January 23, 1984
NRC/THI-84-008

MEMORANDUM TO: 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 THI PROGRAM OFFICE WEEKLY STATUS REPORT FOR
January 15, 1984 - January 21, 1984

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'.

Site activities this period included: Auxiliary and Fuel Handling Building decontamination and "A" spent fuel pool refurbishment. A reactor building entry was made in support of technical specifications and miscellaneous tasks. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

-- Reactor Building Activities
-- Spent Fuel Pool "A" Refurbishment
-- 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

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

OFFICE

SURNAME

DATA

1/2/84
1/3/84
1/2/84
1/22/84
ENCLOSURE

REACTOR BUILDING ACTIVITIES:

A reactor building recovery schedule is being developed based on projected funding for 1984. As a minimum, weekly entries will continue in early 1984 to support technical specification requirements for reactor coolant system (RCS) water samples for boron analysis. The entry frequency is expected to increase in February to support polar crane activities, cana seal plate modification and partial detensioning of the reactor vessel head closure studs. During the single entry scheduled for next week, 35 personnel have been programmed to enter the reactor building to perform various tasks. One of the entry teams will commence repair work on the vertical rail misalignment which was identified during the polar crane inspections. The polar crane is scheduled to move the five (40 ton) missile shields in late February and the qualification load test is tentatively scheduled to be completed in late April, 1984.

SPENT FUEL POOL "A" REFURBISHMENT:

The eighth shield slab is being decontaminated in preparation for painting and movement to storage. The decontamination enclosure will be disassembled and removed from the truck bay following removal of this slab. Work will continue on the construction and testing of lifting beams to be utilized in removing the tanks from the fuel pool. However, no further work on pool refurbishment is scheduled before the fourth quarter of the year.

AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

The B and C bleed tank room on the 282' level of the auxiliary building is being surveyed following flushing. Hands on decontamination, and local shielding of hot spots is being carried out in various cubicles. Scabbling and scrubbing in preparation for painting has been completed on the 280' level corridor of the fuel handling building. A drain and refill of tanks in the neutralizer room is scheduled for next week to reduce radiation levels in preparation for decontamination of surfaces in this area.

WASTE MANAGEMENT ACTIVITIES:

SDS liner D20037 was shipped to Rockwell Hanford on January 20, 1984. This waste liner, which was loaded with a hydrogen/oxygen gas recombiner, is the 15th SDS waste liner in a group of 19 scheduled to be shipped to Hanford, Washington, by mid-year.

PUBLIC MEETINGS:

1. On January 30, 1984, Lake Barrett and Dr. Ronnie Lo will meet with officers of the Harrisburg and Central Pennsylvania Building and Construction Trades Council in Harrisburg to discuss the PEIS Supplement on cleanup occupational exposures.

2. February 3, 1984, the Three Mile Island Unit 2 Advisory Panel will meet at 11:00 AM with the Nuclear Regulatory Commission at 1717 H Street, Washington, DC. The public may observe the meeting.
3. February 9, 1984, the Three Mile Island Unit 2 Advisory Panel 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 future EPA monitoring plans and the NRC PEIS supplement on occupational exposure. 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.

4. 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.
APPENDIX I

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 January 13 through January 19, 1984 no liquid effluent releases were made from individual sources within Unit 2.

Environmental Protection Agency

Lancaster Water Samples: 7 samples
   Period Covered: December 25 - December 31, 1983
   Results: Gamma Scan Negative

TMI Water Samples: 13 samples
   Period Covered: December 24, 1983 - January 7, 1984
   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 December 23, 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 January 10, 1984 through January 17, 1984.

NRC Environmental Data

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

<table>
<thead>
<tr>
<th>Sample</th>
<th>Period</th>
<th>I-131 (uCi/cc)</th>
<th>Cs-137 (uCi/cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP-402</td>
<td>January 12, 1984 - January 18, 1984</td>
<td>&lt;1.0 E-14</td>
<td>&lt;1.0 E-14</td>
</tr>
</tbody>
</table>
APPENDIX 3

RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

-- January 18, 1984, two Haliburton tanks from Unit 1 containing solid metal oxide, were shipped to the Quadrex Corporation in Oak Ridge, Tennessee.

-- On January 20, 1984, 77 drums of contaminated laundry from TMI-1 and TMI-2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.

-- On January 20, 1984, a Marinelli (1.64 liter) gas sample from the TMI-1 B waste gas decay tank was shipped to Teledyne Isotopes, Westwood, New Jersey.

-- On January 20, 1984, SDS liner D20037 from TMI-2 was shipped to Rockwell Hanford, Hanford, Washington.
APPENDIX 4

WATER PROCESSING DATA

Submerged Demineralizer System (SDS)

SDS processed Batch 71 (10,938 gallons) and Batch 72 (3,509 gallons) from January 11 through January 13, 1984. Batch 71 was from the B bleed tank, whereas Batch 72 originated from the C bleed tank. The following performance parameters are averages for the two batches.

SDS Performance Parameters
January 11, 1984 to January 13, 1984

<table>
<thead>
<tr>
<th>Radionuclide</th>
<th>Average Influent (uc/ml)</th>
<th>Average Effluent (uc/ml)</th>
<th>Percent Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesium 137</td>
<td>1.6 E-1</td>
<td>4.9 E-4</td>
<td>99.7</td>
</tr>
<tr>
<td>Strontium 90</td>
<td>2.5 E-1</td>
<td>7.0 E-3</td>
<td>97.2</td>
</tr>
</tbody>
</table>

EPICOR II

During the period of January 10 through January 14, 1984, EPICOR processed Batch 202 (10,493 gallons) and Batch 203 (5,000 gallons). Batch 202 was from the B monitor tank, whereas Batch 203 was taken from the A monitor tank. The performance parameters below are for Batch 203.

EPICOR Performance Parameters
January 14, 1984

<table>
<thead>
<tr>
<th>Radionuclide</th>
<th>Average Influent (uc/ml)</th>
<th>Average Effluent (uc/ml)</th>
<th>Percent Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesium 137</td>
<td>6.0 E-4</td>
<td>1.6 E-7</td>
<td>99.97</td>
</tr>
<tr>
<td>Strontium 90</td>
<td>2.5 E-3</td>
<td>9.4 E-6</td>
<td>99.62</td>
</tr>
<tr>
<td>Antimony 125</td>
<td>4.8 E-3</td>
<td>4.3 E-7</td>
<td>99.99</td>
</tr>
</tbody>
</table>
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, January 20, 1984 (approximate values):
   Average Incore Thermocouples*: 84°F
   Maximum Incore Thermocouple*: 149°F

RCS Loop Temperatures:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Leg**</td>
<td>60°F</td>
<td>65°F</td>
</tr>
<tr>
<td>Cold Leg (1) (2)</td>
<td>56°F</td>
<td>61°F</td>
</tr>
</tbody>
</table>

Reactor Core Decay Heat: 19 Kilowatts

RCS Pressure: 0 psig

Reactor Building: Temperature: 56°F
                 Pressure: -0.1 psig

Airborne Radionuclide Concentrations:
   No Tritium (H³) sample was taken for 1/16/84
   6.8 E-10 uCi/cc particulates
     (predominately Cs-137)
     (sample taken 1/16/84)

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