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

Bernard J. Snyder, Program Director, TMI Program Office

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

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the period of March 8-14, 1981.

Lake H. Barrett
Acting Deputy Program Director
TMI Program Office

Enclosure: As stated

cc: EDO
OGC
Office Directors
Commissioner's Technical Assistants
NRR Division Directors
NRR A/D's
Regional Directors
IE Division Directors
XOOS
XOQA
TMI Program Office Staff (15)
PHS
EPA
Projects Br. No. 2 Chief, DPRI, RI
DPRI Chief, RI
Public Affairs, RI
T. Elsasser
Plant Status

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

Available Core Cooling Modes: Long-term cooling "B" (once through steam generator-B); decay heat removal systems.

RCS Pressure Control Mode: Standby Pressure Control (SPC) System.

Backup Pressure Control Mode: Mini Decay Heat Removal (MDHR) System.

Major Parameters (as of 0500, March 13, 1981) (approximate values)

- Average Incore Thermocouples: 120°F
- Maximum Incore Thermocouple: 150°F

RCS Loop Temperatures:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Leg</td>
<td>116°F</td>
<td>119°F</td>
</tr>
<tr>
<td>Cold Leg (1)</td>
<td>67°F</td>
<td>67°F</td>
</tr>
<tr>
<td>(2)</td>
<td>66°F</td>
<td>66°F</td>
</tr>
</tbody>
</table>

RCS Pressure: 99 psig

Reactor Building: Temperature: 61°F

- Water level: Elevation 290.6 ft. (8.1 ft. from floor) via penetration 401 manometer
- Pressure: -0.4 psig
- Concentration: 1.15 x 10^-4 uCi/cc (Kr-85) (sample taken 3/9/81)

Effluent and Environmental (Radiological) Information

1. Liquid effluents from the TMI site released to the Susquehanna River after processing, were made within the regulatory limits and in accordance with NRC requirements and City of Lancaster Agreement dated February 27, 1980.

During the period March 6, 1981, through March 12, 1981, the effluents contained no detectable radioactivity at the discharge point although individual effluent sources which originated within Unit 2 contained minute amounts of activity. Calculations indicate that less than one millionth (0.000001) of a curie of cesium-137 (Cs-137) was discharged. This represents less than 0.0001% of the permissible total liquid activity as specified in Technical Specifications for operational commercial reactors.
2. EPA Environmental Data. Results from EPA monitoring of the environment around the TMI site were as follows:

-- The EPA measured Krypton-85 (Kr-85) concentrations (pCi/m³) at several environmental monitoring stations and reported the following results:

<table>
<thead>
<tr>
<th>Location</th>
<th>February 27 - March 6, 1981 (pCi/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bainbridge</td>
<td>22</td>
</tr>
<tr>
<td>Goldsboro</td>
<td>22</td>
</tr>
<tr>
<td>Observation Center</td>
<td>24</td>
</tr>
<tr>
<td>Middletown</td>
<td>32</td>
</tr>
</tbody>
</table>

All of the above levels of Kr-85 are considered to be background levels.

-- 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 March 2, 1981, through March 12, 1981.

3. NRC Environmental Data. Results from NRC monitoring of the environment around the TMI site were as follows:

-- The following are the NRC air sample analytical results for the onsite continuous air sampler:

<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-258</td>
<td>March 4, 1981 - March 11, 1981</td>
<td>&lt;8.3 E-14</td>
<td>&lt;8.3 E-14</td>
</tr>
</tbody>
</table>

4. Licensee Radioactive Material and Radwaste Shipments. The following shipments were made:

-- On Monday, March 9, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.

-- On Wednesday, March 11, 1981, a shielded drum containing assorted materials; e.g., nylon rope, signs, telephone, etc., from the Unit 2 Reactor Building was sent to EG&G, Idaho Falls, Idaho.
Major Events

1. Reactor Building Entry. The seventh reactor building entry is currently scheduled for March 17, 1981, and March 19, 1981. The major item scheduled for the entry is obtaining a sample of sump water after the water has passed through a zeolite resin column.

2. Contaminated Building Expansion Joint. The licensee has taken several water-level readings since the installation of the water-level monitor in the expansion joint in the basement of the control building.

   The readings indicate that the water level is approximately 9 inches below the basement floor (281 ft. elevation), with a slight daily variation that, to date, does not show any trend.

3. Contaminated Rodent Feces in the Unit 2 Control and Service Building. The licensee issued a press release on February 27, 1981, concerning the identification of contaminated rodent feces discovered during routine surveys of the Unit 2 Control and Service Building.

   To date no rodents have been trapped. Rodent feces, however, have been found which are contaminated with small amounts of cesium-137 (less than one microcurie, one one-millionth of a curie). The licensee called in an exterminator and poison and traps are in place. The contamination appears localized to small portions of the licensee's protected area.

   On March 10, 1981, the licensee discovered small amounts of contamination and rodent feces outside of the missile door (inside the protected area). This area had been contaminated during the accident and accessible areas have since been decontaminated. An analysis of top soil taken from the area on March 10, 1981, indicated small amounts of cesium contamination (approximately 10^-4 uCi/gm Cs-137). Analysis of a water sample from the area, after a recent rain, showed Cs-137 in trace amounts of 2.1 E-7 microcurie per milliliter. There was no evidence that contamination was being spread outside beyond the vicinity of the missile door. It is not clear at this time as to the source of this contamination. It is possible that mice may have tracked the contamination to outside the missile door. It is also possible that recent heavy rains may have washed the contamination out from inaccessible areas that were not decontaminated after the accident.

4. Attached to this week's Status Report are copies of correspondence transmitted by the Citizens Advisory Panel, which was established last fall to provide advice to the Commission on cleanup activities at THI Unit 2.
Meeting Held

On Tuesday, March 10, 1981, Lake Barrett met with a group of Middletown mothers to discuss various TMI issues. They expressed their concern over possible startup of Unit 1, apparent slow progress of Unit 2 cleanup, reports of contaminated rodents and lack of urgency towards resolution of ultimate disposal of Unit 2 cleanup wastes.

Future Meetings

1. On Tuesday, March 24, 1981, Lake Barrett will meet with area mothers to discuss various issues related to the decontamination of TMI Unit 2.

2. On Tuesday, March 24, 1981, Harold Denton and Lake Barrett will attend a meeting of the American Society of Zoological Park Managers in Hershey.

3. On Friday, March 20, 1981, Lake Barrett and Ronald Bellamy will meet with a group of university professors from City College of New York to discuss cleanup of the Reactor Building sump water.

4. On Monday, March 16, 1981, the Citizens Advisory Panel will meet with the NRC Commissioners to discuss various issues related to the cleanup process of TMI Unit 2.