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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

July 27, 1981

NRC/TMI-81-042

Enclosed is the status report for the period of July 19 - 25, 1981.

Original signed by Lake H. Barrett

Lake H. Barrett

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

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NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of July 19 - 25, 1941

Plant Status

Core Cooling Mode: Heat transfer from the reactor coolant system (RCS)

loops to Reactor Building ambient.

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

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, July 23, 1981) (approximate values)
Average Incore Thermocouples: 120°F
Maximum Incore Thermocouple: 143°F

RCS Loop Temperatures:

Hot Leg	A 120°F	B 122°F
Cold Leg (1)	73°F	75°F
(2.)	74°F	75°F

RCS Pressure: 92 psig

Reactor Building: Temperature: 76°F

Water level: Elevation 290.9 ft. (8.4 ft. from floor)

via penetration 401 manomet -

Pressure: -0.15 psig

Concentration: 4.6 x 10⁻⁶ (LLD) uCi/ml Kr-85 (Sample taken 7/23/81)

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 July 17, 1981, through July 23, 1981, the effluents contained no detectable radioactivity at the discharge point although individual effluent sources which originated within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than 1 millionth (0.000001) of a curie of Cs-137 was discharged. This represents less than 0.00001% of the permissable total liquid activity as specified in Technical Specifications for operational commercial reactors. Calculations also indicate that less than 1 tenth (0.1) of a Ci of Tritium (H-3) was discharged.

- 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:

Location	June 26 - July 3, 1981 (pCi/m ³)		
Goldsboro Observation Center Middletown	26 27 28		
· Yorkhaven	28		

All of the above levels of Kr-85 are considered to be back-ground 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 July 16, 1981, through July 23, 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:

Sample	Period	I-131 (uCi/cc)	Cs-137 (uCi/cc)
HP-277	July 15, 1981 - July 22, 1981	<8.6 E-14	<8.6 E-14

- 4. Licensee Radioactive Material and Radwaste Shipments.
 - -- On Monday, July 20, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.
 - -- On Friday, July 24, 1981, two Hittman steel liners containing Unit 1 solidified evaporator bottoms were shipped to U.S. Ecology, Richland, Washington.

Major Activities

1. Submerged Demineralizer System (SDS). Processing of the first batch (approximately 50,000 gallons) of intermediate radioactivity level water from the Auxiliary Building Reactor Coolant Bleed Tank (RCBT) was completed on July 19, 1981. Preliminary results indicate that the first batch resulted in a loading of approximately 320 curies of Cs-137 and 160 curies of Sr-20 on the first ion exchange vessel.

This represents greater than 99% removal of these radioactive materials from the process stream. Processing of the second batch (approximately 50,000 gallons) of RCBT water commenced on July 23, 1981. After the RCBT water is processed, the SDS will be used to process high level Reactor Building sump water.

2. Reactor Building Entry. Four teams, a total of nine people, entered the Unit 2 Reactor Building during entry number fourteen (designation change) on July 23, 1981. Team four included the first woman into the Reactor Building since beginning the Reactor Building entries last year.

The following tasks were successfully completed.

- -- Maintenance of the closed circuit TV system
- -- Removal of the Core Flood Tank "B" Transducers
- -- Photographs of air cooler equipment and components of the reactor fluid make-up system
- -- Radiation survey of the shallow end of the refueling pool
- -- Miscellaneous sample collection
- -- Installation of two radiation area monitors
- 3. EPICOR-II Second and Third Stage Liners. On June 30, 1981, the last two (of twenty-two) second and third stage EPICOR-II liners reached the burial site in Hanford, Washington, as reported in the Weekly Status Report for the week of June 28 through July 5, 1981. These liners were generated during the processing of contaminated water through the EPICOR-II system. The EPICOR-II system was used to process Auxiliary Building water (approximately 500,000 gallons) from the March 28, 1979 accident.

Regional inspectors from the U.S. Nuclear Regulatory Commission's Region V office in Walnut Creek, California, have visited the Hanford burial site for inspection purposes. The inspectors have concluded, based on physical verification of the burial of the 22 liners, and proper documentation, that all applicable burial site criteria were satisfied for the TMI wastes.