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

Bernard J. Snyder, Program Director, 
TMI Program Office

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

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the period of December 21, 1980 -
January 3, 1981 as discussed in the last status report.

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
XOMA
TMI Program Office Staff (15)
HEW
EPA
RO&NS Branch Chief, Region I
FF&MS Branch Chief, Region I
Public Affairs, Region I
T. Elsasser
Plant Status

Core Cooling Mode: Cyclic natural circulation in the "A" reactor coolant system (RCS) loop via the "A" once through steam generator (OTSG), steaming to the main condenser, and RCS loop A and B cyclic natural circulation to reactor building ambient.

Available Core Cooling Modes: OTSG "B" steaming to the main condenser; long-term cooling "R" (OTSG-R); decay heat removal.

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

Backup Pressure Control Mode: One of two decay heat removal pumps to supply pressure in conjunction with variable recirculation back to the borated water storage tank (BWST) to provide control of pressure.

Major Parameters (As of 0500, January 5, 1981) (approximate values)

Average Incore Thermocouples: 119°F
Maximum Incore Thermocouple: 153°F

RCS Loop Temperatures:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
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<tbody>
<tr>
<td>Hot Leg</td>
<td>118°F</td>
<td>121°F</td>
</tr>
<tr>
<td>Cold Leg (1)</td>
<td>79°F</td>
<td>86°F</td>
</tr>
<tr>
<td></td>
<td>77°F</td>
<td>99°F</td>
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</tbody>
</table>

RCS Pressure: 95 psig (DVM)

Pressurizer Temperature: 69°F

Reactor Building: Temperature: 65°F
Water level: Elevation 290.5 ft. (8.0 ft. from floor) via penetration 401 manometer
Pressure: -0.4 psig (Heise)
Concentration: 1.1 x 10^-4 μCi/cc (Kr-85) (sample taken 1/2/81)

Effluent and Environmental (Radiological) Information

1. Liquid effluents from 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. The concentrations of radioactive material in the discharged effluent during this weekly period were less than the Lower Limits of Detection (LLD).
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>December 12-December 19, 1980</th>
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<tbody>
<tr>
<td>Raphbrodige</td>
<td>25</td>
</tr>
<tr>
<td>Goldsboro</td>
<td>20</td>
</tr>
<tr>
<td>Observation Center</td>
<td>27</td>
</tr>
<tr>
<td>Middletown</td>
<td>16</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 were detected in any of the samples collected from EPA's air and gamma rate networks during the period from December 17 through December 31, 1980.

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:

   **Sample** | **Period** | **I-131 (uCi/cc)** | **Cs-137 (uCi/cc)**
   --- | --- | --- | ---
   HP-247 | December 17-December 23, 1980 | 10.3 E-14 | 10.3 E-14
   HP-248 | December 23-December 30, 1980 | 8.8 E-14 | 8.8 E-14

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

   -- On Monday, December 29, 1980, two 40 ml Unit 2 reactor coolant samples were sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.

   -- On Monday, December 29, 1980, 20 metal boxes of Unit 1 non-compacted waste were shipped to the Chem-Nuclear site, Barnwell, South Carolina.

Major Activities

1. Reactor Decay Heat Removal. Decay heat removal continues to be removed by steaminig (under vacuum conditions) in the "A" Once Through Steam Generator (OTSG) and by heat transfer from reactor coolant system to reactor building ambient. The onsite staff has approved the licensee's proposal (procedure) to use the loss to ambient mode as a means of decay heat removal. Implementation of the licensee's procedures is expected next week.
2. Spent Resin Storage Status  Sixty-six spent resin liners generated from EPICOR I and II are stored in "A" longterm waste storage module. Six of the occupied cells contain stacked 4' x 4' liners (two per storage cell). The "B" longterm waste storage module is holding seven spent resin liners with a holding capacity equivalent to Module "A" (60 cells).

The licensee has continued to relocate liners from the temporary interim storage facility. Only five of the twenty-eight spent resin storage cells hold liners. The final transfers are scheduled for the month of January, 1981.
Meetings Attended

On Tuesday, December 30, 1980, L. Barrett attended the TMI Advisory Panel meeting at the William Penn Museum in Harrisburg. The topic of discussion was the disposition of processed radioactive liquids. Presentations were given by Mr. R. Arnold, Chief Operating Executive, GPU, and Mr. G. Hovey, Director TMI-Unit 2, GPU.

The panel listened to GPU's plans to decouple the processing of contaminated water and the discharge of the processed water. GPU stated that the processed water could be safely stored on site and no formal proposal for final disposition of processed water would be presented to the NRC before 1982. Panel members discussed the urgency of processing the containment sump water, relative environmental impacts of releasing tritium in airborne or liquid form, and the definition of accident related water.

Future Meetings

On Thursday, January 22, 1981, L. Barrett will attend a public briefing in Harrisburg sponsored by the Department of Environmental Resources on the status of decontamination at Three Mile Island. Following the presentation, the Nuclear Regulatory Commission, the Environmental Protection Agency and Metropolitan Edison will be available to answer questions.