VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

June 16, 1989

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

Serial No. 89-378
NAPS/DEQ/R4
Docket No. 50-338
50-339
License No. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
INSPECTION REPORT NOS. 50-338/89-08 AND 50-339/89-08
REPLY TO THE NOTICE OF VIOLATION

We have reviewed your letter of May 17, 1989 which referred to the inspection conducted at North Anna on March 21 through April 17, 1989 and April 25 through May 3, 1989 and reported in Inspection Report Nos. 50-338/89-08 and 50-339/89-08. Our responses to the Notices of Violation are attached.

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,

W. L. Stewart
Senior Vice President - Power

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

IE01
1/1

RESPONSE TO THE NOTICES OF VIOLATION REPORTED DURING THE NRC INSPECTION CONDUCTED ON MARCH 21 THROUGH APRIL 17, 1989 AND APRIL 25 THROUGH MAY 3, 1989

INSPECTION REPORT NOS. 50-338/89-08 AN0 50-339/89-08

NRC COMMENT

During the Nuclear Regulatory Commission (NRC) inspection conducted on March 21-April 17 and April 25 - May 3, 1989, 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 (1989), the violations are listed below:

A. Technical Specification 6.8.1.a requires that written procedures shall be established, implemented and maintained covering the procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Section 9 of Regulatory Guide 1.33 recommends procedures be established for maintenance on safety related equipment.

Contrary to the above, on December 5, 1988, the 480 volt breaker for the A inside recirculation spray pump (1-RS-P-1A) failed to close within the time allowed by Technical Specifications, and on December 13, 1988, the 480 volt breaker for the B quench spray pump (1-QS-P-1B) was delayed in closing due to inappropriate maintenance resulting from an inadequate maintenance procedure (EMP-P-PL-01). The procedure was inadequate in that it did not specify the type of lubricant to be used on the breakers during maintenance. Consequently, improper lubricant and solvents were used on the breakers resulting in sluggish operation of the breakers and potential inoperability of safety-related equipment.

This is a Severity Level IV violation (Supplement I) Unit 1 only.

RESPONSE TO VIOLATION A

1. ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

The violation is correct as stated.

2. REASON FOR THE VIOLATION

Maintenance procedure EMP-P-PL-01 did not specify the type of lubricant or solvents to be used on the breakers.

The sluggish operation of the breakers was due to an accumulation of dirt and lack of lubrication in the breaker mechanism. Dirt or contamination accumulation in the breaker closing mechanism resulted in greater resistance to motion and slower breaker closing.

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

After the delayed closing times were identified on 1-RS-P-1A and 1-QS-P-1B, the Unit 1 and Unit 2 Inside Recirculation Spray and Quench Spray pump breakers were inspected and a complete disassembly of the breakers was performed.

On December 9, 1989, 1-RS-P-1B also exhibited a delayed closing time. The following recommendations have been implemented as a result of a root cause analysis on 1-RS-P-1B:

1) The Unit 1 and Unit 2 Preventative Maintenance procedures for 480 and 4160 volt ITE circuit breakers have been revised to specify the type of lubricant to be used and to require that the operating mechanism be disassembled and relubricated approximately every ten years (per the Manufacturer's recommendation).

2) The Unit 1 and Unit 2 Preventative Maintenance procedures for the 480 and 4160 volt ITE breakers have been revised to require that a service representative assist and/or perform servicing of the operating mechanisms.

3) The Unit 1 safety-related and Unit 2 safety-related spare 4160 volt ITE breakers were removed, disassembled, inspected, cleaned, reassembled, and satisfactorily tested in conjunction with the manufacturer's authorized Field Project Engineer. Each breaker's operating mechanism was found to be in satisfactory condition.

4) The Unit 1 and Unit 2 480 volt emergency bus manually and electrically operated breakers were disassembled, inspected, cleaned, reassembled, and satisfactorily tested.

5) The Unit 2 safety-related spare 4160 volt ITE breakers were disassembled and inspected and the remaining Unit 2 safety-related 4160 volt ITE breakers were visually inspected. Based on these inspections, lubrication was not required.

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

The remaining Unit 1 safety-related 4160 volt ITE breakers will be visually inspected. Based on these inspections, lubrication will be performed as required.

5. THE DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

The breaker inspections on Unit 1 will be completed prior to the end of the current refueling outage.

In addition to the events described in violation A, the breaker for 1-RS-P-1A exhibited a delayed closing time on May 31, 1989. The breaker for 1-RS-P-1A was disassembled by an independent vendor and no mechanical binding/lubrication problems were found. The delayed closing time is believed to be due to problems with the control relay. The relay was replaced and the breaker now performs normally. A root cause analysis was performed and no other causes could be identified.

NRC COMMENT

B. Technical Specification 4.6.1.1.a states in part that primary containment integrity shall be demonstrated at least once per 31 days by verifying that all penetrations not capable of being closed by operable containment automatic isolation valves and required to be closed during accident conditions are closed by valve, blind flange or deactivated automatic valves secured in their positions.

Contrary to the above, the inspector discovered based on discussion with the licensee and a review of surveillance test 1-PT-60.1 and 2-PT-60.1, Containment Integrity, that, as of May 3, 1989, all capped vent and drain valves located between their main containment isolation valve and the contaiment penetration have not been verified closed every 31 days. These valves are checked in the closed position once every 18 months or during the refueling outage.

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

RESPONSE TO VIOLATION B

1. ADMISSION OR DENIAL OF THE ALLEGED VIOLATION

The violation is correct as stated.

2. REASON FOR THE VIOLATION

The violation was caused by the interpretation of Technical Specification 3.6.1.1 which only applied to isolation devices that isolated the main piping penetrations. Based on this interpretation of Technical Specification 3.6.1.1, the vent and drain valves were not considered as containment isolation valves and therefore, were not subject to periodic surveillance to verify valve position.

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

The Unit 2 Leakage Monitoring Connection (LMC) valves were verified and documented closed and capped prior to Mode 4 entry.

Periodic Test PT-60.1, Containment Integrity, is performed every 31 days to verifiy that LMC valves outside containment are closed and capped. A temporary change to PT-60.1 has been written to require the vent and drain valves located between the main containment isolation valve and the containment penetration be verified closed and capped every 31 days. A temporary change to the Containment Integrity checklist, OP-1E, has been written to require MISC-46, Check of LMC Valves Inside Containment, to be performed prior to entry into Mode 4 from a cold shutdown condition.

Verification of correct position and cap installation on containment penetration LMC valves on a 31 day frequency will ensure sufficient boundaries between the containment atmosphere and environment are maintained. Established periodic surveillance controls will verify the LMC lines remain in the desired condition when containment integrity is required. Therefore, the containment integrity verification requirements of Technical Specification 3/4.6.1.1 are satisfied.

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

The Unit 1 LMC valves will be verified and documented closed and capped prior to Mode 4 entry.

The Unit 1 procedures will be deviated with permanent changes required to accomplish the verification of the LMC valves outside containment on a 31 day frequency. The LMC valves inside containment will be verified prior to Mode 4 entry.

5. **THE DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED**

Verification of the Unit 1 LMC valves will be completed prior to Mode 4 entry following the current refueling outage.

Permanent procedure revisions will be made by October 31, 1989.