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October 25, 1982
 NRC/TMI-82-064

50-320

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

Enclosed is the status report for the period of October 17 - October 23, 1982.
 Major items included in this report are:

- Liquid Effluents
- Airborne Effluents
- EPA and NRC Environmental Data
- TMI Occupational Exposure
- Radioactive Material and Radwaste Shipments
- Submerged Demineralizer System Status
- EPICOR II
- Reactor Building Entries
- EPICOR II Prefilter Shipment Status
- Purification Demineralizer Status
- TMI Aerial Radiological Survey
- Public Meetings

Lake H. Barrett
 Deputy Program Director
 TMI Program Office

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Enclosure: As stated

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DATE	10/14/82	10/ /82	10/ /82	10/ /82	10/24/82	10/25/82

Harold R. Denton
Bernard J. Snyder

October 25, 1982

cc w/encl:
EDO
OGC
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

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NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

October 17, 1982 - October 23, 1982

Plant Status

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

Available Core Cooling Modes: Mini Decay Heat Removal (MDHR) system.

RCS Pressure Control Mode: RCS is vented to the reactor building.

Major Parameters (as of 0500, October 22, 1982) (approximate values),

Average Incore Thermocouples*: 110°F

Maximum Incore Thermocouple*: 128°F

RCS Loop Temperatures:

	A	B
Hot Leg**	90°F	88°F
Cold Leg (1)	73°F	74°F
(2)	74°F	75°F

Pressure: The reactor coolant system is vented to the reactor building.

Reactor Building: Temperature: 66°F

Pressure: -0.12 psig

Airborne Radionuclide Concentrations:

5.9 E-7 uCi/cc H³
(sample taken 10/15/82)

5.8 E-9 uCi/cc particulates
(sample taken 10/22/82)

1. Effluent and Environmental (Radiological) Information

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.

During the period October 14, 1982, through October 21, 1982, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources, which originate within Unit 2, contained no detectable radioactivity.

- *Uncertainties exist as to the exact location and accuracy of these readings.
- **The primary water level is below the hot leg temperature sensors.

2. Airborne Effluents

Airborne releases to the environment as measured by licensee installed monitors at discharge stacks are listed below. These releases were well within regulatory limits.

	AUGUST 1982		SEPTEMBER 1982	
	<u>UNIT II</u>	<u>EPICOR II</u>	<u>UNIT II</u>	<u>EPICOR II</u>
Noble Gases (Ci)	2.42×10^1	7.89×10^1	1.63×10^1	5.77×10^1
Particulates (Ci)	2.76×10^{-7}	4.94×10^{-8}	1.43×10^{-6}	6.97×10^{-8}
Tritium (Ci)	1.40×10^1	1.11×10^{-2}	1.48×10^1	1.30×10^{-2}

3. Environmental Protection Agency (EPA) Environmental Data

- The EPA Middletown Office has not received the environmental Kr-85 for the samples which were taken after September 24, 1982, 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 October 13, 1982 through October 21, 1982.

4. 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:

<u>Sample</u>	<u>Period</u>	<u>I-131</u> <u>(uCi/cc)</u>	<u>Cs-137</u> <u>(uCi/cc)</u>
RP-341	October 13 - October 20, 1982	<6.8 E-14	<6.8 E-14

The NRC onsite air sampler is being modified and will be out of service from October 20, 1982 through October 27, 1982.

5. TMI Occupational Exposure

Licensee TLD (Thermoluminescent Dosimeter) records indicate the following Unit 2 occupational radiation exposures for 1982:

September 1982	29 man-rem
Total 1982 (January-September)	259 man-rem

Man-rem is an expression for the summation of whole body doses to individuals in a group. Thus, if each member of a population group of 1,000 people were to receive a dose of 0.001 rem (1 millirem), or if two people were to receive a dose of 0.5 rem (500 millirem) each, the total man-rem dose in each case would be one man-rem.

6. Licensee Radioactive Material and Radwaste Shipments

- On October 18, 1982, one drum containing Unit 2 CRDM cable ties was shipped to Sandia National Laboratory, Albuquerque, New Mexico.
- On October 19, 1982, 11 Unit 2 smears from the pressurizer loop seal were shipped to Babcock and Wilcox, Lynchburg Research Center, Lynchburg, Virginia.
- On October 21, 1982, one Unit 2 EPICOR II prefilter (PF-7) was shipped to Idaho National Engineering Laboratory, Scoville, Idaho.
- On October 22, 1982, 83 drums containing contaminated laundry from Units 1 and 2 were shipped to Interstate Uniform Services, New Kensington, Pennsylvania.
- On October 23, 1982, one Unit 2 EPICOR II prefilter (PF-8) was shipped to the Idaho National Engineering Laboratory, Scoville, Idaho.

Major Activities

1. Submerged Demineralizer System (SDS). SDS is presently in a standby status. No new water is ready to be processed.
2. EPICOR II. The EPICOR II system is presently in standby status. No water is ready to be processed.
3. Reactor Building Entries. Four reactor building entries were conducted during the week of October 17, 1982. Decontamination of the polar crane was the predominant in-containment activity. The polar crane decontamination techniques include the use of a mild chemical degreaser, hands on decontamination, vacuuming, and flushing. Following the decontamination, a strippable coating will be applied to the crane surfaces to help with surface decontamination.

After the polar crane decontamination is complete, electric power lines will be connected to the polar crane and power tests of the motors and control circuits will be performed. Decontamination of the reactor building lower elevations will continue in parallel with the polar crane refurbishment.
4. EPICOR II Prefilter Shipment Status. Two EPICOR II prefilter shipments were made from IMI to the Idaho National Engineering Laboratory (INEL) this week; PF-7 in the CNS-B-120 cask (10/20/82) and PF-8 in the HN-200 cask (10/23/82). Currently five in a group of 49 EPICOR II prefilters

have been shipped to INEL. The remaining 44 PF liners are stored in the solid waste storage facility modules (see Attachment 1). GPU anticipates shipping an additional eight PF's by the end of 1982. The majority of the remaining EPICOR PF's will be shipped during 1983 at an approximate rate of four shipments per month.

5. Purification Demineralizer Status. Preparations are continuing by GPU and DOE for the removal and disposal of two reactor coolant system (RCS) purification demineralizers. External gamma scans on the 4 ft. diameter, 7 ft. high, stainless steel vessels indicate approximately 15,000 curies of mixed fission product activity exist (predominately as Cs-137) within each vessel. Preliminary data from a special Si(Li) (Lithium drifted silicon crystal) detector provided by the DOE Westinghouse-Hanford Environmental Development Laboratory (WHEDL) indicates that some reactor fuel was deposited in these demineralizers. However, the fuel content is significantly below the threshold level for criticality concerns. GPU is making preparations for collecting gas and liquid samples from each of the demineralizer vessels in December, 1982. Further characterization of the vessel internal conditions including resin samples is scheduled to be completed in early 1983. In conjunction with GPU's activities, the DOE through WHEDL is evaluating options for the eventual removal and disposition of the demineralizers. The techniques being considered include resin sluicing, chemical dissolution and vessel removal.
6. TMI Aerial Radiological Survey. Preparations for the aerial radiological survey of the Three Mile Island area are continuing. The initial overflight is scheduled for either Monday, October 25, 1982 or Tuesday, October 26, 1982, weather permitting.

Future Meetings

1. On October 29, 1982, Lake H. Barrett will meet with Friends and Family of TMI to discuss various TMI-2 issues.
2. On November 9, 1982, the NRC Commissioners will hold two public meetings to discuss the potential restart of TMI Unit 1. The first meeting will be to hear oral presentations from the parties involved in the formal TMI Unit 1 restart proceedings. This meeting will be opened for public attendance (not public participation) and will be held from 3:00 to 5:00 PM at the William Penn Museum Auditorium, Third and North Streets, Harrisburg, Pennsylvania.

The second meeting will be in the evening to hear the views of concerned citizens who are not parties to the formal restart proceedings. The speakers for the evening meeting will be selected by Mr. John E. Minnich, Chairman of the Dauphin County Board of Commissioners and also Chairman of the NRC Advisory Panel for Decontamination of TMI Unit 2. He will select the speakers from a list of people who requested to speak at the meeting by calling the NRC's TMI office during October 21 through October 27, 1982. Details for the meetings are included in Attachment 2.

3. On November 17, 1982, the Advisory Panel for the decontamination of TMI Unit 2 will hold a meeting --open for public observation-- to discuss the current status of cleanup efforts and the disposition of processed water. The meeting will take place at the Holiday Inn, 23 South Second Street, Harrisburg, Pennsylvania, from 7:00 to 10:00 PM.