

NOTICE OF VIOLATION

Omaha Public Power District
Fort Calhoun Station
Fort Calhoun, Nebraska

Docket No. 50-285
License No. DPR-40
EA 86-29

During an NRC inspection conducted during the period April 29 - May 3, 1985, violations of NRC requirements were identified. The violations involved the failure to fully meet the requirements of 10 CFR 50.49 regarding environmental qualification of electrical equipment. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1985), the violations are listed below:

10 CFR 50.49 (f) requires that qualification of each component be based on testing or experience with identical equipment or with similar equipment with a supporting analysis to show that the equipment to be qualified is acceptable.

10 CFR 50.49 (k) requires that equipment previously required by the Commission to be qualified to the "Guidelines for Evaluating Environmental Qualification for Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines) need not be requalified. Section 5.1 of the DOR Guidelines requires that qualification for severe temperature, pressure and steam service conditions be based on type testing (as opposed to analysis or test combined with analysis). Section 5.2.2 of the DOR Guidelines requires that the type test only be considered valid for equipment identical in design and material construction to the test specimen, and any deviations be evaluated.

Contrary to the above, at the time of the NRC inspection:

- A. Conax Electrical Penetration Assemblies in the modified configuration installed in the plant were not qualified based on testing or experience with identical equipment, qualification was not based solely on type testing, nor did the evaluation of design differences between the plant equipment and the specimens actually tested adequately establish qualification. Further testing and/or evaluation would be required to qualify the penetration assemblies.

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

- B. States Company terminal blocks in the modified configuration installed in the plant were not qualified based on testing or experience with identical equipment or with similar equipment with a supporting analysis, qualification was not based solely on type testing, nor did the evaluation of design differences between the plant equipment and the specimens actually tested adequately establish qualification. However, these terminal blocks could be qualified without additional testing based on further analysis of available information.

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

- C. Rockbestos Pyrotrol III cable installed in the plant was not qualified based on testing or experience with identical equipment or with similar

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equipment with a supporting analysis, qualification was not based solely on type testing, nor did the evaluation of differences between the plant cable and the specimens actually tested adequately establish qualification. However, this cable could be qualified without additional testing based on further analysis of available information.

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

- D. 10 CFR 50.49 (e)(5) also requires that equipment that has reached the end-of-installed life condition for which it is qualified be replaced or refurbished at the end of this designated life unless ongoing qualification demonstrates that the item has additional life. Section 7.0 of the DOR Guidelines requires that component maintenance schedules include consideration of the specific aging characteristics of the component materials.

Contrary to the above, at the time of the NRC inspection, the licensee had not performed maintenance necessary to maintain equipment qualification for Allis-Chalmers component cooling water pump motors nor were these requirements incorporated into plant procedures. The neglected maintenance included six-month checks of the bearing lubricant as required by the qualification report. In addition, the licensee did not perform an analysis to determine the service life of one motor that was repaired with replacement windings.

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

- E. 10 CFR 50.49 (d)(1) also requires the licensee to document the performance specifications of qualified equipment under conditions existing during and following design basis accidents. Paragraph 5.2.5 of the DOR Guidelines requires that failure criteria should include instrument accuracy requirements based on the maximum error assumed in the plant safety analyses.

Contrary to the above, at the time of the NRC inspection, the licensee had not documented required accuracies for post-accident monitoring transmitters nor compared them with errors reported from qualification type tests.

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

Pursuant to the provisions of 10 CFR 2.201, Omaha Public Power District is hereby required to submit to this office within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply, including for each violation: (1) the reason for the violations if admitted, (2) the corrective steps which have been taken and the results achieved, (3) the corrective steps which will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas,
this 2nd day of March, 1986

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