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June 1, 1981  
 NRC/TMI-81-031

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 May 23 - 30, 1981.

Original signed by  
 Lake H. Barrett /  
 Lake H. Barrett  
 Acting Deputy Program Director  
 TMI Program Office

Enclosure: As stated

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SURNAME	R. Bellamy	R. Monte	M. Hanbaky	A. Fasano	L. Barrett		
DATE	8/24/81	5/29/81	5/24/81	5/29/81	5/29/81		

# NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of May 23 - 30, 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 0400, May 29, 1981) (approximate values)

Average Incore Thermocouples: 117°F

Maximum Incore Thermocouple: 144°F

### RCS Loop Temperatures:

	A	B
Hot Leg	113°F	116°F
Cold Leg (1)	67°F	67°F
(2)	68°F	67°F

RCS Pressure: 98 psig

Reactor Building: Temperature: 72°F  
Water level: Elevation 290.8 ft. (8.3 ft. from floor)  
via penetration 401 manometer  
Pressure: -0.5 psig  
Concentration:  $2.3 \times 10^{-5}$  uCi/ml Kr-85 (Sample taken 5/25/81)

## 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 May 22, 1981, through May 28, 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 permissible total liquid activity as specified in Technical Specifications for operational commercial reactors.

- 2. Airborne effluents are reported on a monthly basis.
- 3. 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 ( $\text{pCi/m}^3$ ) at several environmental monitoring stations and reported the following results:

<u>Location</u>	<u>May 15 - May 22, 1981</u> ( $\text{pCi/m}^3$ )
Goldsboro	25
Observation Center	29
Middletown	28
Yorkhaven	22

All of the above levels of Kr-85 are considered to be background levels.

The installation of tritium ( $\text{H}^3$ ) monitoring devices has been completed at the above listed locations. It is expected that  $\text{H}^3$  environmental results will be routinely reported by EPA in about three to five weeks.

-- 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 May 21, 1981, through May 28, 1981.

- 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> ( $\text{uCi/cc}$ )	<u>Cs-137</u> ( $\text{uCi/cc}$ )
HP-269	May 20, 1981 - May 27, 1981	<8.2 E-14	<8.2 E-14

- 5. Licensee Radioactive Material and Radwaste Shipments

-- On Friday, May 22, 1981, one 4' x 4' EPICOR-II dewatered resin liner (liner DF-15) from Unit 2 was shipped to U.S. Ecology, Richland, Washington. This shipment was not reported in the status report for the period of May 17-22, 1981.

-- On Tuesday, May 26, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W) Lynchburg, Virginia.

- On Thursday, May 28, 1981, 54 drums and 8 metal boxes of compacted and non-compacted Unit 1 low specific activity (LSA) waste were shipped to the Chem-Nuclear Site, Barnwell, South Carolina.
- On Thursday, May 28, 1981, an empty shipping cask used in Unit 2 was shipped to the Chem-Nuclear Site, Barnwell, South Carolina.

### Major Activities

1. Submerged Demineralizer System (SDS). Preparation of the Safety Evaluation Report (SER) by the IMI Program Office is in progress although some necessary information has not yet been received. On May 13, 1981, the licensee submitted a revised schedule for providing the needed information. The outstanding information will be provided in early June 1981.

Functional tests are complete with the exception of a few items which are undergoing engineering evaluation and further testing. Operator training on components not involved with the outstanding functional testing has been initiated. The operator training does not involve processing of contaminated water.

2. Reactor Building (RB) Purge and Entry. The eleventh entry into the Unit 2 RB was completed on Thursday, May 28, 1981. All the tasks scheduled for the entry were completed. The entry tasks included the following:

- Polar crane personnel safety equipment installation,
- Sump survey with portable gamma spectrometer,
- Lighting relay repair,
- Replacement of an inoperable radiation monitor,
- Repair on the RB intercom system,
- Surveillance, servicing, photography, and radiation surveys of components in the vicinity of the pressurizer,
- Floating sump pump discharge hose connection to the SDS.

The radiation survey of the area near the pressurizer indicated that the ambient radiation levels on top of the pressurizer was approximately 3 R/hr (gamma). Radiation hot spots were detected at boron deposits under valves on top of the pressurizer which apparently leaked at one time. There was no indication of recent leakage (the primary system is depressurized to less than 100 psig). The radiation levels at the hot spots were 8 to 10 R/hr (gamma) and approximately 30 Rad/hr (beta). Ambient radiation levels below the plane of the pressurizer top were approximately 1 R/hr. A contact reading of the insulation on the tope of the "A" steam generator was approximately 1 R/hr.

A cursory radiation survey on the polar crane indicated 80 mr/hr (gamma) and 80 mrad/hr (beta). An electrical/mechanical inspection and a thorough radiation survey of the polar crane is planned for the next entry. The next RB entry is tentatively scheduled for June 25, 1981.

#### Future Meeting

On Thursday, June 4, 1981, the Advisory Panel for the Decontamination of TMI Unit 2 will meet from 7:00 p.m. to 10:00 p.m. in the City Council Chambers, Kendig C. Bare Public Safety Building, 208 North Duke Street, Lancaster. At this meeting, which is open for public observance, the Panel will discuss Radiation Worker Exposure and Health Effects.