

April 9, 1984  
NRC/TMI-84-025

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 1, 1984 - April 7, 1984

Data from effluent and environmental monitoring systems indicated no plant releases in excess of regulatory limits. Waste processing continued on a routine basis. Plant parameters showed no significant changes. The reactor coolant system is depressurized and RCS level remains at 321'6".

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 continued through the week. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Reactor Building Activities
- TMI Occupational Dose
- 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:  
LEE H. THONUS for/

Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

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TMI*

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## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

Comprehensive video mapping of the reactor vessel internals continued through the week. Preparations are being made to install the canal seal plate the week of April 9, 1984. This canal seal plate will establish a seal boundary between the reactor vessel and the floor of the refueling canal for reflood purposes.

Preparations are nearing completion for refilling and pressurizing the reactor coolant system (RCS) during the week of April 9, 1984. The RCS refill and pressurization will enable plant operators to increase the reactor coolant boron concentration and more efficiently process the reactor coolant through the submerged demineralizer system (SDS).

The TMIPO staff is currently reviewing the licensee's reactor vessel head lift safety evaluation report (SER). This report addresses all major head lift activities, including (1) final stud detensioning, (2) removal of head studs, (3) head lift and transfer to storage stand, (4) installation of contamination control system, and (5) installation of the internals indexing fixture. Based on its initial review of the SER, the staff has requested additional information from the licensee in a letter dated April 9, 1984. The head lift is currently scheduled for early August 1984.

### TMI OCCUPATIONAL DOSE:

Licensee TLD (Thermoluminescent Dosimeter) records show the following station occupational radiation doses for the period January 1 - February 29, 1984:

January 1 - 31, 1984

#### Unit 1 and Unit 2 Combined Dose Ranges

<u>Category in Rem</u>	<u>Number of Station Personnel</u>
No Measurable Dose	1,190
Dose Less Than 0.1	267
0.1 to 0.25	44
0.25 to 0.5	16
0.5 to 0.75	3
0.75 to 1	0
1 to 2	0
2 to 3	0

Total Plant (Unit 1 and Unit 2) Dose (TLD): 20.888 man-rem  
Total Unit 2 Dose: 16.3 man-rem

February 1 - 29, 1984

Unit 1 and Unit 2 Combined Dose Ranges

<u>Category in Rem</u>	<u>Number of Station Personnel</u>
No Measurable Dose	1,186
Dose Less Than 0.1	253
0.1 to 0.25	53
0.25 to 0.5	22
0.5 to 0.75	7
0.75 to 1	5
1 to 2	0
2 to 3	0

Total Plant (Unit 1 and Unit 2) Dose (TLD): 32.141 man-rem  
Total Unit 2 Dose: 28.0 man-rem

Plant cumulative (Unit 1 and Unit 2) dose for 1984  
 (January 1 - February 29, 1984): 52.239 man-rem\*

\*Includes corrections to previously recorded monthly figures.

AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Decontamination activities continued this week. The major efforts were in the reactor coolant bleed tank and decay heat pump cubicles. Decontamination work has also been done on the outside surfaces of overhead ventilation ducts in the north-south corridor of the 281 ft. level of the auxiliary building. Work on decontamination of the tanks in the "A" fuel pool, in preparation for tank removal, has resumed.

WASTE MANAGEMENT ACTIVITIES:

The Submerged Demineralizer System was restored to operation April 6, 1984 in support of the "A" fuel pool tank farm decontamination. The EPICOR II system remains shutdown for liner replacement.

PUBLIC MEETINGS:Past Meeting

On April 5, 1984, Lake Barrett met with the Concerned Mothers of Middletown. They expressed their concern that Unit 1 not be restarted until the cleanup of Unit 2 is complete.

Future Meetings:

1. On April 12, 1984, the Advisory Panel for the Decontamination of Three Mile Island, Unit 2 will meet from 7:00 p.m. to 10:00 p.m. in the Holiday Inn, 23 South Second Street, Harrisburg, Pennsylvania. The meeting will be open to the public. The major topic for the meeting will be the PEIS Supplement. Persons

that have questions pertaining to the TMI-2 cleanup that would like to have them considered or addressed by the Advisory Panel and persons desiring the opportunity to speak before the Advisory Panel on TMI-2 cleanup related items are asked to contact, in writing, Mr. Joel Roth, R.D.#1, Box 411, Halifax, Pennsylvania 17032.

2. 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.

There were no liquid radioactive batch releases made during the period March 30, 1984 through April 4, 1984.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	March 18 - March 24, 1984
Results:	Gamma Scan Negative
TMI Water Samples:	7 samples
Period Covered:	March 17 - March 24, 1984
Results:	Gamma Scan Negative

## APPENDIX 2

### ENVIRONMENTAL DATA

#### EPA Environmental Data

The EPA measures Kr-85 concentrations in ambient air samples at several environmental monitoring stations and reported the following results:

<u>Location</u>	<u>February 17 - March 2, 1984</u> (pCi/m <sup>3</sup> )
Goldsboro	24
Middletown	26
Yorkhaven	25
TMI Observation Center	26

<u>Location</u>	<u>March 2 - March 16, 1984</u> (pCi/m <sup>3</sup> )
Goldsboro	26
Middletown	28
Yorkhaven	27
TMI Observation Center	26

#### 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</u> (uCi/cc)	<u>Cs-137</u> (uCi/cc)
HP-413	March 30, 1984 - April 5, 1984	<1.2 E-13	<1.2 E-13

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- April 3, 1984, EPICOR II liner K-13 and 103 steel drums of Unit 2 waste were shipped to Hanford, Washington.
- April 4, 1984, 110 drums of contaminated laundry were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.
- April 4, 1984, a one liter liquid sample from the Unit 1 decay heat removal system was shipped to Teledyne Isotopes, Westwood, New Jersey.
- On April 6, 1984, a section of a Unit 1 reactor coolant pump shaft was shipped to Babcock and Wilcox, Lynchburg, Virginia.



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: N/A

Major Parameters as of 5:00 AM, April 6, 1984 (approximate values):

Average Incore Thermocouples\*: 88°F  
Maximum Incore Thermocouple\*: 138°F

RCS Loop Temperatures:

	A	B
Hot Leg**	63°F	69°F
Cold Leg (1)	62°F	62°F
(2)	62°F	63°F

Reactor Core Decay Heat: 18.0 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 65°F

Pressure: -0.2 psig

Airborne Radionuclide Concentrations:

2.4 E-8 uCi/cc H<sup>3</sup> (Tritium)  
(sample taken 4/2/84)

1.7 E-9 uCi/cc particulates  
(predominately Cs-137)  
(sample taken 4/2/84)

\*Uncertainties exist as to the exact location and accuracy of these readings.  
Maximum incore thermocouple reading taken February 22.

\*\*Since the RCS draindown, hot leg temperature detectors are above water level.