THE WHITE HOUSE

Office of the Press Secretary

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FOR RELEASE AT CONCLUSION OF
THE BRIEFING EXPECTED ABOUT
10:30 AM

JULY 16, 1981

STATEMENT BY THE PRESIDENT

Our nation faces major challenges in international affairs. One of the most critical is the need to prevent the spread of nuclear explosives to additional countries. Further proliferation would pose a severe threat to international peace, regional and global stability, and the security interests of the United States and other countries. Our nation has been committed on a bipartisan basis to preventing the spread of nuclear explosives from the birth of the atomic age over 35 years ago. This commitment is shared by the vast majority of other countries. The urgency of this task has been highlighted by the ominous events in the Middle East.

The problem of reducing the risks of nuclear proliferation has many aspects and we need an integrated approach to deal with it effectively. In the final analysis, the success of our efforts depends on our ability to improve regional and global stability and reduce those motivations that can drive countries toward nuclear explosives. This calls for a strong and dependable United States, vibrant alliances and good relations with others, and a dedication to those tasks that are vital for a stable world order.

I am announcing today a policy framework that reinforces the longstanding objectives of our nation in non-proliferation and includes a number of basic guidelines.

The United States will:

- Seek to prevent the spread of nuclear explosives to additional countries as a fundamental national security and foreign policy objective.

- Strive to reduce the motivation for acquiring nuclear explosives by working to improve regional and global stability and to promote understanding of the legitimate security concerns of other states.

- Continue to support adherence to the Treaty on the Non-proliferation of Nuclear Weapons and to the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco) by countries that have not accepted those treaties.

- View a material violation of these treaties or an international safeguards agreement as having profound consequences for international order and United States bilateral relations, and also view any nuclear explosion by a non-nuclear-weapon state with grave concern.

- Strongly support and continue to work with other nations to strengthen the International Atomic Energy Agency to provide for an improved international safeguards regime.

- Seek to work more effectively with other countries to forge agreement on measures for combatting the risks of proliferation.

- Continue to inhibit the transfer of sensitive nuclear material, equipment and technology, particularly where the danger of proliferation demands, and to seek agreement on requiring IAEA safeguards on all nuclear activities in a non-nuclear-weapon state as a condition for any significant new nuclear supply commitment.

I am also announcing that I will promptly seek the Senate's advice and consent to ratification of Protocol I of the Treaty of Tlatelolco.

The United States will cooperate with other nations in the peaceful uses of nuclear energy, including civil nuclear programs to meet their energy security needs, under a regime of adequate safeguards and controls. Many friends and allies of the United States have a strong interest in nuclear power and have, during recent years, lost confidence in the ability of our nation to recognize their needs.

We must re-establish this nation as a predictable and reliable partner for peaceful nuclear cooperation under adequate safeguards. This is essential to our non-proliferation goals. If we are not such a partner, other countries will tend to go their own ways and our influence will diminish. This would reduce our effectiveness in gaining the support we need to deal with proliferation problems.

To attain this objective, I am:

- Instructing the Executive Branch agencies to undertake immediate efforts to ensure expeditious action on export requests and approval requests under agreements for peaceful nuclear cooperation where the necessary statutory requirements are met.

- Requesting that the Nuclear Regulatory Commission act expeditiously on these matters.

The Administration will also not inhibit or setback civil reprocessing and breeder reactor development abroad in nations with advanced nuclear power programs where it does not constitute a proliferation risk.

The United States will support IAEA programs and other international cooperative efforts in the areas of nuclear safety and environmentally sound nuclear waste management.

To carry out these policies, I am instructing the Secretary of State, working with the other responsible agencies, to give priority attention to efforts to reduce proliferation risks, to enhance the international non-proliferation regime and, consistent with United States security interests, to re-establish a leadership role for the United States in international nuclear affairs.

END

THE WHITE HOUSE

Office of the Press Secretary

FOR RELEASE AT CONCLUSION OF
THE BRIEFING, EXPECTED ABOUT 10:30 am

JULY 16, 1981

FACT SHEET

UNITED STATES NON-PROLIFERATION AND
PEACEFUL NUCLEAR COOPERATION POLICY

The President's statement today sets forth the basic elements of the Administration's policy on nuclear non-proliferation and peaceful nuclear cooperation.

Preventing the spread of nuclear explosives to additional countries remains a fundamental objective of the United States.

The President's statement reflects continuity in U.S. non-proliferation policy objectives for over three decades. It marks a shift in emphasis from the approach of the previous Administration, however, on how best to achieve these objectives. The Administration will seek to pursue non-proliferation more effectively by placing greater emphasis on:

- the need to improve regional and global stability and to reduce motivations that can move countries toward nuclear explosives;
- international cooperation as an essential part of strengthening the international non-proliferation regime; and
- the need to restore the U.S. as a reliable nuclear supplier under an effective regime of safeguards and non-proliferation controls.

Policy Guidelines

The President announced several policy guidelines.

1. The United States will seek to prevent the spread of nuclear explosives to additional countries as a fundamental national security and foreign policy objective.

As noted in the President's statement, further proliferation of nuclear explosives would pose a severe threat to international peace, regional and global stability, and the security interests of the United States and other countries.

2. The United States will strive to reduce the motivation for acquiring nuclear explosives by working to improve regional and global stability and to promote understanding of the legitimate security concerns of other states.

This shift in emphasis from the previous Administration means that increased recognition will be given to the fact that proliferation is an international political

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on the civil nuclear fuel cycle. The Administration will consider the range of U.S. diplomatic, economic and national security tools to reduce the motivations of other nations to develop nuclear explosives.

3. The United States will continue to support adherence to the Treaty on the Non-Proliferation of Nuclear Weapons and to the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco) by countries that have not accepted those treaties.

These treaties are major cornerstones in the international non-proliferation regime. The President also announced that the Administration will promptly seek the Senate's advice and consent to ratification of Protocol I of the Treaty Tlatelolco. This Protocol calls on nations outside the treaty zone to apply the denuclearization provisions of the treaty to their territories in the zone. It has been ratified by the United Kingdom and the Netherlands.

The United States ratified Protocol II to the Treaty of Tlatelolco in 1971. Protocol II basically calls upon nuclear-weapon states to respect the denuclearized status of the zone, not to contribute to violations of the treaty, and not to use or threaten to use nuclear weapons against parties to the treaty in the Latin American region. It has also been ratified by France, the United Kingdom, the People's Republic of China, and the Soviet Union.

4. The United States will view a material violation of these treaties or an international safeguards agreement as having profound consequences for international order and United States bilateral relations, and also view any nuclear explosion by a non-nuclear-weapon state with grave concern.

This represents a concern shared by the responsible members of the international community and underlines the gravity of United States concern. The Administration will work diligently with other countries to prevent such violations or nuclear explosions from taking place.

5. The United States will strongly support and continue to work with other nations to strengthen the International Atomic Energy Agency to provide for an improved international safeguards regime.

This reinforces the commitment of the United States to maintaining and strengthening IAEA safeguards and increased safeguards efforts. This is vital to have effective non-proliferation and nuclear cooperation policies, particularly as the magnitude and sensitivity of the IAEA tasks are increasing. The Administration will support the development by the IAEA of improved safeguards techniques, procedures and instrumentation, especially those needed for the larger and more sophisticated nuclear facilities that are likely to be deployed in the coming years.

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The Administration will continue to support efforts under the auspices of the IAEA to develop effective regimes for international plutonium storage and improved cooperation in spent fuel management. It will also support the continuing work of the Committee on Assurance of Supply under IAEA auspices.

6. The United States will seek to work more effectively with other countries to forge agreement on measures for combatting the risks of proliferation.

To fulfill this objective the Administration will work actively with other nations to seek uniform non-proliferation conditions for nuclear supply. In particular, the Administration will work to prevent transfers to non-nuclear-weapon states of any significant nuclear material, equipment or technology that would not be subject to IAEA safeguards and to satisfy the following policy guidelines.

7. The United States will continue to inhibit the transfer of sensitive nuclear material, equipment and technology, particularly where the danger of proliferation demands, and to seek agreement on requiring IAEA safeguards on all nuclear activities in a non-nuclear-weapon state as a condition for any significant new nuclear supply commitment.

As with the preceding guideline, the Administration will undertake concentrated efforts with other countries to fulfill this objective.

Enhanced Nuclear Cooperation

The President's statement also stresses the long-standing interest of the United States in cooperating with other nations in the peaceful uses of nuclear energy, under a regime of peaceful nuclear cooperation agreements and effective safeguards and controls. As the President's statement notes, many friends and allies of the United States have a strong interest in nuclear power and have, in recent years, lost confidence in the ability of our nation to recognize their needs. We need to restore confidence, trust, and mutual understanding in the field of international nuclear cooperation within the framework of effective safeguards and controls.

To accomplish this, the President's statement sets forth the objective of re-establishing the United States as a predictable and reliable partner for peaceful nuclear cooperation under effective safeguards. It notes a key reason for this position. If other countries go their own ways, United States influence will be diminished and its effectiveness in gaining the necessary support to deal with proliferation problems will be reduced.

To attain the objective of reliable and predictable supply, the President has:

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1. Instructed the Executive Branch agencies to undertake immediate efforts to ensure expeditious action on export requests and approval requests

under agreements for peaceful nuclear cooperation, where the necessary statutory requirements are met.

The Administration will also normally authorize retransfers of nuclear material or equipment that precede use in reactors by the time an export license is issued.

2. Requested that the Nuclear Regulatory Commission act expeditiously on these matters.

In addition, the President announced that the Administration will not inhibit or setback civil reprocessing and breeder reactor development abroad in nations with advanced nuclear power programs where it does not constitute a proliferation risk. This also marks a shift from the approach of the previous Administration.

The President's announcement reinforces U.S. support for IAEA programs and other international cooperative efforts in the areas of nuclear safety and environmentally sound nuclear waste management. This will include support for the negotiation of a multilateral convention on nuclear safety cooperation and mutual emergency assistance; strengthened international cooperation in environmentally sound waste management; effective physical protection of nuclear material, including wide adherence to the Convention on the Physical Protection of Nuclear Material; and improved security measures for international transport of plutonium and highly enriched uranium. The Administration will also encourage the substitution of lower enriched fuels in research reactors at the earliest possible date.

The President has instructed the Secretary of State, working with the other responsible agencies, to give priority attention to efforts to reduce proliferation risks, to enhance the international non-proliferation regime and, consistent with United States security interests, to re-establish a leadership role for the United States in international nuclear affairs.

Under this mandate a number of reviews will be carried out. These include reviews of:

-- approaches for dealing with non-proliferation and nuclear cooperation issues in specific cases;

-- what steps might be appropriate, consistent with United States non-proliferation objectives, to facilitate or remove unnecessary impediments to commercial relations in the field of nuclear energy;

-- applicable laws, regulations and procedures to determine whether changes should be sought; and

-- possible approaches to develop a more predictable policy for exercising United States rights to approve reprocessing and plutonium use.

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PDR

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 28, 1984

MEMORANDUM FOR: Chairman Palladino
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
Commissioner Zech

FROM: Carlton Kammerer, Director
Office of Congressional Affairs

SUBJECT: LLOYD/FUQUA HEARING ON HEU/LEU FUEL CONVERSION

On Tuesday, September 25, 1984, the Subcommittees on Energy Research and Development (Lloyd) and Energy Development and Applications (Fuqua) of the House Committee on Science and Technology held a hearing to examine the need for and the impact of requiring research and test reactors to convert to low enriched uranium (LEU) fuel. A list of attendees is attached.

In her opening statement, Chairman Lloyd questioned the necessity of requiring fuel conversion. She noted a previous attempt to set a nonproliferation example by halting the development of domestic fuel reprocessing capability while the rest of the world simply forged ahead using alternate supply sources.

Following NRC's prepared testimony, Commissioners Asselstine and Bernthal responded to questions concerning security during transport, security at the facilities, and the amount of material that would pose a credible threat. The members generally agreed that NRC's goal is laudable and that the proposed rule is commendable as a progressive action; however, there was disagreement in the area of cost and impact vs. benefit.

Testimony from the ACRS, other federal agencies, and reactor operators then followed. Noteworthy comments include:

° NRC's proposed rule is based upon zero risk whereas less restrictive precautions would lead to acceptable risk. These precautions include use of 40-50% enriched fuel, storage of unirradiated fuel offsite at DOE facilities, and increased security precautions. (Dr. Mark of ACRS, DOE, EPRI, TRTR)

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° The diversion of irradiated fuel is not considered a credible event. (DOE)

° NRC may have the best intentions of simplifying the licensing process for fuel conversion; however, history has shown that simplifying the licensing process is beyond the capability of the agency as it currently exists. (NEDHO)

° The Federal Government should fund all costs of conversion including licensing and litigation. (EPRI, NEDHO, TRTR)

° If fuel conversion is forced upon domestic research reactors, some of them will most certainly shut down even if the costs are funded by the government. (DOE, NEDHO, TRTR)

° Congress should consider exempting NRC from conducting public hearings on licensing issues related to fuel conversion so as to avoid uncertainty over litigation and court action. (Dr. Remick of ACRS)

° Reactors with lifetime cores should not be required to convert because of their small fuel inventory, the impracticality, and the fact that there is no similar requirement on foreign reactors of this design. (State Dept., DOE, EPRI)

° Advanced nuclear R&D capabilities are already gravitating abroad and forced conversion of domestic reactors will further that trend. (EPRI, TRTR)

Copies of written testimony are available from the Office of Congressional Affairs.

Attachment:
As stated

cc: EDO
OPE
OGC
SECY
RES
ACRS

ATTENDEES

HEARING ON HEU/LEU FUEL CONVERSION

SEPTEMBER 25, 1984

SUBCOMMITTEES: Rep. Marilyn Lloyd (D-TN)
Rep. Don Fuqua (D-FL)
Rep. Robert Walker (R-PA)
Rep. Rodney Chandler (R-WA)
Rep. Robert Young (D-MI)
Rep. Claudine Schneider (R-RI)

WITNESSES: (SEE ATTACHED SHEET)

Hearing on Conversion of Research and Test Reactors
to Low-Enriched Uranium (LEU) Fuel

Tuesday, September 25, 1984
1:00 - 5:00 P.M.
Room 2325 Rayburn House Office Building

Witness List

Panel 1: U.S. Nuclear Regulatory Commission (NRC)

Honorable Frederick Bernthal
Acting Chairman

Accompanied by:

Honorable James Asselstine
Commissioner

Panel 2: NRC Advisory Committee on Reactor Safeguards (ACRS) and Others

Jesse Ebersole, Chairman
NRC ACRS

Edwin L. Zebrosky
Electric Power Research Institute

Accompanied by:

J. Carson Mark, Chairman
Subcom. on Safeguards and Security

Forrest J. Remick, Member

Panel 3: Agencies

Carlton R. Stoiber, Director
Office of Export and Import Control
Bureau of Oceans and International and Scientific Affairs
U.S. Department of State

James S. Kane, Deputy Director
Office of Energy Research
U.S. Department of Energy

Armando Travelli, Manager
Reduced Enrichment for Res. and Test Reactor (RERTR) Program
Argonne National Laboratory

Panel 4: Research and Test Reactor Operators and Users

Robert S. Carter, Chief
Reactor Radiation Div.
National Bureau of Standards
U.S. Dept. of Commerce Center

A. Francis DiMeglio
National Organization of Test, Research and Training Reactors
Rhode Island Nuclear Science

James J. McGovern
Union Carbide Corporation
Medical Products Division

Paul J. Turinsky, Chairman
Nuclear Engineering Dept. Heads Organization
Depart. of Nuclear Engineering
North Carolina State University

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

R. McEnogue
AB61-2
PDR

January 31, 1984

MEMORANDUM FOR: Chairman Palladino
Commissioner Gilinsky
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal

FROM: John E. Zarbe, Director
Office of Policy Evaluation

SUBJECT: REDUCING FUEL ENRICHMENT AND UPGRADING PHYSICAL PROTECTION AT NON-POWER REACTORS

As requested at the January 26 agenda planning session, we offer for your consideration in preparation for the planned February 6 discussion the following observations concerning LEU conversion and physical protection upgrading at non-power reactors (NPRs).

Introduction

In light of the State Department spokesman's comment at the January 27 briefing that further action by NRC to reduce enrichment of the fuel in licensed U.S. NPRs would have only a "marginal" impact on the U.S. Government's effort to encourage foreign countries to reduce their NPR fuel enrichments, it appears that further Commission consideration of reducing enrichment at U.S. NPRs should be based primarily on domestic safeguards considerations.

As noted by the DOE spokesman at the briefings, it appears that the use of LEU fuel in NPRs is feasible for most NPRs. Moreover, assuming that funding is available, there appears to be general agreement that substitution of LEU for HEU in NPR fuel would largely resolve the issue of the adequacy of NPR safeguards to prevent the theft of weapons-grade material. However, even if funding were available, there are several additional reasons why a conversion process will take some time. For instance, we understand that conversion would require additional case-specific licensing safety analyses, may be limited by the availability of fuel, and is dependent upon DOE's rate of progress in completing its fuel research program.

Contact:
Cookie Ong, OPE
George Eysymontt, OPE
X-43302

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The issue then, it seems to us, is whether safeguards protection at NPRs is adequate in the short run. In this regard, the briefings on January 27 suggest that the HEU fuel now used in NPRs may involve a significant risk of theft in an attempt to produce an explosive. The EDO's memorandum of January 25 suggested further upgrades to Category I and Category II NPR protection that would reduce that risk. In this memorandum, we summarize in broad terms present and proposed rules for Categories I and II NPR fuels to provide a perspective for considering staff's suggested additional requirements. We then offer for your consideration some observations on the requirements and possible alternatives.

NPR Safeguards Requirements: Present, Proposed and Suggested

In broad terms the present interim rule for Category I NPRs (those having more than 5 kg HEU) essentially involves defining specific areas to which access is limited to individuals who have been screened and are badged or who are under escort. All with access to such areas are subject to visual surveillance and exit searches. On-site personnel would contact off-site local law enforcement (LLE) agencies to respond to suspected theft. However, those NPRs which can maintain the fuel at a level of 100 rems per hour at three feet need meet only the requirements for Category II NPRs.

The Category I permanent rule proposed last year would upgrade the present Category I rule by requiring (through performance standards) an upgraded "timely" LLE response to suspected theft; enhanced detection systems that are insider-resistant (e.g., tamper-proof intrusion alarms); and submittal for approval of plans for security should fuel radiation level fall below 100 rems per hour at three feet. On the other hand, it would provide a further exemption (to Category III requirements) if the minimum dose to a potential thief would be expected to exceed 2000 rems. The only change to Category I requirements suggested by the EDO in his January 25 memorandum would be to require a demonstration that the 100 rems/hour criterion would be met.

The existing rule for Category II NPRs (those with 1 to 5 kg HEU) differs from the proposed final Category I rule primarily in that the Category II rule would not require insider-resistant detection systems and would not specify theft response in terms of LLE response time, force size and armament. In his January 25 memorandum the EDO suggested a number of further upgradings of the Category II rule, namely, core access barriers (e.g., shrouds); reduced fresh HEU in storage; systems resistant to one insider; and improved systems for communications to the off-site response force.

Under present rules, Category I NPR fuel must be shipped in an armored vehicle, over planned routes, under tamper-proof seals, with seven armed escorts in armored and escort vehicles. The personnel are screened, the transport vehicle is searched beforehand, the shipper is notified in advance and must confirm receipt. There are two-way radios to alert, if necessary, a

response force. Category II material transportation controls differ primarily in the fact that there are no special vehicle or escort requirements, although shipments must be either in dedicated vehicles or under high-surveillance signature service. The staff makes no mention of the need to maintain comparable levels of protection for NPR fuel in transit if Category II fixed site protection is strengthened.

OPE Comments

We believe that some further upgrading of NPR safeguards is desirable to reduce residual risks associated with present levels of NPR fuel enrichment. While, in general, we consider the staff's proposals to be in the right direction, we offer a few observations for your consideration. First, it appears to us that, while a requirement for core access barriers might be excessive if applied, as the staff suggests, to include Category II NPRs, we do believe it would be an appropriate measure for consideration for Category I NPRs. Secondly, for Category I NPRs the Commission might wish to have the staff consider the possibility of requiring that intrusion alarms be enhanced, including the possible option of tamper-proof radiation detection monitors that would directly alert the LLE. Thirdly, to provide further consistency with any upgraded requirements for Category II NPRs, we believe that, in view of the staff's concern about multiple thefts, the Commission may wish to have the staff consider further upgrading Category II in-transit NPR fuel safeguards to include, e.g., vehicle locks and a two-man rule (one an escort, and possibly armed).

Finally, we do not believe that, as noted in our memorandum of February 3, 1983, the 100 rems/hour at three feet exemption criterion is soundly based. In our view such a level of radiation is at best a psychological deterrent only to casual theft; it could not physically prevent knowledgeable and determined individuals from carrying out a theft, as could some form of physical barrier blocking access to the core. The EDO's January 25 memorandum suggests that a requirement for such a core access barrier be considered to protect Category II NPRs. (We assume it would also be required for non-exempt Category I NPRs.) If the Category II protections are upgraded to the extent identified in the EDO's January 25 memorandum, the difference between Category I and Category II requirements would be narrowed to the quality of the response force and insider resistance. On that basis concern about radiation-exempted Category I NPRs would be much alleviated. If, however, the concept of core barriers were not to be adopted, at least for Category I NPRs regardless of their radiation levels, then concern about the risk of exemption would remain. Moreover, this concern extends to the new 2000 rems exemption criterion provided in the proposed permanent Category I rule, that would put Category I materials under Category III controls. Category III protection would not, in our view, offer adequate protection for materials of such inherent significance. We recommend that radiation-based exemptions be reconsidered.

Conclusion

In summary, we believe the Commission should consider, as the staff has suggested, further short-term upgrading of NPR safeguards. Such upgrading should be considered independently of further consideration of requiring reduced NPR fuel enrichments which, however desirable, can only be done over a number of years. We have identified a number of features in addition to those suggested in the EDO's January 25 memorandum which the Commission may wish to discuss with the staff in the briefing now planned for February 6. The discussion (in closed session, if use of classified information is unavoidable) could usefully focus on staff practice in determining safeguards credit for particular features (such as fuel type) of the present 13 Category I and 21 Category II NPRs; on staff's general assumptions concerning what is required to separate enriched uranium from the NPR fuel alloy and to illicitly fabricate a nuclear explosive; and on the incremental costs of the suggested new NPR safeguards requirements. Based on those discussions, the Commission may then be able to provide guidance to the staff on what further measures it may wish to have them analyze. We understand the staff is preparing a draft of such guidance that should be available before the briefings. Following the briefings we would expect to work with the staff in revising the draft in light of the discussions.

cc: H. Plaine
S. Chilk
W. Dircks
J. Davis
R. Minogue
J. Shea