

NRC FOR



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NUCLEAR REGULATORY COMMISSION  
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August 25, 1980  
NRC/TMI-80-127

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 August 17-23, 1980.

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

Enclosure: As stated

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# NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of August 17-23, 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 0500, August 22, 1980) (approximate values)

Average Incore Thermocouples: 137°F

Maximum Incore Thermocouple: 181°F

RCS Loop Temperatures:

	A	B
Hot Leg	134°F	137°F
Cold Leg (1)	100°F	98°F
(2)	99°F	100°F

RCS Pressure: 89.5 psig (Heise)  
95 psig (DVM-controlling)

Pressurizer Temperature: 89°F

Reactor Building: Temperature: 84°F  
Water level: Elevation 290.4 ft. (7.9 ft. from floor)  
via penetration 401 manometer  
Pressure: -0.15 psig (Heise)  
Concentration:  $3.25 \times 10^{-5}$  uCi/cc (Kr-85)

## 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:

- The EPA measured Kr-85 concentrations (pCi/m<sup>3</sup>) at several environmental monitoring stations and reported the following results:

<u>Location</u>	<u>August 8-15, 1980</u> <u>(pCi/m<sup>3</sup>)</u>
Bainbridge	27
Goldsboro	24
Observation Center	170
Middletown	54
Hill Island	140

Background levels of krypton-85 were measured in air samples collected at EPA's noble gas sampling stations located at Bainbridge and Goldsboro during the period August 8 through August 15, 1980. Levels measured at Hill Island, Middletown, and the TMI Observation Center were slightly elevated. This slight increase in Kr-85 concentrations could be attributed to Kr-85 release during the reactor building purge operation on August 8, 1980.

- EPA environmental stations registered background levels for air particulate and water samples. Gamma scan results for all sampling locations were negative.
- Instantaneous direct radiation readings showed an average level of 0.012 mrem/hr for the 18 monitoring stations.

#### 4. NRC Environmental Data

- 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> <u>(uCi/cc)</u>	<u>Cs-137</u> <u>(uCi/cc)</u>
HP-229	August 13 - August 20, 1980	<7.0 E-14	<7.0 E-14

No reactor related radioactivity was detected.

- Environmental TLD measurements for the period July 2 to July 31, 1980, indicate gamma radiation to be at the natural background levels. Fifty-seven TLD's registered doses ranging from 0.11 mR/day to 0.18 mR/day. Average dose was 0.14 mR/day. These dose rates are consistent with natural background radiation in the TMI area.

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

- On Monday, August 18, 1980, a 40 ml Unit 2 reactor coolant sample was shipped to Babcock & Wilcox (B&W), Lynchburg, Virginia.

- On Thursday, August 21, 1980, 168 drums of compacted waste was shipped from Unit 1 to the burial site at Barnwell, South Carolina.
- On Friday, August 22, 1980, Unit I smear samples (5 smears) were shipped by air to Westinghouse Electric Corporation in Madison, Pennsylvania, for analysis.

### Major Activities This Week

#### 1. EPICOR II System

The outage, which started August 13, 1980, continued. The major work effort is to improve personnel safety items. Startup of this system is not finalized due to higher priority work efforts.

#### 2. Reactor Building Status

Weekly purging of the reactor building was performed on Friday, August 22, 1980. The purge lasted 6 hours and resulted in approximately 30 curies released to the atmosphere.

An attempt was made on Thursday, August 21, 1980, to open the outer door of the personnel airlock No. 1 on the reactor building equipment hatch. This airlock was not used since the accident. In this attempt the licensee found that the differential pressure interlock solenoid on the outer door was activated and that it appeared the pin was stuck in the up position similar to the problem noted with the inner door for personnel airlock No. 2. This was anticipated since the second reactor building entry team also confirmed that the inner door solenoid was in the up position and rusted in place. The outer door solenoid was manually de-energized and the pin did not release itself.

The next entry into the reactor building via personnel airlock No. 2 is expected in 4-6 weeks. At that time it is anticipated that the pins for both equipment hatch personnel airlock doors will be freed from inside the reactor building.

#### 3. Weekly RCS Boron Analysis

On Friday, August 8, 1980, the NRC TMI Program Office was notified by the licensee that the Babcock and Wilcox laboratory was unable to analyze the reactor coolant system (RCS) samples due to contamination from a radiological spill and that the 7 day technical specification (TS) surveillance frequency was exceeded. The backlog of RCS samples were subsequently analyzed. The latest result was 3980 ppm boron for the August 18, 1980, sample. This was in compliance with TS limits of 3000-4500 ppm.

#### 4. NRC Programmatic Environmental Impact Statement for TMI-2

Formal notification of the availability of the Draft Programmatic Environmental Impact Statement (PEIS) was published in the Federal Register on August 22, 1980. A draft PEIS was published on August 14, 1980, and a 45 day period for public comments began August 22, 1980. Copies of the draft PEIS are available in the NRC's Middletown office.

Meetings Held

On Monday, August 18, 1980, B. Snyder and J. Collins met with Pennsylvania Secretary C. Jones, Department of Environmental Resources, T. Gerusky, Bureau of Radiological Protection, M. Bills, and W. Kirk, Environmental Protection Agency, to formulate plans for future meetings with area residents to discuss the NRC's draft Programmatic Environmental Impact Statement (PEIS) for the decontamination and defueling of TMI-2.

Future Meetings

B. Snyder and J. Collins will conduct a news conference at 10:30 a.m., on Monday, August 25, 1980, in the NRC Middletown office to discuss and answer questions about the staff's draft PEIS for the decontamination and defueling of TMI-2.