

NOTICE OF VIOLATION

Commonwealth Edison Company
Quad Cities Units 1 and 2

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30

During an NRC inspection conducted on February 7 through March 7, 1994, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

1. 10 CFR 50, Appendix B, Criterion III, "Design Control," requires in part that regulatory requirements and the design basis for systems are correctly translated into specifications and design control measures shall be provided for verifying the adequacy of design.
 - a. Contrary to the above, as discussed in Section 2.1.1 of the DET report, the licensee failed to verify that the Unit 2 diesel generator field exciter cabinet was seismically mounted as required by design specifications.
 - b. Contrary to the above, as discussed in Section 2.3.3.2 of the DET report, the licensee failed to evaluate loading time of the "B" control room air conditioner compressor onto the Unit 1/2 emergency diesel generator (EDG) in a design basis accident. Additionally, the licensee failed to validate the additional loading to the Unit 1/2 EDG.

This is a Severity Level IV Violation (Supplement I) (50-254/265-94004-13a&b(DRP)).

2. 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," requires in part that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances be promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.
 - a. Contrary to the above, as discussed in Section 2.1.2(1) of the DET report, the licensee failed to promptly identify and correct the feedwater flow nozzle instrument inaccuracies. Accurate feedwater flow is an important input parameter for on-line reactor power calculations. Failure to accurately measure reactor power is a condition adverse to quality.
 - b. Contrary to the above, valve vibration problems affecting safety system reliability, a condition adverse to quality, were not adequately evaluated to identify root cause or corrective actions. Specifically:
 - The licensee failed to correct cavitation induced vibration problems on residual heat removal (RHR) 36A/B valves.

- The licensee failed to identify the root causes of four broken yoke-to-actuator bolts on the Unit 1 RHR 36B valve.
- The licensee failed to identify the root cause for a degraded condition on the Unit 2 RHR 28B valve.
- The licensee failed to perform root cause determinations for 12 yoke-to-actuator bolts on the Unit 2 RHR 28B valve which were found loose.
- The licensee failed to evaluate the failure modes of a cracked casing and grease degradation on the Unit 2 RHR 34A valve.
- The licensee failed to identify the repetitive failures of two cracked welds at the yoke-to-bonnet joint on the Unit 1 RHR 36B valve.
- The licensee failed to evaluate repetitive failures of the Unit 2 RHR 36A valve stem.

This is a Severity Level IV violation (Supplement I) (50-254/265-94004-18a&b(DRP)).

3. Quad Cities Technical Specification 6.2.A.1 stated the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2 dated February 1978, shall be established, implemented, and maintained. Regulatory Guide 1.33 Appendix A included administrative procedures, general plant operating procedures, maintenance procedures, and procedures for startup, operation, shutdown of safety related systems, and radiation protection.
 - a. Contrary to the above, three examples of procedural non-compliance were identified in the area of plant operations:
 - On September 1, 1993, Quad Cities Operating Procedure (QCOP) 1000-5, "Shutdown Cooling Operation," was not adhered to when the operators deviated from the procedure while starting a residual heat removal (RHR) system in shutdown cooling mode on Unit 2.
 - On August 29, 1993, operators failed to follow Quad Cities Operating Annunciator Procedure (QOA) 900-55 and 56 while inerting the Unit 1 drywell.
 - On September 22, 1993, an operator failed to follow Quad Cities Operating Surveillance Procedure (QCOS) 1100-6, "Monthly SBLC Pump Test," in that the operator did not complete prerequisites of the procedure before testing the standby liquid control system.

- b. Contrary to the above, three examples of procedural inadequacies were identified in the area of plant maintenance:
- In May 1993 Work Request Q07434 failed to incorporate required torque of the indicator side cap screws for core spray check valves 9A and 9B.
 - On August 26, 1993, an incorrect weld procedure was used to make a seal weld on 2B regenerative heat exchanger outlet isolation valve resulting in the need for entries into a radiation area.
 - On August 28, 1993, maintenance personnel replaced the wrong drywell equipment drain sump pump due to erroneous plant drawings resulting in the need for multiple drywell entries.

This is a Severity Level IV Violation (Supplement I)(50-254/265-94004-22a&b(DRP)).

4. 10 CFR 50.59 requires written safety evaluations when making changes to the facility as described in the safety analysis report which provides the bases that the changes do not involve an unreviewed safety question.

Contrary to the above as discussed in Section 2.3.6.2 of the DET report, there were instances where the licensee had made changes to the facility and had not performed a 10 CFR 50.59 review or the evaluation performed was inadequate. Specific examples included:

- One of the two pumpback air compressors (described in the UFSAR) had never been operational. The licensee failed to perform a 50.59 evaluation.
- The licensee failed to perform an adequate 10 CFR 50.59 evaluation when four sheared yoke-to-actuator bolts were replaced with stronger bolts on Unit 1 RHR 36B MOV. The licensee failed to address a concern that the allowable fatigue stress for the valve yoke was exceeded by 46 percent.
- The licensee performed an inadequate 10 CFR 50.59 evaluation when replacing the 60 ft-lbf motor of the 1A RHR torus cooling and the 1A torus test return valve actuators with an 80 ft-lbf motor. The 50.59 evaluation did not consider the increased thrust capability of the actuator as a potential adverse affect on the valves.

This is a Severity Level IV Violation (Supplement I) (50-254/265-94004-54(DRP)).

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington D.C. 20555 with a copy to the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois, 60532, and a copy to the NRC Resident Inspector at the Quad Cities Nuclear Station within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or demand for information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Dated at Lisle, Illinois
this 17 day of March 1994