

May 12, 1981

SECY-81-299



**POLICY ISSUE**  
(Notation Vote)



For: The Commission

From: William J. Dircks  
Executive Director for Operations

Subject: PROPOSED TRANSFER OF TECHNOLOGY RELATED TO HEAVY WATER  
FROM SWITZERLAND TO ARGENTINA PURSUANT TO 10 CFR PART 810

Purpose: To obtain the Commission's concurrence in the attached proposed  
response to DOE.

Review Date: Under interagency procedures the NRC consultation period does  
not expire until May 31. However, DOE has requested comments  
by May 11 since, unless the request is approved early, the  
contract for this equipment may be awarded to a West German  
firm. DOE has been formally advised that Commission review  
may not be completed by May 11.

Discussion: On May 1, DOE forwarded for review a request for Foxboro to  
provide a process control system involving U.S. technology to  
Sulzer Brothers in Switzerland for ultimate use in a heavy  
water plant in Argentina (Appendix A). We understand that  
some other Executive Branch agencies have already provided  
comments on this request. We also understand that these  
relevant Executive Branch agencies were advised informally in  
February that Foxboro was considering the submission of this  
Part 810 request. NRC, however, was not informed.

CONTACT:  
Wm. Upshaw, IP (49-28155)

8106010207

Discussion:  
(Continued)

As an argument in favor of approval, the staff notes that the Foxboro equipment is not specially designed for heavy water plant operation and is not essential for the operation of the proposed plant (i.e. the plant could be operated manually, albeit with less efficiency). Furthermore, alternate foreign sources for the equipment are available and the order will likely be given to a West German firm (Siemens) should Foxboro fail to receive export approval. Another factor in favor of approval is that the export of the heavy water plant from Switzerland will be under the conditions required by the suppliers' guidelines.

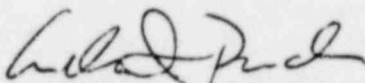
The major factors weighing against approval are as follows:

1. Foxboro's request for an advisory opinion for a similar export proposal was given a negative response by the SNEC in July 1980 because "prospects were dim that Argentina would meet U.S. nonproliferation requirements". The staff is unaware (1) that any progress has, in the interim, been made in resolving these non-proliferation concerns or (2) that U.S. policy toward Argentina has been changed.
2. The U.S. strongly opposed the Swiss decision to sell the heavy water plant to Argentina without requiring full-scope safeguards. To now provide assistance to this sensitive facility could be viewed as a reversal of this policy and a sanctioning by the U.S. of such transactions without full-scope safeguards in the future.

Switzerland conditioned the sale of the heavy water production plant on the application of IAEA safeguards. Argentina and the IAEA are still negotiating the safeguards agreement which will apply to this facility. To the best of the staff's knowledge, the IAEA has not yet fully determined the nature of the safeguards regime which it will apply to heavy water production plants. That is, will safeguards on heavy water production plants be modeled after safeguards on UF<sub>6</sub> conversion plants, where safeguards are applied only to the output of the plant, or modeled more after safeguards on fuel fabrication plants, which would include monitoring production and waste streams in and out of the plant? The Executive Branch has been active in working

with the IAEA on developing a general safeguards approach for heavy water production plants, and the trend of thinking appears to be that safeguards will follow, but perhaps be less rigorous than, the approach used for fuel fabrication plants. The Executive Branch has asserted that this computer production control system could assist in the application of effective international safeguards. The staff agrees that the system could assist in safeguards application; but, without any knowledge of how Argentina intends to use the system, we cannot make any judgment on the degree to which this system will in fact assist in the application of effective international safeguards.

Recommendation: That the Commission authorize the dispatch of the attached response to DOE (Appendix B).



William J. Dircks  
Executive Director for Operations

Appendices:

- A - DOE request dtd 4/30/81
- B - Draft response to DOE

Commissioners' comments should be provided directly to the Office of the Secretary by c.o.b. Tuesday, May 19, 1981.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT May 15, 1981, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

DISTRIBUTION

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Secretariat

APPENDIX A

APPENDIX B

Dear Mr. Griffin:

This is in response to your April 30 letter to Mr. Marvin Peterson of this office concerning the Foxboro request to provide a process control system to Suizer Brothers in Switzerland for end-use in a heavy water plant in Argentina.

The Commission notes the belief of the DOE staff that this export should be approved and has the following comments:

1. Accepting the assertion in your April 30 letter at face value, namely, that "the Foxboro application would not have been approved (by the previous Administration) unless Argentina accepted full-scope safeguards," and recalling that Foxboro's request for an advisory opinion for a similar export proposal was given a negative response by the SNEC in July 1980, the Commission is unclear as to what factors have caused this proposal for a reversal of the Administration's policy in this area. The Commission is also unclear as to what the policy of the new Administration is with respect to approving exports, such as this, to sensitive facilities.
2. The U.S. strongly opposed the Swiss decision to sell the heavy water plant to Argentina without requiring full-scope safeguards. To now provide assistance to this sensitive facility could be viewed as a reversal of this policy and a sanctioning by the U.S. of such transactions without full-scope safeguards in the future.

As a general matter, the Commission believes that the precedential implications of a decision to approve the Foxboro application are sufficiently important to have warranted a systematic development of U.S. policy options for classes of

exports such as the one in question. To establish U.S. policy by an ad hoc treatment of individual export applications does not appear to the Commission to be the most judicious way of advancing US non-proliferation objectives.

At the same time, the Commission recognizes the commercial factors that underlie the position of the DOE staff and, particularly, that the process control system is available from another foreign source. These are legitimate considerations that bear on U.S. decisions in cases such as this one. However, their weight and importance can best be gauged as part of an orderly policy review process in which all factors, including those that formed the basis of the previous Administration's policy, are taken into account.

With regard to the urgency that DOE attaches to this case, the Commission observes that its review would have been facilitated had the Foxboro proposal been brought to the attention of the NRC staff, however informally, at the time concerned Executive Branch agencies were apprised of it in February of this year. In this connection, Section 5/b of the Atomic Energy Act, as amended, admonishes the Secretary of Energy to insure that such requests are handled expeditiously on an inter-agency basis and to identify potentially controversial requests as soon as possible.

Sincerely,

James R. Shea, Director  
Office of International Programs