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April 11, 1983  
NRC/TMI-83-023

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 April 3, 1983, through April 9, 1983. Major items included in this report are:

- Liquid Effluents
- EPA and NRC Environmental Data
- Radioactive Material and Radwaste Shipments
- New Personnel TLD Dosimetry System
- Submerged Demineralizer System Status
- EPICOR II Status
- Reactor Building Entries
- SDS Liner Shipments
- EPICOR II Prefilter Shipment
- Purification Demineralizer Disposal Status
- Polar Crane
- Public Meetings

*-P-*  
Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

OFFICE						
SURNAME						
DATE	R304180653	R30411				
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Harold R. Denton  
Bernard J. Snyder

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April 11, 1983

cc w/encl:

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SURNAME	L Gage/lmp	Beit	Gasino	Prasad	L Barrett		
DATE	4/11/83	4/11/83	4/11/83	4/11/83	4/ /83		

# NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

April 3, 1983 - April 9, 1983

## Plant Status

Core Cooling Mode: Heat transfer from the reactor coolant system (RCS) to reactor building ambient.

Available Core Cooling Mode: Mini Decay Heat Removal (MDHR) system.

RCS Pressure Control Mode: Standby Pressure Control System.

Major Parameters (as of 5:00 AM, April 8, 1983) (approximate values)

Average Incore Thermocouples\*: 91°F

Maximum Incore Thermocouple\*: 133°F

RCS Loop Temperatures:

	A	B
Hot Leg	87°F	85°F
Cold Leg (1)	74°F	76°F
(2)	76°F	76°F

RCS Pressure: 65 psig

Reactor Building: Temperature: 70°F

Pressure: -0.2 psig

Airborne Radionuclide Concentrations:

2.4 E-7 uCi/cc H<sup>3</sup>  
(sample taken 4/7/83)

2.0 E-9 uCi/cc particulates  
(sample taken 4/7/83)

## 1. Effluent and Environmental (Radiological) Information

Liquid effluents from the TMI site released to the Susquehanna River, after sampling and monitoring, were within the regulatory limits and in accordance with NRC requirements and City of Lancaster Agreement.

During the period April 1, 1983, through April 7, 1983, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources, which originated within Unit 2, contained minute amounts of radioactivity. Calculations indicate that less than six millionths (0.000006) of a curie of cesium, and less than thirty-seven millionths (0.000037) of a curie of tritium were discharged.

\*Uncertainties exist as to the exact location and accuracy of these readings.



- On April 5, 1983, one wooden box and one drum containing a demineralizer sample and probe from Unit 2 were shipped to Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- On April 8, 1983, one package containing four Unit 1 500 ml. liquid samples was mailed to Nuclear Water and Waste Technologies Corporation in San Jose, California.
- On April 8, 1983, one package containing one 250 ml. liquid Unit 1 sample was sent to Teledyne Lab in Westwood, New Jersey.
- On April 8, 1983, 55 drums of Unit 1 and Unit 2 contaminated laundry were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.

#### 5. New Personnel TLD Dosimetry System

Effective February 1, 1983, the TMI site initiated daily use of a modified Panasonic TLD dosimetry system including a new personnel badge designed to offer enhanced beta monitoring in mixed beta/gamma radiation environments. (See Attachment 1)

The badge and processing system had been independently assessed by the Idaho National Engineering Laboratory (INEL), working under contract to the TMI Program Office. In its report (EGG-SSDC-5883), INEL stated that "the personnel dosimetry system is fundamentally sound from a technical standpoint and will provide TMI with [the] capability to measure and record personnel dose to beta-gamma radiation equivalent or superior to any in the nuclear industry, if the system functions as designed". As an ongoing project, the TMI Program Office will be continuing to monitor the performance of the new TLD system.

#### Major Activities

1. Submerged Demineralizer System (SDS). SDS is presently in a shutdown mode.
2. EPICOR II. EPICOR II processed approximately 50,000 gallons of water from the EPICOR-II off-spec receiving tank (CCT-2), during the period April 3-7, 1983. The performance parameters are included in Attachment 2.
3. Reactor Building Entries. Reactor building decontamination and other dose reduction activities are continuing. However, the work schedule had been reduced from the normal five entries per week to two entries during the week of March 27, and three scheduled entries for the week of April 3. Further tests of the reactor building forced air circulation system, to determine if there is a significant reduction in airborne particulate activity when the recirculation fans are secured, is planned for next week. The NRC has requested a meeting with the licensee to discuss over-all dose reduction and ALARA programs. It is scheduled for 10:00 AM, April 18, 1983, in Mr. Denton's Bethesda office.

Past Meeting

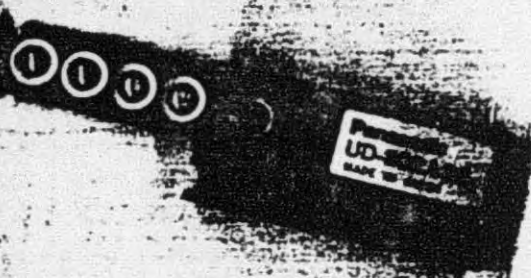
On April 5, 1983, Lake H. Barrett met with the Concerned Mothers of Middletown to discuss clean-up operations at TMI-2. They expressed their concern that TMI Unit 1 should not be restarted prior to completion of the Unit 2 clean-up.

Future Meeting

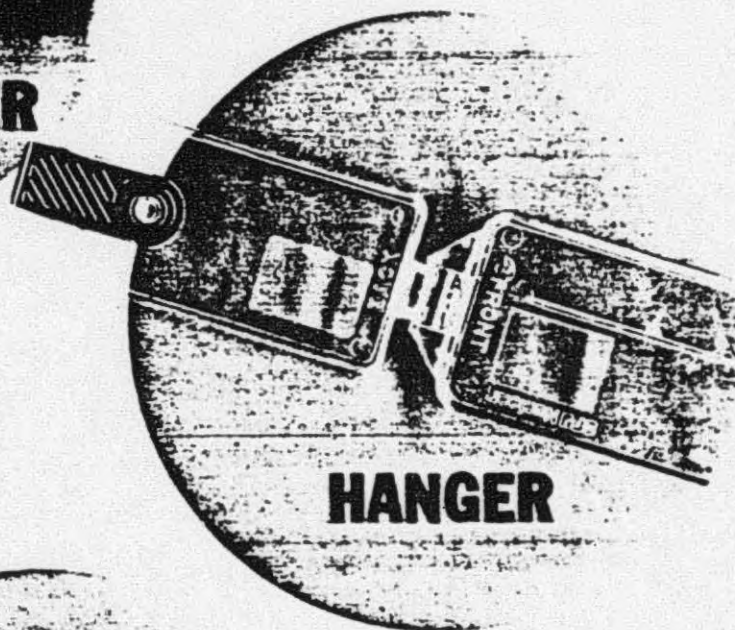
On April 25, 1983, Lake H. Barrett will meet with the Concerned Mothers of Middletown to discuss TMI related issues.

# NEW RADIATION DOSIMETER

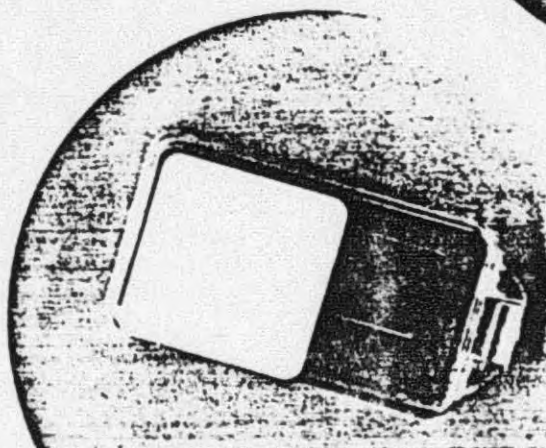
**ELEMENT SLIDE**  
(Showing 4 Phosphors)



**BADGE HOLDER**



**HANGER**



**ASSEMBLED DOSIMETER**

Attachment #1