GPU Nuclear

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October 4, 1994
C311-94-2137

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

Dear Sir:

Subject: Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
"Reply to a Notice of Violation" - Inspection Report 94-13

Enclosed is the GPU Nuclear reply to the Notice of Violation transmitted as an enclosure to Inspection Report 94-13. An additional enclosure includes a response which addresses the reasons why corrective actions for a previous event of a similar nature did not prevent this event from occurring.

Sincerely,

T. G. Broughton
Vice President and Director, TMI

AWM/mkk

Attachment

cc: M. G. Evans - TMI Senior Resident Inspector
R. W. Hernan - TMI-1 Senior Project Manager
T. T. Martin - Administrator, Region I

IE01
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NOTICE OF VIOLATION - 94-13-01

Technical Specification 3.3.1.3.b requires that the sodium hydroxide (NaOH) tank level shall be maintained at 8 feet +/- 6 inches lower than the borated water storage tank (BWST) level as measured by the BWST/NaOH tank differential pressure indicator.

Contrary to the above, on May 23,1994, the NaOH tank was not maintained at 8 feet +/- 6 inches lower, in that an auxiliary operator incorrectly opened four building spray valves which initiated draining of the NaOH tank to the auxiliary building sump. As a result, the differential level was out of specification, with the BWST level too high in the range of 1.197 to .797 inches.

This is a Severity level IV violation (Supplement I).

GPU NUCLEAR RESPONSE TO THE NOTICE OF VIOLATION

This Notice of Violation (NOV) is related to an event which resulted when an auxiliary operator incorrectly opened drain valves and reduced the level of the NaOH tank so that the BWST/NaOH tank differential levels were beyond the required TS limit for approximately 2 hours. The details of this event were reported in Licensee Event Report (LER) 94-003 which was submitted to the NRC on June 20, 1994.

I. Reason for the Violation

As stated in LER 94-003, a previous event which occurred on January 29, 1993, included work practices as a contributing factor. The corrective action implemented for this previous event was apparently ineffective. The previous event, bypassing of both decay heat removal river water system heat exchangers, and the event associated with this NOV have been determined to be similar in nature in that auxiliary operator performance, task supervision, and communications were less than adequate.

II. Corrective Steps That Have Been Taken and the Results Achieved

The Lead Operations Engineer reviewed management expectations including the standards outlined in Administrative Procedure (AP) 1029,"Conduct of Operations", with the personnel involved in this incident. Lessons learned from this incident were reviewed with the task supervisor prior to the subsequent performance of the quarterly ES test prerequisites. The performance of the subsequent ES test prerequisites was accomplished without incident.

III. Corrective Steps That Will Be Taken to Avoid Further Violations

The corrective actions planned as identified in LER 94-003 are included below for information purposes:

1. Review AP 1029 Section 4.5, "Shift Operations Work Controls and Practices," for revision as a result of this event.

2. Review with all operators the importance of properly controlling activities on ES systems. Review the work control practices established in AP 1029 with licensed and non-licensed operators.

3. Review/evaluate the practice of performing prerequisites for ES testing to determine the need to proceduralize this practice.

4. Ensure the work control practices established in AP 1029 Section 4.5, "Shift Operations Work Control and Practices" are appropriately incorporated into the AO and licensed operator training programs.

5. Review the GPUN self checking concept, "Be SURE", with licensed and non-licensed operators.

6. Review the computer setpoint controls for NaOH/BWST delta pressure to assure computer alarms are correctly set.

These actions will be completed by December 15, 1994.

The following corrective actions will be taken in addition to the corrective actions planned in LER 94-003 as identified above.

1. The evaluation (above planned corrective action item 3) of the practice of performing prerequisites for ES testing without proceduralized guidance is complete. Technical Specification Surveillance Procedure 1303-5.1, "RB Emergency Cooling and Isolation System Logic Channel/ Component Test", will be revised to provide for prerequisite performance prior to performance of the test. This proceduralized task will provide an additional barrier to errors in this task performance. Until the ES preparation tasks for Surveillance Procedure 1303-5.1 are proceduralized, lessons learned from this incident will be reviewed with the task supervisor prior to performance of the ES test prerequisites. Additionally, all other Operations Department performed Engineered Safeguards Technical Specification Surveillance procedures will be reviewed to determine if similar changes are required.

2. It has been determined that the supervisory oversight of the tasks was less than adequate. The supervisory function needs to ensure that auxiliary operator tasks are conducted in a safe and effective manner. The supervisory function of the in plant foreman and control room coordination were not effective in providing an additional barrier to personnel error. The in plant foreman duties and responsibilities described in Operations Memo 93-01 shall be revised to link supervisory duties with in plant operator tasks.

3. The final barrier to effective performance in relation to these events is communications. The communications between the auxiliary operator and the shift foreman were less than adequate. The auxiliary operators and control room team shall be provided training material on communications expectations with emphasis on the accountability by the control room supervision and the in plant foreman to ensure the expectation is being established and maintained.

IV. Date of Full Compliance

All corrective actions will be completed by December 15, 1994.

GPU NUCLEAR RESPONSE TO ADDITIONAL REQUEST FOR INFORMATION

Inspection report 94-13 requested GPU Nuclear to address the reasons why the corrective actions for a previous similar event (reported in LER 93-02) did not prevent this event from occurring. The applicable corrective actions for LER 93-02 are as follow:

- Each operating crew will review the event to ensure their understanding of the errors that were committed and how similar errors can be avoided. Conformance to the Administrative Procedure guidance on verbal communications, work preparation, and work control will be emphasized.

- A more comprehensive review of the human performance aspects involved in this event will be conducted to include the role of supervision, communications, and what improvements in the work practices and controls are indicated.

The corrective actions for the previous event, LER 93-002, were ineffective for three reasons. First, the shift work controls and practices were not effectively communicated to the auxiliary operators. Second, supervision did not maintain effective implementation of shift work control practices and coaching of the auxiliary operators. Operations Memo 93-01 does not provide adequate detail for the in plant foreman duties and responsibilities in order to link supervisory duties with in plant operator tasks. And third, the auxiliary operator and control room communications interface has not maintained the expected standard. The additional corrective actions described in Attachment 1 are designed to provide additional assurance that these types of events will not recur.