

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

W. R. CARTWRIGHT  
VICE PRESIDENT  
NUCLEAR

March 23, 1989

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

Serial No. 89-156  
NO/GDM:pmk  
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. 50-280/88-51 AND 50-281/88-51

We have reviewed your letter of February 23, 1989 in reference to the inspection conducted at Surry Power Station from December 18, 1988 to January 28, 1989 and reported in Inspection Report Nos. 50-280/88-51 and 50-281/88-51. Our response to the violation described in the Notice of Violation is provided in the attachment.

The corrective actions outlined in the attachment include additional actions taken in response to the operational errors involved with the operation of the Residual Heat Removal and Component Cooling Systems on March 17, 1989.

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. R. Cartwright*  
W. R. Cartwright

Attachments

cc: U. S. Nuclear Regulatory Commission  
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Mr. W. E. Holland  
NRC Senior Resident Inspector  
Surry Power Station

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RESPONSE TO NOTICE OF VIOLATION REPORTED  
IN NRC INSPECTION REPORT NOS. 50-280/88-51 AND 50-281/88-51

NRC COMMENT:

During the Nuclear Regulatory Commission (NRC) inspection conducted between the period of December 18, 1988, to January 28, 1989, a violation of NRC requirements was identified. The violation examples involved the failure to follow procedures and/or failure to provide adequate procedures with regard to operations related problems during this period. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions", 10 CFR Part 2, Appendix C (1988), the violation is listed below:

Technical Specification 6.4 requires that detailed written procedures with appropriate checkoff lists and instructions shall be provided and followed for normal start up, operation, shutdown, testing, and conduct of preventative or corrective maintenance operations of all systems and components involving nuclear safety of the station.

Contrary to the above, detailed written procedures were either not followed, or were not provided in the following examples:

1. On January 11, 1989, containment isolation valve CC-TV-209A was inadvertently operated in the closed direction resulting in breakage of a mechanical stop blocking device. The operation was performed without procedure.
2. On January 11, 1989, the Unit 2 cavity area was inadvertently flooded due to failure to follow operational procedure 14.3 with regard to system realignment.
3. On January 13, 1989, one service water drain valve was found to be shut when it was tagged open in accordance with station procedure. On January 17, 1989, three service water drain valves were found to be closed when they were tagged open in accordance with station procedure.
4. On January 15, 1989, containment isolation valve CC-TV-109A was inadvertently operated in the closed direction resulting in breakage of a mechanical stop blocking device. The operation was performed in accordance with a procedure which was not appropriate for the evolution.
5. On January 19, 1989, the Unit 1 "A" charging pump was started and operated for several minutes without proper system alignment for operation (recirculation flow path isolation valve shut). The operational procedure requires proper system alignment prior to pump start.
6. On January 21, 1989, the Unit 1 containment vacuum pump was started with the suction flow path to the pump blocked. Operators subsequently determined that the containment suction line had a blank installed. Operational procedure requires proper system alignment prior to pump start.

This is a Severity Level IV Violation (Supplement 1).

RESPONSE TO NOTICE OF VIOLATION  
REPORTED IN NRC INSPECTION REPORT NOS. 50-280/88-51 AND 50-281/88-51

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 inadequate procedures and insufficient attention to plant component status and system configurations by operations personnel. In addition, there was an apparent misunderstanding of the importance of the danger tagging process on the part of some station personnel or contractors.

The incident identified in item 6 of the violation concerning the installed blank in the containment vacuum pump suction line has been thoroughly reviewed. Verification of installation and removal of the blank was properly performed and documented by operations personnel; however, the blank was apparently reinstalled at a later date without proper documentation.

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

Station management has conducted face-to-face meetings with operations personnel to reemphasize the importance of high work standards, adherence to procedures, and personal responsibility for attention to detail. In addition, station employees and contractors have been reinstructed in the significance of danger tagging and the importance of not manipulating or otherwise disturbing tagged components. Management also reemphasized that operators are the only station personnel authorized to manipulate a component when it is in service.

The operations department has implemented an accountability process which temporarily removes an operator from his watchstanding duties if he has been involved in an operational incident. The operator is not reinstated to his normal duties until he has prepared a thorough report of the incident, including recommendations for programmatic corrective actions, and the report is presented to and accepted by station management.

The two examples noted in the violation (Items 1 and 4) that concerned breakage of mechanical stop blocking devices when two trip valves were inadvertently closed were due to an inadequate procedure. A temporary operating procedure was written to address the installation and removal of the blocking devices to preclude a similar occurrence.

Previous operations practice allowed the removal of blank flanges from system piping by rotating the blank out of the flow stream and resecuring it to the pipe flange by one or more of the flange bolts. This method ensured the blank was locally available for future use. As a result of the incident discussed in item 6 of the violation, however, blank flanges will now be completely removed from the system in which they are installed and placed in storage. A visual verification of blank removal will also be performed.

The conditions under which certain licensed personnel may perform their operational duties to maintain license certification have been revised. Individuals obtaining license certification will not be allowed to relieve similar licensed individuals during shift changes. These individuals will typically be assigned to one particular unit during their seven days on an operating shift.

4. Corrective Steps 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 operating standards including review of any applicable examples of substandard performance.

The temporary operating procedure for the installation and removal of mechanical stop blocking devices for the subject component cooling water (CCW) trip valves will be changed into a permanent station procedure.

In addition, an Abnormal Plant Status Log is being developed 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. This document when fully implemented will replace the existing Balance of Plant Log.

As an enhancement, the Superintendent of Operations will also issue operations standards that will document management expectations regarding attention to detail and plant ownership. The issuance of the standards will be an ongoing program and will also address topical concerns specific to plant operations and personnel performance as appropriate. A standard will be issued that will specifically address the removal of blanks.

5. The Date When Full Compliance Will Be Achieved:

The issuance of operating standards documenting management expectations of the operations staff will be an ongoing program to be updated with topical concerns as appropriate. The standard specifically addressing the removal of blank flanges will be issued by April 30, 1989.

The Abnormal Plant Status Log will be developed and implemented by operations personnel by April 15, 1989.

The permanent station procedure for the installation/removal of the mechanical blocks for the CCW trip valves (CC-TV-1/209A,B) will be issued by May 31, 1989.