



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

June 23, 1980  
NRC/TMI-80-099

MEMORANDUM FOR: H. R. Denton, Director,  
Office of Nuclear Reactor Regulation  
B. J. Snyder, Program Director, TMI Program Office

FROM: J. T. Collins, Deputy Program Director,  
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the week of June 14-20, 1980.

*John T. Collins*  
John T. Collins  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

cc: EDO  
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# NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of: June 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" 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: Makeup system in conjunction with letdown flow (Emergency use only due to suspected leaks in the seal injection system).

Major Parameters (As of 0530, June 20, 1980) (approximate values)

Average Incore Thermocouples: 154°F

Maximum Incore Thermocouple: 197°F

RCS Loop Temperatures:

|              | A     | B     |
|--------------|-------|-------|
| Hot Leg      | 148°F | 152°F |
| Cold Leg (1) | 93°F  | 90°F  |
| (2)          | 85°F  | 86°F  |

RCS Pressure: 82 psig (Heise)  
93 psig (DVM controlling)

Pressurizer Temperature: 89°F

Reactor Building: Temperature: 80°F  
Pressure: -0.9 psig (Heise)  
Water level: Elevation 290.3 ft. (7.8 ft. from floor)  
via penetration 401 manometer

## Environmental & Effluent Information

1. Liquid effluents from TMI-1 released to the Susquehanna River, after processing, were within the limits specified in Technical Specifications.
2. No liquid effluents were discharged from TMI-2.
3. Results from EPA monitoring of the environment around the TMI site were:

- EPA environmental stations registered background levels for air particulate and water samples. Gamma scan results for all sampling locations were negative.
- Gas/Air (Kr-85) sample results during the period June 6 through June 13, 1980 were: Goldsboro - 19 pCi/m<sup>3</sup>, TMI Observation Center - 28 pCi/m<sup>3</sup>, Middletown - 18 pCi/m<sup>3</sup> and Bainbridge - 19 pCi/m<sup>3</sup>. The EPA states that the Kr-85 background concentration in the vicinity of TMI to be in the range of 20 and 40 pCi/m<sup>3</sup>.
- Instantaneous direct radiation readings showed an average level of 0.013 mRem/hr at the 18 monitoring stations. The measurements are all attributed to naturally occurring radioactivity.

#### 4. NRC Environmental Data

- The West Screen House continuous air sample (HP-220) for the sampling period June 11 through June 18, 1980, has been delivered to the EPA Coordination Center for analysis.
- 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><br><u>(uCi/cc)</u> | <u>Cs-137</u><br><u>(uCi/cc)</u> |
|---------------|-------------------------|---------------------------------|----------------------------------|
| HP-218        | May 20 - June 4, 1980   | <5.1E-14                        | <5.1E-14                         |
| HP-219        | June 4 - June 11, 1980  | <5.2E-14                        | <5.2E-14                         |
| HP-220        | June 11 - June 18, 1980 | <5.4E-14                        | <5.4E-14                         |

No reactor related radioactivity was detected.

- The licensee provided the following monthly inventory of Kr-85 releases for 1980: January-80 Ci, February-80 Ci, March-63 Ci, April-69 Ci, May-85 Ci, and June (to 11:30 a.m. of June 18) 42 Ci. Total-419 Ci.
- Results of the environmental TLD measurements for the period April 30 to May 29, 1980, indicate no gamma levels above natural background. Fifty-eight TLD's registered doses ranging from 0.11 mR/day to 0.20 mR/day. Average dose was 0.16 mR/day. These dose rates are consistent with natural background radiation in the TMI area.

#### 5. Radioactive Material and Radwaste Shipments Offsite were as follows:

- On Monday, June 16, 1980, the ban on waste shipments to the State of Washington was lifted.

- On Monday, June 16, 1980, a Unit 2 shipment of effluent samples from EPICOR II was sent to Science Applications Incorporated (SAI), Rockville, Maryland, for analysis.
  - On Tuesday, June 17, 1980, Unit 2 reactor coolant and resin samples were sent to Babcock and Wilcox (B&W), Lynchburg, Virginia, for analysis.
  - On Tuesday, June 17, 1980, a Unit 2 dewatered resin liner, LSA, Type B, was shipped to the Hanford burial site, Richland, Washington.
  - On Tuesday, June 17, 1980, Unit 2 calibration sources were sent to the National Bureau of Standards, Washington, D.C.
  - On Thursday, June 19, 1980, a Unit 1 shipment of seven boxes of non-compacted LSA waste was shipped to Barnwell burial site, Barnwell, South Carolina.
  - On Friday, June 20, 1980, a Unit 1 dewatered resin liner, LSA, Type B, was shipped to the Hanford burial site, Richland, Washington.
6. EPICOR II Processing Status: (auxiliary building approximate quantities)

|                             |                    |
|-----------------------------|--------------------|
| Amount processed this week: | None due to outage |
| Amount processed to date:   | 331,000 gallons    |
| Amount to be processed:     | 143,000 gallons    |

NOTE: The amount to be processed is approximately 3,000 gallons less this week since the level indicator for the reactor coolant bleed tank read erroneously high last week. At the time of last week's data collection the transfer from the fuel pool storage tank was just completed. The transfer medium utilizes steam eductors. The water in the bleed tank was consequently hotter than ambient and this affected the level indication.

#### Major Activities This Week

1. Reactor Building Purge. The controlled purge of Kr-85 from the reactor building is scheduled to commence at 8:00 a.m. on Saturday, June 28, 1980. The purge is contingent upon NRC approval of the purge procedure and the satisfactory completion of purge system tests. The tests are currently in progress and it appears that both the "slow" and "fast" purge trains will be ready for use by June 28, 1980. The purge procedure and associated documents are being reviewed by the TMI Program Office staff. To date, no procedural problems have been identified which would delay the purge. During this week calibration for the effluent monitor HPR -219 was completed along with the uncapping of the plant (vent) stack.

A Technical Specification conflict must be resolved before modifications to the "fast" purge system can be completed. Technical Specifications require the radiation monitor downstream of the reactor building purge fan to be interlocked with the fan dampers. A high monitor reading automatically closes the dampers. During the purge, Kr-85 concentrations will exceed the range of this monitor and, if not defeated, the interlock will close the dampers. A request to change this section of the Technical Specifications has been initiated by the licensee. During the purge, the stack radiation monitor, will be used to monitor the release. Grab samples from the reactor building and the stack will be taken periodically to back up the stack monitor readings.

The licensee has established procedural hourly radiation release limits that are 1/3 of the release limits permitted by the NRC. The NRC order, which permits the purge, limits the maximum hourly skin dose to 3 mrem and the maximum hourly total body dose to 1 mrem. The licensee's procedure limits the hourly skin dose to 1 mrem and the hourly total body dose to 0.3 mrem.

2. Reactor Building Entry. Purging of the personnel airlock (No. 2) began June 20, 1980, in preparation for an attempt to free the jammed solenoid pin on the inner door as described in the June 16, 1980, report. This will involve drilling a 3/4 inch diameter hole in the inner door with containment integrity maintained at all times. The TMI Program Office will monitor the evolution.
3. EPICOR II STATUS. EPICOR II unscheduled outage continued throughout this week for system maintenance. The one week delay was unexpected. Startup of the system is expected on Monday, June 23, 1980.
4. (Temporary) Nuclear Sampling System. The system became operational on Tuesday, June 17, 1980. The first reactor coolant system sample was obtained without incident.

Meetings Attended with Public Officials and Interested Groups

1. On Monday, June 16, 1980, J. Collins and R. Browning met with Governor Ray of Washington State and representatives of Met-Ed to discuss waste shipments to the Hanford burial site, Richland, Washington.
2. On Thursday, June 19, 1980, J. Collins, B. Snyder, et al, met with Metropolitan Edison officials to discuss preparations for purging the reactor building.
3. On Thursday, June 19, 1980, J. Collins, B. Snyder, et al, met with representatives of Metropolitan Edison, Environmental Protection Agency, Department of Environmental Resources and the Department of Energy to discuss interaction between the various groups during the purging operation.