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November 15, 1982  
NRC/TMI-82-067

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 November 7 through November 13, 1982. Major items included in this report are:

- Liquid Effluents
- EPA and NRC Environmental Data
- Radioactive Material and Radwaste Shipments
- Submerged Demineralizer System Status
- EPICOR II Status
- Reactor Building Entries
- SDS Liner Disposal Preparations
- EPICOR II Prefilter Shipment Status
- Public Meetings

*Original signed by  
Lake H. Barrett*

Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

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DATE						

Harold R. Denton  
Bernard J. Snyder

November 15, 1982

cc w/encl:  
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NRR Division Directors  
NRR A/D's  
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DATE	11/15/82	11/15/82	11/15/82	11/15/82	11/15/82	11/15/82

NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

November 7, 1982 - November 13, 1982

Plant Status

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

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

RCS Pressure Control Mode: RCS is vented to the reactor building.

Major Parameters (as of 0500, November 12, 1982) (approximate values)

Average Incore Thermocouples\*: 107°F

Maximum Incore Thermocouple\*: 130°F

RCS Loop Temperatures:

	A	B
Hot Leg**	86°F	84°F
Cold Leg (1)	69°F	70°F
(2)	71°F	71°F

Pressure: The reactor coolant system is vented to the reactor building.

Reactor Building: Temperature: 63°F

Pressure: -0.12 psig

Airborne Radionuclide Concentrations:

2.8 E-7 uCi/cc H<sup>3</sup>  
(sample taken 11/10/82)

2.9 E-10 uCi/cc particulates  
(sample taken 11/10/82)

1. Effluent and Environmental (Radiological) Information

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.

During the period November 5, 1982, through November 11, 1982, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources, which originated within Unit 2, contained no detectable radioactivity.

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

\*\*The primary water level is below the hot leg temperature sensors.



## 2. Environmental Protection Agency (EPA) Environmental Data

The EPA measures Kr-85 concentrations at several environmental monitoring stations and reported the following results:

<u>Location</u>	<u>October 8, 1982 - October 26, 1982</u> (pCi/m <sup>3</sup> )
Goldsboro	22
Middletown	25
Yorkhaven	25
TMI Observation Center	26

- The EPA Middletown Office has not received the environmental Kr-85 results from the EPA's Counting Laboratory at Las Vegas, Nevada for the TMI samples which were taken after October 26, 1982. These results will be included in a subsequent report.
- 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 November 3, 1982 through November 11, 1982.

## 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:

<u>Sample</u>	<u>Period</u>	<u>I-131</u> (uCi/cc)	<u>Cs-137</u> (uCi/cc)
HP-343	November 3 - November 10, 1982	<7.1 E-14	<7.1 E-14

## 4. Licenses Radioactive Material and Radwaste Shipments

- On November 9, 1982, one box containing 12 Unit 1 once-through-steam-generator-A swipes was shipped to Battelle Columbus Laboratories, Columbus, Ohio.
- On November 10, 1982, one box containing two Unit 2 liquid samples (125 ml) from the borated water storage tank and the processed water storage tank was mailed to Westinghouse Electric, Forest Hills, Pennsylvania.
- On November 10, 1982, 65 drums containing contaminated laundry from Units 1 and 2 were shipped to Interstate Uniform Services, New Kensington, Pennsylvania.



## Major Activities.

1. Submerged Demineralizer System (SDS). SDS began processing of Batch No. 38 (approximately 44,000 gallons of reactor building sump water) on November 6, 1982. This water, which was previously processed by the SDS, was reused for the ongoing decontamination activities in the reactor building, and collected in the reactor building sump. Batch No. 38 processing is scheduled to be completed on November 15, 1982.
2. EPICOR II. The EPICOR II system was activated on November 10, 1982 to process SDS effluent from Batch No. 38. EPICOR II processing is expected to continue through November 17, 1982.
3. Reactor Building Entries. Reactor building entries are continuing at a rate of three per week. Polar crane refurbishment is the priority activity in the reactor building. The licensee is preparing a polar crane load test procedure (which will be submitted to the TMI Program Office for approval). The crane load test is scheduled for the last week in February 1983. Functional testing of individual crane control circuits is currently in progress.

Reactor building decontamination is continuing in parallel with the polar crane refurbishment. The three control rod drive leadscrews, which were removed from the reactor vessel during the quick look inspection, have been transferred from the refueling pool to an area inside the "B" D-ring. The leadscrews will eventually be cut into smaller pieces and transferred offsite for analysis. The first cutting, of leadscrew 8H (the least contaminated of the three), is scheduled for November 15, 1982.

4. SDS Liner Disposal Preparations. The functional testing (described in the November 8, 1982 Weekly Status Report) of the SDS liner recombiner and vacuum outgassing system (LRVOS) has been temporarily delayed. This testing, which began last week on a non-radioactive SDS liner, was to provide an operational demonstration of both the water removal (vacuum drying) and catalyst loading capabilities. The vacuum drying test was completed satisfactorily with the water removal rates meeting the design performance criteria established by GPU, DOE and the system designers. However, the catalyst insertion phase of the functional test was delayed because the loading tool experienced valve blockage and flow restriction problems when the cylindrical palladium recombiner pellets (1/16" diameter, 1/8" length) were added. GPU is currently re-evaluating the hardware designs and techniques including a change to spherical pellets. The catalyst loading phase of the LRVOS functional test will have to be repeated before GPU performs a full scale demonstration on an actual spent SDS vessel.
5. EPICOR II Prefilter Shipment Status. No EPICOR II prefilter liner shipments were made this week. The following three shipments are scheduled next week: PF-47 (in the CNS-8-120 cask), PF-6 (in the SN-1 cask), and PF-20 (in the HN-200 cask). Initial gas sample measurements on the PF-20 liner indicated 22.4% hydrogen, 68% nitrogen, 9% others

(argon, organic gases, etc.) and non-detectable oxygen (<0.2%). Radiolytic gas generation rates on PF-20 are currently being monitored and the liner will be inerted with nitrogen (similar to the inerting of PF-6 and PF-47) to insure non-combustible gas conditions during shipment.



Past Meetings

1. On November 8, 1982, Dr. Bernard J. Snyder spoke to a subcommittee of the National Association of Regulatory Utility Commissioners in Boston, Massachusetts.
2. On November 9, 1982, the NRC Commissioners held two public meetings to discuss the potential restart of TMI Unit 1. The first meeting heard oral presentations from the parties involved in the formal TMI Unit 1 restart proceedings.

The second meeting heard the views of concerned citizens who were not parties to the formal restart proceedings. The NRC Commissioners are scheduled to issue a decision December 10, 1982 concerning the 1979 TMI-1 orders.

3. On November 12, 1982, Lake H. Barrett met with the Concerned Mothers of Middletown to discuss TMI related issues. They expressed their concern that Unit 1 should not be restarted prior to completion of the Unit 2 cleanup.

Future Meetings

1. On November 16, 1982, Dr. Bernard J. Snyder will present a paper on the regulatory perspective on TMI-2 cleanup at the American Nuclear Society meeting in Washington, DC.
2. On November 17, 1982, the Advisory Panel for the decontamination of TMI Unit 2 will hold a meeting --open for public observation-- to discuss the current status of cleanup efforts and the disposition of processed water. The meeting will take place at the Holiday Inn, 23 South Second Street, Harrisburg, Pennsylvania, from 7:00 to 10:00 PM.
3. On November 17, 1982, Dr. Bernard J. Snyder will participate in a panel discussion at Rutgers University, New Brunswick, New Jersey on nuclear wastes at a conference on the Disposal of High Level Radioactive Wastes. The conference is being organized by the League of Women Voters of New Jersey and the Coordinating Council on Radiation Studies of Rutgers University.
4. On November 22, 1982, Lake H. Barrett will meet with the Concerned Mothers of Middletown to discuss TMI related issues.
5. On December 1, 1982, Lake H. Barrett will present a paper on TMI to the New England Chapter of the Health Physics Society in Boston, Massachusetts.
6. On December 5, 1982, Lake H. Barrett will meet with Friends and Family of TMI to discuss various TMI-2 issues.