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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

March 23, 1981
NRC/TMI-81-021

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

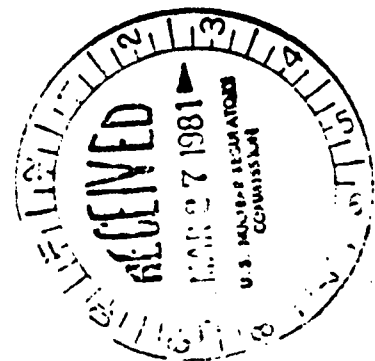
SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the period of March 15-21, 1981.

L. H. Barrett
Lake H. Barrett
Acting Deputy Program Director
TMI Program Office

Enclosure: As stated

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NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of March 15-21, 1981

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 Modes: Mini Decay Heat Removal (MDHR) System.
Decay Heat Removal (DHR) System.

Major Parameters (as of 0500, March 20, 1981) (approximate values)

Average Incore Thermocouples: 120°F
Maximum Incore Thermocouple: 149°F

RCS Loop Temperatures:

	A	B
Hot Leg	116°F	119°F
Cold Leg (1)	66°F	67°F
(2)	66°F	66°F

RCS Pressure: 106 psig

Reactor Building: Temperature: 64°F
Water level: Elevation 290.6 ft. (8.1 ft. from floor)
via penetration 401 manometer
Pressure: -0.25 psig
Concentration: 1.15×10^{-4} uCi/cc (Krypton-85 (Kr-85))
(sample taken 3/15/81)

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 13, 1981, to March 19, 1981, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources which originated within Unit 2 contained no detectable radioactivity.

2. Environmental Protection Agency (EPA) Environmental Data. Results from EPA monitoring of the environment around the TMI site were as follows:

-- The EPA measured Kr-85 concentrations (pCi/m^3) at several environmental monitoring stations and reported the following results:

<u>Location</u>	<u>March 6 - March 16, 1981</u> (pCi/m^3)
Bainbridge	26
Goldsboro	24
Observation Center	23
Middletown	26

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 11, 1981, through March 19, 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:

<u>Sample</u>	<u>Period</u>	<u>I-131</u> (uCi/cc)	<u>Cs-137</u> (uCi/cc)
HP-259	March 11, 1981 - March 18, 1981	<8.6 E-14	<8.6 E-14

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

-- On Tuesday, March 17, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.

-- On Friday, March 20, 1981, 43 drums, containing Unit 2 contaminated laundry, were shipped to Tri-State Industrial Laundries, Utica, New York.

Major Events

1. Contaminated Rodent Feces in the Unit 2 Control and Service Building. The onsite TMI Program Office staff is following the licensee's ongoing investigation concerning the contaminated rodent feces discovered in the Unit 2 Control and Service Building and outside

the missile door. Contaminated areas have been decontaminated and followup surveys are being performed. No rodents have been observed and the poison and tracking devices installed in the area appear to be undisturbed.

2. Submerged Demineralizer System (SDS). The SDS construction is approximately 91% complete. The onsite TMI Program Office, with Region I specialist assistance, has commenced a special inspection of the SDS.
3. Reactor Building Entry. The seventh entry into the Unit 2 Reactor Building commenced on Tuesday, March 17, 1981, and was completed on Friday, March 20, 1981. The entry was originally scheduled for a three day period but was extended when difficulties were encountered with equipment designed to pass sump water through zeolite and collect the effluent. This task was eventually completed and except for some valve servicing tasks, which were terminated because of personnel fatigue, all of the planned entry operations were completed.

During the entry, three 1 liter samples of sump water were obtained for analysis at the Oak Ridge National Laboratory. A 150 milliliter sample of sump water was obtained for archive storage. Valves inside the Reactor Building were serviced and a lighting circuit was repaired. The sump water processing equipment obtained effluent from the zeolite test column for use in evaluating alternatives for further processing of sump water after passing through the SDS zeolite media.

Initially, a submersible pump, which was to pump water to the zeolite test column, became stuck as it was being lowered into the sump. The pump was freed, but soon after the experiment was activated remotely from the command center, it appeared that some of the components were not functioning properly. Two trouble shooters who were sent into the Reactor Building were able to correct the problem.

A total of 13 men entered the Reactor Building during the seventh entry. Two men became exhausted and were examined by the TMI medical staff. One was sent to an offsite doctor for observation. To reduce the likelihood of radioactive contamination, all the entry team members wore plastic protective clothing. Although the temperature inside the Reactor Building is approximately 64°F, the plastic protective clothing retains body heat and humidity and increases physical discomfort significantly. The licensee is evaluating other types of protective clothing for use in future entries. The next Reactor Building entry is scheduled for April.

4. Test Boring Update. No significant changes have been observed in water samples taken from test borings on the island. The tritium levels in all the test borings have remained relatively constant. Cesium activity, which has been regularly detected in test boring 2, since November 1980, has indicated a gradual decrease over the past several weeks.
5. Source Range Neutron Monitor. The licensee has declared source range neutron monitor, NI-2, operable. NI-2 had been inoperable since the March 28, 1979, accident. Repairs to the NI-2 channel commenced during the third Reactor Building entry. Following the repair of the preamplifier and cables inside the Reactor Building, an extensive calibration program was performed by the licensee and their consultants. NI-2 is presently indicating approximately 1.04 counts per second. NI-1, the other source range monitor, is indicating approximately 1.4 counts per second. The NRC staff is evaluating the status of the neutron monitors.
6. On Friday, March 27, 1981, Congressman Morris Udall and members of the House Energy & Environment Subcommittee plan to make an inspection tour of TMI Unit 1 and TMI Unit 2. The subcommittee members are also planning to meet with representatives from GPU Public Utilities Corporation and the U.S. Nuclear Regulatory Commission.

Meetings Held

1. On Monday, March 16, 1981, the Citizens Advisory Panel met with the NRC Commissioners to discuss various issues related to the cleanup process of TMI Unit 2.
2. On Friday, March 20, 1981, Lake Barrett, Ronald Bellamy and Joel Wiebe met with a group of university professors from City College of New York and Fordham University to discuss cleanup of the Reactor Building sump water.

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.