

October 31, 1983  
NRC/THI-83-068

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

Bernard J. Snyder, Program Director  
THI Program Office

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

SUBJECT: NRC THI PROGRAM OFFICE WEEKLY STATUS REPORT FOR  
October 23 - October 29, 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: AFHB 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
- Risk of Cleanup Delays/Equipment Deterioration
- Public Meeting

Data summary sheets included in this report are:

- Liquid Effluent Data
- Environmental Data
- Radioactive Material/Radwaste Shipment Data
- Water Processing Data
- Plant Status Data
- Lake Barrett Letter to Mayor Reid

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//signed//

Lake H. Barrett  
Deputy Program Director  
THI Program Office

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OFFICE ▶	Enclosure: As stated				
SURNAME ▶					
DATE ▶					

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## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

One reactor building entry was made during the week of October 23, 1983. Due to 1983 GPU financial constraints, cleanup activities inside the reactor building have virtually stopped. Entry schedules include a brief, weekly reactor building entry to obtain the primary water sample required by the technical specifications and to perform periodic surveillance.

### POLAR CRANE STATUS:

The TMIPO has received all GPU correspondence required by the September 28, 1983 letter to the licensee on polar crane refurbishment. Currently, 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:

After completion of the decontamination enclosures in the truck bay, lifting of the eight southern-most 20 ton concrete shield slabs is expected to start on October 31, 1983. The remaining slabs will be used as a work platform for operations to be performed on the tanks.

Earlier this week, 300 gallons of processed water were used for high pressure flushing of the internal walls of the upper tanks. This processed water, which is now staged in the tanks, will be removed in order to proceed further with the decontamination activities. Presently, SDS processing of the tank water has been delayed, due to operational problems and other water processing priorities. Upper tank farm water processing is now scheduled for next week.

### AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Work on the 328 ft. elevation decontamination facility addition continued this week. The final system to be turned over will be the ventilation system. This is scheduled to occur early next week. The completion of this system will allow partial operation of the facility, possibly next week. Full operation will occur when the 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:

1. SDS Liner Shipments. Shipment of SDS zeolite liner D20031 is tentatively planned for the week of November 1.
2. EPICOR Demineralizer Shipments. No demineralizers were shipped from TMI this week. Demineralizers F-42, F-47, K-8, K-10, 2K-7, and F-48 have been dewatered in preparation for shipment.

RISK OF CLEANUP DELAYS/EQUIPMENT DETERIORATION:

Mayor Robert Reid, Middletown, Pennsylvania, requested Lake Barrett to comment on public health and safety risks created by equipment deterioration at TMI-2. A copy of the response is included for information as Appendix 6.

PUBLIC MEETING:

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.

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 October 21, 1983 through October 27, 1983 no liquid effluent releases were made from individual sources within Unit 2.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	October 9 - October 15, 1983
Results:	Gamma Scan Negative
TMI Water Samples:	7 samples
Period Covered:	October 7 - October 15, 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>September 30 - October 14, 1983</u> (pCi/m <sup>3</sup> )
Goldsboro	28
Middletown	21
Yorkhaven	28
TMI Observation Center	28

-- 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 October 18, 1983 through October 26, 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-390	October 20, 1983 - October 26, 1983	<8.8 E-14	<8.8 E-14

### APPENDIX 3

#### RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- On October 25, 1983, a box containing a 2 liter and a 500 milliliter liquid sample from TMI-1 was shipped to NWT Corporation, San Jose, California.
- On October 25, 1983, a box containing a 1 liter liquid sample from TMI-1 was shipped to Teledyne Isotopies, Westwood, New Jersey.
- On October 25, 1983, a HN-100 Series 3 cask containing solidified resin from TMI-1 was shipped to Chem-Nuclear Systems, Inc., Barnwell Waste Management Facility, Barnwell, South Carolina.
- On October 27, 1983, 116 drums of contaminated laundry from TMI-1 and TMI-2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.
- On October 27, 1983, two steel liners containing solidified evaporator bottoms from TMI-1 was shipped to U.S. Ecology, Hanford Burial Site, Richland, Washington.

## APPENDIX 4

### WATER PROCESSING DATA

#### Submerged Demineralizer System (SDS)

SDS processed batch No. S-046 on October 29, 1983. This batch consisted of approximately 1,000 gallons from the lower tank farm. This water had been previously processed through SDS and used for decontamination of the lower tank farm.

#### EPICOR II

EPICOR II remained shutdown during the week.



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, October 28, 1983) (approximate values)

Average Incore Thermocouples\*: 98°F

Maximum Incore Thermocouple\*: 125°F

RCS Loop Temperatures:

	A	B
Hot Leg**	70°F	78°F
Cold Leg (1)	61°F	70°F
(2)	62°F	70°F

Reactor Core Decay Heat: 20.5 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 63°F

Pressure: -0.17 psig

Airborne Radionuclide Concentrations:

1.9 E-7 uCi/cc H<sup>3</sup> (Tritium)  
(sample taken 10/18/83)

2.3 E-9 uCi/cc particulates  
(predominately Cs-137)  
(sample taken 10/24/83)

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

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