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March 5, 1982  
NRC/TMI-82-013

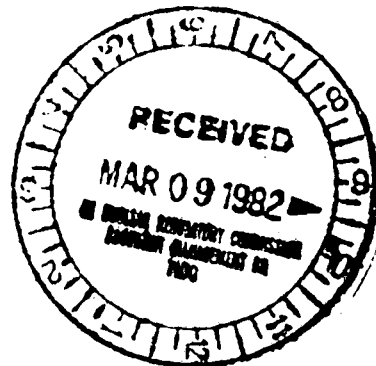
MEMORANDUM FOR: Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
Bernard J. Snyder, Program Director  
TMI Program Office

FROM: Lake H. Barrett, Deputy Program Director  
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the period of February 28, 1982 to March 5, 1982. Major items included in this report are:

- Liquid Effluent Releases
- Airborne Effluents
- NRC and EPA Environmental Data
- Radioactive Material and Radwaste Shipments
- Submerged Demineralizer System Status
- EPICOR II
- Reactor Building Entries
- Public Meetings



Original signed by  
Lake H. Barrett

Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

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NRC FORM 318 (10-80) NRCM 0240

Harold R. Denton  
Bernard J. Snyder

-2-

March 5, 1982

cc w/encl:

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# NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

February 28, 1982 - March 5, 1982

## 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, March 5, 1982) (approximate values)

Average Incore Thermocouples: 103°F

Maximum Incore Thermocouple: 133°F

### RCS Loop Temperatures:

	A	B
Hot Leg	95°F	98°F
Cold Leg (1)	80°F	82°F
(2)	86°F	87°F

RCS Pressure: 96 psig

Reactor Building: Temperature: 63°F  
Water level: Elevation 283.1 ft. (0.4 ft. from floor)  
Pressure: -0.2 psig  
Airborne Radionuclide Concentrations:  
4.0 E-6 uCi/cc H<sup>3</sup>  
(sample taken 3/1/82)  
7.5 E-6 uCi/cc Kr<sup>85</sup>  
(sample taken 3/1/82)

## 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 February 26, 1982, through March 4, 1982, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources, which originated within Unit 2, contained no detectable radioactivity.

2. Airborne Effluents. Airborne releases to the environment, as measured by licensee installed monitors at discharge stacks, are listed below. The airborne releases were well within regulatory limits.

	January 1982	
	<u>Unit II</u>	<u>EPICOR II</u>
Noble Gases (Ci)	$<1.60 \times 10^2$	$<2.13$
Particulates (Ci)	$4.85 \times 10^{-5}$	$9.76 \times 10^{-7}$
Tritium (Ci)	6.78	$3.06 \times 10^{-2}$

3. Environmental Protection Agency (EPA) Environmental Data.

- The EPA Middletown Office has not received the analytical results for Kr-85 measurements around the TMI site from the EPA's Counting Laboratory at Las Vegas, Nevada. When these results become available, they will be included in a subsequent report.
- No radiation above normally occurring background levels was detected in any of the samples collected from EPA's air and gamma rate networks during the period from February 24, 1982 through March 4, 1982.

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 (uCi/cc)</u>	<u>Cs-137 (uCi/cc)</u>
HP-309	February 24, 1982 - March 3, 1982	$<6.0 \text{ E-14}$	$<6.0 \text{ E-14}$

5. License Radioactive Material and Radwaste Shipments.

- On Tuesday, March 2, 1982, four one liter EPICOR II samples from Unit 2 were shipped to the State of Maryland Laboratory and Research Facility, Baltimore, Maryland.
- On Thursday, March 4, 1982, six liquid samples from Unit 2 (various plant locations) were shipped to the Westinghouse Electric Corp. Laboratory, Waltz Mills, Pennsylvania.

## Major Activities

1. Submerged Demineralizer System (SDS). Processing of batch 22 continued during the week. Batch 23 will process accumulated auxiliary building bleed tank water and is scheduled for next week after completion of batch 22. SDS will then enter an outage prior to processing of reactor coolant system water, now scheduled for May.
2. EPICOR II. The EPICOR II system continued to process SDS effluents during the week. Performance parameters are included in Attachment 1.
3. Reactor Building Entries. Four reactor building (RB) entries were conducted during the past week. Entries were originally scheduled for Tuesday, Wednesday, and Thursday (March 2, 3, and 4, 1982). Due to mechanical problems, all the scheduled gross decontamination experiment tasks were not completed during the entries and an additional entry was made on Friday in an attempt to get back on schedule.

On Friday, minor operational problems arose with the high pressure pump which supplies flush water to the RB and the entry was terminated. Despite the problems, a low pressure flush of the 305 ft. elevation surfaces was completed and some decontamination was performed on the polar crane.

The pump leak is being repaired and it is expected that the gross decontamination experiment will continue next week. The following list of decontamination tasks will be performed when the pump is repaired:

1. low pressure flush of the polar crane
2. low pressure flush of the refueling pool
3. low and high pressure flush of the 347 ft. elevation surfaces
4. high pressure flush of the 305 ft. elevation surfaces

The effectiveness of the completed low pressure flush of the 305 ft. elevation is being evaluated from the data collected before and after the decontamination.

Prior to the start of the gross decontamination experiment, the water level in the RB was pumped down to approximately six inches (~30,000 gallons) above the RB sump. The decrease in water depth from approximately eight feet to six inches did not produce a detectable change in the RB ambient radiation levels. The decontamination experiment in addition to removing some of the loose surface contamination, will dilute the radioactive water remaining in the RB basement. Several thousand gallons of water will be added to the sump during the decontamination experiment. The sump water will be eventually processed with the SDS.

Future Meetings

1. On Saturday, March 13, 1982, Lake Barrett will address the Society of Manufacturing Engineers in Williamsport, PA, on the cleanup of TMI and general aspects of nuclear power.
2. On Wednesday, April 14, 1982, Lake Barrett will be the keynote speaker for the Southern Pennsylvania Association of Occupational Health Nurses, to be held at the Holiday Inn in York.

ATTACHMENT 1

EPICOR II Performance  
February 23, 1982 to March 1, 1982

<u>Radionuclide</u>	<u>Average Influent (uc/ml)</u>	<u>Average Effluent (uc/ml)</u>	<u>Average DF</u>
Cesium 137	$7.4 \times 10^{-4}$	$5.4 \times 10^{-7}$	$1.4 \times 10^3$
Strontium 90	$6.0 \times 10^{-3}$	$<1.6 \times 10^{-5}$	$>3.7 \times 10^2$
Antimony 125	$1.0 \times 10^{-2}$	$<4.2 \times 10^{-7}$	$>2.4 \times 10^4$