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February 26, 1988
4410-88-L-0025/0357P

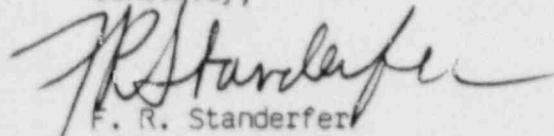
US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sirs:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Inspection Report 87-15

Inspection Report 50-320/87-15 dated September 21, 1987, identified two (2) items of non-compliance. Attached are the GPU Nuclear responses to those items. Additionally, the NRC Letter forwarding the referenced report states, "With respect to these items and the events associated with them, we are concerned that there appears to be a failure on the part of supervisory personnel to balance the pace of operations with attention to detail required to assure compliance with procedures. In your response, please describe the measures you have taken to ensure that events of this kind will not recur." The attachment describes the actions being taken by GPU Nuclear in response to this concern.

Sincerely,


F. R. Standerfer
Director, TMI-2

RJW/emf

Attachment

cc: TMI-1, NRC Resident Inspector - R. J. Conte
Regional Administrator, Region 1 - W. T. Russell
Director, TMI-2 Cleanup Project Directorate - Dr. W. D. Travers

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1. NRC NOTICE OF VIOLATION

Technical Specification 3.7.10.3 requires, in part, that when the Halon System for the cable room and transformer room is inoperable, a roving (at least one per hour) fire watch with back up fire suppression equipment be established within one hour.

Contrary to the above, the Halon System for the cable room and transformer room was inoperable from 1625 hours on November 23, 1987, to 1610 hours on November 28, 1987, without a roving fire watch being established.

This is a Severity Level IV Violation (Supplement 1).

GPU NUCLEAR RESPONSE

As described in Inspection Report 87-15 and Licensee Event Report (LER) 87-11, the Cable Room and Transformer Room Halon System was out-of-service for approximately five (5) days.

This event was initiated at 1040 hours on November 23, 1987, when the Cable Room and Transformer Room Halon System was removed from service to perform Surveillance Procedure 4224-SUR-3812.03, "Fire System Halon System Check." Switching Order No. 13662 authorized the Halon System Main/Reserve Bank Key Switch to be positioned to the main bank (i.e., out-of-service). The Action Statement of Technical Specification 3.7.10.3.a was entered requiring a roving hourly firewatch. Upon completion of the surveillance, the Utility Maintenance Foreman reported to the Shift Foreman and the Plant Operations Manager that the surveillance was completed and the system could be returned to service. Control Room Operator and Shift Foreman Log entries at 1625 hours on November 23, 1987, noted that the surveillance was completed satisfactorily, the system was returned to service, and the hourly firewatch was secured. However, Switching Order No. 13662 was not cleared and the Main/Reserve Bank Key Switch was not repositioned. This condition was discovered on November 28, 1987, during a weekly audit of the Switching and Tagging Log by the Operations Department.

LER 87-11 documented the following corrective actions taken as a result of this event:

Immediate - The Cable Room and Transformer Room Halon System was returned to service by clearing Switching Order No. 13662. The red tag was removed and the Main/Reserve Key Switch on Local Panel 727 was placed in the reserve position and pinned. This action was completed at 1610 hours on November 28, 1987.

Long-Term - The Plant Operations Manager and Shift Foreman were counseled regarding this incident. The Operations Manager placed an entry in the Night Order Book so that all shifts would be aware of this incident. In addition LER 87-11 was reviewed by all operating crews to highlight the importance of properly returning Technical Specification required systems to service.

The above actions were completed as of February 1, 1988. GPU Nuclear believes that these corrective actions provide reasonable assurance that a similar event will not occur and that full compliance has been achieved.

2. NRC NOTICE OF VIOLATION

Technical Specification 6.8.1 requires, in part, that written procedures shall be implemented covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Operating procedures are identified as applicable procedures in Appendix A of Regulatory Guide 1.33. An operating procedure, 4210-OPS-3524.05, for filling the Fuel Transfer Canal with water from the Processed Water Storage Tanks, requires that valves PW-V-069 and PW-V-098 be closed prior to opening valve FCC-V-11.

Contrary to the above, on December 24, 1987, an operating procedure (4210-OPS-3524.05) was not properly implemented in that valve FCC-V-11 was opened before valves PW-V-069 and PW-V-098 were closed, resulting in the inadvertent transfer of about 3660 gallons of water from the Borated Water Storage Tank, instead of from the Processed Water Storage Tank, to the Fuel Transfer Canal.

This is a Severity Level IV Violation (Supplement 1).

GPU NUCLEAR RESPONSE

As described in Inspection Report 87-15, on December 24, 1987, a valve line-up was performed to refill the Fuel Transfer Canal (FTC) from the Processed Water Storage Tank (PWST-2) following a letdown from the FTC to the "B" Reactor Coolant Bleed Tank. This line-up was performed in accordance with Temporary Change Notice (TCN) 4210-3524-87-47 to Operating Procedure 4210-OPS-3524.05, "Filling the FTC With Processed Water From the PWSTs." The valve line-up specified in the above procedure requires that containment isolation valves PW-V-069 and PW-V-098, which are in the Borated Water Storage Tank (BWST) flowpath, be closed prior to opening valve FCC-V-11.

However, the Shift Supervisor deviated from the sequence of the procedure by having a worker in the Reactor Building open FCC-V-11. When FCC-V-11 was opened, water from the BWST was inadvertently transferred via SF-P-2 to the FTC. Approximately 3660 gallons of borated water were transferred.

The reason the Shift Supervisor deviated from the sequence of the procedure was to expedite the operation by using a worker already in the Reactor Building in lieu of requiring another worker to make an entry into the Reactor Building at a later time. Seemingly, such an approach, had it been attended by compliance with the proper sequence, would have been found to be an efficient approach. Because the wrong source of borated water (i.e., the BWST) contained a boron concentration in compliance with the Technical Specification requirements, this event has minor safety significance.

Corrective Actions:

Immediate - Upon discovery of the rising water level in the FTC, operators isolated the flowpath and initiated an investigation to determine the cause of the unplanned transfer.

Long-Term - A Procedure Change Request (PCR) to 4210-OPS-3524.05 has been initiated to incorporate the changes in TCN 4210-3524-87-476. Though not directly contributable to this event, the PCR will revise the flowpath diagram to indicate that valves PW-V-069 and PW-V-098 are part of the BWST flowpath.

Other corrective actions to minimize the potential for similar events are described below. Upon completion of the below actions, GPU Nuclear believes that full compliance will have been achieved.

3. NRC GENERAL OBSERVATION CONCERNING CONDUCT OF OPERATIONS

The NRC Letter forwarding Inspection Report 87-15 states: "...we are concerned that there appears to be a failure on the part of supervisory personnel to balance the pace of operations with attention to detail required to assure compliance with procedures. In your response, please describe the measures you have taken to ensure that events of this kind will not recur."

GPU NUCLEAR RESPONSE

GPU Nuclear agrees that the events described in Inspection Report (IR) 87-15 were primarily due to inattention to procedural detail. Additionally, GPU Nuclear believes that the events described in the second Notice of Violation resulted from a perceived opportunity for expedience in the operation by the Shift Supervisor. However, GPU Nuclear believes that a generalization should not be drawn concerning the events described in IR 87-15 as a lack of balance between attention to detail and a desire to expedite ongoing operations. This statement is based on the following information.

- o A trend analysis of the Incident Event Reports (IERs) that occurred in 1987 was performed by the Safety Review Group (SRG). Of the 121 IERs received by SRG in 1987, only 14 IERs (i.e., approximately 12%) were received by the SRG during the inspection report period (i.e., November 26 through December 31, 1987). The 14 IERs received by the SRG during this period include the events associated with IR 87-15. The SRG report did not identify adverse trends associated with the pace of operations. However, the SRG did recommend that attention to procedural detail should receive increased emphasis by all levels of management and employees must be held accountable for procedure compliance. Additionally, the SRG report noted that pre-job planning and briefings should provide better detail of the work scope, job conditions, and contingency planning.

- o The Quality Assurance (QA) Department evaluated the concern expressed by the NRC in IR 87-15. The QA Department was not able to identify a trend associated with the pace of operation or the presence of undue pressure to increase productivity.

GPU Nuclear has a strong commitment to attention to procedural detail and performing tasks safely. Thus, as a result of the expressed NRC concern, GPU Nuclear has taken the following actions to further emphasize the importance of attention to procedural detail and to ensure a proper balance between productivity and the pace of operations.

- o The Site Operations Director (SOD) has stressed to his managers and Senior Reactor Operators (SROs) that attention to procedural detail and performing tasks safely has precedence over the pace of operations. The SOD stressed that schedules should be a means of sequencing and pacing work, but by no means should they be cause to compromise safety and procedural compliance. The department managers have been instructed to discuss this matter in some detail with their supervisory personnel. The SROs also will discuss this matter with the operating crews. These actions are expected to be completed by February 29, 1988.
- o The events associated with IR 87-15 are being discussed with Defueling Department Supervisory personnel to stress the importance of attention to procedural detail. This action is expected to be completed by March 31, 1988.
- o From January 8 to February 24, 1988, 29 briefings were conducted with a total of 507 workers, supervisors, and managers who support or perform work in TMI-2 radiological areas. Each session emphasized GPU Nuclear's commitment to procedure compliance and reminded each attendee of their individual responsibilities in this area. Briefings are scheduled for remaining workers, supervisors, and managers who support or perform work in TMI-2 radiological areas. This action is expected to be completed by March 18, 1988.

GPU Nuclear believes that the above actions should minimize the potential for recurrence of events similar to those described in IR 87-15.