

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 23, 1988

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

Serial No. 88-592
NO/GDM:pms
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

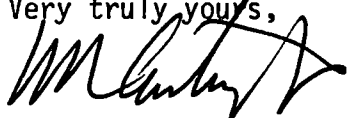
VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
NRC INSPECTION REPORT NOS. 50-280/88-29 AND 50-281/88-29

We have reviewed your letter of August 24, 1988 in reference to the inspection conducted at Surry Power Station on July 18-22, 1988 and reported in Inspection Report Nos. 50-280/88-29 and 50-281/88-29. Our response to the Notice of Violation is provided in the attachment.

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
Vice President - Nuclear

Attachment

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

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RESPONSE TO THE NOTICE OF VIOLATION ITEM
REPORTED DURING THE NRC INSPECTION
ON JULY 18-22, 1988
INSPECTION REPORT NOS. 50-280/88-29 AND 50-281/88-29

NRC COMMENT

During the Nuclear Regulatory Commission (NRC) inspection conducted on July 18-22, 1988, 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 (1987), the violation is listed below:

Technical Specification 6.4.A.2 requires procedures for calibration and testing of systems involving the nuclear safety of the station. Technical Specification 3.1.C.2 limits the leakage rate of the reactor coolant system from other than controlled sources to less than one gallon per minute.

Contrary to the above, procedures 1 and 2-PT-10, Reactor Coolant Leakage, issued for use in October 1987, contained errors in constants used to correct for changes in pressurizer level and reactor coolant system temperature during the test. These errors could have led to accepting an unacceptable result.

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

RESPONSE

1. Admission or Denial of the Alleged Violation:

The violation is correct as stated.

2. Reason for the Violation:

The constant used to correct for changes in average Reactor Coolant System (RCS) temperature during RCS leakage measurements assumed linearity between two average temperatures and their respective pressurizer levels. As such, it did not properly account for variations in overall RCS volume due to changes in average RCS temperature. Furthermore, the distance between pressurizer level taps was incorrectly specified.

In addition, the correction factors used in the calculation of RCS leakage failed to correct for density differences between the pressurizer and volume control tank.

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

Instructions were provided to the control room operators to maintain constant RCS temperature and pressurizer level when performing the RCS leak rate test. This constraint ensures conservatism of the test results. If temperature and pressurizer level fluctuations occur during performance of the test, the procedure is considered invalid and must be repeated. These measures will remain in effect until the periodic test (PT-10) for calculating the RCS leak rate is revised to include the appropriate correction factors.

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

The periodic test procedure (PT-10) for determining the RCS leak rate is being revised to include correction factors for changes in average RCS temperature. This revision will accurately compensate for changes in overall RCS volume due to variation in average RCS temperature.

An addendum to the engineering work sheet will be prepared to document the evaluation of the distance between the pressurizer level taps and the corrected distance will then be factored into future leakage calculations.

In addition, the PT will be revised to utilize a mass basis for calculating the RCS leak rate. This will eliminate the need to correct for density differences in the pressurizer and volume control tank. The final leak rate results will be converted to a volumetric value for consistency with the Technical Specifications.

5. The Date When Full Compliance Will Be Achieved:

Full compliance will be achieved prior to the startup of either unit from its current outage.