May 23, 1986
NRC/THI-86-051

MEMORANDUM FOR: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Frank J. Miraglia, Director
Division of NRC Licensing-B

FROM: William D. Travers, Director
THI-2 Cleanup Project Directorate

SUBJECT: NRC THI-2 CLEANUP PROJECT DIRECTORATE WEEKLY STATUS REPORT FOR MAY 19 - 23, 1986

1. DEFUELING
   - Pick and place defueling activities resumed on May 23, 1986. The number of canisters transferred to the fuel pool remains at 42.
   - The second of four batches of the Reactor Coolant System (RCS) draindown and refill process was completed on May 22, 1986.
   - Batch three of the RCS draindown and refill will start late on May 23, 1986 with refill to be completed on May 24, 1986. Defueling operations will be performed on May 25, 1986 and the fourth batch of drain and refill will be performed next week.
   - Both of the defueling work platform jib cranes have been modified and returned to service.

2. PLANT STATUS
   - The reactor remains in long term cold shutdown, vented to the atmosphere. Core cooling is by natural heat loss to ambient building atmosphere. The average incore thermocouple reading is 89°F. Water visibility is approximately 1 foot.
   - The airborne radioactivity on the defueling platform is about 7.0 E-7 uCi/cc Tritium and 2.7 E-11 uCi/cc particulates, predominately Cesium-137. The platform is mounted above the modified internals indexing fixture which is mounted over the reactor vessel. These provide about 15 feet of water over the core region and 6 feet over the carousel holding the defueling canisters.

3. WASTE MANAGEMENT
   - The Submerged Demineralizer System and EPICOR II are in temporary shutdown.
4. ENVIRONMENTAL MONITORING

- Results from US Environmental Protection Agency (EPA) analysis of the NRC outdoor air sampler for the period May 8 - 15, 1986 are:

  Prefilter
  - I-131 - 2 ± 1 E-14 uCi/cc
  - Cs-137 - 1.9 ± 0.6 E-14 uCi/cc

  Charcoal Filter
  - I-131 - 8.5 ± 4.2 E-13 uCi/cc

The same sampler for May 15 - 22, 1986 resulted in concentrations of Cs-137 and I-131 below the analysis lower limit of detectability of 1.1 E-13 uCi/cc. The results for the May 8 - 15, 1986 period are consistent with those obtained from other samplers in the area and the State, and are attributed to fallout associated with releases from the Chernobyl reactor.

- EPA sample analysis results show that TMI site liquid effluents are in accordance with regulatory limits, NRC requirements, and the City of Lancaster Agreement.

- TMI water samples taken by EPA at the plant discharge (includes TMI-1 and TMI-2) to the river consisted of seven daily composite samples taken from May 3 - 10, 1986. A gamma scan detected no reactor related activity above the lower limit detectability.

- The Lancaster water sample taken at the water works intake and analyzed by EPA consisted of a seven day composited sample taken from May 4 - 10, 1986. A gamma scan detected no reactor related radioactivity.

5. AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES

- Preparations are being made for cleaning up the highly contaminated auxiliary building sump room. A gross water flush will reduce the contamination levels to provide easier access.

- Assembly has continued on the desludging system which will be used first on the neutralizer tanks and then on the auxiliary building sump.

- An acceptance testing program is being done for the rail car mounted shipping casks. The testing involves all the components of the system which removes core shipping canisters from the "A" Spent Fuel Pool and loads them into the cask. The testing program will also be conducted on the system which removes the canisters from the rail car and lifts it from the horizontal shipping position to the vertical loading position.

6. NRC EVALUATIONS IN PROGRESS

- Technical Specification Change Request number 49, and 51.
- Core Stratification Safety Evaluation (Revision 3).
- Defueling Canister Technical Evaluation Report, Revision 2.

signed by John White for:

William D. Travers
Director
TMI-2 Cleanup Project Directorate
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