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

December 22, 1980
NRC/TMI-80-153

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 14-20, 1980. Due to the holiday period, the next report will cover the two week period December 21, 1980, through January 3, 1981.

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 December 14-20, 1980

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 "B" (OTSG-B); 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, December 19, 1980) (approximate values)
Average Incore Thermocouples: 113°F
Maximum Incore Thermocouple: 153°F

RCS Loop Temperatures:

	A	B
Hot Leg	112°F	116°F
Cold Leg (1)	86°F	82°F
(2)	96°F	86°F

RCS Pressure: 83 psig (DVM)

Pressurizer Temperature: 69°F

Reactor Building: Temperature: 63°F
Water level: Elevation 290.5 ft. (8.0 ft. from floor) via penetration 401 manometer
Pressure: -0.25 psig (Heise)
Concentration: 3.8×10^{-5} uCi/cc (Kr-85) (sample taken 12/17/80)

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/m^3) at several environmental monitoring stations and reported the following results:

Location	December 8 - December 12, 1980 (pCi/m^3)
Bainbridge	28
Goldsboro	26
Observation Center	30
Middletown	19

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 the EPA's air and gamma rate networks during the period from December 10 through December 18, 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-246	December 10 - December 17, 1980	<8.2 E-14	<8.2 E-14

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

-- On Monday, December 15, 1980, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.

-- On Wednesday, December 17, 1980, contaiminated cork samples from the Unit 2 auxiliary building expansion joint were shipped to Science Applications, Incorporated, (SAI), Rockville, Maryland.

-- On Thursday, December 18, 1980, a box containing Unit 2 air filter and smear sample papers was mailed to Teledyne Isotopes, Westwood, New Jersey.

-- On Thursday, December 18, 1980, a box containing a Unit 1 waste evaporator condensate storage tank (WECST) monthly composite sample was mailed to Teledyne Isotopes, Westwood, New Jersey.

Major Activities

1. Reactor Decay Heat Removal. Decay heat removal (approximately 80 KW) continues to be removed by steaming (under vacuum conditions) in the "A" Once Through Steam Generator (OTSG) and by heat transfer from reactor coolant system to reactor building ambient. Work continues on resolving staff comments on the licensee's proposal to use the loss to ambient mode as a viable means of decay heat removal. Approval of the licensee's procedure is expected next week.

2. Contamination of Building Expansion Joints. Sample results of cork adjacent to the air intake tunnel show no activity above the lower level of detectability. This indicates that the water stop in the expansion joint between the "control and service building" and the "air intake tunnel" is intact and keeping the contamination from spreading past the water stop.

   The licensee is developing a plan to remove the contaminated water from the expansion joints and is continuing in their efforts to ensure the contamination is not being released to the environment. The onsite NRC staff will continue to closely monitor the licensee's actions in this area.

Meetings Attended

1. On Wednesday, December 17, 1980, L. Barrett, A. Fasano, D. Haverkamp, and M. Shanbaky attended a meeting at NRC Region I, King of Prussia, PA. Licensee management representatives were present to discuss the Unit 1 Health Physics Program Evaluation concerning acceptable corrective action for the evaluation findings and applicability to Unit 2.

2. On Thursday, December 18, 1980, B. Snyder and L. Barrett attended the TMI Advisory Panel meeting at the William Penn Museum in Harrisburg. The topic of discussion was radioactive waste management. Presentations were given by Mr. G. Cunningham, Assistant Secretary for the Department of Energy (DOE), Mr. R. Arnold, Chief Operating Executive, General Public Utilities Nuclear Group (GPUNG), and representatives from Congressman Udall's staff and the ACRS.

   The panel focused on the progress towards the disposal of TMI radiaoctive water. The panel also expressed concern that DOE could accept TMI high level waste only for research and development (R&D) purposes and therefore store that accepted waste only and that it did not appear any organization is taking the lead in resolving any legislative hurdles for TMI waste disposal. Concerns on delays of the cleanup efforts and financial status of GPU were also expressed.

3. On Friday, December 19, 1980, L. Barrett, R. Bellamy and G. Kalman held a seminar on the Three Mile Island containment building, in Bethesda, Maryland for the NRC staff.