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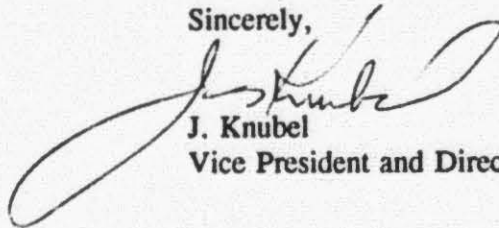
U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Dear Sir:

Three Mile Island Nuclear Station Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Biennial 10 CFR 50.59 Report

Attached is the Biennial report for Three Mile Island Nuclear Station, Unit 2 (TMI-2). This report is being submitted in accordance with TMI-2 Technical Specification 6.8.1.4 and the requirements of 10 CFR 50.59. Included in this report are descriptions of changes, tests and experiments meeting the requirements of 10 CFR 50.59 made during the previous two calendar years and a description of the changes made to the PDMS SAR during the previous two calendar years.

Sincerely,



J. Knubel
Vice President and Director, TMI

JSS

Attachment

cc: M. G. Evans - TMI Senior Resident Inspector
L. H. Thonus - TMI-2 Project Manager
T. T. Martin - Administrator, Region 1
File 96037

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TMI-2 PDMS ACTIVITIES DURING 1994 AND 1995

TMI-2 entered PDMS on December 28, 1993. During 1994 and 1995 activities at TMI-2 were limited to normal rad waste processing, routine surveillances and minor equipment repair. A limited number of modifications were made to the facility as described in the PDMS SAR to increase equipment reliability, and to simplify plant maintenance and operation. In addition, some dismantlement of non-nuclear portions of the facility was performed. The activities performed at TMI-2 during 1994 and 1995 were evaluated and determined to not involve an unreviewed safety question.

PDMS SAFETY ANALYSIS REPORT CHANGES

The PDMS Safety Analysis Report (SAR) was updated (Update 1) and submitted to the NRC in GPU Nuclear C311-95-1368 letter dated August 31, 1995. The changes made to the PDMS SAR included the deletion of the Technical Specifications and Supplements chapters, editorial and reformatting changes. Also changed were several sections of the SAR to reflect modifications of the plant configuration in regards to the electrical distribution system, the cork seam monitoring and investigation and some minor changes regarding fire protection. The changes made to the PDMS SAR during the previous two years were evaluated and determined to not involve an unreviewed safety question.

PROCEDURE CHANGES

A number of procedure changes were made consistent with the transfer of TMI-2 from Mode 3 into PDMS. In addition, some procedure changes were made in accordance with system operating changes as described in the PDMS Safety Analysis Report, Update 1 and other correspondence separately submitted to the NRC (e.g. the shutdown of the Auxiliary/Fuel Handling Building ventilation systems after completion of the special airborne monitoring study). The majority of the procedure changes were editorial in nature (reformatting, etc.) but some changes were made to system operating practices and rad waste processing.

Typical categories of procedures that were changed in 1994 and 1995 were:

Ventilation System Operation
Rad Waste Processing
Fire Protection
Containment Integrity Surveillance
Alarm Response

Changes to the procedures were made to accommodate the plant being in PDMS and were determined to not constitute an Unreviewed Safety Question.

TESTS AND EXPERIMENTS

No tests or experiments not described in the PDMS Safety Analysis Report were performed at TMI-2 during 1994 and 1995.

FACILITY MODIFICATIONS

Activities included in this section were performed without prior approval of the NRC in accordance with the provisions of 10 CFR 50.59. The facility modifications are discussed in Update 1 of the PDMS Safety Analysis Report which has been previously submitted to the NRC. The modifications listed below were evaluated and determined to not constitute an Unreviewed Safety Question. A summary of the modification and the associated safety evaluation is listed below:

MMA 3041-91-0200, Conversion of Temporary Mechanical Modifications, Lifted Leads, Electrical Jumpers or Disabled Alarms to Permanent Modifications

This modification made permanent several previously performed and evaluated facility changes initially classified as temporary including temporary mechanical modifications, lifted leads, electrical jumpers or disabled alarms. This modification did not involve any actual change in the plant configuration, it was an administrative change in the status of previously enacted physical changes.

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Safety Evaluation

The mini-mod that made permanent facility changes previously classified as temporary that involve mechanical modifications, lifted leads, electrical jumpers or disabled alarms did not pose an unreviewed safety question because each of the changes made permanent had been previously evaluated via the TMI safety evaluation process.

S-ECM 1096, Containment Airlock Doors Replacement Differential Switches

This modification replaced the differential switches for the Containment Airlock doors with an upgraded model

Safety Evaluation

This modification did not involve an unreviewed safety question because it did not modify the supporting equipment circuitry or change the function of the equipment involved. It merely involved the replacement of the subject differential switches with an upgraded model.

MMA 930268, Install Ball Float Valves in the Auxiliary/Fuel Handling Building Floor Drains

This modification installed ball float valves in selected floor drains in the Auxiliary and Fuel Handling buildings at TMI-2 to prevent the backward flow of air out of the floor drains. This was desired to prevent the spread of contamination from the floor drain system to surrounding floor areas.

Safety Evaluation

This modification did not involve an unreviewed safety question because the configuration of the floor drain system improves contamination control in the Auxiliary and Fuel Handling buildings at TMI-2.

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MMA 3570-93-0269, Modification of the Sump Drain (SD) Lines in the TMI-2 Turbine Building to Provide Freeze Protection

This modification provided freeze protection for the sump drain lines in the TMI-2 Turbine Building and re-established the connection of the TMI-1 Turbine Building sump drain to the TMI-2 sump drain.

Safety Evaluation

This modification did not involve an unreviewed safety question because the two (2) sumps had already been connected previously and the installation of freeze protection enhances system reliability by preventing unintended system rupture due to freezing from low environmental temperatures.

MMB 930261, Deactivate Unneeded Sewage Facilities/Lines for PDMS

This modification deactivated unneeded sewage facilities within the unit. The completion of this modification eliminated the need to freeze protect unneeded plumbing within the unit.

Safety Evaluation

This modification did not involve an unreviewed safety question because it eliminated the potential accidental release of sewage and water from unneeded lines in the facility that may have resulted from the freezing of the lines.

MMB 930262, Deactivate Unneeded Domestic Water Facilities/Lines for PDMS

This modification deactivated unneeded domestic water supply lines within TMI-2 in preparation for PDMS. This modification eliminated the potential flooding of the facility by eliminating unneeded domestic water supply lines.

Safety Evaluation

This modification did not involve an unreviewed safety question because it eliminated the potential accidental flooding of the facility by removing from service lines that could freeze when exposed to low temperatures.

MMA 930252, PDMS 480 Volt Electrical System Re-Power

This modification upgraded the TMI-2 480 volt portion of the electrical distribution system.

Safety Evaluation

This modification did not involve an unreviewed safety question because it upgraded the 480 volt distribution system within the unit to improve its reliability. There was no change to system function.

MMA 3814-93-0267, Isolation of Fire Service Piping to the River Water Pumphouse for PDMS

This modification isolated the Fire Service system piping that was connected to the River Water Pumphouse. The modification drained the Fire Service system piping in the pumphouse and isolated the water supply to the facility. This was necessary because the River Water Pumphouse is deactivated and is not heated during cold temperatures. Isolation of the Fire Service system piping precludes potential pipe rupture and resultant flooding from the Fire Service system.

Safety Evaluation

The modification did not involve an unreviewed safety question because there is no need for the Fire Service system piping to be connected to the yard system because the facility has been deactivated. Isolation of the Fire Service system from the River Water Pumphouse enhances reliability of the Fire Service system by precluding rupture of piping exposed to freezing temperatures.

MMA 3690-93-0273, Security Door Depower

This modification removed power from doors that previously had been controlled by Security. These doors were no longer Security barriers due to the plant status and therefore did not require power.

Safety Evaluation

The removal of power from the doors did not involve an unreviewed safety question because the doors no longer perform any safety function.

MMA 930256, PDMS Control Room Air Conditioning

This modification involved the drilling of holes in the Control Building Roof to facilitate the installation of a separate air conditioning system for the TMI-2 Control Room.

Safety Evaluation

This modification did not involve an unreviewed safety question because the design criteria for the TMI-2 Control Room is not applicable during PDMS. Therefore, the Control Building is not a safety related structure during PDMS and the drilling of the holes did not impair any safety function.

MMA 930265, Cork Seam Investigation

This modification involved the investigation of ground water leakage via the cork seam installed in the TMI-2 Auxiliary and Fuel Handling buildings. This investigation included modifying the cork seam to allow pumping of water for processing via liquid rad waste processing systems.

Safety Evaluation

This modification did not involve an unreviewed safety question because it did not impact operating equipment or create a new release pathway.

Field Change Request-C117624, PDMS 480 Volt Electrical System Repower

This modification changed the electrical distribution system for TMI-2 in PDMS by 1) providing backup power for regulated AC and DC circuits, 2) extending the TMI-1 radio communication system to TMI-2, 3) removing the TMI-2 protective relaying interlocks from the 230 kV substation breakers and 4) multiplexing the TMI-2 alarms to the TMI-1 plant process computer.

Safety Evaluation

The modification did not pose an unreviewed safety question because (1) it increased the reliability of the off-site power supply to TMI-1 by removing the possibility of opening the 230kV breakers due to misoperation of the TMI-2 protective relays, and (2) the facilitation of alarm response by having the alarms actuate in the TMI-1 Control Room in addition to the TMI-2 Control Room improves alarm response and thus enhances safety.

MDD-T1/T2-232-B, Permanent Demineralizer System

This modification provided the capability to process liquid rad waste using either a permanent or temporary demineralizer system installed in the Chemical Cleaning Building. Specifically, from a TMI-2 perspective, it provided a capability to process water from the TMI-2 Miscellaneous Holdup Tank.

Safety Evaluation

The modification did not involve an unreviewed safety question because it enhanced the processing of liquid rad waste for TMI-1 and TMI-2 and did not adversely affect nuclear safety because potential accidents were shown to be bounded by previous evaluations.