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Docket Number 50-346

License Number NPF-3

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United States Nuclear Regulatory Commission
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Subject: Response to Inspection Report Number 50-346/92002

Gentlemen:

Toledo Edison (TE) has received Inspection Report 92002 (Log Number 1-2628) dated March 13, 1992, and provides the following response.

Violation
92002-02:

Technical Specification 6.8.1.a requires that written procedures be established, implemented and maintained covering activities recommended in Appendix A of Regulatory Guide 1.33, November 1972. Regulatory Guide 1.33, Appendix A lists procedures for operation of Containment Atmosphere Systems.

DB-OP-06417, Rev 0, CTMT Vessel Atmospheric H₂ Analyzer System operating procedure, step 3.1.4.d, requires that four (4) AC POWER circuit breakers in the rear of the Hydrogen Analyzer cabinet be closed.

Contrary to the above, on February 10, 1992, from approximately 8:52 a.m. and until 6:46 p.m., one of four AC POWER circuit breakers in the rear of the Hydrogen Analyzer was opened making the #1 Containment Hydrogen Analyzer System inoperable. The system was inoperable for almost ten (10) hours before operators observed the condition.

Response: Acceptance or Denial of the Alleged Violation

Toledo Edison acknowledges the alleged violation.

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Operating Companies
Cleveland Electric Illuminating
Toledo Edison

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Reason for the Violation

On February 10, 1992 at 6:43 p.m., with the plant in Mode 1, it was discovered that both channels of the Containment Hydrogen Analyzer were inoperable. Channel 2 of the hydrogen analyzer had been removed from service for maintenance at approximately 12:10 a.m. and the action statement for Technical Specification 3.6.4.1, which allows operation for 30 days with one inoperable hydrogen analyzer, was entered.

A review of the computer alarm records was initiated after a reactor operator noted a below scale reading on Containment Hydrogen Analyzer Channel 1. During this review, it was discovered that computer point A302, CTMT H2 Channel 1, had entered the alarm state at 8:52 a.m. The Assistant Shift Supervisor was notified of this condition at 6:30 p.m. An investigation was initiated and at 6:43 p.m. the AC input breaker associated with Channel 1 was verified to be open. Technical Specification 3.0.3 was entered at 6:43 p.m. because the action statement in Technical Specification 3.6.4.1 did not contain a provision for two inoperable channels of the hydrogen analyzer. At 6:46 p.m., the breaker was closed, a channel check was performed which demonstrated the operability of Channel 1 of the hydrogen analyzer, and Technical Specification 3.0.3 was exited.

The cause of this event was the inadvertent opening of the Channel 1 hydrogen analyzer AC input breaker while Channel 2 was removed from service. This required entry into Technical Specification 3.0.3 since both channels of the Containment Hydrogen Analyzer were out of service and the action statement in Technical Specification 3.6.4.1 did not contain a provision for two inoperable channels of the hydrogen analyzer.

The inadvertent opening of the Channel 1 hydrogen analyzer AC input breaker can most probably be attributed to a malfunction of the breaker. Maintenance personnel were at the hydrogen analyzer cabinet when the breaker opened. Both channels of the hydrogen analyzer are located in this cabinet, separated by a metal barrier. The maintenance personnel had the doors to each side of the cabinet open in order to compare the configuration of Channel 2 circuitry to that of Channel 1. During this comparison, the Channel 1 breaker box cover was loose and was slightly jarred by maintenance personnel. Due to the level of noise in the area, the tripping of the breaker would not have been audible. While opening of the breaker could be due solely to mechanical shock induced by the maintenance personnel, it is believed that their actions would not

have been sufficient to jar the breaker open. This scenario is supported by a previous incident, in January 1992, when the breaker was inexplicably found open during performance of a channel calibration prior to returning Channel 1 to service.

During the review of this event, it was determined that enhancements to the control room alarm system are warranted. Anomalies exist in the computer alarm system which contribute to the number of continuous and extraneous computer alarms. In addition, neither the screen display nor the hardcopy printout of the computer alarms provides an indication of which alarms are associated with Technical Specification equipment. This makes it more difficult for the operators to determine the appropriate action for each alarm. As a result of these problems, the confidence of operations personnel in the computer alarm system has been reduced.

Corrective Action Taken and Results Achieved

On January 16, 1992, the NRC issued Amendment 168 to the Davis-Besse Operating License. This amendment revised Technical Specification Section 3/4.6.4.1 by adding an additional action statement, applicable when both hydrogen analyzers are inoperable, which allows 72 hours to return one of the two inoperable hydrogen analyzers to operable status before initiating a plant shutdown. Although Amendment 168 was issued, Toledo Edison had not yet implemented the change. Amendment 168 was implemented on February 11, 1992.

An Operations Night Order was issued on February 14, 1992, which requires review of the computer alarms list at least twice per shift with logging of this review and actions taken in response to computer alarms.

The Channel 1 hydrogen analyzer AC input breaker was replaced on February 20, 1992. Testing was conducted on the removed breaker, however, inappropriate breaker operation could not be reproduced.

License Event Report (LER) 92-001 was issued on March 10, 1992, in accordance with 10 CFR 50.73(a)(2)(i) describing this event.

Corrective Actions to Prevent Recurrence

Due to the configuration of the hydrogen analyzer circuitry, with both channels in a single cabinet, better labeling and access control will be established to reduce the potential of inadvertent operation. The hydrogen analyzer cabinet is now locked with access

controlled by the Shift Supervisor. The ability to separately lock each channel will be provided by June 1, 1992. In addition, labeling will be enhanced to provide channel indication on each cabinet door and labels for the AC input breakers. The labeling enhancements will be completed by April 30, 1992.

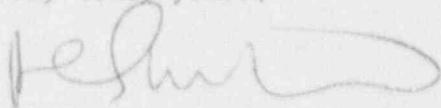
A review team has been formed to address possible improvements in the computer alarm system. The first meeting of this team was held on February 20, 1992. It is expected that this team will recommend improvements which will make identification of significant computer alarms easier for control room operators. The team is expected to provide an edited list of computer points to be monitored by the Control Room CRT by June 1, 1992. This will delete a number of unnecessary points and greatly improve on the "nuisance" factor experienced by the operators. Final results of the computer alarm system improvements are expected by December 1, 1992, for management review.

Date When Full Compliance Will Be Achieved

Full compliance with procedure DB-OP-06417, Revision 0 was achieved at 6:46 p.m. on February 10, 1992, when the AC input breaker for Channel 1 of the Containment Hydrogen Analyzer was returned to its proper position. The corrective actions to prevent recurrence noted above will be completed by December 1, 1992.

Should you have any questions or require additional information, please contact Mr. R. W. Schrauder, Manager - Nuclear Licensing, at (419) 249-2366.

Very truly yours,



NKP

cc: A. B. Davis, Regional Administrator, NRC Region III
J. B. Hopkins, NRC/NRR DE-1 Senior Project Manager
W. Levis, NRC Senior Resident Inspector
Utility Radiological Safety Board