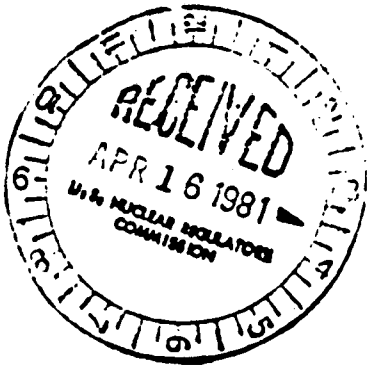
NRC PDR

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

April 13, 1981
NRC/TMI-81-024




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 April 5-11, 1981.

Ronald R. Billings /for
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 April 5-11, 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, April 10, 1981) (approximate values)
Average Incore Thermocouples: 118°F
Maximum Incore Thermocouple: 147°F

RCS Loop Temperatures:

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

RCS Pressure: 98 psig

Reactor Building: Temperature: 65°F
Water level: Elevation 290.7 ft. (8.2 ft. from floor) via penetration 401 manometer
Pressure: -0.29 psig
Concentration: Less than the lower limit of detection (LLD). (LLD was 4.0 x $10^{-6}$ uCi/cc) (Krypton-85 (Kr-85)) (sample taken 4/8/81)

## 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 April 3, 1981, to April 9, 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 3 millionths (0.000003) of a curie of cesium (Cs-137) and less than one thousandth (.001) of a curie of tritium 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 | March 27 - April 3, 1981 ($pCi/m^3$) |
|---|---|
| Goldsboro | 26 |
| Observation Center | 24 |
| Middletown | 29 |
| *Yorkhaven | 23 |

*Yorkhaven station replaces Bainbridge

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 April 3, 1981, through April 9, 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-262 | April 1, 1981 - April 8, 1981 | <8.6 E-14 | <8.6 E-14 |

-- Environmental TLD measurements for the period January 9, 1981, to February 5, 1981, indicated gamma radiation to be at the natural background levels. Fifty-three TLD's registered doses ranging from 0.18 mR/day to 0.33 mR/day. Average dose was 0.25 mR/day. These dose rates are consistent with natural background radiation in the TMI area.

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

-- On Monday, April 6, 1981, one 6' x 6' EPICOR-I dewatered resin liner (liner D-21) from Unit 1 was shipped to the Chem-Nuclear Site, Barnwell, South Carolina.

-- On Tuesday, April 7, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.

-- On Tuesday, April 7, 1981, a Hittman solidified liner from Unit 1 was shipped to the Chem-Nuclear Site, Barnwell, South Carolina.

-- On Wednesday, April 8, 1981, the Unit 1 waste evaporator condensate storage tank (WECST) monthly composite was mailed to Teledyne Isotopes, Westwood, New Jersey.

-- On Wednesday, April 8, 1981, one 6' x 6' EPICOR-I dewatered resin liner (liner D-22) from Unit 1 was shipped to the Chem-Nuclear Site, Barnwell, South Carolina.

-- On Thursday, April 9, 1981, 65 drums and 7 boxes of compacted and non-compacted Unit 1 and Unit 2 low specific activity (LSA) waste were shipped to U.S. Ecology, Richland, Washington.

Major Activities

1. Submerged Demineralizer System (SDS). Region I and TMI Program Office inspections of the SDS are continuing. Construction work on the SDS is now approximately 95% complete. Preparation of the Safety Evaluation Report (SER) by the TMI Program Office is in progress although some necessary information has not yet been received. The licensee has submitted a schedule for providing the needed information.

2. Reactor Building Entry. A 40 minute entry into the Unit 2 Reactor Building occurred on Wednesday, April 8, 1981. The entry was undertaken to survey the area in the vicinity of the open stairwell where the floating sump pump will be installed during entry 8. The floating sump pump will be used to transfer the sump water to the SDS for processing and also to pump sump water to storage tanks in the event leakage from the sump occurs.

   As engineers were surveying the open stairwell for potential sump pump obstructions, they noticed water dripping into the sump in an area below the discharge of the 18 inch vent pipe connected to the rupture disk on the reactor coolant drain tank. High radiation levels in the area of the open stairwell prevented the engineers from positively identifying the origin of the leak. The engineers intend to construct a device to help in determining whether the observed leak is on the same scale as the measured leakage from the RCS. RCS leakage has been averaging approximately 0.1 gallons per minute.

   Entry 8, the next entry into the Reactor Building, has been scheduled for April 30, 1981.

Future Meeting

On Tuesday, April 21, 1981, Lake Barrett will meet with area mothers to discuss various issues related to the decontamination of TMI Unit 2.