

May 14, 1984
NRC/THI-84-031

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
May 7, 1984 - May 14, 1984

The first reactor building entry scheduled during off-shift hours was made by operations and health physics personnel on May 11, 1984 to perform surveillances on equipment and perform radiological surveys. As planned in the future, this type of entry will lessen the number of personnel in the reactor building during day shift hours, facilitating control and supervision of activities by allowing segregation of tasks to be accomplished.

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 have shown no significant changes.

Other site activities this period included: preparations for head lift in late summer, reactor building air cooling system work and auxiliary and fuel handling building decontamination and tank removal. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Reactor Building Activities, including Off-Shift Routine Entry
- Auxiliary and Fuel Handling Building Activities
- Waste Management Activities
- Advisory Panel Tour
- Public Meeting

Data summary sheets included in this report are:

- Liquid Effluent Data
- Environmental Data
- Radioactive Material/Radwaste Shipment Data
- Plant Status Data

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ORIGINAL SIGNED BY:

Lake H. Barrett
Deputy Program Director
THI Program Office

Enclosure: As stated

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OFFICE	TMIPD	TMIPD	TMIPD	TMIPD
SURNAME	DCollins/Imp	AFasano	PGrant	LBartlett
DATE	5/14/84	5/14/84	5/14/84	5/14/84

ENCLOSURE

REACTOR BUILDING ACTIVITIES:

Reactor building entries are continuing at the rate of four per week in preparation for reactor vessel head lift which is scheduled for August 1984. The most man hour intensive task in the building at the present time involves the modification of the auxiliary fuel handling bridge for use as a defueling work platform.

A reactor building entry was made on May 11, 1984, during the 11:00 PM - 7:00 AM shift for the purpose of conducting routine plant surveillance and maintenance tasks. The entry was observed by the NRC's resident inspector. This is the first scheduled reactor building entry to be conducted on a shift other than the day (7:00 AM - 3:00 PM) shift. During the entry, which lasted about one hour, surveillance tasks were performed to operationally check various smoke detectors and to verify the closure of various valves. Also health physics surveys were performed and oil was added to the oilers for containment purge valves. More entries on the off-shift are being scheduled in the future to conduct tasks.

Engineering work is in progress to develop a system to process reactor coolant system (RCS) water after the reactor vessel head is removed. This system will include a submerged pump attached to the Internals Indexing Fixture for transferring primary water to the Submerged Demineralizer System for processing. Processed water will be stored in the reactor coolant bleed tanks and an automatic RCS level controller will regulate the flow of water from the bleed tanks back to the RCS.

AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Decontamination activities continued in the Auxiliary and Fuel Handling Buildings this week. Steady progress continues on installation of the Reactor Building Chiller System. The concrete support pad was poured this week in the plant yard. Steady progress is also being made on the equipment installation for the purification demineralizer elution project.

WASTE MANAGEMENT ACTIVITIES:

The EPICOR II system remains shutdown. The licensee is performing supplemental dewatering on Unit 2 secondary system condensate polisher depleted resin liners as part of preparation for disposal.

The submerged demineralizer system (SDS) completed processing batch S-086 (RCS letdown batch 22) on May 4, 1984. The SDS is processing decontamination water from the "A" fuel pool upper tanks through the prefilter and postfilters to the lower tanks. The zeolite demineralizers are not being used for this purpose.

ADVISORY PANEL TOUR

On May 10, 1984, nine members of the Advisory Panel for the Decontamination of Three Mile Island, Unit 2 toured the TMI-2 area, accompanied by the TMIPO Deputy Program Director, the TMIPO Chief of the Technical Support Section, and licensee representatives.

PUBLIC MEETINGS:

1. On May 22, 1984, Lake Barrett will meet with the Concerned Mothers of Middletown at the NRC's office located at 100 Brown Street, Middletown to discuss various issues related to TMI.
2. On May 30, 1984, the Advisory Panel for the Decontamination of Three Mile Island, Unit 2, will meet with the Nuclear Regulatory Commission at 11:00 AM in the Commission's offices at 1717 H Street, NW, Washington, DC. The public may observe the meeting.

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 May 5 through May 11, 1984, the effluents contained no detectable radioactivity at the discharge point. Individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. Calculations indicated that the discharges were less than:

2.5 E-6 (0.0000025) of a curie of Cs-137

1.3 E-6 (0.0000013) of a curie of gross beta activity

As stated in this appendix on May 7, 1984, TMIPD and GPU Nuclear have reviewed a waste water batch discharge which was made on April 24, 1984. EPA sampling indicates that the effluents contained no detectable radioactivity at the site discharge point. Calculations indicate the release was within regulatory limits and the City of Lancaster Agreement. The total of individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. The data reported on April 30, 1984 have been corrected and now show releases of less than:

1.2 E-4 (0.00012) of a curie of Cs-137

1.5 E-4 (0.00015) of a curie of gross beta radioactivity

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	April 22 - April 28, 1984
Results:	Gamma Scan Negative
TMI Water Samples:	7 samples
Period Covered:	April 21 - April 28, 1984
Results:	Gamma Scan Negative

APPENDIX 2

ENVIRONMENTAL DATA

NRC ENVIRONMENTAL DATA

A continuous outdoor air sampler operated by the NRC at the TMI site did not detect any reactor related radioactivity. The air sampler results are listed below.

<u>Sample</u>	<u>Period</u>	<u>I-131</u> <u>(uCi/cc)</u>	<u>Cs-137</u> <u>(uCi/cc)</u>
HP-418	May 3, 1984 - May 10, 1984	<1.1 E-13	<1.1 E-13

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- On May 8, 1984, a Unit 2 radioactive materials shipment consisting of steam generator thermal sensors was sent to the Idaho National Engineering Laboratory at Scoville, Idaho.
- On May 8, 1984, a limited quantity radioactive material shipment, from Unit 1, was sent to Teledyne Isotopes, Westwood, New Jersey.
- On May 9, 1984 a combined Unit 1 and 2 shipment of radioactively contaminated laundry was sent to Interstate Nuclear Services at New Kensington, Pennsylvania.

APPENDIX 4

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: SPC

Major Parameters as of 5:30 AM, May 11, 1984 (approximate values):

Average Incore Thermocouples*: 87°F

Maximum Incore Thermocouple*: 118°F

RCS Loop Temperatures:

	A	B
Hot Leg	75°F	81°F
Cold Leg (1)	67°F	70°F
(2)	65°F	70°F

Reactor Core Decay Heat: 17.5 Kilowatts

RCS Pressure: 60 psig

Reactor Building: Temperature: 64°F

Pressure: -0.2 psig

Airborne Radionuclide Concentrations:

3.8 E-8 uCi/cc H³ (Tritium) (LLD)
(sample taken 5/7/84)

1.4 E-9 uCi/cc particulates
(predominately Cs-137)
(sample taken 5/7/84)

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