

October 22, 1984  
NRC/TMI-84-076

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

FROM: William D. Travers, Deputy Program Director  
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT FOR  
OCTOBER 13, 1984 - OCTOBER 21, 1984

Data from effluent and environmental monitoring systems indicated no plant release in excess of regulatory limits. Waste processing continued on a routine basis. Plant parameters have shown no significant changes. Other site activities this period included: return to service of the polar crane with limited use requirements, scabbling and sealing of reactor building floor surfaces, makeup and purification demineralizer elution operations and continued fuel pool "A" refurbishment.

Significant items covered in the enclosure are:

- Reactor Building Activities
- Auxiliary and Fuel Handling Building Activities
- Emergency Diesel Generator Out-of-Service
- Public Meetings

Summary sheets included in this report are:

- Liquid Effluent and Environmental Data
- Plant Status Data

ORIGINAL SIGNED BY-

William D. Travers  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

*IDAR-5  
TMI*

8411010078 841022  
PDR ADDOCK 05000320  
R PDR

OFFICE >							
SURNAME >							
DATE >							

INTERNAL DISTRIBUTION

EDO  
OGC  
Office Directors  
Commissioner's Technical Assistants  
NRR Division Directors  
NRR A/D's  
Regional Administrators  
IE Division Directors  
TAS  
EIS  
TMI Program Office Staff (10)  
PHS  
EPA  
DOE  
RI Division Directors  
Public Affairs, RI  
State Liaison, RI  
TMIPO HQ r/f  
TMI SITE r/f  
CENTRAL FILE  
NRC PDR  
LOCAL PDR  
TMI-2 Project  
Section File

OFFICE ▶	TMIPQ	TMIPQ	TMIPQ	TMIPQ		
SURNAME ▶	J. Cook	R. Cook	R. Cook	W. Avers		
DATE ▶	10/27/84	10/27/84	10/27/84	10/27/84		

## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

The reactor building polar crane was returned to limited service on Friday, October 19, 1984, after inspections by licensee and NRC staff confirmed that there were no identifiable discrepancies which would inhibit limited safe crane operations. The crane was taken out of service after one of two redundant hoist brakes was found to be disabled due to a misadjustment on a manual brake release mechanism. Subsequently, it was determined that the manual brake release mechanism had been installed during the post accident crane refurbishment without the required engineering review and documentation. Both hand release mechanisms have been removed from the brakes and the 500 ton-designed crane has been approved for use by the NRC for lifts of 5 tons or less. This restriction will remain in effect until a review of all crane related engineering documents is completed.

Plenum inspection and initial lift using hydraulic jacks remains scheduled for completion in December 1984. The transfer of the 55 ton plenum from the reactor vessel to storage in the deep end of the fuel pool is expected to occur during the second quarter of 1985.

Scabbling and sealing of floor surfaces for dose reduction purposes is continuing. Work on the 347 foot level is essentially complete and further work on the 305 foot level is planned following the installation of local shielding.

### AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Refurbishment activities in the "A" fuel pool continued this week, concentrating on the internal decontamination of the lower tanks and removal of tank support steel.

The makeup and purification resin elution process continued this week. Four batches have been processed from the "A" demineralizer and the seventh batch is in progress from the "B" demineralizer. The process appears to be successful in removing the radioactive cesium from the resin and no significant technical problems have been encountered to date.

### EMERGENCY DIESEL GENERATOR OUT-OF-SERVICE:

Repairs were initiated on a diesel generator when it was determined that a cylinder liner O-ring seal on the water jacket was leaking. The diesel generator had been initially removed from service to conduct routine preventive maintenance during which a hydrostatic test of the system revealed that the repairs were needed. Operational tests are being performed the second, redundant, diesel generator every 12 hours. Repairs are expected to be completed by October 24, 1984.

### PUBLIC MEETINGS:

1. On October 30, 1984, Dr. William Travers will speak to the Metropolitan-Edison Company Consumer Advisory Council in Lebanon, Pennsylvania. He will speak on the NRC's role at the Three Mile Island nuclear station.

2. The Advisory Panel for the Decontamination of Three Mile Island Unit 2 will meet on November 8, 1984, from 7:00 PM to 10:00 PM in the Lancaster City Council Chambers, Public Safety Building, 201 North Duke Street, Lancaster, Pennsylvania. The meeting will be open to the public.

Persons desiring the opportunity to speak before the Panel are asked to contact Mr. Thomas Smithgall at 717-291-1042 or write to him at 2122 Marietta Avenue, Lancaster, Pennsylvania 17603. Persons desiring to submit topics or questions for consideration by the Panel are asked to contact, in writing, Mayor Arthur Morris, 120 North Duke Street, Lancaster, Pennsylvania 17602.

## APPENDIX 1

### LIQUID EFFLUENT AND ENVIRONMENTAL DATA

#### GPU Nuclear

Based on sampling and monitoring, liquid effluents from the TMI site released to the Susquehanna River were determined to be within regulatory limits and in accordance with NRC requirements and the City of Lancaster Agreement.

During the period October 12, 1984 through October 18, 1984, liquid effluents contained no detectable radioactivity at the discharge point. Individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than  $5.8 \text{ E-}7$  (0.00000058) of a curie of Cs-137 and less than  $1.2 \text{ E-}6$  (0.0000012) of a curie of gross beta activity were discharged.

#### Environmental Protection Agency

Lancaster Water Samples: 7 samples

Period Covered: September 30 - October 6, 1984

Results: Gamma Scan Negative for reactor related radioactivity

TMI Water Samples: 7 samples

Period Covered: September 29 - October 6, 1984

Results: Gamma Scan Negative for reactor related radioactivity

#### NRC Environmental Data

The NRC operated continuous outdoor air sampler at the TMI site did not detect any reactor related radioactivity. The air sampler parameters are listed below. The analysis results were less than the lower limit of detectability of the analytical instruments: less than  $7.5 \text{ E-}14$  uCi/cc for I-131 and less than  $7.5 \text{ E-}14$  uCi/cc for Cs-137.

<u>Sample</u>	<u>Period</u>	<u>Volume</u>
HP-441	October 10 - 17, 1984	469.4 m <sup>3</sup>

APPENDIX 2

PLANT STATUS

Reactor Vessel Configuration: Reactor vessel open with modified internals indexing fixture installed

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

Available Core Cooling/Makeup Sources:

Standby pressure control (SPC) system  
Reactor coolant bleed tank (RCBT) water transfer system  
Mini decay heat removal (MDHR) system

Major Parameters as of 5:00 AM, October 19, 1984 (approximate values):

Reactor Coolant System:

Loop Temperatures:

	A	B
Cold Leg (1)	60°F	65°F
(2)	60°F	65°F

Reactor Core:

Average Incore Thermocouples:\* 95°F  
Maximum Incore Thermocouple:\* 107°F  
Decay Heat: 15 kilowatts

Reactor Building: Temperature: 65°F  
Pressure: -0.137 psig

Airborne Radionuclide Concentrations:

Tritium: 6.4 E-8 uCi/cc (sample 10/19/84)  
Particulates: 1.9 E-9 uCi/cc (sample 10/17/84)  
predominately Cs-137

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