

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

March 27, 2003

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Serial No.: 03-195  
NL&OS/GDM R0  
Docket No.: 50-281  
License No.: DPR-37

Gentlemen:

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**SURRY POWER STATION UNIT 2**  
**EVALUATION OF SURRY UNIT 2 CAPSULE Y DATA**

10 CFR 50 Appendix H, "Reactor Vessel Material Surveillance Program Requirements," requires reactor vessel materials surveillance capsule analysis results to be submitted to the NRC within one year of the date of capsule withdrawal. Pursuant to 10 CFR 50 Appendix H, Virginia Electric and Power Company (Dominion) is providing an analysis report for Surry Unit 2 Reactor Vessel Materials Surveillance Capsule Y. This surveillance capsule was withdrawn on March 31, 2002 during the Surry Unit 2 Cycle 17/18 refueling outage. This Capsule Y analysis report is provided in Attachment 1 to this letter.

Attachment 2 presents revised Surry Unit 2 data tables for inclusion in the NRC's Reactor Vessel Integrity Database (RVID), as well as an evaluation of the changes relative to the previous RVID update for Surry Unit 2. The evaluation assesses the impact of the Surry Unit 2 Capsule Y surveillance data on the currently applicable (a) reactor coolant system (RCS) pressure/temperature (P/T) limit curves, (b) the associated Low Temperature Overpressure Protection System (LTOPS) setpoints and enabling temperature, (c) 10 CFR 50.61 Pressurized Thermal Shock (PTS) screening calculations, and (d) Charpy Upper Shelf Energy (CvUSE) values. As documented in the evaluation, the PTS screening calculation results for Surry Unit 2 continue to meet the applicable screening criteria. Further, the RTNDT value used in the development of the current Surry Unit 2 Technical Specifications P/T limits, LTOPS setpoints, and LTOPS enabling temperature remains valid and conservative. Finally, calculated CvUSE values continue to meet the 10CFR50 Appendix G 50 ft-lb criterion.

If you have any questions or require additional information, please contact us.

Very truly yours,



Leslie N. Hartz  
Vice President - Nuclear Engineering

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Commitments made in this letter: None

Attachments:

- 1) WCAP-16001, Revision 0, "Analysis of Capsule Y from Dominion Surry Unit 2 Reactor Vessel Radiation Surveillance Program," dated February 2003.
- 2) Evaluation of Application of Surry Unit 2 Capsule Y Surveillance Data to Surry Unit 2 Lower Shell Plate Material C4339-1 and Intermediate to Lower Shell Circumferential Weld Material R3008

cc: U. S. Nuclear Regulatory Commission  
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NRC Senior Resident Inspector  
Surry Power Station