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LWP-95-114

ComEd

December 8, 1995

Director, Office of Enforcement
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

ATTENTION: Document Control Desk

SUBJECT: Quad Cities Power Station Units 1 and 2;
NRC Docket Number 50-254 and 50-265;
NRC Inspection Report Numbers 50-254(265)/95007

Reference: William Axelson Letter to E. S. Kraft, Jr., Dated
April 14, 1995, Transmitting Notice of Violation

Enclosed is Commonwealth Edison's (ComEd's) response to the Notice of Violation transmitted with the referenced letter. The NOV cited one Severity Level IV violation concerning the failure to assure that adequate test instrumentation, consistent with applicable design documents was used in the performance of surveillance procedure QCIS 1000-3.

This letter contains the following new commitments:

- 1) Review Nuclear Engineering Department (NED) generated Quad Cities Instrument setpoint calculations and/or applicable Nuclear Design Information Transmittals (NDIT) against latest completed IM surveillances for discrepancies between M&TE used by the Instrument Maintenance (IM) to calibrate the RPS and ESF systems process instrumentation, and M&TE evaluated in the setpoint calculations. If any discrepancy exists, then resolve the concerns by evaluating if the affected instrument exceeded its TS limit. If so, initiate a Problem Identification Form (PIF), revise the affected setpoint calculation to include additional M&TE error, and/or recalibrate the affected instrument using the correct M&TE. This review will be completed by February 1, 1996 (NTS #254-100-95-00704.01).
- 2) Review remaining TS related NED generated Quad Cities Instrument setpoint calculations and/or applicable NDITs against latest completed IM surveillances for discrepancies between M&TE used by the IM's and M&TE evaluated in the setpoint calculations. If any discrepancy exists, then resolve the concerns by evaluating if the affected instrument exceeded its TS limit. If so, initiate a PIF, revise the affected setpoint calculation to include additional M&TE error, and/or recalibrate the affected instrument using the correct M&TE. The review will be completed by February 28,

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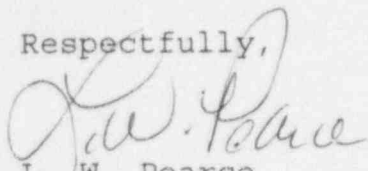
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.1996 (NTS #254-100-95-00704.02).

- 3) Develop an interim program to ensure that all future calibration of instruments in the RPS, ESF, and TS compliance systems are performed using acceptable M&TEs as accounted for in the existing NED setpoint calculations. This will be completed by December 30, 1995 (NTS #254-100-95-00704.03).
- 4) Revise applicable IM calibration procedures associated with the RPS and ESF systems, for which NED instrument setpoint calculations exist, to specify an M&TE accuracy value that IM technicians will use when selecting M&TE to perform the calibration process. This revision will be completed by February 28, 1996 (NTS #254-100-95-00704.04).
- 5) Revise all remaining IM calibration procedures associated with TS complianced systems, for which associated NED setpoint calculations exist, to specify an M&TE accuracy value that IM technicians will use when selecting M&TE to perform the calibration process. This will be completed by August 1, 1996 (NTS #254-100-95-00704.05).
- 6) Develop and implement a permanent program to ensure that all NDIT items associated with instrument setpoint calculations are incorporated into affected station procedures. This will be completed by December 31, 1996 (NTS #254-100-95-00704.06).

If there are any questions or comments concerning this letter, please refer them to Nick Chrissotimos, Regulatory Assurance at (309)654-2241, extension 3100.

Respectfully,



L. W. Pearce
Station Manager
Quad Cities Station

Attachment

cc: H. Miller, Regional Administrator, RIII
R. Pulsifer, Project Manager, NRR
C. Miller, Senior Resident Inspector, Quad Cities

VIOLATION 50-254/265-95007-04

During an NRC inspection conducted from September 2 through October 18, 1995, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600 (60 FR 34381; June 30, 1995), the violation is listed below:

Criterion XI of 10 CFR Part 50, Appendix B, requires, in part, that written test procedures incorporate the acceptance limits contained in applicable design documents and that adequate test instrumentation is used.

Contrary to the above, on May 12, 1995, the licensee failed to assure that adequate test instrumentation, consistent with applicable design documents, was used in the performance of Surveillance Procedure No. QCIS 1000-3, "Quarterly High Drywell Pressure Core Spray, LPCI, and EDG Calibration and Functional Test." (50-254/265-95007-04 (DRS))

This is considered a Severity Level IV violation (Supplement I).

REASON(S) FOR THE VIOLATION

ComEd acknowledges the violation. No mechanisms existed to control surveillance procedure information incorporated as design input information in setpoint calibrations. Setpoint calculations used surveillance procedure calibration accuracy and Measurement and Testing Equipment (M&TE) accuracy in the setpoint determination to ensure a margin of safety was built-in to prevent an instrument from exceeding its Technical Specification (TS) limit.

Calculation No. NED-I-EIC-0019 conservatively used an M&TE accuracy of +/- 0.183 inches of water column (in. WC), which was believed to be the least accurate M&TE that the instrument mechanics could select for performing surveillance procedure QCIS 1000-3, in developing the ECCS drywell high pressure setpoint. However, the procedure, QCIS 1000-3, did not specify the allowable M&TE accuracy to be used but rather stated "capable of measuring 0 to 166 in. WC". It was identified that on May 12, 1995, procedure QCIS 1000-3 was performed with a Druck pressure gauge model DPI-601 as M&TE. The Druck pressure gauge had a range of 0 to 415 in. WC and an accuracy of +/- 0.282 in. WC. This Druck pressure gauge accuracy was less conservative than the accuracy figure used in the setpoint calibration thereby creating a concern on the validity of the QCIS 1000-3 calibration results. It was determined that Quad Cities failed to ensure that adequate M&TE instrumentation was used to meet applicable design documents.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The affected instrument setpoint calculation was reperformed using the Druck pressure gauge accuracy as the M&TE accuracy. It was determined that the increased error associated with the selection of a Druck certified pressure gauge was offset by the additional margin that was added to the initial calculation to account for unknown loop uncertainties. There was still margin between the actual instrument and the TS limit. Therefore, the instruments calibrated under QCIS 1000-3 on May 12, 1995, were considered operable and the calibration results were valid.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION

- 1) Ensure Quad Cities Station has sufficient safety margin in the Reactor Protection System (RPS) and Engineering Safety Feature (ESF) systems event from possible of unanalyzed M&TEs.
 - A) Review Nuclear Engineering Department (NED) generated Quad Cities Instrument setpoint calculations and/or applicable Nuclear Design Information Transmittals (NDIT) against latest completed IM surveillances for discrepancies between M&TE used by the Instrument Maintenance (IM) to calibrate the RPS and ESF systems process instrumentation, and M&TE evaluated in the setpoint calculations. If any discrepancy exists, then resolve the concerns by evaluating if the affected instrument exceeded its TS limit. If so, initiate a Problem Identification Form (PIF), revise the affected setpoint calculation to include additional M&TE error, and/or recalibrate the affected instrument using the correct M&TE. This review will be completed by February 1, 1996 (NTS #254-100-95-00704.01).
 - B) Review remaining TS related NED generated Quad Cities Instrument setpoint calculations and/or applicable NDITs against latest completed IM surveillances for discrepancies between M&TE used by the IM's and M&TE evaluated in the setpoint calculations. If any discrepancy exists, then resolve the concerns by evaluating if the affected instrument exceeded its TS limit. If so, initiate a PIF, revise the affected setpoint calculation to include additional M&TE error, and/or recalibrate the affected instrument using the correct M&TE. The review will be completed by February 28, 1996 (NTS #254-100-95-00704.02).
- 2) Prevent usage of unanalyzed M&TEs in the calibration of RPS, ESF, and TS complianced system instruments.
 - A) Develop an interim program to ensure that all future calibration of instruments in the RPS, ESF, and TS compliance systems are performed using acceptable M&TEs

as accounted for in the existing NED setpoint calculations. This will be completed by December 30, 1995 (NTS #254-100-95-00704.03).

- B) Revise applicable IM calibration procedures associated with the RPS and ESF systems, for which NED instrument setpoint calculations exist, to specify an M&TE accuracy value that IM technicians will use when selecting M&TE to perform the calibration process. This revision will be completed by February 28, 1996 (NTS #254-100-95-00704.04).
 - C) Revise all remaining IM calibration procedures associated with TS complianced systems, for which associated NED setpoint calculations exist, to specify an M&TE accuracy value that IM technicians will use when selecting M&TE to perform the calibration process. This will be completed by August 1, 1996 (NTS #254-100-95-00704.05).
- 3) Develop and implement a permanent program to ensure that all NDIT items associated with instrument setpoint calculations are incorporated into affected station procedures. This will be completed by December 31, 1996 (NTS #254-100-95-00704.06).

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

The date when full compliance will be met is upon completion of all of the above corrective actions on December 31, 1996.