February 13, 1984
NRC/TMI-84-012

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

Bernard J. Snyder, Program Director
TMI Program Office

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

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT FOR
February 5, 1984 - February 11, 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: reactor building general activities, preparation for polar crane testing, partial detensioning of reactor head studs and other activities to prepare for head lift in late summer, and auxiliary and fuel handling building decontamination. Three reactor building entries were made this week in support of technical specifications and polar crane refurbishment tasks. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

-- Reactor Building Activities
-- Polar Crane Load Test Schedule
-- Auxiliary and Fuel Handling Building Activities
-- East Dike I-131 Activity
-- 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

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SIGNED BY:

Lake H. Barrett
Deputy Program Director
TMI Program Office

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SURNAME ▶	Enclosure: As stated						
DATE ▶							

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SURNAME ▶	JBell/lmp	AFasano	PGrant	LBarrett			
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ENCLOSURE

REACTOR BUILDING ACTIVITIES:

During the week of February 5, 1984, a third reactor building entry was added to the entry schedule to accommodate the in-containment recovery work. Three entries are scheduled for the week of February 12, 1984.

The major work effort was focused on preparations for the polar crane load test. Missile shield movement in preparation for the 210-ton polar crane qualification test will commence this week. A date has not been set for the polar crane qualification load test.

In addition to polar crane work, refueling canal modifications, and preparations for first pass detensioning of the reactor vessel head are also in progress. Reactor vessel head lift is tentatively scheduled for August 1984.

POLAR CRANE LOAD TEST SCHEDULE:

The first phase of the polar crane load test will commence on Monday, February 13, 1984. On Monday, the 6-ton internals indexing fixture is scheduled to be transferred away from the area where the missile shields will be stacked on the load test stand. The missile shield transfer is expected to commence on Wednesday. Four, 40-ton missile shields from above the reactor vessel are scheduled to be placed on the load test frame. In addition, the 30-ton missile shield from above the pressurizer will be placed on the load test frame. The qualification test load, with associated rigging, will weigh approximately 210 tons. The test will be scheduled at a later date. When completed, the qualification load test will qualify the crane to lift the 170-ton reactor vessel head. The target date for the reactor vessel head lift remains late summer of 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 B and C bleed tank room on the 281' level of the auxiliary building is now accessible for surveillance. Approximately 95% of the corridors on the 281' level have been scabbled and painted.

EAST DIKE I-131 ACTIVITY:

The Environmental Protection Agency has reported that very low concentrations (6 pCi/l) of I-131 were detected in a water sample taken from the East Dike on January 25, 1984. (The Federal limits for release of I-131 in water, such as the East Dike, is 300 pCi/l.) Separate measurements made by the Pennsylvania Department of Environmental Resources and GPU Nuclear on the same samples confirmed the presence of this radioisotope. Samples taken before and after January 25, 1984 have shown no detectable concentrations of I-131 in the East Dike.

The presence of I-131 cannot be attributed to plant operations since there has been no known generation of I-131 in either TMI reactor since March 28, 1979 and

the residual inventory is calculated to be of the order of 10^{-15} Curies (0.001 pico curies) in the Unit 2 reactor. No radioiodine has been found on any of the EPA's charcoal cartridge collectors of airborne radioactivity or in any other water samples collected at the main industrial outfall. Also, no radioiodine was detected in in-plant systems or effluent monitors. The source of the activity has not been identified, although it does not appear to be plant related. The EPA will conduct additional tests on the sample taken on January 27, 1984 to confirm the identity of the radioisotope detected.

WASTE MANAGEMENT ACTIVITIES:

SDS and EPICOR II waste water processing systems were shut down throughout this period.

PUBLIC MEETINGS:

Past Meeting

On February 9, 1984, the Advisory Panel for the Decontamination of Three Mile Island, Unit 2 held a meeting in Harrisburg, Pennsylvania.

The Chairman of the Panel, Mayor Arthur Morris, summarized the results of the February 3, 1984 meeting with the NRC Commissioners in Washington, DC.

GPUNC, the Pennsylvania DER, US NRC and US EPA provided presentations on their respective radiation monitoring programs in the TMI area. Dr. Glen Sjoblom, Director of EPA's Office of Radiation Programs, addressed the Advisory Panel on EPA's future role in radiation monitoring at TMI. He requested that the other State and Federal agencies involved in monitoring meet with EPA and reexamine the total monitoring program to determine if redirection is warranted and if there is any unnecessary monitoring. The Advisory Panel took the positions that, 1) EPA's effort at TMI is essential to the radiation monitoring program in the TMI area and should not be phased out, and 2) EPA should convene a meeting of the State and Federal groups that conduct radiation monitoring in the area to determine if any changes to the program are warranted. The Panel requested that EPA notify the Panel of the results of any such meeting and any recommendations issuing from the meeting relative to changes in the monitoring program.

The topic of discussion for the second half of the Panel meeting was radiation health effects. The NRC and GPUNC provided a panel of experts on the health effects of low level ionizing radiation. The discussion centered around the risk of health effects associated with the estimated occupational radiation exposure due to the Unit 2 cleanup effort.

Future Meetings

1. On February 15, 1984, NRC staff will hold a public meeting to receive public comments on the draft Supplement 1 to the Programmatic Environmental Impact Statement (PEIS, NUREG-0683, Supplement 1). The meeting will be held at 7:00 PM at the Middletown High School auditorium, 1155 N. Union Street, Middletown, PA. Single copies of the draft Supplement may be obtained by writing to the Director, Division of Technical Information and Document Control, U.S. Nuclear Regulatory Commission, Washington, DC 20555, or the

Deputy Program Director, NRC TMI Program Office, P.O. Box 311, Middletown, PA 17057. The staff welcomes comments from the public on the draft Supplement. All comments will be reviewed and taken into consideration when the NRC staff prepares the final Supplement to the PEIS. The comments should be received by February 29, 1984, and addressed to Dr. Bernard J. Snyder, Program Director, TMI Program Office, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

2. On February 21, 1984 Lake Barrett will speak to the members of Three Mile Island Alert to discuss Supplement 1 of the Programmatic Environmental Impact Statement.

3. On February 29, 1984 Lake Barrett will speak to the Baltimore-Washington chapter of the Health Physics Society concerning TMI-2 cleanup issues.

4. On March 8, 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. 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, 4705 Carlisle Pike, Mechanicsburg, PA 17055.

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 February 3, 1984 through February 9, 1984 the effluents contained no detectable radioactivity at the discharge point. Individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than 1.1 E-6 (0.0000011) of a curie of Cs-137 and less than 8.1 E-5 (0.000081) of a curie of tritium (H-3) were discharged.

Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	January 15 - January 21, 1984
Results:	Gamma Scan Negative
TMI Water Samples:	7 samples
Period Covered:	January 21 - January 28, 1984
Results:	Gamma Scan Negative (See previous I-131 discussion)

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 January 20, 1984 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 January 31, 1984 through February 7, 1984.

NRC Environmental Data

Results from the NRC continuous air sampler monitoring of the TMI site environment are as follows:

Sample	Period	I-131 (uCi/cc)	Cs-137 (uCi/cc)
HP-405	February 2, 1984 - February 9, 1984	<8.7 E-14	<8.7 E-14

APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

-- February 6, 1984, 78 drums of contaminated clothing from TMI-2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.

-- February 7, 1984, six reactor coolant letdown samples (250 ml each) and six decay heat removal system samples (250 ml each), all from TMI-1, were shipped to NWT Corporation, San Jose, California.

-- February 7, 1984, a 1 liter sample from the TMI-1 decay heat removal system was shipped to Teledyne Isotopes, Westwood, New Jersey.

-- February 10, 1984, a 250 ml sample from the TMI-1 "A" reactor coolant bleed tank was shipped to NUS Corporation Lab Services, Pittsburgh, Pennsylvania.

APPENDIX 4

WATER PROCESSING DATA

SDS and EPICOR II were shutdown throughout 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 6:00 AM, February 10, 1984 (approximate values):
Average Incore Thermocouples*: 84°F
Maximum Incore Thermocouple*: 150°F

RCS Loop Temperatures:

	A	B
Hot Leg**	59°F	64°F
Cold Leg (1)	78°F	59°F
(2)	79°F	61°F

Reactor Core Decay Heat: 18.5 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 58°F
Pressure: -0.3 psig
Airborne Radionuclide Concentrations:

2.2 E-7 uCi/cc H^3 (Tritium)
(sample taken 2/8/84)

2.9 E-9 uCi/cc particulates
(predominately Cs-137)
(sample taken 2/8/84)

*Uncertainties exist as to the exact location and accuracy of these readings.
**Since the RCS draindown, hot leg temperature detectors are above water level.