

November 14, 1983  
NRC/TMI-83-072

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  
November 6 - November 12, 1983

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

Site activities this week included: Auxiliary Fuel Handling Building decontamination, "A" spent fuel pool refurbishment and procedure review. One reactor building entry was made in support of technical specifications and miscellaneous tasks. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Reactor Building Activities
- Polar Crane Status
- Spent Fuel Pool "A" Refurbishment
- 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
- Water Processing Data
- Plant Status Data

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Lake H. Barrett  
Deputy Program Director  
TMI Program Office

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TMI*

Enclosure: As stated

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## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

Reactor building entries are continuing at the rate of one per week. Ongoing reactor building activities include weekly primary system water sampling and a project to obtain a water and sludge sample from the reactor coolant drain tank. Reactor building activities are expected to remain at a minimal level during the remainder of 1983.

On November 7, 1983 an NRC site resident inspector performed a walk-through inspection of the reactor building. The purpose of the inspection was to observe cleanliness, fire protection and worker safety conditions in the reactor building. The walk-through included the 305 ft. and 347 ft. elevations of the reactor building, the polar crane and top of the "D" rings. In addition, the following specific areas were examined:

- Deep end of refueling canal where a source range detector cover plate was dropped on May 13, 1983
- Refueling canal/reactor vessel seal area
- Reactor vessel service structure areas including the monorail hoist.

Photographs were taken of the above areas. Plant cleanliness and safety conditions were found to be satisfactory and no fire hazards were observed. The visual inspection did not disclose any apparent damage to the refueling canal from the dropped source tube cover plate.

### POLAR CRANE STATUS:

The TMIPO has received all GPU correspondence required by the September 28, 1983 letter to the licensee on polar crane refurbishment. The staff is reviewing all related documentation and will address the adequacy of the planned load test in a letter to the licensee in the near future.

### SPENT FUEL POOL "A" REFURBISHMENT:

During the week radiation readings were taken on contact with the empty southernmost upper tank; they were in the 150-400 mR/hr range. The upper tanks were flushed twice on Tuesday and Wednesday after repair of the transfer pump. Approximately 1,100 gallons of processed decontamination water were used in the flushing operations. Processing of water from the second flushing through SDS was interrupted while zeolite ion exchanger changeout was accomplished, leaving some water in the tanks. Radiation surveys determine the efficiency of the flushes in reducing radiation levels.

Use of the enclosure erected in the truck bay for reception, decontamination and radiological survey of the pool shield slabs is being prepared for the first slab lift which is scheduled for Monday, November 14, 1983.



AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Work on the 328 ft. elevation decontamination facility addition continued this week. Partial operation of the facility has begun. Full operation will occur when final procedural adjustments are made for operation of all the special decontamination equipment.

Other decontamination activities in the auxiliary and fuel handling building are severely curtailed due to funding constraints.

WASTE MANAGEMENT ACTIVITIES:

EPICOR Demineralizer Shipment. Demineralizers F-44 and K-5 were shipped from TMI to Hanford, Washington, on November 7, 1983. Demineralizers F-48 and F-35 have been dewatered in preparation for shipment.

PUBLIC MEETINGS:

1. On November 14, 1983, Lake Barrett will meet with the Middletown Mothers to discuss TMI related issues.
2. On November 17, 1983, at 11:00 AM, Lake Barrett will speak on NRC issues at a Lancaster County ELANCO meeting to be held at the Trinity Lutheran Church, 221 East Main Street, New Holland, Pennsylvania.
3. On December 8, 1983, the Three Mile Island Unit 2 Advisory Panel will meet from 7:00 PM to 10:00 PM 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 1984 plans for lifting the reactor vessel head. 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, 4705 Carlisle Pike, Mechanicsburg, Pennsylvania 17055.

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 November 4, 1983 through November 9, 1983 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  $2.9 \text{ E-}7$  (0.00000029) of a curie of Cs-137 was discharged.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	October 23 - October 29, 1983
Results:	Gamma Scan Negative
TMI Water Samples:	6 samples
Period Covered:	October 22 - October 29, 1983
Results:	Gamma Scan Negative

APPENDIX 2

ENVIRONMENTAL DATA

EPA Environmental Data

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

<u>Location</u>	<u>October 14 - October 28, 1983</u> (pCi/m <sup>3</sup> )
Goldsboro	25
Middletown	29
Yorkhaven	29
TMI Observation Center	27

-- No radiation above normally occurring background levels was detected in any of the samples collected from the EPA's air and gamma rate networks during the period from November 1, 1983 through November 9, 1983.

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-392	November 2, 1983 - November 9, 1983	<8.0 E-14	<8.0 E-14



APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- On November 7, 1983, two NU PAC 14/190M Type A casks containing EPICOR II liners F-44 and K-5 were shipped to U.S. Ecology, Hanford Burial Site, Richland, Washington.
- On November 8, 1983, a HN-100 Type A cask containing non-compacted trash from TMI-1 was shipped to U.S. Ecology, Hanford Burial Site, Richland, Washington.
- On November 8, 1983, 111 drums of contaminated laundry from TMI-2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.

## APPENDIX 4

### WATER PROCESSING DATA

#### Submerged Demineralizer System (SDS)

SDS began processing Batch 65 on November 8, 1983. Batch 65 will consist of several sub-batches of approximately 700 gallons each from the upper tank farm, resulting from decontamination work on the tank farm.

#### EPICOR II

The next scheduled process for EPICOR II is Batch 191 from the miscellaneous waste holdup tank. This will begin after minor maintenance of the system is completed.



## APPENDIX 5

### 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, November 10, 1983) (approximate values)

Average Incore Thermocouples\*: 95°F  
Maximum Incore Thermocouple\*: 130°F

RCS Loop Temperatures:

	A	B
Hot Leg**	66°F	67°F
Cold Leg (1)	59°F	68°F
(2)	60°F	68°F

Reactor Core Decay Heat: 20.5 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 60°F  
Pressure: -0.13 psig  
Airborne Radionuclide Concentrations:

2.0 E-7 uCi/cc H<sup>3</sup> (Tritium)  
(sample taken 11/7/83)

1.0 E-8 uCi/cc particulates  
(predominately Cs-137)  
(sample taken 11/7/83)

\*Uncertainties exist as to the exact location and accuracy of these readings.  
\*\*Since the RCS draindown, hot leg temperature detectors are above water level.