



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

March 10, 1993

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Dresden Nuclear Power Station Units 2 and 3
Response to Notice of Violation
Inspection Report Nos. 50-237/92035;
50-249/92035

Reference: A.B. Davis letter to L. DelGeorge, dated
February 12, 1993

Enclosed is Commonwealth Edison Company's (CECo) response to the Notice of Violation (NOV) which was transmitted with the referenced letter. The NOV cited one Severity Level III violations requiring a written response. CECo's response is provided in the attachment.

If your staff has any questions or comments concerning this letter, please refer them to Denise Saccomando, Compliance Engineer at (708) 663-7285.

Sincerely,

D. Farrar
Nuclear Regulatory Services Manager

Attachment

cc: A. Bert Davis, NRC Regional Administrator - RIII
J. Stang, Project Manager - NRR
M. Leach, Senior Resident Inspector

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ATTACHMENT

REPLY TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/92035; 50-249/92035

Violation:

During an NRC inspection conducted on October 19 through December 15, 1992, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

10 CFR 50.9 requires, in part, that information provided to the Commission by a licensee be complete and accurate in all material respects.

Contrary to the above, on October 23, 1989, the licensee provided to the Commission a Unit 2 Technical Specification amendment request which was not complete and accurate in all material respects. Specifically, the amendment requested a change to the Technical Specification pressure-temperature curve for Unit 2. The information was not accurate in that it was based on material properties from a welding procedure qualification test assembly instead of the Unit 2 reactor vessel fabrication data as stated in the amendment request. The information was material because the NRC staff would not have issued the Technical Specification change had the staff known the information was inaccurate.

This is a Severity Level III violation (Supplement VII).

Reason for the Violation:

In July 1988, Generic Letter 88-11, "Radiation Embrittlement of Reactor Vessel Materials," was issued. Evaluation of the impact of the Generic Letter was assigned to a loanee (industry expert in the field of materials science on loan to CECO) in the ISI & Materials Group. In October 1988, the evaluation was completed utilizing the 1985 Summary Data Tables which were based on B & W fabrication records. The evaluation concluded that the Dresden 2 reactor vessel could be considered separately from the response the other units (Dresden 3, Quad Cities 1 and 2). This conclusion was subsequently determined to be in error. Unclear Summary Data Table information was misinterpreted by the loanee. Additionally, the ISI & Material Group Supervisor relied on the loanee's expertise and did not conduct a detailed review of the evaluation.

In November 1988, CECO responded to the Generic Letter, informing the NRC that new vessel specific Pressure/Temperature curves (PT) were being calculated. CECO contracted GE to calculate new PT curves. GE, with CECO's knowledge, used the October 1988 report along with other information for curve preparation. Based upon the October 1988 report, GE considered the Dresden 2 PT curve to be separate from the other units. GE did not verify the inputs used from the October report. CECO reviewed the methodology and data inputs supporting the PT curves, found them to be acceptable and submitted the Tech Spec Amendment.

In June 1992, while reviewing documentation relating to Generic Letter 92-01, "Reactor Vessel Structural Integrity, Rev. 1 10CFR50.54," CECO recognized that some of the GE summary data had been misunderstood, and that the input data used in 1989 for the Dresden 2 PT curve was deficient. An ENS notification was made, and Dresden immediately applied administrative control to ensure the Dresden 3 PT curves were used for operation of Unit 2.

The apparent cause of this event was the inadequate verification of the loanee's assumptions and engineering judgments which allowed an initial personnel error to be translated into an inaccurate Tech Spec.

Corrective Steps Taken and Results Achieved:

In September 1992, the Unit 2 Tech Spec Amendment request was submitted for the revised PT curves.

Corrective Steps Taken to Avoid Further Violations:

Corrections to the Summary Tables for identified discrepancies have been made.

Since 1989, Engineering and Construction has been improving the processes for the performance, review and approval of design calculations done by both CECO and its contractors.

A/E Guidebook Section 7.8 was issued in December 1989 and provides specific requirements for selection design inputs for calculations and other design products.

A CECO-GE Agreement, "CECO Engineering Evaluation Requirements Quad Cities, Dresden and LaSalle," was initiated in Spring 1992 and was approved by CECO and GE in January 1993. The specification calls for GE engineering output documents to contain certain information including definition of design assumptions and engineering judgments, a listing of input documentation and a definition of the analytical methods and techniques used to perform the evaluation.

ENC-QE-81, "Review of Assumptions and Judgements for A/E Supplied Design Evaluations," was issued in May 1991. This procedure documents the expectations for the review of assumptions and engineering judgements in A/E design evaluations.

ENC-QE-69, "Personnel Qualifications for Safety Related Calculations and/or Design Work," was issued in October 1989, to establish requirements for Engineering and Construction personnel who will prepare or review calculations.

ENC-QE-51.D, "Controlled Analysis Originated by Engineering and Construction," was revised in January 1990, to include a standardized calculation methodology and format to establish a minimum quality standard.

ENC-QE-51.M, "Nuclear Design Information transmittal", was issued in December 1992, to establish the responsibilities of quality requirements for the preparation, transmittal, documentation and control of design information, both internal and external to Nuclear Engineering Department.

TID-DS-03, "ENC Technical Information for Engineering Design Calculations" was issued in December 1992. This instruction provided guidance for the preparation of engineering design calculations prepared by CECO, or for CECO by A/Es. The instruction is applicable to the Nuclear Engineering Department and other CECO engineering departments such as Nuclear Fuel Services and the Production Services Department.

Date When Full Compliance Was Achieved:

Full compliance was achieved in September 1992, with the issuance of the Tech Spec Amendment request for the revised PT Curves.