

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 5, 1988

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 88-141
NAPS/JHL
Docket Nos. 50-338
50-339
License Nos. NPF-4
IPF-7


Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT NOS. 1 AND 2
NRC INSPECTION REPORT NOS. 50-338/88-02 AND 50-339/88-02
REPLY TO NOTICE OF VIOLATION

We have reviewed your letter of March 14, 1988 which referred to the inspection conducted at North Anna between January 25-29 and February 8-12, 1988 and reported in Inspection Report Nos. 50-338/88-02 and 50-339/88-02. The response to the Notice of Violation is provided in the attachment.

We have no objection to this correspondence being made a matter of public record. If you have any further questions, please contact us.

Very truly yours,


D. S. Cruden
Vice President - Nuclear

Attachment

cc: U. S. Nuclear Regulatory Commission
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. J. L. Caldwell
NRC Senior Resident Inspector
North Anna Power Station

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ATTACHMENT

REPLY TO THE NOTICE OF VIOLATION REPORTED DURING THE NRC
INSPECTION CONDUCTED BETWEEN JANUARY 25-29 AND FEBRUARY 8-12, 1988
INSPECTION REPORT NOS. 50-338/88-02 AND 50-339/88-02

NRC COMMENT

During the Nuclear Regulatory Commission (NRC) inspection conducted on January 25-29 and February 8-12, 1988, a violation of NRC requirements was identified. The violation involved a failure to perform a documented design analysis with supporting calculations. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1986), the violation is listed below:

10 CFR 50, Appendix B, Criterion III, and the licensee's accepted Quality Assurance (QA) program, Update Final Safety Analysis Report, Section 17.2.3, collectively require that design changes including field changes shall be subject to design control measures commensurate with those applied to the original design. The licensee is committed to Regulatory Guide 1.64, "Quality Assurance Requirements for the Design of Nuclear Power Plants", which endorses ANSI N45.2.11-1974, "Quality Assurance Requirements for the Design of Nuclear Power Plants". Section 4.2 of this standard states that design analyses shall be performed in a planned, controlled and correct manner and that analyses shall be sufficiently detailed as to the purpose, method, assumptions, design input, references and units. Additionally, calculations shall be identifiable.

Contrary to the above, a design change was made to pipe hanger 01-CC-R-173 and the analysis was not performed in a planned, controlled and correct manner in that a documented analysis was not performed and the supporting calculations were not identified. Additionally, the design change was not documented.

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

RESPONSE:

1. ADMISSION OR DENIAL OF THE VIOLATION:

The violation is correct as stated.

2. REASON FOR THE VIOLATION:

The violation was the result of a failure to follow procedure. During the Unit 1 refueling outage a pipe support inspection was performed and a loose nut on one bolt was noted on pipe hanger 01-CC-R-173. Efforts were made to torque the loose nut. The baseplate bolt was subsequently removed because efforts to torque the loose nut were ineffective. The

removal of one of fourteen baseplate bolts on pipe hanger 01-CC-R-173 was originally determined to be satisfactory by engineering (Site Engineering Office) based on preliminary calculations and engineering judgement that the hanger would remain structurally adequate. The removal of the baseplate bolt was performed without formal supporting documentation. The removal of the baseplate bolt, without formal supporting documentation, was contrary to the Engineering and Construction Nuclear Design Control Manual which controls the process for design calculations.

3. CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

Site Engineering Office (SEO) Calculation 1022, Revision 0 was performed to document the acceptability of the removal of the baseplate bolt on pipe hanger 01-CC-R-173. Engineering Work Request (EWR) 88-062 was prepared to control the design process and document the revisions to the controlled documents. EWR 88-062, which contains calculation SEO-1022, Revision 0 was approved by the Station Nuclear Safety and Operating Committee on February 18, 1988. EWR 88-062 concluded that the existing baseplate for pipe hanger 01-CC-R-173 was still structurally adequate with one of fourteen baseplate bolts removed.

Site Engineering Office personnel providing inservice inspection (ISI) pipe support inspection activities have been re-instructed in the requirements for completing formal supporting documentation related to design calculations.

A SEO implementing procedure has been developed to define the specific requirements for documenting activities completed in support of ISI pipe support inspection activities. The procedure assures document updates through the use of the EWR process. The procedure also requires appropriate design calculations for modifications resulting from engineering support activities related to ISI pipe support inspection activities be prepared and independently reviewed prior to performance of the modification.

A review of other ISI pipe support inspection activities was performed and no additional discrepancies related to the documentation of design calculations were found.

4. CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

No additional corrective actions are necessary.

5. THE DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance has been achieved.