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MEMORANDUM FOR:

Harold R. Denton, Director,

Office of Nuclear Reactor Regulation

Bernard J. Sayder, Program Director,

TNI Program Office

FROM:

Lake H. Barrett, Acting Deputy Program Director,

THE Program Office

SUBJECT:

NRC THI PROGRAM OFFICE HEEKLY STATUS REPORT

Enclosed is the status report for the period of April 19-25, 1981.

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

Enclosure: As stated

cc: EDO OCC

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## MRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of April 19-25, 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 0430, April 24, 1981) (approximate values)
Average Incore Thermocouples: 114°F
Maximum Incore Thermocouple: 143°F

### RCS Loop Temperatures:

Hot Leg	113°F	8 116°F
Cold Leg (1)	65°F	66°F
(2)	66°F	65°F

RCS Pressure: 99 psig

Reactor Building: Temperature: 61°F

Water level: Elevation 290.7 ft. (8.2 ft. from floor)

via penetration 401 manometer

Pressure: -0.35 psig

Concentration: 2.65 x 10-5 uCi/cc (Krypton-85 (Kr-85))

(sample taken 4/20/81)

# 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 17, 1981, through April 23, 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 permissable total liquid activity as specified in Technical Specifications for operational commercial reactors.

- 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/m³) at several environmental monitoring stations and reported the following results:

Location	April 10 - April 17, 1981 (pCi/m <sup>3</sup> )	
Goldsboro	22	
Observation Center	24	
Middletown	31	
Yorkhaven	28	

All of the above levels of Kr-85 are considered to be back-ground 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 17, 1981, through April 21, 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-264	April 15, 1981 - April 22, 1981	*	*

\*Sample results are not available due to a temporary outage of EPA counting equipment. EPA reported that the counting equipment will be restored to service by April 28, 1981. NRC air monitoring results will be reported in the next status report.

- 4. <u>Licensee Radioactive Material and Radwaste Shipments</u>. The following shipments were made:
  - -- On Monday, April 20, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.
  - -- On Thursday, April 23, 1981, a 250 ml Unit 1 decay heat tank B sample was mailed to Teledyne Isotopes, Westwood, New Jersey.
  - -- On Thursday, April 23, 1981, one 4' x 4' EPICOR-II dewatered resin liner (liner DF-11) from Unit 2 was shipped to U.S. Ecology, Richland, Washington.

### Major Events

1. Submerged Demineralizer System (SDS). Region I and TMI Program Office inspections of the SDS are continuing. 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 revised schedule for providing the needed information.

The licensee is performing functional tests of the SDS components to verify that the equipment will operate as designed. The testing does not involve processing of contaminated water. The licensee has scheduled pumping 60,000 gallons of water (previously processed by EPICOR-II) into the fuel pool next week. The pool is being filled as the schedule of functional tests permits and is expected to be completely filled by the middle of May.

2. Reactor Building Entry and Purge. Entry 9 into the Unit 2 reactor building (RB) is scheduled for Thursday, April 30, 1981. A surface decontamination experiment, which was originally scheduled for the entry, was cancelled after pre-entry practice sessions indicated more time was needed for preparation for the experiment. The decontamination experiment has been rescheduled for entry 10, on May 14, 1981. During entry 9, a RB penetration will be modified with hose inlets in preparation for the decontamination experiment. A floating sump pump is also scheduled to be installed during entry 9.

The RB purge system will be activated one day prior to the entry to reduce airborne activity in the RB to below the maximum permissible concentration (MPC). RB air samples indicate that  $2.65 \times 10^{-5}$  uCi/ml of Kr-85 are dispersed in the RB air. Kr-85 MPC for restricted areas is  $1 \times 10^{-5}$  uCi/ml.

3. EPICOR-II Resin Liner Shipment. The first EPICOR-II resin liner left the TMI site at 8:45 p.m., April 23, 1981. The EPICOR-II resin liner is destined for Hanford, Washington, for burial. The EPICOR-II System was used to process the 500,000 gallons (approximate) of contaminated water in the auxiliary building as a result of the March 28, 1979, accident. The system utilized a resin bed (ion exchange) process with the resin contained in 4° x 4° and 6° x 6° cylindrical liners.

This is the first of 22 liners containing low levels of radioactivity that were approved by the Commission in March 1981, for shipment and low level waste disposal. The licensee plans to ship the remaining 21 liners to the burial site within the next 2-3 months.

The licensee provided a vehicle and personnel to escort the shipment to the burial site for the complete trip. The NRC TMI Program Office personnel inspected the licensee's onsite shipping activities and escorted the shipment to I-83.

### Meeting Held

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

#### Future Meetings

- 1. On Tuesday, April 28, 1981, Lake Barrett will conduct a plant tour for area mothers.
- 2. On Thursday, April 30, 1981, Harold Denton and Lake Barrett will attend the annual convention of the Pennsylvania Osteopathic Medical Association to be held at the Host Farm in Lancaster. Mr. Denton will be addressing the convention at its opening session, following Governor Dick Thornburgh of Pennsylvania.
- 3. On Wednesday, May 13, 1981, Lake Barrett and Oliver Lynch will participate in a meeting with the Susquehanna Valley Alliance on the Programmatic Environmental Impact Statement. The meeting will be held at 7:30 p.m., in the Friends Meeting House in Lancaster at 110 Tulane Terrace.