations assistance in arranging for spent fuel storage in the U.S. or elsewhere, in anticipation of the IAEA storage regime.



Finally, I reiterate my pledge that any country accepting responsible restraints on its nuclear power program can rely on the United States as an assured supplier of nuclear fuel. To this end, I have directed the Secretary of State to offer to negotiate binding letters of intent for the supply of nuclear fuel, to be fulfilled by either new U.S. Government capacity or by private U.S. suppliers, at U.S. discretion.

These steps will contribute to lessening the pressures for national reprocessing while the world decides on the wisdom of reprocessing. In addition it is necessary to show whether we can develop a system in which all nations share in the benefits of an assured supply of nuclear fuel, even through the number and location of facilities is limited to meet non-proliferation goals.

The appropriate agencies of the U.S. Government have been studying proposals for such a system.

I have specifically directed consultations be undertaken with Canada, Japan, and the nations of Europe to develop a prototype for such multilateral institutions.



Finally, the United States will continue to work with other nations to seek to develop nonnuclear sources of power. In particular, we are prepared to assist in the analysis of energy development strategies. We would place special emphasis on providing technological assistance in developing indigenous fossil fuel resources as an alternative to nuclear power.

Our third task in assessing the wisdom of plutonium reprocessing is a technological one. We need the technological foundation on which we can erect a structure of international controls and assured fuel supply.

I will propose to Congress in my budget next January, the details of the program to achieve these goals.



I do not underestimate the scope and complexity of the program I have just put forward. It is technically difficult and expensive. More important, its success depends on an extraordinary coordination of the policies of all nations toward the common good. The U.S. is prepared to lead, but we cannot succeed alone.

No nation should underestimate the gravity of the problem. World order, perhaps even our survival, is at stake. This is not a time for narrow vision, half-hearted attempts, or national or partisan advantage. We must move boldly, and together, for our common interest.



[Sept. 1976]
TAB A

Carter Promises

President's Performance

1. World-wide voluntary moratorium on national sale or purchase of enrichment or reprocessing plants and withholding authority for U.S. domestic commercial reprocessing pending
 - satisfactory completion of a multinational program designed to develop experimentally (not full scale demonstrations) the technology, economics, regulations and safeguards
 - development of mutually satisfactory ground rules for management and operation, including next generation of material accounting procedures and physical security requirements.

If both conditions met, all ensuing commercial reprocessing plants should be on a multi-national basis.

1. Domestically, Administration has prevented export of all reprocessing facilities through authority under Section 810 of the Atomic Energy Act of 1954, as amended.

Internationally, U.S. has

- bilaterally, attempted to stop all sales of reprocessing equipment and has stopped a sale to South Korea and development of a facility in the Republic of China (Taiwan); negotiations are proceeding to stop sales to Pakistan and Brazil
- multilaterally, developed through the London Suppliers Group a common set of guidelines requiring safe-guards and security measures in connection with export of sensitive facilities, including reprocessing facilities.

*The President now proposes

- not accepting reprocessing as inevitable
- undertaking realistic demonstration program to determine the safeguards, economics and technological performance of reprocessing
- undertaking extensive research on potential alternatives to plutonium recycle
- encouraging other nations to participate in the demonstrations and offering to share information obtained with other nations.

2. No new U.S. commitments on nuclear technology of fuel would be allowed unless recipients agree to

- forego possessing nuclear explosives
- refrain from reprocessing

2. Administration's policy

has been

*will be

forego possessing nuclear explosives but only with regard to U.S.-supplied materials and facilities

forego possessing nuclear explosives with respect to all nuclear materials and facilities

obtaining a U.S. veto over reprocessing on U.S.-supplied materials and facilities

insisting on recipient foregoing reprocessing, whether or not U.S. supplied material or facilities are involved

*Fri recommended new proposal.



- place all national nuclear facilities under IAEA safeguards

requiring IAEA safeguards on U.S. supplied materials and facilities

requires IAEA safeguards on all civil nuclear materials and facilities

Renegotiate existing agreements to include reprocessing safeguards

renegotiating agreement only if amendment to them required for other reasons

*to seek to negotiate changes to provide U.S. veto of reprocessing involving U.S. supplied material and facilities

3. Call for World Conference on Energy (along the lines of the World Food Conference) to develop world-wide information on energy supplies and needs with a view toward establishing a permanent World Energy Agency

3. Through U.S. initiative in 1974, the International Energy Agency, consisting of 18 industrial consumer nations, was established to consider common problems. In December 1975, U.S. participated in French-initiated Conference on International Economic Cooperation (Producer/Consumer Conference) consisting of 27 countries. The Conference is in the process of developing world-wide information on energy resources and needs, common research strategies, capital sources and needs, etc. U.S. has also proposed an International Energy Institute to provide technical assistance on energy matters to developing countries and that proposal will probably be finalized in December. U.S. has proposed an International Resources Bank to guarantee against political risk on investments for development of energy resources and other minerals.

4. Support strengthening of IAEA safeguards and inspection authority

4. In 1976, Administration requested \$5 million increase in IAEA voluntary contribution; in addition, U.S. has over past 2 years more than doubled other technical assistance to IAEA. *Even more assistance would be recommended.

5. Place U.S. civil nuclear facilities under IAEA safeguards

5. The Administration has been negotiating placement of U.S. civil nuclear facilities under IAEA safeguards for some time. Formal submission of agreement was made to, and accepted by, the IAEA Board of Governors on September 17. The Administration will now proceed to implement the agreement.

6. Support enlargement of U.S. Government-owned enrichment facilities to insure that U.S. is a reliable supplier

6. Administration has proposed legislation, passed by the House of Representatives, which would authorize both public and private expansion of enrichment facilities.

*Fri recommended new proposal.

Explore international initiatives for

- multinational enrichment plants

There are already two multinational plants -- both in Europe -- and Administration has encouraged foreign investment in new privately-owned U.S. enrichment plants.

- multinational spent fuel storage areas

U.S. has encouraged IAEA consideration and possible implementation of multinational spent fuel and plutonium storage under IAEA auspices; other participants are receptive and *President would now announce need for IAEA study to proceed with such a regime.

as alternatives to national enrichment and reprocessing plants.

3. Correct disproportionate emphasis in energy R&D, placing more emphasis on renewable energy technologies, and relatively less emphasis on nuclear power

8. Of the Nation's total energy research and development budget, private industry provides about 90% of the amount spent on non-nuclear research (oil, gas, coal, etc.) but only % of the Nation's nuclear energy research. The Federal Government, fulfilling its historic research role in the sensitive nuclear area, has tended to equalize this disparity and this role needs to be continued. Nevertheless the President has increased the non-nuclear energy R&D budget by \$202 million to \$671 million in FY 1977. This increase changed the proportion of non-nuclear items from 20% to 35% of Federal research. Currently, we estimate that 60% of the total Nation's energy total research efforts are in in the non-nuclear field and 40% are in the nuclear field.

4. Convert breeder reactor research to a long-term, possibly multinational effort.

9. The breeder reactor is the only demonstrated, inexhaustible source of energy. (Large-scale solar and fusion plants are decades away.) To stretch out current levels of breeder reactor research -- as the phrase "long-term" implies -- can only delay answering crucial questions on environment, economics and safety.

5. Negotiate with the Soviet Union

10. The Administration has

- comprehensive test ban treaty, with a five-year moratorium on testing of both weapons and "peaceful nuclear devices" while treaty is being negotiated

- proposed on several occasions over the years a comprehensive test ban treaty; obstacles have been failure of the Soviets to agree to on-site verification procedures and the unwillingness of France and the Peoples Republic of China to become parties; since prospects of progress appear to be dim, continuing negotiations are not likely to be fruitful in the near future

- through the SALT talks, strategic nuclear forces and technology reductions

- reached accords at Vladivostok which limits numbers of strategic weapons; Administration is currently negotiating remaining issues, once limits of numbers are in place, President intends to commence negotiations on reductions in numbers.

* Fri recommended new proposal.



Rebuttal
to Carter
position

Mr. Carter's remarks on nuclear proliferation suggest that

[Sept. 1976]

he has not followed what has been happening in U. S. foreign policy and he does not know how an effective foreign policy is made.

His claim that the proliferation issue has been ignored is flatly wrong. Shortly after I took office I became concerned that some other nations, eager to improve their nuclear business, were enhancing their competitive position by offering customers easy access to plutonium. As a nation, we had three choices:

-- compete along with them. But if we did, the world would become an even more dangerous place than it is today;

--issue a unilateral declaration like Mr. Carter has proposed announcing that we did not like what was happening and threatening other countries with ~~sanctions~~ they could easily avoid or ignore;

--Finally, we could take the initiative to eliminate this dangerous form of competition once and for all on a world-wide base.

I choose this third course. As a direct result of our efforts, the first Nuclear Suppliers Conference convened in London in April 1975.



That conference has met six times and the seven nations have agreed to a much tighter set of guidelines on nuclear exports. I directed that as an interim step, the U. S. adopt these guidelines as our policy.

But I was not satisfied that we had done all in our power to effectively prevent nuclear proliferation. Last summer, therefore, I called for a complete review of our policy toward plutonium both here and abroad. That review was completed a month ago. I have made my decision. We are now in the process of ensuring that we get the kind of international cooperation necessary to make an effective worldwide policy.

Unlike Mr. Carter, I cannot be content with settling for a speech which sounds good at home but makes no difference abroad. In the area of nuclear proliferation this is particularly true. The blunt fact is that there are other nations who have the technology, the resources and the will to supply nuclear materials no matter what we do or say. In order to stop proliferation we must get the cooperation of all of those nations. We won't get that cooperation by issuing unilateral declarations. We have gotten it, and we will continue to get it, by developing wise policies, and by pursuing those policies through a course of quite, firm and patient negotiation.



THE PRESIDENT'S POSITION ON PROLIFERATION

When the President took office, the United States had three ways of dealing with nuclear proliferation and preventing the spread of plutonium:

- no U.S. export of reprocessing facilities
- support for Non-Proliferation Treaty
- support of International Atomic Energy Agency Safeguards Program

Since taking office, he has expanded enormously U.S. efforts:

- bilateral pressure on those who would acquire plutonium facilities elsewhere
 - South Korea
 - Taiwan
- much greater financial commitment to research in U.S. and International Atomic Energy Agency to develop ways of detecting diversion of plutonium.
- multilateral cooperation to develop common guidelines for all nuclear suppliers.
- London Suppliers Conference, beginning April, 1975, produced new, tougher guidelines on all nuclear exports. U.S. has adopted as interim policy.
- comprehensive review (Fri report) begun summer '76 to review entire U.S. stance toward plutonium:
 - question assumption whether use of plutonium is either necessary or desirable.



As a result of Fri report, President has made decisions dramatically changing U.S. stance toward use of plutonium:

- it is not certain that plutonium use is either necessary or desirable;
- before we or others commit to it, it is necessary to establish that the material can be handled in such a way as to ensure both safety and non-proliferation;
- calls for a three-year worldwide moratorium on export of all reprocessing facilities;
- for those countries which do produce plutonium, to put it in the custody of the International Atomic Energy Agency.
- U.S. initiative to undertake agreements restricting reprocessing and plutonium use;
- development of financial and technical alternatives to use of plutonium until and unless its safety is assured.



Overview Response on Nuclear Issues

Nuclear power is one of the most complex issues we face. It is also one of the most difficult to discuss in a campaign because it lends itself so easily to demagoguery. Fortunately, nuclear power has traditionally been approached in a bipartisan manner. There has never been a Republican or Democratic position on questions of nuclear safety or preventing nuclear proliferation. I hope there never will be.

As President I have dealt with nuclear issues from three different perspectives:

First, in assuring that our domestic nuclear power plants are safe and environmentally acceptable;

Second, preventing the proliferation of nuclear materials which can be used to make weapons;

Third, in developing a balanced program of nuclear and non-nuclear research and development which will contribute to reduction of dependence on foreign oil and our vulnerability to embargoes.

My Administration has taken strong action in each of these areas. For example:

1. Shortly after I took office, I signed into law the bill creating an independent Nuclear Regulatory Commission. Its primary mission is to oversee the development of the nuclear industry from



the standpoint of protecting public health and safety. This legislation eliminated the potential conflict of interest that existed in the old Atomic Energy Commission where the regulatory and promotional responsibilities were combined.

2. In the last two years, I have increased the budget for nuclear safety regulation by more than 60% from \$148 million when I took office to nearly \$250 million this year.

3. In the fall of 1974, I became concerned that some other nations, eager to become nuclear suppliers, were being tempted to offer laxity in the treatment of nuclear materials as a competitive device. I directed the Secretary of State to find ways of eliminating this dangerous form of competition. As a result of this effort, the first Conference of Nuclear Supplier Nations was convened in London in April 1975. That Conference has met 6 times and the seven nations have agreed to a much tighter set of guidelines on nuclear exports. I have directed that the United ^{states} adopt these guidelines as our policy.

4. In the area of energy research and development, I have increased our commitments in both the nuclear and non-nuclear areas. By far the greatest increase, however, has occurred in the non-nuclear area. Coal research has tripled in the last two years. Solar energy research has increased about 8 times--conservation research more than 4 times. We now have a balanced program, and we expect results in both the nuclear and non-nuclear areas



that will contribute substantially to reducing our dependence on foreign oil.

But the effort to insure that the benefits of nuclear energy outweigh its risks have not stopped. Several months ago, I initiated a complex review of the entire nuclear fuel cycle in both its domestic and international aspects. That review has now been completed. In the context of this debate, there is obviously not enough time for me to explain fully the decisions that I have made on this entire range of issues, but I shall announce them in a very short time.

There is one final point that I would like to make on this whole question of dealing with nuclear energy, particularly on the question of proliferation. As in so many other areas of foreign policy, the real issue which confronts the President is to make very sure that what he proposes is effective. He cannot be satisfied with mere words. In nuclear proliferation this means making sure that other countries which have the ability to export nuclear materials and technology abide by the same set of rules as the United States. If they do not, then all of our words and all of our efforts are in vain and the world becomes an even more dangerous place than it is. Achieving cooperation in these areas requires leadership on our part and a willingness to negotiate positively but firmly to apply strong pressures, as we have in some cases, to discourage undesirable developments, and to offer incentives, as we have in other areas, to encourage cooperation. Unilateral declarations, no matter how good they may sound, will not prevent nuclear



proliferation, and it is with such proliferation that the President of the United States must concern himself.



Folio

THE WHITE HOUSE
WASHINGTON

INFORMATION

September 13, 1976

*Glenn -
Travis -
Jan*

MEMORANDUM FOR: BRENT SCOWCROFT
JIM CANNON
JIM CONNOR

FROM: DAVE ELLIOTT *D.E.*
GLENN SCHLEDE *G.S.*

SUBJECT: STATUS OF NON-PROLIFERATION LEGISLATION
AND ADMINISTRATION POSTURE

This memorandum is to bring you up-to-date on the status of this matter.

BACKGROUND

The large number of bills and proposed bills include the following:

- A bill reported by Senate Government Operations Committee (S. 1439) called the Nuclear Export Reorganization Act, which was referred to the Joint Committee on Atomic Energy (JCAE) and Foreign Relations. The JCAE reported unfavorably and Foreign Relations reported a substitute bill (discussed below).
- A bill introduced in the Senate by Senators Pastore and Baker (S. 3770) and in the House by Price and Anderson (by request). This bill was worked out with and was acceptable to the leaders of Senate Government Operations (Percy, Ribicoff, and Glenn). This bill set rigorous and unacceptable policy guidelines and restrictions.
 - o The JCAE met to mark it up but broke up without reporting it.
 - o Senate Foreign Relations reported it out as S. 1439, substituting it for the original S. 1439.
- John Anderson modified S. 3770 somewhat and reintroduced it as a new bill, H.R. 15419 -- which is still considered unacceptable by the Administration.



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- Administration officials under Bob Fri's leadership have reviewed the Anderson bill, marked it up to make it acceptable and met with Anderson's staff (Dave Swanson) and the JCAE staff. Anderson will amend H.R. 15419 in the mark up session tomorrow -- hopefully in a way that is acceptable to the Administration. Price's staff indicates that our suggested changes are acceptable.
- The JCAE will have a mark up session tomorrow, focusing on H.R. 15419, with the intention of reporting it out.
- On Thursday, September 16, the Senate is scheduled to take up S. 1439 (apparently the version which was introduced by Pastore and Baker as S. 3770 and reported out by Foreign Relations as S. 1439). Apparently, Senator Pastore hopes to get the JCAE's new bill considered as a substitute.

ADMINISTRATION ROLE AND POSITION

Thus far, Administration officials have worked closely with the JCAE staff to make the bill acceptable and apparently George Murphy is very satisfied with the help provided by the Administration. Whether this assistance has been sufficient to satisfy the President's commitment to Senators Pastore and Baker and Congressmen Price and Anderson is not entirely clear.

Administration officials have been careful to make clear that views and assistance provided so far should not be regarded as acceptance of the bill on behalf of the President.

It is possible that Senator Pastore will ask, during the mark up tomorrow, whether the bill is acceptable to the Administration. Depending upon content, Bob Fri plans to give his views but again indicate that he cannot commit the President. It is possible that Senator Pastore will insist at that point on having some kind of position statement from the President.



FUTURE OUTLOOK

The following events are conceivable:

- The Senate could pass one of the versions of S. 1439 -- both of which are unacceptable to the JCAE and us -- and the House would take no action on it.
- The Senate could take up the new JCAE bill (to be marked up tomorrow) and pass it:
 - ° If it is acceptable to Anderson and Price, it probably would be pushed through the House.
 - ° If it is not acceptable to Anderson and to us, Anderson is committed to do everything he can to prevent its passage by the House.
 - ° If it is acceptable to Anderson but not to the Administration, we could have problems.

The following results are possible:

- An acceptable bill will come to the President's desk.
- An unacceptable bill will come to the President's desk.
- The whole issue will get bogged down -- with a good possibility that the Administration will be blamed for it.



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 (their detailed comments at Appendix II) and your senior advisers.

Problems Requiring Attention

Briefly, the following major problems 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.

- . 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.
- . 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 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 needed later 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.

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.

- . 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.

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- 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.

