

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

June 21, 2006

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Serial No. 06-503  
NL&OS/PRW R1  
Docket Nos. 50-280/281  
License Nos. DPR-32/37

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**SURRY POWER STATION UNITS 1 AND 2**  
**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI)**  
**ON PROPOSED TECHNICAL SPECIFICATION CHANGE TO ADDRESS**  
**GENERIC SAFETY ISSUE 191 (TAC NOS. MC9724 AND MC9725)**

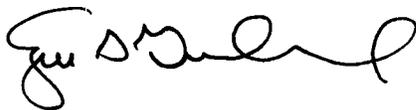
In a letter dated January 31, 2006 (Serial No. 06-014), Virginia Electric and Power Company (Dominion) requested an amendment to Operating License Numbers DPR-32 and DPR-37 in the form of changes to the Technical Specifications (TS) for Surry Power Station Units 1 and 2 (Surry). The proposed change was submitted as part of Dominion's resolution to NRC Generic Safety Issue 191 (GSI-191).

In a letter dated June 9, 2006, the NRC provided a request for additional information (RAI) in order to complete its review of Dominion's amendment request.

The response to the RAI is provided in the attachment to this letter.

Should you have any questions regarding the response, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,



Eugene S. Grecheck  
Vice President – Nuclear Support Services

Attachment

Commitments in this letter: None

cc: U. S. Nuclear Regulatory Commission  
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**ATTACHMENT**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**  
**PROPOSED TECHNICAL SPECIFICATION CHANGE TO ADDRESS**  
**GENERIC SAFETY ISSUE 191**

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**SURRY POWER STATION**

In a letter dated January 31, 2006 (Serial No. 06-014), Virginia Electric and Power Company (Dominion) requested an amendment to Operating License Numbers DPR-32 and DPR-37 in the form of changes to the Technical Specifications (TS) for Surry Power Station Units 1 and 2 (Surry). The proposed change was submitted as part of Dominion's resolution to NRC Generic Safety Issue 191 (GSI-191). In a letter dated June 9, 2006, the NRC provided a request for additional information (RAI) in order to complete its review of Dominion's amendment request. The response to the RAI is provided below.

### **NRC QUESTION**

By letter dated January 31, 2006, Virginia Electric and Power Company (VEPCO) submitted proposed license amendments to address Generic Safety Issue 191 at Surry Power Station, Unit Nos. 1 and 2. VEPCO is requested to respond to the following questions.

1. Please confirm that the exclusion area boundary (EAB), low population zone (LPZ), and control room atmospheric dispersion factors (X/Q) listed below are those used in the loss-of-coolant accident dose assessment in support of the proposed TS change to address Generic Safety Issue 191:

#### **EAB and LPZ X/Q Values:**

2 hrs	$1.76 \times 10^{-3} \text{ sec/m}^3$
0 – 8 hrs	$2.01 \times 10^{-4} \text{ sec/m}^3$
8 – 24 hrs	$1.22 \times 10^{-4} \text{ sec/m}^3$
1 – 4 days	$4.18 \times 10^{-5} \text{ sec/m}^3$
4 – 30 days	$8.94 \times 10^{-5} \text{ sec/m}^3$

#### **Control Room X/Q Values:**

Unit 1 Containment	0 - 2 hrs	$6.74 \times 10^{-4} \text{ sec/m}^3$
(to turbine building fresh air	2 - 8 hrs	$5.18 \times 10^{-4} \text{ sec/m}^3$
air intake #1)	8 – 24 hrs	$2.22 \times 10^{-4} \text{ sec/m}^3$
	1 – 4 days	$1.66 \times 10^{-4} \text{ sec/m}^3$
	4 – 30 days	$1.20 \times 10^{-4} \text{ sec/m}^3$

### **DOMINION RESPONSE**

The X/Q values listed above are the control room X/Q values for the containment release and the LPZ X/Q values that were used in support of the TS change to address Generic Safety Issue 191. The X/Q value used to model the EAB was  $1.79 \times 10^{-3} \text{ sec/m}^3$ . Subsequent analysis, documented in a letter dated May 23, 2006 (Serial No. 06-200A), determined that  $1.79 \times 10^{-3} \text{ sec/m}^3$  is conservative and

a more appropriate value is  $1.76 \times 10^{-3} \text{ sec/m}^3$ . This small change in the EAB X/Q will result in approximately a 1.7% reduction of the LOCA EAB dose consequence from that provided in Dominion's letter of January 31, 2006.

Additionally, control room X/Q values for the ECCS and RWST releases through Vent Stack No. 2 are as follows:

0 - 2 hours	$6.95 \times 10^{-4} \text{ sec/m}^3$
2 - 8 hours	$5.40 \times 10^{-4} \text{ sec/m}^3$
8 - 24 hours	$2.30 \times 10^{-4} \text{ sec/m}^3$
1 - 4 days	$1.71 \times 10^{-4} \text{ sec/m}^3$
4 - 30 days	$1.22 \times 10^{-4} \text{ sec/m}^3$