

March 19, 1984  
NRC/THI-84-020

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  
March 11, 1984 - March 17, 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: completion of partial detensioning of all reactor vessel head studs, other activities to prepare for head lift in late summer, reactor building air cooling system work and auxiliary and fuel handling building decontamination. Four reactor building entries were made this week in support of technical specification requirements and completion of first pass head detensioning. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Reactor Building Activities
- 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

Original signed by  
**Lake H. Barrett**

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Lake H. Barrett  
Deputy Program Director  
THI Program Office

Enclosure: As stated

OFFICE	TMI:PO	TMI:PO	TMI:PO	TMI:PO			
SURNAME	JBe11:wa	AF:asano	For [unclear]	LHBarrett			
DATE	3/19/84	3/19/84	3/19/84	3/19/84			

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## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

The reactor vessel head studs were partially detensioned during reactor building entries last week. The detensioning procedure was modified to permit manual impact on the nuts to induce unthreading after the hydraulic detensioning machines could not loosen the nuts initially. All 60 nuts were partially detensioned and two studs at the guide pin locations were unthreaded from the flange. Partially detensioned, the reactor vessel head is designed to maintain pressure retaining capability up to a minimum of 1000 psig.

Core debris sampling had been scheduled in parallel with first pass detensioning. The sampling did not occur and has been rescheduled to commence on Wednesday, March 21, 1984. The sampling procedure calls for a total of six core debris samples from various core locations. For two of the samples, the sampler operator will attempt to push the sampling chamber as deep as possible into the debris bed using manual force.

A thorough video mapping of the core void has been scheduled to commence during the week of March 25, 1984.

### AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Decontamination of areas necessary to provide access for surveillance of safety related equipment continued during the week. The Decay Heat Pump cubicles on the 258' level of the Auxiliary Building are now accessible. Scheduled activities for these areas include pumping 400 gallons of oil-laden water from each (of two) sump to disposal containers, hydrolazing the cubicle walls and floors, performing internal system decontamination by draining, flushing, then refilling the system, performing maintenance on pumps and valves, and returning the Decay Heat System to service.

### WASTE MANAGEMENT ACTIVITIES:

SDS and EPICOR II waste water systems will be shut down for maintenance until approximately April 9, 1984, at which time the refilling of the Reactor Coolant System will begin. The 'A' Reactor Coolant Bleed Tank will be the water source for the refill. Chemical adjustment of the boron concentration in the 'A' Reactor Coolant Bleed Tank is being performed by transferring water to it from the Boric Acid Mix Tank.

Dewatering of EPICOR II demineralizer vessels, F-53 and K-13, has been completed and the vessels are being prepared for shipment.

PUBLIC MEETING:

Future Meeting

1. On March 29, 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.

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 March 9, 1984 through March 16, 1984 there were no liquid effluent releases from Unit II.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	February 26 - March 3, 1984
Results:	Gamma Scan Negative
TMI Water Samples:	8 samples
Period Covered:	February 24 - March 3, 1984
Results:	Gamma Scan Negative

APPENDIX 2

ENVIRONMENTAL DATA

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-410	March 8, 1984 - March 15, 1984	<1.0 E-13	<1.0 E-13

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- March 13, 1984, a 1 liter sample from the TMI-1 'A' Decay Heat Removal System was shipped to Teledyne Isotopes in Westwood, New Jersey.
- March 13, 1984, a sample (1640 cc) from the TMI-1 Waste Gas Decay Tank 'C' was shipped to Teledyne Isotopes in Westwood, New Jersey.
- March 14, 1984, 83 drums of TMI-2 protective clothing were shipped to Interstate Uniform Service in New Kensington, Pennsylvania.
- March 16, 1984, a 1 liter sample from the Saxton Reactor Building sump was shipped to Teledyne Isotopes in Westwood, New Jersey.

## APPENDIX 4

### WATER PROCESSING DATA

#### Submerged Demineralizer System (SDS)

SDS was shutdown this week. Batches 75 and 76 were processed March 6, 7 and 8, 1984. Batch 75 (2305 gallons) was a flush in preparation for the reactor coolant system letdown Batch 76 (14,095 gallons). Both batches were fed through SDS from the 'C' Reactor Coolant Bleed Tank. Below are the performance parameters for Batch 76.

#### SDS Performance Parameters

March 6, 1984 to March 8, 1984

<u>Radionuclide</u>	<u>Average Influent (uc/ml)</u>	<u>Average Effluent (uc/ml)</u>	<u>Percent Removed</u>
Cesium 137	3.0 E-0	1.8 E-4	99.9
Strontium 90	4.9 E-0	3.0 E-2	99.4

#### EPICOR II

EPICOR II was shutdown this 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, March 16, 1984 (approximate values):

Average Incore Thermocouples\*: 85°F  
Maximum Incore Thermocouple\*: 143°F

RCS Loop Temperatures:

	A	B
Hot Leg**	60°F	67°F
Cold Leg (1)	65°F	61°F
(2)	65°F	62°F

Reactor Core Decay Heat: 18.0 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 59°F  
Pressure: -0.28 psig  
Airborne Radionuclide Concentrations:

2.7 E-9 uCi/cc H<sup>3</sup> (Tritium)  
(sample taken 3/16/84)

1.4 E-9 uCi/cc particulates  
(predominately Cs-137)  
(sample taken 3/12/84)

\*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.