### May 31, 2000

#### COMMISSION VOTING RECORD

DECISION ITEM:SECY-00-0085TITLE:REVIEW OF THE TOKAI-MURA CRITICALITY ACCIDENT AND LESSONS LEARNED

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of May 31, 2000.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette Vietti-Cook Secretary of the Commission

Attachments: 1. Voting Summary 2. Commissioner Vote Sheets

cc: Chairman Meserve Commissioner Dicus Commissioner Diaz Commissioner McGaffigan Commissioner Merrifield OGC EDO PDR

### VOTING SUMMARY - SECY-00-0085

#### **RECORDED VOTES**

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. MESERVE	Х				Х	5/16/00
COMR. DICUS	Х				Х	5/9/00
COMR. DIAZ	Х				Х	5/11/00
COMR. McGAFFIGAN	Х				Х	5/12/00
COMR. MERRIFIELD	Х				Х	5/11/00

#### COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on May 31, 2000.

# Commissioner Comments on SECY-00-0085

### **Chairman Meserve**

I agree with the staff's recommendations to forward NRC's report entitled *NRC Review of the Tokai-mura Criticality Accident* to the National Security Council, other Federal agencies, Congressional Oversight Committees, the Japanese Science and Technology Agency, as well as the Japanese Nuclear Safety Commission (added recipient), provided that the following changes are made:

1. Revise the report to include the three elements of Commissioner Dicus' comment no. 2 and the changes reflected in the attachment to the vote of Commissioner Diaz.

 As "GyEq" (Gray equivalent) is not an ICRU basic dosimetric quantity, revise the report to include the explanation of the unit (and reference to its source) that appears on page 29 of the IAEA report, which is attachment no. 6 to SECY-00-0085.

# **Commissioner Dicus**

I agree with the staff's recommendations to forward NRC's report entitled, *NRC Review of the Tokai-mura Criticality Accident*, to the National Security Council, other Federal agencies, Congressional Oversight Committees, and the Japanese Science and Technology Agency provided that the following changes are made:

- Replace the term "GyEq" (Gray equivalent) in this report with the International Commission on Radiation Units and Measurements (ICRU) units of sievert (Sv) and rem throughout the report because the term "GyEq" is not a basic dosimetric quantities, as defined by the ICRU; and
- Revise SECY-00-0085 and the report, *NRC Review of the Tokai-mura Criticality Accident*, so that they include: (a) the second fatality of Victim B that occurred April 2000 (page 2 of SECY-00-0085 and elsewhere in the attached report); (b) the fact that NEI has finalized its report on the subject (page 3 of SECY-00-0085); and (c) both SI and English radiological quantities (rather than SI units only), per NRC's metrication policy.

# **Commissioner Diaz**

I commend the staff for identifying and applying the lessons learned from the Tokai-Mura event to the NRC regulatory programs for fuel cycle facilities in the United States. These lessons will allow us to improve further our assurance of adequate protection of public health and safety. I approve the staff's recommendation that the Commission provide the NRC report included as Attachment 1 to SECY-00-0085 to the National Security Council, other Federal agencies, Congressional Oversight Committees, and the Japanese Science and Technology Agency. However, before doing so, the staff should make the attached changes to the report.

# **Commissioner McGaffigan**

I approve the staff recommendation to provide the NRC report on the Tokai-Mura Japan Criticality Accident to the National Security Council, other Federal agencies as appropriate, Congressional Oversight Committees and the Japanese Science and Technology Agency. In addition, I recommend that we provide the report to the Japanese Nuclear Safety Commission (NSC) and the Japanese Ministry of International Trade and Industry (MITI). Both agencies are directly involved in the regulatory changes resulting from the accident under recently enacted Japanese legislation.

I also agree with the comments of Commissioner Dicus with one exception. While I agree that the term, "Gray Equivalent (Gy/Eq)" has not been internationally recognized, I do not support a wholesale modification of the NRC report to delete and replace it with the more common terms, "Sievert" and "Rem." The Japanese report introduced the term, the International Atomic Energy Agency included it in its report and offered an explanatory footnote on page 29, and the Department of Energy uses the term in its report. For consistency, the NRC report should use the term "GyEq" as well. However, to address Commissioner Dicus' concern, the staff should consider including a footnote in the NRC report similar to the one included in the IAEA report.

At the May 8, 2000 Commission Briefing, I expressed my view that inadequate regulatory oversight was at the heart of the accident. The Japanese government and Diet have apparently reached a similar judgment. The Science and Technology Agency (STA) is a large research ministry, combining the functions of our Department of Energy, National Aeronautics and Space Administration, and smaller research agencies. It will grow only larger when combined with the Education Ministry (MONBUSHO) in the pending Japanese government reorganization. It is easy for a regulatory function to get second-class status in a large institution whose primary mission is research. We have some history of that in this country. As I understand it, recent Japanese legislation seeks to strengthen the NSC and shifts some of the STA's responsibility (for example, for private reactor fuel cycle facilities) to MITI, but leaves in STA the responsibility for regulatory oversight of STA-funded research and development facilities such as those of the Japan Nuclear Cycle Development Institute (JNC) and the Japan Atomic Energy Research Institute (JAERI). I would urge that consideration be given by the Japanese government to shifting those responsibilities to MITI as well. Ultimately, consideration will need to be given to transferring the whole nuclear regulatory function under the NSC to have single point of accountability reporting directly to the Prime Minister.

# **Commissioner Merrifield**

I concur with the staff's recommendation to provide the NRC report to the National Security Council, other Federal Agencies, Congressional Oversight Committees, and the Japanese Science and Technology Agency, subject to the changes proposed by Commissioner Dicus.