Issues in the Current Review of US Post-INFCE Non-Proliferation Policy

The PRC Meeting

A PRC meeting is being scheduled to discuss a Presidential Decision Paper. The paper presents "Planning Assumptions" to guide preparations for upcoming negotiations with EURATOM and Japan. None of the Planning Assumptions require changes in law or entail direct budget implications. Requests for authority to conclude specific agreements would be submitted as required.

This is the second PRC meeting on the subject. The first was held on April 9 to discuss the February 16th interagency memorandum to the President. At the first PRC meeting, State, DOE, ACDA and JCS all supported the recommendations in the memorandum but questions were raised by CEQ and the NSC Staff. An interagency working group was then asked to prepare another paper with options and analysis on the key issues of reprocessing and the use of plutonium, and specifically how we should exercise our bilateral rights over reprocessing of US-origin fuel.

The resulting Presidential Decision Paper is intended to frame the issues for the President and discuss the questions raised at the last PRC. The course recommended in the February 16th memorandum on reprocessing and plutonium use policy is now presented in the form of options. In addition there are recommendations in three other areas: specific improvements in the non-proliferation regime that would be sought in negotiations, US participation in ongoing discussions to establish an International Plutonium Storage (IPS) regime, and improved assurances of US low-enriched uranium fuel supply.

Background To the Issues

The President's 1977 Non-Proliferation Policy was designed to bring attention to the proliferation risks associated with sensitive aspects of the fuel cycle, in particular plutonium separation and use. INFCE was designed to study the fuel cycle from both proliferation and nuclear power points of view. We have succeeded in increasing awareness; but we have also caused tensions with our major Allies.

Nuclear programs have been slowed in recent years for domestic reasons and the proliferation dangers inherent in plutonium based fuel cycles are now more widely accepted, but advanced and fast breeder reactor options which use plutonium are still perceived to be of great importance by major countries.
in Europe and Japan. We have indicated to our Allies that we recognized that their resource situations differ from ours and that we respect their choice with regard to timing of fast breeder reactor programs. To the extent US policy attempts to interfere with these programs, it is seen as a threat to their energy security and as inconsistent with our assurances.

It is also apparent that any progress on an effective international non-proliferation regime requires the cooperation of the major nuclear suppliers in Europe and Japan. We believe that their cooperation is closely related to resolution of outstanding questions regarding their reprocessing of US source material and use of the resulting plutonium.

Our current guidelines are perceived as threatening energy security in Europe and Japan, and are clearly unacceptable to the Europeans as a basis for renegotiation of the US-EURATOM Agreement for Cooperation. If sustained, they would lead to either a termination of US supply to EURATOM — which is totally unacceptable on political grounds — or a continuation of supply based on annual extension of the exception for EURATOM. These guidelines would keep some of our control in the case of Japan, but at a high political cost for the obvious discrimination. Neither of these outcomes is acceptable.

We believe that our ability to influence decisions about reprocessing and plutonium use is diminishing. Our objective is to see whether by offering greater predictability in our supply relationships we can get an improved non-proliferation regime over the longer term and avoid a serious risk of alienating allies and others. The issues presented for decision set a course for that objective.

The Issues in the Decision Paper

Four Planning Assumptions are put forward in the Presidential Decision Paper. Three are simple recommendations and the last is presented in the form of options.

The first Planning Assumption describes what the US would seek to get in negotiations with the Europeans and Japanese. The objectives include, inter alia, significant concessions by major suppliers in the timing of reprocessing facilities and the use of plutonium in their countries, and agreement to require full-scope safeguards as a condition for significant new supply commitments. The relevant point in recommending these objectives is that they add up to a stronger non-proliferation regime or avoid setbacks in our non-proliferation efforts. While we cannot be certain of how much would ultimately be realized
in negotiations, without an effort to harmonize other portions of our nuclear policies we can expect no real improvements.

The second Planning Assumption recommends general guidance for US participation in the IAEA International Plutonium Storage (IPS) study. Although there is concern that US involvement in the study would make it politically more difficult for us to restrict the release of plutonium derived from US spent fuel, it is outweighed by our interest in assuring that the IPS regime that eventually emerges is as strong as possible. The approach in the Paper attempts to protect our essential interests while going ahead without commitment.

The third Planning Assumption would extend the licensing period for low-enriched uranium exports to NPT or equivalent countries beyond 5 years, perhaps up to the life of the power reactor. This would mean somewhat decreasing the leverage we have over some countries through fuel supply in the interest of demonstrating our reliability as a supplier to those countries having excellent non-proliferation credentials. It would also give us an initiative that will help meet criticism that will be leveled at us at the August NPT Review Conference over our performance as a nuclear supplier.

The Plutonium Separation and Use Issue

The options for the fourth Planning Assumption expose the key issue for the meeting: how should the US exercise its existing right to limit retransfers of US-origin spent fuel from Japan and other (non-EURATOM) countries to European reprocessing plants, and how should we seek and exercise such rights in the case of EURATOM?

Our US-EURATOM agreements do not give us any retransfer rights to approve reprocessing of US-origin materials in EURATOM countries. But our policy and our law -- the Nuclear Non-Proliferation Act of 1978 -- requires us to seek such rights. If we are to be successful we will have to spell out clearly how such rights would be exercised. Japan, where we now have these rights, will insist that we exercise them according to the same criteria agreed upon with EURATOM.

Since adoption of a case-by-case approval policy in April 1977 for retransfer of US-origin material for reprocessing and subsequent plutonium use, we have received requests from Japan, Spain, Switzerland, and Sweden for such approvals to permit reprocessing in the UK and France, and have approved several such retransfers. We have not resolved questions
related to plutonium use. As reprocessors, France and the UK want approvals of retransfers of spent fuel from third countries to them.

Two policy options are offered in the Decision Paper: the first would codify the current interim practice of case-by-case approvals only to relieve spent fuel storage congestion or where the transfer is necessary to reprocessing contracts predating the April 1977 policy; the second would grant generic approval for cases involving contracts predating 1977 and in addition grant advance approval of transfers for reprocessing and the use of derived plutonium for specified breeder and advanced reactor R&D programs. The second option would thus permit programmatic agreement to reprocessing for specified plutonium use in EURATOM and Japan.

We favor Option 2. Option 1 would underline US opposition to reprocessing, breeders and the use of plutonium. But it would not stop the European reprocessing or breeder programs, and by effectively applying greater pressure on Japan than EURATOM, it would provoke early construction of a second Japanese reprocessing plant. Most important, if we fail to accommodate specified breeder and advanced reactor programs, we will have little chance of renegotiating our agreements for cooperation with EURATOM and others, or of achieving our other objectives designed to strengthen the non-proliferation regime.

If Option 2 and the principle of programmatic approvals is accepted, it can be implemented in either a more or less restrictive way as described by sub-options 2(a) and 2(b) in the Decision Paper. The principal difference between the two is that sub-option (a) would accept for approval at this time only programs committed to prior to 1977 (and only in Europe and Japan) while sub-option (b) would accept programs committed to over the next ten years in NPT or equivalent countries that have an advanced nuclear program. Thus while the criteria of 2(b) covering use of plutonium would apply only to Europe and Japan now, they reasonably would be expected to include others at some unspecified time in the future (e.g., South Korea).

We favor Option 2(b). Although 2(a) explicitly distinguishes between those countries that now have breeder programs and those that do not, it would not provide the predictability in our policy sought by EURATOM and Japan, and it would be roundly criticized as discriminatory by developing
countries for its failure to provide for the maturation of their nuclear programs. Option 2(b) recognizes that countries such as Japan and Sweden have entered into reprocessing contracts after April 1977 with the UK and France and allows us to offer the generic approvals they need to maintain domestic political viability in their nuclear programs. On balance this option offers the best chance of preserving reasonable technical and economic criteria for legitimate use of plutonium while still meeting the demands of negotiability with the Europeans and Japanese.