

September 30, 1985  
NRC/TMI-85-074

MEMORANDUM FOR: Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Bernard J. Snyder, Program Director  
TMI Program Office

FROM: William D. Travers, Deputy Program Director  
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT FOR  
SEPTEMBER 23, 1985 - SEPTEMBER 30, 1985

1. PLANT STATUS

- The facility remains in long term cold shutdown with the Reactor Coolant System (RCS) vented to the reactor building atmosphere and the reactor vessel head and plenum assembly removed from the reactor vessel.
- The plenum is on its storage stand in the deep end of the fuel transfer canal. A dam has been installed between the deep and shallow ends of the fuel transfer canal. The deep end is filled with water to a depth of about 20 feet (about 5 feet above the top of the plenum).
- The modified internals indexing fixture is installed on the reactor vessel flange and is flooded to elevation 327 feet 6 inches (15½ feet above the top of the core region). The defueling platform is installed over the Internal Indexing Fixture in preparation for defueling.
- Calculated reactor decay heat is less than 12 kilowatts.
- RCS cooling is by natural heat loss to the reactor building ambient atmosphere. Incore thermocouple readings range from 70°F to 91°F with an average of 80°F. Average cold leg temperature is 54°F.
- The average reactor building temperature is 56°F. The reactor building airborne activity is 9.8 E-7 uCi/cc Tritium and 1.9 E-10 uCi/cc particulate, predominantly Cesium 137.

2. WASTE MANAGEMENT

- The Submerged Demineralizer System (SDS) was shutdown during this period.
- EPICOR II completed processing batch 266 from Condensate Tank 1A (COT-1A). To date 56,000 gallons from this batch have been processed. From September 26 to September 29, 1985 this water was transferred from CC-T-2 back to COT-1A. COT-1A had been desludged in the interim while it was empty.

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- Total volume processed through SDS to date is 2,963,375 gallons, and the total volume processed through EPICOR II is 2,662,982 gallons.

3. DOSE REDUCTION/DECONTAMINATION ACTIVITIES

- Decontamination activities are continuing on the 281' level of the auxiliary building.
- Average general area radiation dose rate is 40 mrem per hour on the 347' level of the reactor building and is 67 mrem per hour on the 305' level of the reactor building.

4. RADIOCHEMISTRY ANALYSIS ERROR

- The licensee has identified an error at TMI-2 in their radiochemistry analysis procedure for quantifying strontium-90 (Sr-90) in solid samples. The error has resulted in samples being reported at one-half their actual Sr-90 values. The error does not affect gaseous or liquid samples since these are typically analyzed by a different process. The analysis error is believed unique to TMI-2 in using a beta spectrometer for rapid assessment of accident-generated Sr-90 levels. The error involved failure to correctly interpret calibration procedure wording with respect to equilibrium of Sr-90 and Yttrium-90 in the standards.

A preliminary evaluation by the licenses indicates the error is not likely to impact compliance with regulations related to occupational exposure or radiological effluent releases. The error does affect at least one past shipment of radioactive waste to U. S. Ecology in Hanford, Washington. The shipment documents indicate at least one barrel had not been accurately classified as required by State of Washington and NRC regulations (10 CFR 61.55).

5. ENVIRONMENTAL MONITORING

- US Environmental Protection Agency (EPA) sample analysis results show TMI site liquid effluents to be in accordance with regulatory limits, NRC requirements, and the City of Lancaster Agreement.
- TMI water samples taken by EPA at the plant discharge to the river consisted of seven daily composite samples taken from September 7 through September 14, 1985.
- The Lancaster water sample taken at the water works intake and analyzed by EPA consisted of a seven day composited sample taken from September 8 through September 14, 1985. A gamma scan detected no reactor related radioactivity.
- The NRC outdoor airborne particulate sampler at the TMI Site collected a sample between September 18 and September 25, 1985. No reactor related radioactivity was detected. Analysis showed Iodine-131 and Cesium-137 concentrations to be less than the lower limits of detectability.

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6. REACTOR BUILDING ACTIVITIES

- Defueling Water Cleanup System (DWCS) preoperational testing and modification continued.
- Installation of cable tray shielding is complete.
- Preoperational testing of the reactor building sump recirculation system components is complete. The system is now operable.
- Work is in progress on the canister positioning system and canister handling bridge.
- Installation of the vacuum defueling system began.

7. AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES

- Installation of the DWCS continued. Partial DWCS turnover for processing RCS during early defueling is expected to be completed in October.
- All four of the fuel canister storage racks have been delivered to the TMI site and inspected. The third rack delivered is being installed and its position adjusted in spent fuel pool "A". The second rack delivered has been repaired and re-inspected and is being prepared for installation. The first rack delivered has been repaired and is being re-inspected. The fourth rack is being repaired.

8. NRC EVALUATIONS IN PROGRESS

- Technical Specification Change Requests numbers 48, 49, and 50.
- Recovery Operations Plan Change numbers 29, 31, and 32.
- Fuel Canister Technical Evaluation, Revision 1.
- Defueling Safety Evaluation.
- Application for seismic exemption.
- SDS Technical Evaluation and System Description Update.
- Core Stratification Sample Safety Evaluation.
- Heavy Load Handling Safety Evaluation Report.

9. PUBLIC MEETING

The next meeting of the Advisory Panel is scheduled for October 16, 1985 in Lancaster, Pennsylvania at 7:00 PM. The meeting will be held in the Lancaster Council Chambers at 201 North Duke Street. Dr. H. Arnold Muller, Secretary, Department of Health will review the results of the Health Department's recently completed epidemiology studies.

Persons desiring the opportunity to speak before the Panel are asked to contact Mr. Thomas Smithgall at 717-291-1042 or write to him at 2122 Marietta Avenue, Lancaster, Pennsylvania 17603.

**ORIGINAL SIGNED BY:**  
William D. Travers

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Deputy Program Director  
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Harold R. Denton  
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