

October 17, 1983
NRC/THI-83-065

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 9 - October 15, 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.

Reductions in the cleanup workforce were started by GPUH this week because of 1983 funding limitations. GPUH is also redirecting resources to improve administrative procedures. Other site activities this week included: canal seal plate modifications, AFHB decontamination, "A" spent fuel pool refurbishment and procedure review. Four reactor building entries were made in support of miscellaneous tasks. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Cleanup Workforce Reductions
- Administrative Procedures
- Reactor Building Activities
- Polar Crane Status
- Spent Fuel Pool "A" Refurbishment
- Auxiliary and Fuel Handling Building Activities
- Waste Management Activities
- Purification and Demineralizer Status
- 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

8311080198 831017
PDR ADOCK 05000320
R PDR

//signed//

Lake H. Barrett
Deputy Program Director
THI Program Office

*IDIR-5
THI*

OFFICE					
SURNAME	Enclosure:	As stated			
DATE					

INTERNAL DISTRIBUTION

EDO
OGC
Office Directors
Commissioner's Technical Assistants
NRR Division Directors
NRR A/D's
Regional Administrators
IE Division Directors
TAS
EIS
THI Program Office Staff (15)
PHS
EPA
DOE
RI Division Directors
Public Affairs, RI
State Liaison, RI
TMIPO HQ r/f
THI SITE r/f
CENTRAL FILE
NRC PDR
LOCAL PDR
THI-2 Project
Section File

OFFICE ▶	TMIPD	TMIPD	TMIPD	TMIPD		
SURNAME ▶	J Bell	A Fasano	P Grant	L Barrett		
DATE ▶	10/17/83	10/17/83	10/17/83	10/17/83		

ENCLOSURE

CLEANUP WORKFORCE REDUCTIONS:

GPUN has announced that it is reducing the number of personnel assigned to the cleanup because of 1983 budget constraints. This involves an approximate 50% reduction in crafts personnel who work at the site for Catalytic Inc., and an approximate 15% reduction in engineering support personnel who work for Bechtel North American Inc. at their office in Gaithersburg, Maryland, and at the TMI-2 site. Both of these companies are contractors to GPUN.

These reductions were deemed necessary by GPUN to keep 1983 Unit 2 cleanup expenditures within available financial resources, i.e. \$76 million. It was initially hoped by this office that additional funding from the utility industry (e.g. Edison Electric Institute and Electric Power Research Institute) and GPUN system ratepayers would result in an increase in available 1983 funds that would have prevented workforce reductions. Lack of progress on industry pledges (to date only approximately \$65 million of the minimum required \$100 million) and the October 14, 1983, Pennsylvania Public Utilities Commission decision to disallow the use of an additional \$17 million a year in ratepayer funds for the cleanup, has made 1983 budget increases virtually impossible.

ADMINISTRATIVE PROCEDURES:

GPUN is redirecting TMI-2 supervision and management resources to further upgrade the TMI-2 administrative procedures that control site work activities.

This effort will result in some supervisory and management staff spending significant addition amounts of their time toward revising procedures and training of their personnel. The expected result is better administrative control consistency of all groups, including contractors, in performing cleanup activities.

REACTOR BUILDING ACTIVITIES:

Four reactor building entries were completed during the week of October 9, 1983. Major work activities during the week included refueling canal seal plate modifications, elevator pit water sampling/removal, and trial parking of four control rod drive leadscrews. The leadscrew parking was performed in order to evaluate the dose rate increase associated with moving the leadscrews from inside the reactor vessel to a position in the CRDM motor tubes in the reactor service structure. Preliminary dose rate measurements and data evaluation will be reported in next week's Status Report.

The reductions in workforce and redirection of some existing resources to administrative control procedures is expected to substantially reduce cleanup activities in the reactor building. Over the past year reactor building entries have averaged nearly four per week. Present available GPUN resources will force a reduction to probably one or two entries per week. Routine plant maintenance and activities to comply with technical specification requirements (primary water sampling, safety equipment checks, etc.) will continue. The future of long term projects such as reactor vessel disassembly, defueling, refueling canal clean-up system design/fabrication, and dose reduction programs is being reviewed in conjunction with the prospect of long term funding concerns.

POLAR CRANE STATUS:

The TMIPO staff is continuing the review of all licensee documents related to the reactor building polar crane. GPUN has responded to the NRC's September 28, 1983, letter which requested additional refurbishment information in the area of administrative controls. GPUN's response, dated October 11, 1983, is presently under staff review.

SPENT FUEL POOL "A" REFURBISHMENT:

Repair work on the shield slab lifting lugs is progressing. Load tests of lugs and the lifting beam are scheduled for next week. Preparations for decontamination of the internals of the tank farm are underway.

AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Plumbing, electrical work, and installation of specialized decontamination equipment in the 328 ft. elevation decontamination facility continued this week. Construction of the physical structure is complete.

All of the supporting procedures governing operation of the decontamination facility and its equipment have been reviewed and are in effect. Operation of the new facility is scheduled to commence in November.

WASTE MANAGEMENT ACTIVITIES:

1. SDS Liner Shipments. No new data are available at this time pertaining to the eventual shipment and disposal of the pre and final SDS particulate filters (sand and "Cuno" filters). Preparations for the shipment of SDS zeolite liner (D20031) which was tentatively scheduled for the week of October 10th are still ongoing. No new shipping date for liner (D20031) is available at this time.
2. EPICOR Demineralizer Shipments. No demineralizers were shipped from TMI this week. Demineralizers F-42, F-47 and K-8 have been dewatered and are being prepared for shipment.

PURIFICATION AND DEMINERALIZER STATUS:

Plans and preparations continue for the removal of the radioactive resins from the AFHB makeup and purification demineralizers (MU-K-1A & -B).

A gas sample was obtained from the "A" demineralizer (MU-K-1A) on October 13, 1983, indicating that there is no significant buildup of hydrogen in the demineralizer. Gas sample results: nitrogen - 97.67%, hydrogen - 0.8%, oxygen - less than 0.1%; and organic gases - approximately 1.2%.

GPU Nuclear engineers also determined that the apparent gas leakage within the "A" demineralizer system, reported last week in the Weekly Status Report, did not occur. The cause of the previous failure to obtain a gas sample from this system was associated with the different amounts of nitrogen needed to pressurize the "A" and "B" demineralizers to 10 psig. More nitrogen was required for MU-K-1A than MU-K-1B because there is a larger gas space in MU-K-1A due to the smaller volume of material present in it.

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 7, 1983 through October 13, 1983 no liquid effluent releases were made from individual sources within Unit 2.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	September 25 - October 1, 1983
Results:	Gamma Scan Negative
TMI Water Samples:	6 samples
Period Covered:	September 24 - October 1, 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 September 16, 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 October 4, 1983 through October 12, 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> <u>(uCi/cc)</u>	<u>Cs-137</u> <u>(uCi/cc)</u>
HP-388	October 6, 1983 - October 13, 1983	<7.3 E-14	<7.3 E-14

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- On October 7, 1983, one steel liner containing solidified evaporator bottoms and three steel liners containing dewatered resins from TMI-1 were shipped to U.S. Ecology, Hanford Burial Site, Richland, Washington.
- On October 10, 1983, a 14/190M type A cask containing solidified resin from TMI-1 was shipped to U. S. Ecology, Hanford Burial Site, Richland, Washington.
- On October 13, 1983, 46 drums of contaminated laundry from TMI-1 and TMI-2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.
- On October 14, 1983, 20 steel boxes of noncompacted trash from TMI-1 and TMI-2 were shipped to U. S. Ecology, Hanford Burial Site, Richland, Washington.

APPENDIX 4

WATER PROCESSING DATA

Submerged Demineralizer System (SDS)

SDS processed batches 62 and 63 during the past week. Batch 62 consisted of approximately 7,000 gallons of water from the lower tank farm and batch 63, approximately 13,000 gallons, was from the upper tank farm. The water for both batches was previously processed through SDS and used for decontamination of the tank farms. This was done as part of the work for removal of the lower and upper tank farm assemblies.

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 14, 1983) (approximate values)

Average Incore Thermocouples*: 104°F
Maximum Incore Thermocouple*: 129°F

RCS Loop Temperatures:

	A	B
Hot Leg**	74°F	79°F
Cold Leg (1)	67°F	77°F
(2)	67°F	77°F

RCS Pressure: 0 psig

Reactor Building: Temperature: 71°F
Pressure: -0.12 psig
Airborne Radionuclide Concentrations:

6.9 E-8 uCi/cc H³ (Tritium)
(sample taken 10/13/83)

8.1 E-10 uCi/cc particulates
(predominately Cs-137)
(sample taken 10/14/83)

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

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