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## POLICY ISSUE

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(Information)

SECY-87-275

FOR: The Commissioners  
FROM: Victor Stello, Jr.  
Executive Director for Operations  
SUBJECT: TMI-2 CLEANUP REORGANIZATION

PURPOSE: To inform the Commission of staff plans to reorganize agency staffing dedicated to regulatory oversight of the Three Mile Island Unit 2 (TMI-2) cleanup consistent with the approved FY88 budget.

BACKGROUND: Since shortly after the March 1979 accident at TMI-2, the Commission has maintained a dedicated organization to provide regulatory oversight of the cleanup operations. Currently the TMI-2 Cleanup Project Directorate (TMICPD), Office of Nuclear Reactor Regulation, is charged with this responsibility. As noted in the "NRC Plan for the Cleanup at Three Mile Island Unit 2," NUREG-0698, Revision 2, the NRC's cleanup organization was established to ensure that the cleanup is carried out safely and expeditiously. Regulatory objectives include: (1) maintenance of reactor safety and control of radioactive material; (2) assurance that environmental impacts are minimized, and that radiation exposures to workers, the public and the environment are within regulatory limits and are as low as reasonably achievable; (3) assurance of safe interim storage and/or disposal of radioactive wastes from cleanup operations; and (4) coordination of NRC activities with other Federal and State agencies having cleanup responsibilities.

To carry out its responsibility to ensure safe and timely cleanup, the TMICPD has been staffed with both NRR licensing engineers and engineering and health physics inspectors from Region I. Most current staff resources (i.e., 10 full-time equivalent (FTE) positions) including the Project Director, are assigned to the TMI site and most licensing actions are processed by site, not headquarters, personnel. Over the course of the cleanup, staffing has been reduced gradually from approximately 34 FTE positions to the current level of 10 FTE positions. These gradual reductions in staffing have

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paralleled the progress of continuing cleanup and the accomplishment of major regulatory goals (e.g., publication of environmental impact statements and review of major cleanup tasks).

**DISCUSSION:** On the basis of the current status of the TMI-2 cleanup the staff plans to reorganize NRC oversight staffing of the TMI-2 cleanup. Beginning on or about January 31, 1988, the TMICPD will be eliminated as an organizational unit. Regulatory oversight of the remaining cleanup activities will be carried out using onsite and Region I inspectors as well as headquarters project management and engineering support. This reorganization will provide the staff the resources necessary to ensure that NRC regulatory objectives continue to be met.

Although reorganization of TMI-2 staffing is included in the agency's approved FY88 budget, the staff had delayed implementation to allow for an effective transition. A reduction in agency resources responsible for cleanup oversight, on or about January 31, 1988, is warranted based on the projected status of the cleanup and on the licensee's continuing management of the project. Since the 1979 accident, the licensee has accomplished a number of objectives which have greatly reduced the potential public health and safety risk associated with the damaged facility. All of the highly radioactive water released into the reactor and auxiliary buildings during the accident has been treated to remove the bulk of the contamination. The reactor coolant system (RCS) has been depressurized, the reactor vessel head has been removed, and active RCS cooling is no longer required. Facility decontamination efforts have been successful in returning most areas of the auxiliary and fuel-handling buildings to pre-accident radiological levels. Additionally, disposal of low- and high-level radioactive wastes has been actively proceeding over the course of the cleanup. Highly radioactive wastes that are not suitable for commercial disposal are being accepted by the Department of Energy (DOE), in accordance with and NRC/DOE Memorandum of Understanding, for research and development activities.

The most significant cleanup progress, from an overall risk reduction standpoint, has been made in efforts to defuel the reactor. The fuel, damaged and partially distributed by the accident, represents the largest remaining quantity of radioactive material requiring cleanup. Approximately 60 percent of the core has now been removed from the vessel and the experience to date indicates that the licensee's defueling system is highly effective in minimizing accident potential (e.g., recriticality) and routine worker dose (i.e., an average of approximately 10 mrem/hr). It is expected that the entire core cavity will be defueled by mid-November 1987. Additional defueling in the lower regions of the vessel and the remainder of the RCS is scheduled to be completed by October 1988. The core debris is being shipped by DOE from the TMI site to the Idaho National Engineering Laboratory where it is being examined and stored

pending disposal. The entire core is scheduled to be removed from TMI by late 1988 to early 1989 and the licensee plans to place the facility in storage beginning in 1989. A decision to decommission or recommission the unit will not be made before the facility is placed in storage.

In addition to significant cleanup progress, the licensee has been carrying out cleanup and shutdown operations safely and has generally been in conformance with applicable NRC regulatory requirements. Licensee management, which is uniquely integrated with utility (GPU Nuclear Corporation) and Bechtel Corporation personnel, has been conducting the cleanup in a technically competent manner with a conservative approach to ensuring safety. As a measure of this, offsite radiological releases throughout the cleanup have been maintained well below 10 CFR Part 50, Appendix I, design objectives for operating power facilities. The licensee's radiological control organization, which has been faced with complex post-accident and radiological hazards, also has been successful in limiting individual and cumulative worker doses. Average individual whole-body worker dose has been about 0.7 rem per year, and the average collective TMI-2 radiation dose over the duration of the cleanup has been about 450 person-rem per year. (This cumulative dose compares with a U.S. nuclear power industry average of 400 to 800 person-rem per year per reactor).

To provide for timely and coordinated notification, senior NRC staff management plan to brief appropriate Federal and State agencies before any general announcement of the TMI-2 reorganization. Senior management also plans to meet with the Chairman of the Commission's TMI-2 Advisory Panel and notify the entire panel before implementing the reorganization. These notifications will emphasize the NRC's continuing commitment and plans for ensuring safe and expeditious completion of the cleanup.

CONCLUSION:

Reorganization of NRC responsibilities for oversight of the TMI-2 cleanup is scheduled to occur on or about January 31, 1988. The change will eliminate the current TMICPD organization. Remaining cleanup oversight will be accomplished by onsite and Region I based inspections as well as project management and engineering support based in headquarters. The reorganization recognizes effective cleanup management and significant cleanup progress including the soon-to-be-completed defueling of the reactor vessel core cavity. The facility currently poses a relatively small risk to the health and safety of the offsite population, the work-force, and the environment. The planned reorganization will

retain an appropriate NRC focus on the safety of the cleanup as well as timely NRC staff reviews and approvals of remaining cleanup activities. Prior to implementation, senior staff management will provide reorganization notification to appropriate Federal and State agencies and the Commission's TMI-2 Advisory Panel.



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