



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

February 27, 1992

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

Subject: Braidwood Nuclear Power Station Units 1 and 2
Response to Notice of Violation
Inspection Report Nos. 50-456/91023; 50-457/91021
NRC Docket Numbers 50-456 and 50-457

Reference: H. Miller letter to C. Reed dated January 31, 1992
transmitting NRC Inspection Report
50-456/91023; 50-457/91021

Enclosed is Commonwealth Edison Company's (CECo) response to the Notice of Violation (NOV) which was transmitted with the reference letter and Inspection Report. The NOV cited one Severity Level IV violation requiring a written response. The violation concerned the failure to terminate a Type A leak rate test when excessive leakage paths were identified. CECo's response is provided in the following attachment.

If your staff has any questions or comments concerning this letter, please refer them to Denise Saccomando, Compliance Engineer at (708) 515-7285.

Very truly yours,

P. L. Barnes for

T.J. Kovach
Nuclear Licensing Manager

Attachment

cc: A. Bert Davis, NRC Regional Administrator - RIII
R. Pulsifer, Project Manager - NRR
S. Dupont, Senior Resident Inspector-Braidwood

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ATTACHMENT A

RESPONSE TO NOTICE OF VIOLATION NRC INSPECTION REPORT 50-456/91023; 457/91021

VIOLATION

10 CFR Part 50, Appendix J, Section III.A.1.a requires, in part, that if during a Type A test potentially excessive leakage paths are identified which will interfere with satisfactory completion of the test, the Type A test shall be terminated and the leakage through such paths shall be measured using local leakage testing methods. The corrective action taken and the change in leakage rate determined from the tests and the overall integrated leakage determined from the local leak and Type A tests shall be included in the report submitted to the Commission.

Contrary to the above, on February 12 through 14, 1991, during performance of the Unit 1 Type A test, potentially excessive leakage paths were identified which interfered with satisfactory completion of the test, and the Type A test was not terminated nor was the leakage through such paths measured.

REASON FOR THE VIOLATION

On February 11, 1991, Braidwood Station initiated a Type A leak rate test for Unit 1. On February 12, the temperature stabilization period began. Approximately four hours later, it was decided to continue the stabilization period due to a computer calculation showing a high containment leakage rate. Personnel were dispatched to identify the source or sources, of the calculated leakage. Six possible leaks were identified, but the magnitude of these leaks could not be quantified; therefore, their significance could not be determined. Test personnel proceeded to isolate these potential paths. Additionally, in some instances, continuous make up air was applied to facilitate the continuance of the test. The NRC was informed prior to pressurization between the valves. Concurrently, airlock shaft seal leakage was identified and blocked. The test engineers continued to collect and analyze the data until the previously observed leakage rate had decreased. Stabilization was verified and the acceptance criteria was met. On February 13, the statistical integrated leak rate test was initiated. Within twenty-four hours, the statistical test was determined successfully completed. An induced leak rate test was performed to verify the statistical test results.

The test engineers proceeded under the assumption that they had performed a successful as found test. They were not aware of the concern that sufficient time was not allowed to quantify excessive leakage for specific paths. Additionally, Braidwood Technical Staff Surveillance, 1BwVS 6.1.2.a-1, "Unit 1 Primary Containment Type A Integrated Leakage Rate Test (ILRT)," did not address this specific issue.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Subsequent to the Unit 1 Type A test, station personnel took their experience and lessons learned from the Unit 1 test and applied them to the Unit 2 Type A test. These actions contributed significantly to the successful performance of the Unit 2 test. The systematic, methodical process used to identify, quantify, and isolate steam generator leakage during performance of the Unit 2 test was considered to be a strength by the NRC inspector in the referenced inspection report. Prior to execution of the Unit 2 Type A test in September, 1991, the Unit 2 Type A test procedure, 2BwVS 6.1.2.a-1, was revised to include an appendix on excessive leak detection and an appendix to record information regarding penetrations that had not been properly challenged. Furthermore, training was provided for the personnel conducting the Unit 2 test. This training emphasized potential leak paths, the importance of a sequence of events log and reviewed the entire test evolution. Additionally, station management provided written instructions to the ILRT Test Directors stating management's expectations for the Sequence of Events Log entries.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION

Braidwood Technical Staff Surveillance 1BwVS 6.1.2.a-1 will be revised to incorporate the procedure enhancements which were incorporated into 2BwVS 6.1.2.a-1 and proved effective during the performance of the Unit 2 Type A test.

Additionally, Braidwood Technical Staff Surveillances 1(2)BwVS 6.1.2.a-1, "Unit 1(2) Primary Containment Type A Integrated Leakage Rate Test (ILRT)," will be revised to include monitoring of plant response time between isolation of individual containment penetrations as well as guidance for identifying any change in leakage rates as a result of isolating these penetrations. Both procedures will be revised to require Sequence of Events Log entries to document activities associated with excessive leak rate quantification. Finally, a caution statement will be added to restrict the use of continuous make up air to facilitate the continuance of the test.

The procedure revisions are expected to be completed prior to the next Unit 1 Type A test which is currently scheduled for March, 1994.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance was achieved with the implementation of the corrective actions prior to the Unit 2 leak rate test.