July 9, 1984 NRC/TMI-84-050

MEMORANDUH FOR:

Harold R. Denton, Director

Office of Nuclear Reactor Regulation

Bernard J. Snyder, Program Director

THI Program Office

FROM:

Philip J. Grant, Acting Deputy Program Director

Titl Program Office

SUBJECT:

NRC THI PROGRAM OFFICE WEEKLY STATUS REPORT FOR

July 1, 1984 - July 7, 1984

On July 5 and 6, 1984, all reactor pressure vessel (RPV) studs were loosened, removed and stored in racks in the reactor building. No conditions within the RPV were affected and there was no leakage since the reactor coolant system has been drained down to approximately one foot below the interface between the RPV and the RPV head. 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. The reactor coolant system is depressurized with the primary system water level drained to the 321'6" elevation. (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 -- Public Meetings

Data summary sheets included in this report are:

-- Liquid Effluent Deta

-- Environmental Data

-- Radioactive Material/Radwaste Shipment Data

-- Plant Status Data

ORIGINAL SIGNED BY: Philip J. Grant Acting Deputy Program Director TMI Program Office

Enclosure: As stated

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ENCLOSURE

REACTOR BUILDING ACTIVITIES:

On July 5, 1984, the licensee successfully completed the loosening of the 58 reactor pressure vessel (RPV) studs which are threaded into the RPV. This activity did involve the use of liquid nitrogen and an impact wrench to free one of the studs. The configuration of the head on the RPV was not altered because stud detensioning and stud loosening only involved relaxation of the studs and nuts. The reactor coolant system (RCS) has been partially drained down to a level about one foot below the interface between the RPV and the head, and no leakage resulted from the detensioning. On July 6, 1984, all studs were removed from the RPV and stored in racks in the reactor building. The reactor vessel head studs were removed from the reactor vessel flange ahead of schedule. In general, preparatory activities for the reactor vessel head lift are being completed ahead of schedule, which is tentatively scheduled for August 8, 1984,

Reactor building entries are continuing at a rate of six entry days per week. During entries next week (week of July 8, 1984), new head lift rigging will be transferred into the reactor building, shielding will be installed around the control rod drive mechanisms on the reactor vessel head, and modifications to the internals indexing fixture (IIF) will continue. The IIF will serve as a mini refueling canal on top of the reactor vessel following the head lift.

AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Hydrostatic testing of lines associated with the makeup and purification demineralizer elution system was completed satisfactorily on July 5, 1984.

Work continued on the "A" fuel pool refurbishment. Additional structural steel was removed from the fuel pool tanks. The licensee is studying methods of final disposition of the tanks, including onsite decontamination of the internals, and sale to others for contaminated or non-contaminated use. Decontamination activities continued in the buildings.

WASTE MANAGEMENT ACTIVITIES:

The submerged demineralizer system (SDS) completed processing batch 95 from the "C" reactor coolant bleed tank (RCBT). This processing took place from June 23 to July 1, 1984, and consisted of 56,050 gallons of water.

SDS began processing water directly from the reactor building sump (batch 96) on July 3, 1984. Processing of this batch was stopped on July 4, when high Sr-90 concentrations were detected in the effluent and subsequently a zeolite vessel was changed out. A total of 7,897 gallons was processed to the "A" monitor tank before the strontium breakthrough occurred.

SDS will continue processing batch 93 from the lower tank farm in the "A" fuel pool. The water has been generated as a result of the ongoing decontamination of the lower tank farm.

EPICOR II has been shutdown since the completion of batch 215 on June 23, 1984.

PUBLIC MEETINGS:

- On July 12, 1984, Phil Grant will meet with Mayor Robert Reid of Middletown to discuss head lift activities.
- 2. On July 12, 1984, the Advisory Panel for the Decontamination of Three Mile Island Unit 2 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. Persons that have questions pertaining to the TMI-2 cleanup that would like to have them considered or addressed by the Advisory Panel are asked to contact, in writing, Mayor Arthur Morris, 120 Duke Street, Lancaster, PA 17602. Persons desiring the opportunity to speak before the panel are asked to contact Mr. Thomas Smithgall at 2122 Marietta Avenue, Lancaster, PA 17603 (telephone 717-291-1041).

At this meeting the Panel will be briefed by Dr. W. Kirk, Environmental Protection Agency, on the results of the interagency radiation monitoring program review. Representatives from GPU Corporation will discuss facility decontamination alternatives after fuel removal, and funding for the cleanup for 1984 and beyond. The status of the Edison Electric Institute TMI-2 voluntary funding program will also be presented.

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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 June 29 through July 5, 1984, there were no liquid effluents released from TMI-2.

Environmental Protection Agency

Lancaster Water Samples:

7 samples

Period Covered:

June 17 - 23, 1984

Results:

Gamma Scan Negative

TMI Water Samples:

7 samples

Period Covered:

June 16 - 23, 1984

Results:

Gamma Scan Negative

ENVIRONMENTAL DATA

NRC Environmental Data

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

Sample	Period	Volume	I-131 (uCi/cc)	Cs-137 (uCi/cc)
	June 27 - July 5, 1984	•	<1.1 E-13	<1.1 E-13

ENVIRONMENTAL DATA

NRC Environmental Data

The NRC operated continuous outdoor air sampler at the TM1 site did not detect any reactor related radioactivity. The air sampler analysis results are listed below.

Sample	Period	Volume	I-131 (uCi/cc)	Cs-137 (uCi/cc)
HP-426	June 27 - July 5, 1984	315.3 m ³	<1.1 E-13	<1.1 E-13

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- -- On July 3, 1984, a Unit 1 sample from the waste evaporator condensate storage tank was sent to Teledyne Isotopes, Westwood, New Jersey.
- On July 5, 1984, a combined Unit 1 and 2 shipment consisting of radioactively contaminated laundry was sent to Interstate Nuclear Services at New Kensington, Pennsylvania.

PLANT STATUS

Core Cooling Mode: Heat transfer from the reactor coclant system (RCS) to reactor building ambient

Available Core Cooling/Makeup Sources:

Standby pressure control (SPC) system

Reactor coolant bleed tank (RCBT) water transfer system

Mini decay heat removal (MDHR) system

RCS pressure control is no longer applicable since the RCS is vented to the reactor building atmosphere

Major Parameters as of 5:30 AM, June 29, 1984 (approximate values):

Average Incore Thermocouples*: 98°F

Maximum Incore Thermocouple*: 135°F

RCS Loop Temperatures:

Hot Leg**	A 72°F	8 78°F
Cold Leg (1) (2)	72°F 72°F	75°F 75°F

Reactor Core Decay Heat: 16.5 kilowatts

RCS Pressure: O psig (open to reactor building atmosphere)

Reactor Building: Temperature: 68°F

Pressure: -0.01 psig

Airborne Radionuclide Concentrations:

4.3 E-7 uCi/cc H³ (tritium) (sample taken 7/5/84)

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

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

^{**}Since the RCS is drained down below these temperature detectors, they no longer are indicative of RCS temperatures.

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