Commonwealth Edison Company
Braidwood Generating Station
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Braceville, IL 60407-9619
Tel 815-458-2801

ComEd

May 30, 1995

Mr. James Lieberman, Director, Office of Enforcement
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Attention: Document Control Desk

Subject: Braidwood Nuclear Power Station Units 1 and 2
Reply to a Notice of Violation and Civil Penalty
Inspection Report Numbers
50-456/457/95005
NRC Docket Numbers 50-456; 50-457

References:

1) J. B. Martin letter to M. J. Wallace dated May 2, 1995, transmitting Notice of Violation from NRC Inspection Report 50-456/457/95005

2) W. L. Axelson letter to K. Kaup dated March 14, 1995, transmitting NRC Inspection Report Nos. 50-456/457/95005

3) K. L. Kofron letter to NRC dated March 17, 1995, transmitting Licensee Event Report 95-002-00 Docket No. 50-457

4) T. J. Tulon letter to NRC dated April 21, 1995, transmitting Licensee Event Report Supplement 95-002-01 Docket No. 50-457

Enclosed is Commonwealth Edison Company's (ComEd) reply to the Notice of Violation (NOV) which was transmitted with the letter identified in reference 1. The NOV cited two violations which have been classified in the aggregate as a Severity Level III violation and imposed a $100,000 civil penalty requiring a written response. ComEd's response and payment of the civil penalty are attached.

This serious violation reinforces our need to improve performance. Performance standards developed and piloted by the Braidwood Operating Department have been adopted and communicated

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across the site. These standards are further discussed in the attachment.

A supplemental LER (reference 4) was submitted after the enforcement conference detailing the additional investigation and extensive reviews performed to reconcile the train B reconnection.

The performance of personnel associated with this event was poor. My expectations for communications, a questioning attitude, and self checking were not met. Our corrective actions are intended to address the performance issues associated with this event and with overall performance at Braidwood.

If your staff has any questions or comments concerning this letter, please refer them to Kevin Bartes, Braidwood Regulatory Assurance Supervisor, at (815)458-2801, extension 2980.

Sincerely,

Karl L. Kaup
Site Vice-President
Braidwood Station

KLK/JML/mr

Attachment

cc: J. B. Martin, NRC Regional Administrator - RIII
R. R. Assa, Project Manager - NRR
S. G. Du Pont, Senior Resident Inspector
K. A. Strahm, Vice President PWR Operations

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ATTACHMENT

REPLY TO A NOTICE OF VIOLATION
INSPECTION REPORT
50-456/457/95005

VIOLATION (456/457/95005-01):

Technical Specification 3.6.4.1 requires that two independent containment hydrogen monitors shall be operable in Modes 1 and 2.

Technical Specification 3.6.4.1.a requires that with one hydrogen monitor inoperable, the Licensee must restore the inoperable monitor to operable status within 30 days or be in Hot Standby within the next 6 hours.

Technical Specification 3.6.4.1.b requires that with both hydrogen monitors inoperable, the Licensee must restore at least one monitor to operable status within 72 hours or be in at least Hot Standby within the next 6 hours.

1. Contrary to the above, from February 3 until February 15, 1995, while in Mode 1, both hydrogen monitors (trains A and B) were inoperable and action was not taken to restore at least one monitor to operable status within 72 hours or to be in at least Hot Standby within the next 6 hours.

2. Contrary to the above, from November 15, 1994, until February 3, 1995, while in Modes 1 or 2, the train A hydrogen monitor was inoperable and action was not taken to restore the train A inoperable monitor to operable status within 30 days or be in Hot Standby within the next 6 hours.

This is a Severity Level III problem (Supplement I).
Civil Penalty - $100,000.

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REASON FOR THE VIOLATION:

The causes of the aggregate violation are procedural deficiency and personnel error.

A procedural deficiency existed such that neither the disconnection portion of the Integrated Leak Rate Test (ILRT) procedure nor the reconnection portion of that same procedure provided enough information to clearly identify the location where the hydrogen monitor sensing lines were to be opened. As a result, during the restoration, the operators mistakenly assumed that the connections on the outside of the cabinet were the ones to be reconnected, and they verified that these connections were intact.

A personnel error occurred when the operators who performed the restoration portion of the ILRT did not display a questioning attitude when they attempted to reconnect the sensing lines and found them already connected.

A second personnel error occurred when the Instrument Maintenance Department (IMD) technicians performing a calibration of the train A monitor failed to notice the disconnected lines with balloons covering the open ends.

A third personnel error occurred when a Problem Identification Form (PIF) was not written to document plant deficiencies.

Contributing to the difficulty resolving the causes of this event was the inability to reconcile plant data with information obtained from interviews during the investigation process. Interviews with an IMD technician and an IMD first line supervisor (FLS) identified that they recalled finding similar balloons on the supply sensing line for another hydrogen monitor, some time in the few months prior to this event identification. A review of work records for the previous six months found one instance on December 19, 1994, where these two IMD personnel were working on Unit 2 train B hydrogen monitor. However, the plant process computer data and the Operating Control Room shiftly channel checks indicate that the train B hydrogen monitor read correctly for the entire period following the Unit 2 Fall 1994 refueling outage. Because the recollections of the IMD personnel could not be substantiated by data, reference 3 stated that additional investigation was warranted and a supplemental report would be submitted to the NRC.

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CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

Upon discovery of the disconnected sensing lines, the lines were reconnected and the operability of the associated hydrogen monitor was ensured.

An investigation of the event by the Braidwood root cause team was initiated.

A task team was formed to ensure that all other lines had been properly restored following the ILRTs. The team reviewed the ILRT data sheets for both Unit 1 and Unit 2. Those restorations that could not be verified by either indirect or direct indications were physically verified by field walk downs. No other discrepancies were noted.

The Operations, Maintenance and System Engineering departments reviewed this event with department personnel and clarified management expectations for identifying, communicating, and documenting problems of this nature.

Subsequent to the Enforcement Conference the following extensive investigations were performed and documented in reference 4 to attempt to reconcile the differences between the recollections of the IMD personnel and the plant data from the process computer:

- Shiftly/Daily log review
- Work Request review
- Computer Point Trend review

Based on the results of these reviews the recollection of the IMD personnel could not be substantiated by any objective plant data. Plant management still considers their recollection as valid. They recall finding balloons on the supply sensing lines of another hydrogen monitor some time in the previous few months (November-December 1994 time frame), and that upon discovery the IMD FLS contacted the Chemistry Department, an Operations Field Supervisor, an Operations Unit Supervisor, and System Engineering to determine if the balloons were on the lines as part of a Foreign Material Exclusion (FME) barrier for ongoing work. The IMD FLS recalls that System Engineering called him back and told him that the balloons were a part of a test (now presumed to have been the ILRT) and that they could be removed and the monitor could be reconnected. The IMD FLS directed the IMD technician to reconnect the lines and perform the work on the monitor.

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CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED (continued):

Because no concerns were apparently raised during any of the phone conversations, the IMD FLS felt that the action of reconnecting the monitor was of little consequence, and did not write a PIF to document the issue. Interviews with personnel from Operations, System Engineering, and Chemistry did not identify anyone who recalled receiving a call from the IMD FLS.

The details of this event were issued to all site personnel via a General Information Notice (GIN). This GIN, which was a required topic for all personnel, highlighted both the actual and presumed human performance problems that were concluded from this investigation, including the need for a questioning attitude when problems are identified.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATION:

The Unit 1 and Unit 2 ILRT lineup and restoration sheets for the hydrogen monitors are being revised to indicate the exact location at which the disconnections and reconnections are to be performed. A review of all ILRT lineup and restoration sheets for both units is being performed to ensure there are adequate instructions for an operator to determine where the other disconnections and reconnections are to be performed. These revisions will be completed prior to the next ILRT for each unit.

During future ILRTs, the hydrogen monitor cabinet door will be posted stating the process lines inside the cabinet are disconnected making the hydrogen monitor inoperable. The procedure controlling this activity is being revised prior to the next ILRT for each unit.

The Maintenance Department has developed a guideline for initiation of PIFs. This guideline provides a threshold for maintenance workers to determine when it is appropriate to write a PIF. Maintenance management presented this guideline to the union stewards for feedback and will implement revisions as appropriate. Once the guideline is approved, management will conduct formal department tailgate meetings to inform workers and respond to questions on the guideline. These meetings will be completed by June 30, 1995.

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CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATION (continued):

To improve human performance and improve the safety culture, management policies must be clearly communicated, well understood by all personnel, and routinely reinforced in training and in the daily conduct of business. Based on this premise, Braidwood Operating Department developed a set of standards for human performance. These standards were presented to the Operating Department during the first training cycle of 1995. Subsequently, these standards have been adopted by Maintenance and the rest of the Braidwood site.

Through self assessment, the Maintenance Department identified a need to improve upper management overview, correction, and coaching of activities and work practices in the plant to change behaviors and raise the standards of the workers. To accomplish this, Maintenance management has increased its presence in the plant observing jobs in progress and working with the first line supervisors and workers to:

- Reinforce the Braidwood Standards
- Clarify expectations to ensure people understand what is expected
- Provide coaching
- Correct improper work practices
- Recognize and reinforce positive behavior

Monthly Review Planning Meetings (RPMs) between all levels of Maintenance line management and their direct reports are used to assign tasks, evaluate results, and convey expectations. The Maintenance Department's goal is to elevate performance and work standards.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance has been achieved for the cited violations.