

August 3, 1981
NRC/TMI-81-043

DISTRIBUTION
TMI Program Office/HQ r/f
TMI SITE r/f
CENTRAL FILE
NRC PDR
LOCAL PDR
Site Operations file

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

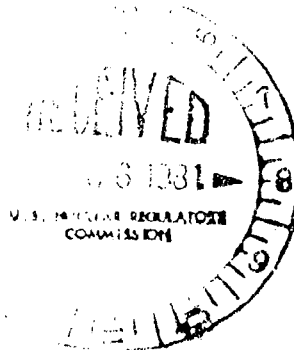
Enclosed is the status report for the period of July 26 - August 1, 1981.

ORIGINAL SIGNED BY:

Lake H. Barrett
Deputy Program Director
TMI Program Office

Enclosure: As stated

cc: EDO
OGC
Office Directors
Commissioner's Technical Assistants
NRR Division Directors
NRR A/D's
Regional Directors
IE Division Directors
TAS
EIS
TMI Program Office Staff (15)
PHS
EPA
DOE
Projects Br. #2 Chief, DRPI, RI
DRPI Chief, RI
Public Affairs, RI
T. Elsasser



8108100133 810803
PDR ADOCK 05000320
R PDR

TO: TMI:PO	TMI:PO	TMI:PO	TMI:PO	TMI:PO	TMI:PO
NAME: GKalman/Imp	RChen	MShanbary	AFasano	RBe11amy	LBarrett
DATE: 8/ /81	8/3 /81	8/3 /81	8/3 /81	8/5 /81	8/3 /81

NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of July 26 - August 1, 1981

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, July 31, 1981) (approximate values)

Average Incore Thermocouples: 120°F

Maximum Incore Thermocouple: 143°F

RCS Loop Temperatures:

	A	B
Hot Leg	119°F	122°F
Cold Leg (1)	73°F	75°F
(2)	74°F	75°F

RCS Pressure: 95 psig

Reactor Building: Temperature: 76°F

Water level: Elevation 290.9 ft. (8.4 ft. from floor)
via penetration 401 manometer

Pressure: -0.44 psig

Concentration: 4.6×10^{-6} (LLD) uCi/ml Kr-85
(Sample taken 7/23/81)

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 July 24, 1981, through July 30, 1981, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources which originated within Unit 2 contained no detectable radioactivity.

2. Environmental Protection Agency (EPA) Environmental Data. Results from EPA monitoring of the environment around the IMI site were as follows:

- The EPA measured Kr-85 concentrations (pCi/m^3) at several environmental monitoring stations and reported the following results:

<u>Location</u>	<u>July 3 - July 17, 1981</u> (pCi/m^3)
Goldsboro	21
Observation Center	27
Middletown	22
Yorkhaven	26

All of the above levels of Kr-85 are considered to be background 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 July 23, 1981, through July 30, 1981.

3. NRC Environmental Data. Results from NRC monitoring of the environment around the IMI 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-278	July 22, 1981 - July 30, 1981	<8.0 E-14	<8.0 E-14

4. Licensee Radioactive Material and Radwaste Shipments.

- On Monday, July 27, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.
- On Tuesday, July 28, 1981, 21 drums of Unit 1 compacted and solidified LSA waste were shipped to Chem-Nuclear System, Incorporated, Barnwell, South Carolina.
- On Wednesday, July 29, 1981, 42 drums and 8 metal boxes, containing Unit 1 compacted and noncompact LSA waste and 1 Unit 2 dewatered preaccident resin liner were shipped to Chem-Nuclear System, Incorporated, Barnwell, South Carolina.
- On Thursday, July 30, 1981, 81 drums containing Unit 1 and Unit 2 contaminated laundry were shipped to Tri-State Industrial Laundries, Utica, New York.

Major Activities

1. Submerged Demineralizer System (SDS). Processing of the second batch (approximately 50,000 gallons) of intermediate radioactivity water from the Auxiliary Building Reactor Coolant Bleed Tank (RCBT) was completed on July 31, 1981. Processing was interrupted a number of times because of operational problems and once because a leak developed from a gasket on a processed water storage tank. The leak was minor (approximately 1 pint of water leaked to the soil) and since the leak did not directly interfere with SDS operations, processing was resumed to another tank while the leak was repaired. Preliminary results indicate that the total curie loading after completion of the second processing batch is approximately 680 curies of Cs-137 and 340 curies of Sr-90 on the first ion exchange vessel. This loading represents greater than 99% removal of these radioactive materials from the process stream. Staging of RCBT water for the third batch (approximately 50,000 gallons) was completed over the weekend (August 1-August 2) and processing of this water started August 2, 1981.
2. Reactor Building Entry. The fifteenth entry into the Unit 2 Reactor Building has been scheduled for August 27, 1981. The licensee has tentatively proposed the following tasks for the fifteenth entry:
 - Closed circuit TV maintenance
 - Reposition refueling bridge and survey deep end of refueling pool
 - Survey Reactor Building interior with gamma spectrometer
 - Survey of air coolers
 - Barrier installation around elevation 305' floor hatch and placement of rubber mat over high beta field
 - Miscellaneous clean up work and tool removal
 - Overhead smear survey, elevation 305'
 - Floor smears, elevation 305'
 - Instrument removal for accident effects studies
 - Survey of Reactor Building sump refill pipe path
 - Reset radiation area monitor alarm
 - Video tape potential hose paths for Reactor Building decontamination

- Reactor Building sump sample near drain tank rupture disk discharge

The above list of tasks is still under review by the licensee and the NRC onsite staff.

3. Memorandum of Understanding Between USNRC and US Department of Energy.
A Memorandum of Understanding has been signed between the US Nuclear Regulatory Commission (NRC) and the US Department of Energy (DOE) concerning the removal and disposition of solid nuclear wastes from cleanup of the Three Mile Island Unit 2 Nuclear Plant. Dated July 15, 1981 the agreement specifies interagency procedures to help ensure that the TMI site does not become a long-term waste disposal facility.

Close cooperation between the two agencies is expected to ensure the following disposition of TMI-2 accident generated solid radioactive wastes which currently exist or are planned to be generated:

- EPICOR-II system wastes - forty-nine liners are on site with loadings up to 1500 curies. DOE is developing a high integrity container which may allow disposal in existing licensed commercial land burial facilities (1-2 years from now). Alternately, DOE may elect to take the liners for a research and development program for waste analysis and processing, or take possession on a reimbursable basis for storage or disposal.
- Submerged Demineralizer System wastes - DOE will take possession and retain, for research and development purposes, zeolite liners used for disposition of accident generated radioactive materials.
- Reactor fuel - DOE will analyze appropriate samples, with the remains being stored in containers in the TMI-2 spent fuel storage pool. Disposition of the balance of the damaged fuel will await resolution of the generic spent fuel storage issue.
- Transuranic contaminated waste materials - waste materials accumulated at TMI with transuranic levels above the acceptance criteria at commercial land burial facilities will be considered on a case-by-case basis by DOE. Alternatives include archiving, research and development, temporary onsite storage or DOE processing/disposal with reimbursement by the licensee.
- Makeup and purification system resins and filters - due to the high levels of contamination deposited on these filters from the accident and the generic value of analysis, DOE will take possession and retain these filters for research and development activities, or for storage and disposal on a reimbursable basis.

Any part of the memorandum of understanding may be modified with the agreement of both parties.

Future Meetings

1. On Thursday, August 6, 1981, Lake Barrett will meet with area mothers to discuss various issues related to the decontamination of TMI Unit 2.
2. On Tuesday, September 1, 1981, the Citizens Advisory Panel for the Decontamination of TMI Unit 2, will meet from 7:00 p.m. to 10:00 p.m. at the Holiday Inn, 23 South Second Street in Harrisburg, to discuss current activities at TMI. This meeting will be open for public observation.