

VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

September 6, 1991

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

Serial No. 91-457
SPS/RJS R3c
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
REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORT NOS. 50-280/91-18 AND 50-281/91-18

We have reviewed your Inspection Report Nos. 50-280/91-18 and 50-281/91-18 dated July 31, 1991 and the enclosed Notice of Violation. The violation identified a failure to provide and follow procedures for normal startup and operation of a unit, specifically, the reactor coolant system filling procedure, 2-OP-5.1.1, and the reactor coolant system venting procedure, 2-OP-5.1.2. Our reply to the Notice of Violation is provided as an attachment to this letter. While we do not agree with the description of the violation for each example identified, we understand the basic issues and have addressed them in our response.

You also expressed concern over the implementation of our new policies associated with procedural adherence and the adequacy of an upgraded procedure. As discussed in the attached response, our policies associated with procedural adherence are not new. Strict procedural compliance continues to be stressed in the various training programs, in Employee Update Meetings, and in the day-to-day monitoring of station activities. We are currently implementing a significant procedure upgrade program, and in this instance, the required level of compliance with a procedure change was not achieved.

With regard to the adequacy of the procedures cited in the Notice of Violation, these procedures had not yet been upgraded and thus had not yet benefited from the enhanced human factors review that is a part of the upgrade program. As of August 16, 1991, the procedure upgrade program was 21 percent complete with operations department procedure upgrades 28 percent complete. Although procedures 2-OP-5.1.1 and 2-OP-5.1.2 provide direction to safely fill and vent the reactor coolant system as currently written, our procedure upgrade program should further enhance their successful performance.

110049

9109110201 910906
PDR ADOCK 05000280
Q PDR

IEO/ '11

Thus, we believe that our procedures and policy of strict procedure compliance have and will continue to provide adequate control of plant evolutions. Should you have any questions concerning our response, please contact us. We have no objection to this reply being disclosed to the public.

Very truly yours,



W. L. Stewart
Senior Vice President Nuclear

Attachment

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

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION CONDUCTED JUNE 9 - JULY 6, 1991
SURRY POWER STATION UNITS 1 AND 2
INSPECTION REPORT NOS. 50-280/91-18 AND 50-281/91-18

NRC COMMENT:

During a NRC inspection conducted on June 9 - July 6, 1991, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1991), the violation is listed below:

Technical Specifications 6.4.A and 6.4.D requires, in part, that detailed written procedures with appropriate check-off lists and instructions be provided for normal startup and operation of a unit and also that these procedures shall be followed.

Contrary to the above, procedures for normal startup and operation of a unit were not provided and followed, as evidenced by the following examples:

1. Procedure 2-OP-5.1.1, Filling the Reactor Coolant System, dated May 10, 1991, was not followed during loop filling on June 28, 1991, in that step 5.11.3, associated with marking source range indication every 15 and 30 minutes was not being performed.
2. Procedure 2-OP-5.1.1, steps 5.2.1 through 5.2.6 were not adequate, in that a caution associated with having the loop stop valves open during reactor coolant system filling is circumvented by the procedure option to annotate "if closed, then enter N/A" for steps 5.2.1 through 5.2.6, which verify that the valves are open prior to filling.
3. Procedure 2-OP-5.1.2, Venting the Reactor Coolant System, dated May 10, 1991, was not properly implemented, in that, on July 1, 1991, precautions associated with clearing reactor coolant pump red tags and starting a second reactor coolant pump with one pump already running during solid plant operations were not adhered to.

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

REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION CONDUCTED JUNE 9 - JULY 6, 1991
SURRY POWER STATION UNITS 1 AND 2
INSPECTION REPORT NOS. 50-280/91-18 AND 50-281/91-18

(1) **Reason for the Violation, or, if Contested, the Basis for Disputing the Violation**

The violation is correct in that it serves to point out weaknesses in existing non-upgraded procedures and guidance on transitions between existing and upgraded procedures. The inspector has established that procedures as written require plant specific training to be effectively implemented. We have reviewed each of the examples cited and have provided the reasons or explanations for each.

Example 1:

Marking source range indication every 15 and 30 minutes as required by Step 5.11.3 of 2-OP-5.1.1, Filling the Reactor Coolant System, was not performed due to operator oversight of a requirement in a recently revised procedure. It is our policy and expectation that personnel using procedures will familiarize themselves with the contents of the procedure prior to use. Strict compliance is expected and would have prevented this occurrence. It was noted that while the chart was not being marked in strict conformance with procedure, the chart was being monitored. Other indications of reactivity addition, such as source range level, startup rate, and audible count rate were available to operators and were also being monitored.

Example 2:

Steps 5.2.1 through 5.2.6 of 2-OP-5.1.1 are written to determine the position of the loop isolation valves. If any of these valves are found shut, the shift supervisor is to be notified. No instructions were provided nor were intended to be provided for opening the loop isolation valves at this point in the procedure. Section 5.14 of the procedure is the section intended to assure that the system contains adequate water to fill the loop and that the desired boron concentration is maintained. In this section, Step 5.14.4 contains instructions for opening the valves. No violation of procedures occurred, and personnel operated the plant in a safe and controlled manner.

Example 3:

Procedure 2-OP-5.1.2, Venting the Reactor Coolant System, prohibits starting a second RCP in a solid plant condition with one already running. Since the RCS had been vented during a previous startup only a few days earlier, the full venting procedure was deemed to be unnecessary. Therefore, the operators proceeded to Procedure 2-GOP-1.1, Unit Startup, which permitted an additional RCP to be started to heat up the RCS. No violation of procedures occurred, and

personnel operated the plant in a safe and controlled manner. However, a conflict does exist between the procedure that was not upgraded (2-OP-5.1.2) and the upgraded procedure (2-GOP-1.1) with respect to the running of two reactor coolant pumps in a solid plant condition. Therefore, the example indicates a weakness in administrative guidance on how to properly transition between such procedures.

(2) **Corrective Steps Which Have Been Taken and the Results Achieved**

Example 1:

Operations Department management reviewed this event with the shift personnel involved and the failure to achieve strict compliance with the procedure was discussed.

Example 3:

Engineering performed a review to verify that running two reactor coolant pumps in a solid plant condition was acceptable. The limiting parameter is the difference between primary system and steam generator secondary side temperature as addressed in Technical Specifications. The engineering study indicated that, with one pump running in a solid plant condition, only a slight pressure transient would result from starting a second reactor coolant pump.

(3) **Corrective Steps That Will be Taken to Avoid Further Violations**

Based upon our review of these three examples, we have concluded that the plant was operated in a controlled and safe manner. Corrective steps for Example 1 and other actions being taken to enhance procedural compliance are discussed below.

Example 1:

A discussion of this event will be placed in the required reading program for the operating shifts not directly involved with this event. We will continue to emphasize our philosophy of strict adherence to procedures and self checking in our training programs and in our day-to-day monitoring of station activities.

Example 2 and 3:

The ongoing procedure upgrade program will correct human factor concerns such as identified in Example 2. The upgrade program will also provide enhanced direction on the preconditions necessary to perform specific evolutions such as those questioned in Example 3. The specific filling and venting procedure concerns will be addressed prior to upgrading to improve human factors aspects of the procedures. Procedure 2-GOP-1.1 will also be enhanced to provide more specific direction for starting reactor coolant pumps.

In addition, the Station Manager will issue a memorandum to station personnel to enhance and clarify policies for making procedure transitions between nonupgraded and upgraded procedures. The memorandum will also review policy for marking procedure steps "not applicable."

(4) **The Date When Full Compliance Will be Achieved**

Full compliance has been achieved.