

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

June 8, 1989

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

Serial No. 89-370  
NO/GDM:pmc  
Docket Nos. 50-280  
50-281  
License Nos. DPR-32  
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY  
SURRY POWER STATION UNITS 1 AND 2  
NRC INSPECTION REPORT NOS. 50-280/89-08 AND 50-281/89-08

We have reviewed your letter of May 10, 1989 in reference to the inspection conducted at Surry Power Station from March 5, 1989 to April 1, 1989 and reported in Inspection Report Nos. 50-280/89-08 and 50-281/89-08. Our response to the violations described in the Notice of Violation is provided in the attachment.

The corrective actions outlined in the attachment include actions taken to assure plant lineup procedures are followed and to ensure an appropriate balance of operator experience is maintained on shift.

Meetings between station management and the operating shifts have been conducted to discuss the loss of component cooling to the residual heat removal heat exchanger and to reemphasize the requirement to follow plant procedures when manipulating plant components/systems. Also, the use of Operations Department standards and a Plant Status Log have been implemented to clearly identify management expectations and to control off-normal system configurations, respectively.

To balance control room operator experience on shift, a new Operations Department standard has been issued. The standard provides the conditions under which certain licensed personnel may perform their operational duties to maintain license certification, and also specifies the on shift experience level required for daily plant control room operations.

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We have no objection to this inspection report being made a matter of public disclosure.

If you have any further questions, please contact us.

Very truly yours,



W. L. Stewart  
Senior Vice President - Power

Attachments

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

Mr. W. E. Holland  
NRC Senior Resident Inspector  
Surry Power Station

**RESPONSE TO NOTICE OF VIOLATION REPORTED  
IN NRC INSPECTION REPORT NOS. 50-280/89-08 AND 50-281/89-08**

**NRC COMMENT:**

During the Nuclear Regulatory Commission (NRC) inspection conducted between the period of March 5, 1989, to April 1, 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 (1988), the violations are listed below:

- A. Technical Specification 6.4 requires that detailed written procedures with appropriate check-off lists and instructions be provided and followed for normal startup, operation, and shutdown of all systems and components involving nuclear safety of the station.

Contrary to the above, on March 17, 1989, Unit 1 reactor operators realigned the flow of the component cooling water to the residual heat removal heat exchangers without the use of a written procedure. This realignment resulted in the loss of decay heat removal from the unit for approximately 10 hours.

This violation has been categorized as a Severity Level IV Violation (Supplement 1).

- B. 10 CFR 50, Appendix B, Criterion V, as implemented by the licensee's accepted Quality Assurance Program (Virginia Power Topical Report VEP-1-5A), Section 17.2.5, requires that activities affecting quality shall be prescribed by instructions or procedures appropriate to the circumstances and shall be accomplished in accordance with these instructions or procedures.

Contrary to the above, activities affecting quality were not prescribed by instructions or procedure, or were not accomplished in accordance with procedures as evidenced by the following examples:

1. From December 23, 1988 to March 27, 1989, the operation and control of six safety injection accumulator pressure instrumentation valves were not included in instructions or procedures.
2. As of February 22, 1989, activities affecting quality were not performed according to procedures in that licensee procedure SUADM-ENG-01 (dated November 3, 1987) paragraph 6.7.1 states in part that if a technical review is required, the system or component shall not be considered operational until completion of the technical review. NRC inspections conducted between February 22 and April 1, 1989 identified four examples of work completed by Work Orders referencing Engineering Work Requests in which the component was returned to service without the required technical review being completed.

3. On March 9, 1989, work accomplished in accordance with Engineering Work Request 89-148 was inadequate in that proper instructions were not provided to ensure that appropriate disassembly of the electrical connections were accomplished based on environmental considerations. The procedure was also inadequate in ensuring that the necessary corrective actions had been performed prior to reassembly of the connection.

This violation has been categorized as a Severity Level IV Violation (Supplement 1).

RESPONSE TO NOTICE OF VIOLATION REPORTED  
IN NRC INSPECTION REPORT NOS. 50-280/89-08

Violation A.

1. Admission or Denial of the Alleged Violation:

The violation is correct as stated.

2. Reason for the Violation:

The reason for the violation was operator error due to insufficient attention to plant component status and system configurations by operations personnel. In addition, the component cooling trip valves were manipulated without the use of a procedure.

3. Corrective Actions Which Have Been Taken and the Results Achieved:

The personnel involved in this incident were disciplined. In addition, the licensed operators associated with this event were temporarily removed from their normal watch standing duties to prepare a report and recommend corrective actions to preclude a similar occurrence. These operators also held meetings with the various operations shifts to inform the other operators of the incident and the corrective actions.

Operations management has also met with the operating shifts to discuss this event and to reemphasize the requirement to utilize written procedures when manipulating any plant component/system.

A Plant Status Log has been developed and implemented to document off-normal system configurations due to testing, equipment unavailability, or other causes. This log will provide an improved source of system status information to enhance operator performance.

A new Operations Department standard was issued to establish requirements for ensuring an appropriate level of experience is maintained on shift to conduct daily plant control room operations. The standard identifies the acceptable combinations of individuals with different experience levels.

4. Corrective Actions Which Will Be Taken to Avoid Further Violations:

Operations management will continue to conduct meetings with the operating shifts on a routine basis to reinforce management expectations and operation standards, and to review operational events and examples of substandard performance.

5. The Date When Full Compliance Will Be Achieved:

Full compliance has been achieved.

RESPONSE TO NOTICE OF VIOLATION  
INSPECTION REPORT NOS. 50-280/89-08 AND 50-281/89-08

Violation B.

1. Admission or Denial of the Alleged Violation:

The violation is correct as stated.

2. Reasons for the Violation:

The reason for each violation example is as follows:

- The six safety injection accumulator pressure transmitter vent valves were relocated per a design modification. Since the valves were relocated to a portion of the system not typically under the responsibility of operations personnel, the valves were deleted from the valve operating procedure. However, operations personnel did not inform the instrumentation department of the need to include these valves in their procedures.
- The instances identified where systems have been returned to service prior to the completion of an Engineering Work Request technical review are due to inadequate procedural direction concerning when a technical review is necessary.
- The individual inspecting the motor termination was performing his first unsupervised inspection. Adequate instructions had not been provided to the individual concerning environmental considerations. Also, the process for issuing design details was inadequate in that it did not require independent review and approval.

3. Corrective Steps Which Have Been Taken And The Results Achieved:

A memorandum has been issued by the Superintendent of Operations to Operations and Instrument Department personnel establishing the policy which addresses valve operation/ownership. The Instrument Department is responsible for valve lineups of only those valves included on instrument tubing. The subject safety injection vent valves have been incorporated into an instrument department valve lineup procedure by a temporary change.

The station administrative procedure governing engineering work requests (EWR) has been revised to 1) better define the purpose of a technical review, 2) clarify when a technical review is required, and 3) strengthen the EWR work documentation control process to promote more timely initiation of technical reviews.

Subsequent inspections of motor terminations removed the Raychem sleeves regardless of the potential environment. Additional supervised inspections were completed to assure the engineers performing inspections were fully cognizant of the specific inspection requirements. The EWR used for performing termination inspections was revised to include specific as-found determination information and retermination details (including any required corrective actions) and then independently reviewed for acceptability.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations:

An administrative procedure will be developed to formalize the policy on valve operation and ownership between the Operations and Instrument Departments.

The temporary procedure change to include the safety injection vent valves in the Instrument Department's valve lineup procedure will be incorporated as a permanent change.

The details and instructions for the performance of motor termination inspections presently included in the EWR will be incorporated into the station's electrical maintenance procedures. In addition, more detailed direction for performing motor terminations will be included in the existing electrical installation specification.

Training will be provided to the appropriate personnel for performing and inspecting safety-related terminations.

5. The Date When Full Compliance Will Be Achieved:

The administrative procedure governing valve ownership will be completed by September 30, 1989.

The applicable electrical maintenance procedures and the electrical installation specification will be revised to include more detailed direction for performing/inspecting terminations by December 31, 1989.

Training of personnel on the performance/inspection of terminations will be accomplished by December 31, 1989.

A permanent change to the applicable Instrument Department valve lineup procedure to include the six safety injection vent valves will be completed by July 31, 1989.