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Nuclear  
Operations

December 19, 1990  
NRC-90-0168

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

- References: 1) Fermi 2  
NRC Docket No. 50-341  
NRC License No. NFP-43
- 2) NRC Inspection Report No. 50-341/90013,  
dated November 19, 1990

Subject: Response to NRC Notice of Violation 90-013-03

Enclosed is Detroit Edison's response to Notice of Violation (NOV) 90-013-03. This Level IV violation concerned the automatic realignment of the High Pressure Coolant Injection pump suction from the condensate storage tank to the suppression pool during surveillance testing without control room operator cognizance. Detroit Edison's response includes: (1) the corrective actions that have been taken and the results achieved; (2) the corrective actions that will be taken to avoid further violations; and (3) the date when full compliance will be achieved. This Inspection Report 90-013 and its associated NOV have been given to licensed operators for their review.

If there are any questions related to this response, please contact Mr. Joseph Pendergast, Compliance Engineer, at (313) 586-1682.

Sincerely,

cc: A. B. Davis  
R. W. DeFayette  
W. G. Rogers  
J. F. Stang  
Region III

Statement of Violation:

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states in part that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures and drawings."

Administrative procedure NPP-OP1-05, "Shift Turnover," requires in attachments to the procedure that each oncoming Nuclear Shift Supervisor, Nuclear Assistant Shift Supervisor, Control Room Nuclear Supervising Operator, and Shift Technical Advisor walk down control room panels for, in part, identification of any off-normal conditions and status of ESF equipment before assuming the shift.

Administrative procedure NPP-OP1-05, "Shift Turnover," Attachment 12, "ESF Status Checklist," specifies in part that proper position of HPCI pump suction valve E41-F004 be verified aligned to the condensate storage tank (CST) once per shift.

Alarm Response Procedure (ARP) 2D69, "Suppression Chamber Level High," specifies in the automatic actions section that HPCI pump suction transfers from the CST to the torus at the subject level and in the subsequent action section that when torus level returns to normal, HPCI pump suction valves be realigned to their normal standby position.

Contrary to the above, on October 10, 1990, HPCI pump suction automatically realigned from the CST to the suppression pool during surveillance testing without control room operator cognizance. This abnormal configuration went unnoticed despite receipt of associated annunciator 2D69 at the time of occurrence, performance of the ESF checklist on three separate occasions after the realignment, and panel walkdowns performed during three subsequent shift turnovers. Consequently, the valves remained mispositioned for approximately 19 hours until identified by the NRC.

Discussion of Event and Root Cause:

- o During the performance of surveillance 24.408.01, "Primary Containment Monitoring System Valve Operability and Position Indication Verification Test", failure to execute established Operations Practice Standards (OPS-403 Annunciator Response) resulted in not properly acknowledging annunciator 2D69 "Suppression Chamber Level High". Consequently the HPCI pump suction transfer was not identified and corrected.

- o The shift turnover procedure requires that on-coming personnel walkdown control room panels for the status of ESF systems and any off-normal lineups before assuming the shift.

Three shift turnovers were not properly conducted in that the off-normal HPCI system alignment was not identified due to insufficient attention to detail.

- o The ESF Status Checklist is performed on a shiftly basis and documents verification that certain ESF systems are properly aligned. Following the HPCI suction automatic realignment this checklist was not properly completed by three consecutive shifts due to insufficient attention to detail in that individual suction valve positions were not adequately reviewed.

In summary, the root cause is a failure to follow established operating practice and procedure due to insufficient attention to detail by Licensed Operators.

The Corrective Actions That Have Been Taken and The Results Achieved:

Much of the corrective action has been directed towards Licensed Operator awareness and responsibility as it relates to maintaining the required level of system equipment status, attention to detail, and adherence to administrative procedures.

As a result of this event, in order to assist the shift turnover process and ensure proper implementation of the ESF status checklist, the checklist is now performed jointly by the off going and oncoming Control Room Nuclear Supervising Operator (NSO). This practice will continue until management is satisfied that adequate attention to detail is achieved.

Inspection Report 90-013 and the associated Notice of Violation were forwarded to the Licensed Operators and Shift Technical Advisors, for reading.

The Plant Manager and the Operations Superintendent met with Nuclear Shift Supervisors (NSS) and Nuclear Assistant Shift Supervisors (NASS) to discuss recent performance problems. These problems were weaknesses in the area of procedure compliance, lack of awareness of equipment status, inadequate equipment status turnover between shifts and loss of equipment configuration control. Shift Supervision has reviewed the list of examples with their shift teams.

The Operations Superintendent met with the Licensed Operators involved in the HPCI system incident on a shift team basis (NSS, NASS, Control Room NSO and the ESF Panel (603) NSO). The event was discussed and then each operator involved was counselled individually. This included the appropriate disciplinary action in accordance with company policy.

The Corrective Action That Will Be Taken to Avoid Further Violations:

Production Quality Assurance (PQA) is conducting a two month period of intensive control room monitoring in accordance with an established plan and schedule.

The PQA surveillance includes an evaluation of the following activities relevant to this violation:

- o Conduct of shift relief.
- o The Control Room environment is conducive to good work practices.
- o Control of shift testing activities is being maintained.
- o Operator knowledge of combination operating panel switches and recorders is current.
- o Operator knowledge and response to annunciators and alarms.
- o Planned events and evolutions are properly handled.
- o Licensed and support personnel are aware of the present plant conditions and performing their assigned duties.
- o Control Room staff use clear and effective oral communication.

This will provide an independent assessment of personal performance to the Plant Manager.

Date When Full Compliance Will Be Achieved:

Detroit Edison has taken adequate corrective action for this event. Future activities will continue to assess the adequacy of the corrective action.