

April 16, 1984  
NRC/TMI-84-026

MEMORANDUM FOR: Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
Bernard J. Snyder, Program Director  
TMI Program Office

FROM: Lake H. Barrett, Deputy Program Director  
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT FOR  
April 8, 1984 - April 14, 1984

Data from effluent and environmental monitoring systems indicated no plant releases in excess of regulatory limits. The reactor vessel closure devices have been installed and the primary coolant system pressurized.

Other site activities this period included: preparations for head lift in late summer, reactor building air cooling system work and auxiliary and fuel handling building decontamination. Video mapping of the reactor vessel internals was completed. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Reactor Building Activities
- Update of NUREG on Cleanup Activities
- Auxiliary and Fuel Handling Building Activities
- Waste Management Activities
- Public Meetings

Data summary sheets included in this report are:

- Liquid Effluent Data
- Environmental Data
- Radioactive Material/Radwaste Shipment Data
- Plant Status Data

//ORIGINAL SIGNED BY: Philip J. Grant for//

Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

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## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

All reactor vessel closure devices have been installed and the reactor coolant system (RCS) has been refilled and pressurized to  $60 \pm 10$  psig. This pressurized condition will enable plant operators to more expeditiously process reactor coolant through the SDS and reduce the radiocesium and strontium concentrations. The licensee anticipates reactor coolant processing to continue through June, 1984 before draindown in preparation for head lift which is tentatively scheduled for August, 1984.

Preparations are continuing for installation of the canal seal plate. The canal seal plate will establish a seal boundary between the reactor vessel and the floor of the refueling canal. The reactor vessel ledge and floor seal area were wiped down as part of the cleanliness requirement. Seal plate installation is scheduled for the week of April 16, 1984. The TMIPO staff is awaiting licensee responses on the head lift safety evaluation report (SER) questions which were transmitted to the licensee on April 9, 1984.

### UPDATE OF NUREG 0732:

Revision 1 to NUREG 0732, "Answers to Frequently Asked Questions About Cleanup Activities at Three Mile Island, Unit 2," was recently published. This document was originally published in 1981 to provide a non-technical treatment of subjects covered in the Programmatic Environmental Impact Statement. The questions in the report are based on public meetings, issues appearing in the news media, and questions frequently asked by public officials and concerned citizen groups in the TMI area.

The document covers the full range of TMI-2 cleanup issues, including: goals, progress and remaining tasks; details on buildings and accident water decontamination; issues regarding fuel removal and the packaging and transportation of radioactive wastes; potential social, economic and environmental impacts, including monitoring and the potential for accidents; worker exposure and safety concerns; and the schedules and funding for the cleanup.

The revision was specifically requested by the TMI Advisory Panel in August 1983. Copies of the report and a complementary report "Answers to Frequently Asked Questions About Updated Estimates of Occupational Exposure at Three Mile Island, Unit 2," (NUREG 1060), are available at the NRC's Middletown Office at 100 Brown Street, Middletown, PA 17057 and at TMI-2 Advisory Panel meetings held in Harrisburg, PA.

### AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Decontamination activities continued this week. Decontamination of the "A" decay heat pump vault has progressed to the point where pump maintenance work may be possible. Decontamination work continued on the outside surfaces of overhead ventilation ducts in the north-south corridor of the 281 ft. level of the auxiliary building as did decontamination work on the tanks in the "A" fuel pool. Steady progress is also being made on the reactor building cooling (chiller) system.

WASTE MANAGEMENT ACTIVITIES:

The Submerged Demineralizer System (SDS) operated in support of the "A" fuel pool tank farm decontamination. The EPICOR II system remained shutdown throughout the week.

PUBLIC MEETINGS:Past Meeting

On April 12, 1984, the Advisory Panel for the Decontamination of Three Mile Island, Unit 2 held a meeting in Harrisburg, Pennsylvania. Dr. Ronnie Lo, TMIPO, made a presentation on the staff's December 1983 Supplement to the Programmatic Environmental Impact Statement (PEIS) dealing with worker radiation exposure.

Mr. J. Hildebrand, from GPUNC, discussed GPUNC's program to limit worker radiation exposure to as low as reasonably achievable (ALARA) levels. The present program and program results were described.

After GPUNC's presentation, the Panel, in a work session, drafted comments on the PEIS Supplement to be submitted in writing to the NRC Chairman. At the conclusion of the meeting, the Panel entertained comments from the public.

Future Meeting:

On April 26, 1984, Lake Barrett will address Food and Drug Administration staff on the status of TMI-2.

APPENDIX 1

LIQUID EFFLUENT DATA

GPU Nuclear

Based on sampling and monitoring, liquid effluents from the TMI site released to the Susquehanna River were determined to be within regulatory limits and in accordance with NRC requirements and the City of Lancaster Agreement.

During the period April 6, 1984 through April 12, 1984 the effluents contained no detectable radioactivity at the discharge point. Individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than  $4 \text{ E-}7$  (0.0000004) of a curie of Cs-137 was discharged.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	March 25 - March 31, 1984
Results:	Gamma Scan Negative
TMI Water Samples:	7 samples
Period Covered:	March 24 - March 31, 1984
Results:	Gamma Scan Negative

APPENDIX 2

ENVIRONMENTAL DATA

NRC Environmental Data

Results from the NRC continuous air sampler monitoring of the TMI site environment are as follows:

<u>Sample</u>	<u>Period</u>	<u>I-131 (uCi/cc)</u>	<u>Cs-137 (uCi/cc)</u>
HP-414	April 5, 1984 - April 12, 1984	<1.0 E-13	<1.0 E-13

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- April 10, 1984, the licensee made a limited quantity shipment of a Unit 1 reactor coolant pump impeller and a diffuser to Teledyne Isotopes, Westwood, New Jersey.
- April 11, 1984, 95 drums of contaminated laundry from Unit 1 and Unit 2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.
- On April 11, 1984, two drums of Unit 2 control rod drive mechanism cables were shipped to Hanford, Washington.

APPENDIX 4

PLANT STATUS

Core Cooling Mode: Heat transfer from the reactor coolant system (RCS) to Reactor Building ambient.

Available Core Cooling Mode: Mini Decay Heat Removal (MDHR) system.

RCS Pressure Control Mode: SPC

Major Parameters as of 5:00 AM, April 13, 1984 (approximate values):

Average Incore Thermocouples\*: 83°F  
Maximum Incore Thermocouple\*: 144°F

RCS Loop Temperatures:

	A	B
Hot Leg	73°F	76°F
Cold Leg (1)	62°F	68°F
(2)	62°F	69°F

Reactor Core Decay Heat: 18.0 Kilowatts

RCS Pressure: 66 psig

Reactor Building: Temperature: 63°F  
Pressure: -0.15 psig  
Airborne Radionuclide Concentrations:

<3 E-9 uCi/cc H<sup>3</sup> (Tritium) (LLD)  
(sample taken 4/9/84)

4 E-9 uCi/cc particulates  
(predominately Cs-137)  
(sample taken 4/9/84)

\*Uncertainties exist as to the exact location and accuracy of these readings.