

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

August 22, 1980

The Honorable John Heinz United States Senate Washington, D.C. 20510

Dear Senator Heinz:

On May 27 you raised a number of questions concerning information provided on May 1 concerning differences in the role of the NRC and the Executive Branch, as related to the processing of export requests. I am pleased to respond to your request for additional information on this matter.

Our responses to your individual questions are enclosed. We will be glad to provide further clarification should you desire it.

Sincerely,

John F. Ahearne

Chairman

Enclosure: Response to questions

Mr. Dircks' letter places great emphasis upon the extent to which the NRC relies upon the comments of the Executive Branch agencies. In particular, the letter mentions several instances where the NRC called upon outside personnel to evaluate certain technical information. If this is the case, in what manner is the Commission's review different from that conducted by Executive Branch agencies?

ANSWER

Under the NNPA, NRC is required to obtain Executive Branch comments on certain export requests. Our requests for technical information, however, are separate from these routine requests for comments and have been made only on relatively few occasions, such as the ones we previously cited involving the use of the U.S. Geological Survey and DOE. On these occasions we concluded it would be useful to have input from agencies having specialized capabilities in these areas.

In making its independent assessments and judgments of export cases, the scope of the Commission's review is, to a large degree, comparable to that of the Executive Branch agencies, including for example such areas as nuclear export policy and international legal matters related to nuclear exports. However, there are some differences in emphasis. For example, the Commission has consistently placed greater emphasis on detailed examination of safeguards and physical security considerations in its review of applications and currently requests detailed assessments in these areas for each relevant application. Executive Branch reviews, while taking into account the relevance of safeguards and physical security adequacy, have typically not involved such detailed and specific reviews.

In addition, of course, the Commission may, from its perspective, draw different policy or legal conclusions than the Executive Branch from the same basic data and statutory guidelines for certain export cases.

On page 3 of Mr. Dircks' letter there is a list of factors which affect the time it takes the Executive Branch and NRC to complete action on individual cases. I was surprised to see that almost all of these factors relate to political matters—e.g., "the proliferation intentions of certain countries." Could you please explain the capability of the NRC to independently review such judgments of the Executive Branch?

ANSWER

The Commission relies heavily on Executive Branch policy judgments in making its export licensing decisions. In no cases has the Commission disputed the Executive Branch's political judgments on non-proliferation matters. The Commission must, as a matter of law, find, pursuant to the Atomic Energy Act, as amended, that a proposed export of a reactor or special nuclear material would not be inimical to the common defense and security and would not constitute an unreasonable risk to the health and safety of the American public. In making this finding, other matters may be considered, including our relations with the proposed recipient country and the availability of alternative sources. Because of its statutory mandate, the NRC's expertise is focused on the adequacy of safeguards and physical security. It should also be noted that expertise was not the sole basis for licensing nuclear exports. Relevant in this regard are Senator Percy's comments on the role of the NRC during the February 7, 1978 Senate floor debate on the NNPA. Senator Percy states:

"I am committed to the concept of a strong independent check on Executive Branch nuclear export decisions... The Executive Branch still plays the leading role in the implementation of U.S. nuclear export policy. But we must recognize that in their zeal to achieve their own institutional interests, these agencies may well overlook important non-proliferation concerns."

In the same list the letter refers to the considerable time which often is required to resolve differing interpretations of the applicable export review criteria. A cursory review of the legislative history of the Non-Proliferation Act indicates that the adoption of criteria was designed to give the Commission specific guidance for the purpose of preventing delays. Leaving aside those in the Tarapur case which obviously presents unique difficulties, would you please give examples of criteria which have led to these problems?

ANSWER

While the adoption of the criteria under the NNPA has significantly clarified export licensing requirements, differing interpretations of their intent have, on occasion, delayed the review of some export license applications. Examples of these disputed or unclear areas, none of which is currently causing a significant delay in export licensing activities, are identified below:

- A. Whether, under Criterion 1 of Section 127, a determination must be made as to the "adequacy" of safeguards.
- B. Questions on whether the assurances regarding no nuclear explosives development are adequate for a finding that criterion 2 is met.
- C. Questions as to the adequacy of physical security assurances as required by Criterion 3.
- D. Whether the language contained in certain agreements for cooperation gives the U.S. adequate control over the retransfer of produced special nuclear material as required under Criterion 4.
- E. Whether the full-scope safeguards criterion of Section 128 applies to the export of components and other items under Section 109.
- F. Whether exports could be made after March 10, 1980 to countries not accepting full-scope safeguards if the export application was filed prior to September 10, 1979, and, during the normal course of events, the export would have taken place prior to March 10, 1980. (While this has been noted most prominently in the Tarapur case, it could affect a number of exports to other countries as well.)
- G. Questions as to what constitutes an acceptable basis for technically determining that a particular country is <u>maintaining</u> IAEA safeguards on all its applicable peaceful nuclear activities.

QUESTION 3 (cont.)

H. Questions about the adequacy of reprocessing assurances in Agreements for Cooperation.

On page 5 of the letter, Mr. Dircks referred to the Commission's use of a "no material changed circumstances" finding to eliminate repetitive analyses of applications. Could you provide examples of countries for which this test has been used to expedite shipments of fuel and reactors?

ANSWER

The following is a list of countries for which the Commission has authorized exports pursuant to the NNPA of 1978 after considering Executive Branch views and comments as to how each country meets the criteria established in the NNPA, and an indication of whether the "no material changed circumstance" approach has been used by the Executive Branch or NRC.

Parties to Non-Proliferation Treaty	No Material Changed Circumstance Provision Exercised
Austria	
Belgium	Yes
Canada	Yes
Denmark	
Germany, Fed. Rep. of	Yes
Greece	
Italy	Yes
Japan	Yes
Mexico .	
Netherlands	Yes
Philippines	
Korea, Rep. of	Yes
Romania	
Sweden	Yes
Switzerland	Yes
United Kingdom	
Yugoslavia	Yes
Taiwan	
Non-Parties to Non-Proliferation Treaty	
Brazil	
France (NWS)	Yes
India	
Spain	

The initial export application approved for special nuclear material to each country, following enactment of the NNPA in March, 1980, was granted only after detailed Executive Branch views and comments were received describing the

QUESTION 4 (CONT'D)

manner in which all applicable NNPA criteria were satisfied. All these cases were referred to and reviewed by the Commission. This procedure is now incorporated in NRC regulations to the effect that any proposed export to a country to which the Commissioners previously have not authorized an export pursuant to the NNPA will be reviewed by the Commissioners. (10 CFR 110.40b. (15)).

In several of the listed countries, at least one subsequent export has been authorized under the "no material changed circumstances" finding. This method of expediting the approval of exports is utilized by the Executive Branch in responding to NRC requests for views, as well as by NRC in the issuance of licenses. In fact, for several countries, the Executive Branch, on November 21, 1979, authorized the NRC, "in the absence of a material change in circumstances, to license, without referral to the Executive Branch, requests for the export of single reloads of low-enriched uranium fuel for use in light water moderated power reactors previously fueled by the United States." The NRC has acted on a number of cases under this authorization, as indicated above.

For your information, we are providing a typical progression from the full review under NNPA to the current authorization procedures for single reloads of low-enriched fuel for a typical nuclear power reactor in Sweden.

1. Application XSNM01074 of January 25, 1977 was commented upon by the Executive Branch on March 3, 1978 under the response format then current. With the NNPA enactment on March 10, 1978, NRC requested and received a revised analysis from the Executive Branch addressing the criteria of the NNPA. The license subsequently was reviewed and approved by the Commission. Commission action paper SECY-78-216A is attached.

QUESTION 4 (CONT'D)

- 2. License application XSNM01532 was received in June 1978 and forwarded for Executive Branch comments. On August 29, 1979, the Executive Branch responded with a favorable recommendation under the "no changed circumstance" construction. This license was issued by the NRC staff under the delegation of authority contained in 10 CFR 110.44a.2, without Commissioner review. The application and related documents are attached.
- 3. License application XSNMO1633 was received in December 1979. It was forwarded to the Department of Energy in order to obtain the necessary assurance letter from the Government of Sweden that the material would be subject to all the terms of the U.S./Sweden Agreement for Cooperation and that the recipient was authorized by Sweden to receive the material. (This step is typical and common in cases of this nature, although it could be avoided if the assurances are provided by the recipient government at the time of application.) Since the application was for a single reload of low-enriched power fuel no Executive Branch review was required. The staff issued the license under the "no changed circumstance" construction. The application and related documents are attached.

QUESTION 5:

On the next page, Mr. Dircks referred to procedures whereby the Commissioners receive export applications soon after they are received by the NRC. How often--with examples--do the Commissioners take advantage of this opportunity?

ANSWER

Prior to June 1979, the staff routinely forwarded to the Commissioners advance information copies of all export license applications requiring eventual Commissioner review. In three of these cases, the Commissioners took advantage of the early notification procedure to raise issues requiring Executive Branch or staff analyses. In none of these 3 cases did the Commission send subsequent questions to the Executive Branch after receipt of the Executive Branch's analysis and judgment.

These cases were:

- 1. XSNM-510, Amendment No. 2, to extend the expiration date for an additional two years to December 31, 1980 to allow export to Japan of a remaining quantity of 29 kilograms of natural uranium and 1,088 grams of plutonium in the form of mixed oxide rods and archival samples. Chairman Ahearne requested the staff to provide clarification of Commission procedures and standards used in the review of new applications, as opposed to requests for amendments.
- 2. XSNM-1429, for the export of 21.554 kilograms of uranium enriched to 93.3% for use in the FRJ-2 reactor in the Federal Republic of Germany.
 Chairman Ahearne raised a question regarding the status of IAEA safeguards facility attachments for all facilities involved, including the conversion and fabrication facility at NUKEM and the FRJ-2 reactor.

3. XSNM-1472, for the export of 104,730 kilograms of uranium, enriched to 3.5% U-235 for use as the initial core plus three reloads in the KORI-2 reactor in the Republic of Korea. (The original application by Westinghouse requests fuel for the initial core and 40 reloads for a period in excess of 40 years.)
Commissioner Bradford subsequently raised questions with regard to what plans Korea has for the spent fuel that will be generated by the 40 reloads, and what policy the NRC or Executive Branch has adopted concerning the number of reloads which may be approved in a single application.

In June 1979, the Commission revised its procedures to require Commission notification upon receipt of Executive Branch comments. This has been judged sufficient to provide the Commission with an adequate opportunity to provide the staff with any questions or comment that can be addressed in the staff analysis that is forwarded to the Commission. The staff also continues to send to the Commissioners, upon receipt, any applications that raise new or unusual issues. In addition, the Office of International Programs continues to provide early notification to all involved NRC staff offices of the receipt of all significant license applications. These procedures were specifically designed to facilitate early NRC staff review and identification of problems in such areas as safeguards, physical security and legal issues. As a consequence, the staff has on many occasions identified and forwarded to the Executive Branch specific questions and concerns in advance of receiving Executive Branch views.

QUESTION 6:

In the Philippine case which the letter referred to, I am curious as to the length of time it took the Commission to reach its decision. It is my understanding that the NRC received the Executive Branch comments on this case in September 1979, and that the only contentious issue was a legal question relating to the extent of Commission jurisdiction over foreign health and safety impacts, an issue which the Commission had addressed in several earlier cases. Nevertheless, the Commission did not rule on this application until early May. Could you please explain the reasons for this delay of over six months and whether such delays are common in the Commission's deliberations on reactor exports?

ANSWER

Westinghouse initially applied for the Philippine reactor export license on November 18, 1976. The first Executive Branch judgment on this case (XR-120) was received by NRC on December 12, 1977. However, we were subsequently requested by State to defer judgment on the case pending further review. The Final Executive Branch judgment was received 21 months later, on September 28, 1979.

In response to a Petition for Leave to Intervene and Request for Hearing filed by the Center for Development Policy and others on April 19, 1979, and several expressions of congressional interest, the Commission issued on October 19, 1979 an order calling for written hearings on two aspects of the potential health, safety and environmental impacts of the export: (1) the general jurisdictional scope and appropriate procedural framework for addressing the issue and (2) the potential nature and magnitude of the impacts associated with the particular Philippine plant site at Napot Point.

Submissions by all participating parties on the first subject above were filed by November 19, 1979. Following review of the voluminous amount of written material submitted, with sharply divergent view points on the issues involved, the Commission, on January 29, 1980, decided to confine its consideration of subject (2), noted above, to potential health, safety and

QUESTION 6 (CONT'D)

environmental effects of the proposed Napot Point plant on the U.S. territory and on the global commons. Accordingly, on February 8, the Commission issued a second hearing order requesting views by February 29 on the above subject, as well as on the relationship of these effects to the common defense and security of the U.S.

The material submitted by participants during this second phase of the hearing consisted of numerous papers which often presented contradictory or conflicting analyses, conclusions and recommendations. The Commission order which was drafted at the end of the second phase was considerably more complex and comprehensive than that issued at the end of the first phase. Considerable effort was devoted to capturing the separate views of individual Commissioners on the subject. This resulted in the expenditure of a far greater amount of time for evaluation than had initially been envisaged.

On March 14 the NRC staff submitted a staff paper (SECY-80-142) in which it recommended that the Commission authorize the staff to issue export license XR-120. The Commission's Memorandum and Order (CLI-80-14) authorizing issuance of the export license was issued on May 6, 1980. It noted that the export met all applicable export licensing criteria set forth in the Atomic Energy Act of 1954, as amended, and would not create unacceptable health, safety and environmental risks to U.S. territory or the global commons.

The export license was issued by the staff that same day.

Considering the unprecedented nature of the scope of public participation in the Philippine export case, the complexity of the issues and the controversy surrounding them, and the unclear legal and legislative history from which the Commission could draw for guidance in reaching a decision on this subject,

QUESTION 6 (CONT'D)

we do not believe that the amount of time taken by the Commission to complete action was excessively lengthy. Clearly the unique nature of this export case sets it apart from all others. This case is, therefore, not representative of past, and, most probably, future reactor export cases.