VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

March 30, 2012

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Serial No. 12-155
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Docket Nos. 50-280
50-281
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Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
ANNUAL CHANGES, TESTS, AND EXPERIMENTS REPORT
REGULATORY COMMITMENT EVALUATION REPORT

Virginia Electric and Power Company submits the annual report of Changes, Tests, and Experiments pursuant to 10 CFR 50.59(d)(2) and Regulatory Commitment Changes identified in Commitment Evaluation Summaries implemented at Surry Power Station during 2011. Attachment 1 provides a description and summary of the Regulatory Evaluations. There were no Regulatory Commitment Changes in 2011.

Should you have any questions regarding this report, please do not hesitate to contact me at (757) 365-2725.

Very truly yours,

B. A. Garber,
Supervisor Licensing
Surry Power Station

Attachment

Commitments made in this letter: None.

cc: United States Nuclear Regulatory Commission, Region II
Marquis One Tower, Suite 1200
245 Peachtree Center Avenue, NE
Atlanta, Georgia 30303-1257

NRC Senior Resident Inspector
Surry Power Station

IE47
NRR

Attachment 1

Surry Units 1 & 2

2011 - 10 CFR 50.59 Changes, Tests and Experiments

11-001 Regulatory Evaluation 05/28/11

Description: Regulatory Evaluation 11-001 reviewed the proposed activity that would cycle a Residual Heat Removal (RHR) valve in an attempt to seat the valve and reduce leakage.

Summary: During Unit 2 startup, RHR valve 2-RH-MOV-2720B was isolated but continued to leak past the seat. The proposed activity was to cycle the valve in an attempt to reseat the valve and isolate the leak. The RHR system has a rating of over 650 psig at 450°F. During performance of the activity, the reactor coolant system will be limited to 450°F and 500 psig. In addition, valve 2-RH-HCV-2142 was available to reduce RHR pressure to normal letdown. Relief valve 2-RH-RV-2721 was also available to reduce RHR pressure. The evaluation concluded that the RHR boundary will not be challenged by this activity.

11-002 Regulatory Evaluation 12/01/11

Description: Regulatory Evaluation 11-002 reviewed a proposed change to the UFSAR which would update the design basis radiological accident analyses for the fuel handling accident (FHA) and locked rotor accident (LRA) to be consistent with the most recent radiological analyses.

Summary:
The proposed changes to the FHA accident analysis were:

1) The reduction of the atmospheric dispersion factor for the exclusion area boundary (EAB), based upon a change in the definition of the EAB from a circle around Unit 1 containment to the site property line,
2) The change in the use of LOCADOSE computer code from version 4.1a to 7.0,
3) The change in the LOCADOSE computer code to track daughter isotopes and their radiation emissions, and
4) The increase in the radial peaking factor from 1.62 to 1.70

The only proposed change to the LRA accident analysis was to increase in the radial peaking factor from 1.62 to 1.70.

The use of the lower EAB atmospheric dispersion factor in the FHA analysis was previously approved by the NRC and was not a departure from the method of evaluation. The use of LOCADOSE 7.0 in the FHA analysis and the tracking of radiation emissions from daughter products resulted in no change to the calculated dose consequences. Therefore, these changes to elements of a method of evaluation resulted in consequences that were essentially the same and neither constitute a departure from a method of evaluation. The increased radial peaking factor caused less than a minimal increase in consequences.