

November 21, 1983
NRC/TMI-83-073

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 13 - November 19, 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
- NRC TLD Results
- 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
- Polar Crane Load Test Approval Letter

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//signed by//
Lake H. Barrett
Deputy Program Director
TMI Program Office

*ID# 5
TMI*

OFFICE >	Enclosure: As stated					
SURNAME >						
DATE >						

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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. The reactor building recovery schedule for 1984 is being developed based on the projected 1984 recovery funding.

POLAR CRANE STATUS:

On November 18, 1983, the NRC staff approved the series of load tests proposed by GPU Nuclear (GPUN). A copy of the November 18, 1983 B. Snyder to B. Kanga letter is attached as Appendix 6. The staff also approved the written procedures to be followed in conducting these tests. GPUN informed the staff that the tests probably will not begin until first quarter next year because of a shortage of funds.

As a prerequisite to the full load test, nondestructive examination (NDE) of three high stress welds on the lift tripod assembly will be required to verify weld integrity. The NRC staff has determined that the tripod is safe for use in moving loads up to 10 tons before the NDE is performed, but the examination must be completed before testing with heavier loads is done. Initially, the tests will involve the lifting of a 6-ton object and will progress to the lifting of large missile shields located in the reactor building. These missile shields, ranging in weight from 32 to 40 tons each, will be combined to provide increasingly heavy lifts up to approximately 212 tons. A series of lifting maneuvers will be done to check the functioning of all parts of the lifting equipment. When the test program is successfully completed, the crane will be qualified for lifts up to 170 tons.

Early notice of the test schedule will be provided in the Weekly Status Report when the schedule is established by GPUN.

SPENT FUEL POOL "A" REFURBISHMENT:

The 1,400 gallons of water used for decontamination of the upper tanks has been processed through the SDS pre and final sand filters and is now staged in the lower tank farm. Processing through the SDS ion exchangers will occur as soon as the first stage zeolite liner changeout is completed.

The lift of the two concrete shield slabs in the southwest corner of the "A" fuel pool was terminated on November 15, 1983 because the fuel handling building crane upper limit switch was actuated while one of the 2 foot thick shield slabs was not yet clear of the lugs on an adjacent blocks. Shorter certified turnbuckles are currently being fitted to the rigging. Another shield slab lift is scheduled for the week of November 21, 1983, using the modified rigging.

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 should occur in a few weeks following the receipt of additional equipment components.

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

WASTE MANAGEMENT ACTIVITIES:

EPICOR Demineralizer Shipment. Demineralizers F-35 and F-45 were shipped from TMI to Hanford, Washington, on November 15, 1983.

NRC TLD RESULTS:

The NRC TLD environmental, direct radiation monitoring network at TMI includes 59 offsite locations. Two sets of TLDs are placed at each location. Each set contains two lithium borate and two calcium sulfate phosphors. Both sets are read on a quarterly basis. Based on data reported in NUREG 0837, Volume 3, No. 1, October 1983, net gamma radiation levels ranged from 0.05 to 0.14 mR/day at the 59 offsite locations during the period January through March 1983. These dose rates are consistent with natural background radiation in the TMI area.

PUBLIC MEETINGS:

Past Meetings

1. On November 14, 1983, Lake Barrett met with the Concerned Mothers of Middletown to discuss cleanup operations at TMI-2. They expressed their concern that TMI-1 should not be restarted prior to completion of the TMI-2 cleanup.
2. On November 17, 1983, Lake Barrett spoke on NRC issues at a Lancaster County ELANCO meeting. It was held at the Trinity Lutheran Church, New Holland, Pennsylvania.

Future Meetings

1. On December 5, 1983, Lake Barrett will meet with the Concerned Mothers of Middletown to discuss TMI related issues.
2. 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 11, 1983 through November 17, 1983 no liquid effluent releases were made from individual sources within Unit 2.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	October 30 - November 5, 1983
Results:	Gamma Scan Negative
TMI Water Samples:	5 samples
Period Covered:	October 29 - November 4, 1983
Results:	Gamma Scan Negative

APPENDIX 2

ENVIRONMENTAL DATA

EPA Environmental Data

- The EPA Middletown Office has not received the environmental Kr-85 analytical results for the samples which were taken subsequent to October 28, 1983 from the EPA's Counting Laboratory at Las Vegas, Nevada. These results will be included in a subsequent report.
- 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 8, 1983 through November 16, 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 (uCi/cc)</u>	<u>Cs-137 (uCi/cc)</u>
HP-393	November 9, 1983 - November 18, 1983	<6.2 E-14	<6.2 E-14

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- On November 15, 1983, two NU PAC 14/190M Type A casks containing EPICOR II liners F-35 and F-45 were shipped to U.S. Ecology, Hanford Burial Site, Richland, Washington.
- On November 17, 1983, 101 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 66 on November 11, 1983. Batch 66 consists of several sub-batches of water resulting from decontamination work on the tank farm.

EPICOR II

EPICOR II remained shutdown during the week for minor maintenance.

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 6:00 AM, November 18, 1983) (approximate values)

Average Incore Thermocouples*: 91°F

Maximum Incore Thermocouple*: 116°F

RCS Loop Temperatures:

	A	B
Hot Leg**	64°F	65°F
Cold Leg (1)	56°F	68°F
(2)	56°F	69°F

Reactor Core Decay Heat: 20.0 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 59°F

Pressure: -0.3 psig

Airborne Radionuclide Concentrations:

3.2 E-8 uCi/cc H³ (Tritium)
(sample taken 11/14/83)

1.3 E-8 uCi/cc particulates
(predominately Cs-137)
(sample taken 11/14/83)

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

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