

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**RICHMOND, VIRGINIA 23261**

February 8, 2002

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

Serial No. 01-037D  
SPS-LIC/CGL R1  
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**  
**TECHNICAL SPECIFICATION BASIS CHANGE**  
**ALTERNATE SOURCE TERM IMPLEMENTATION**

In a letter dated April 11, 2000 (Serial No. 00-123), Virginia Electric and Power Company (Dominion) submitted a license amendment request for implementation of the Alternate Source Term (AST) as the plant design and licensing bases for Surry Power Station Units 1 and 2. In a subsequent letter dated July 31, 2001 (Serial No. 01-037A), we provided a revised AST analysis report reflecting changes in certain analytical assumptions and results that were incorporated in response to review questions received from the NRC staff. This subsequent letter also indicated that a revision to the proposed Basis section of Technical Specification (TS) 3.10 was required based on the additional analysis work and that this Basis revision would be provided in a later submittal.

The purpose of this letter is to provide the TS 3.10 Basis revision. This revision reflects the following two changes in the TS 3.10 Basis discussion of the fuel handling accident: 1) reference to Regulatory Guide 1.183 (versus the initial reference to the draft guidance of DG 1081) and 2) a revision addressing the revised gap fraction assumptions used in the reanalysis. A UFSAR change request is also being completed consistent with this TS Basis revision and will be included in the next scheduled UFSAR update in accordance with 10CFR50.71(e).

The TS 3.10 Basis change has been reviewed and approved by the Station Nuclear Safety and Operating Committee.

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The marked-up TS Basis page and the proposed TS Basis page are provided in Attachments 1 and 2, respectively. Note that the marked-up page in Attachment 1 is a revision of the marked up page sent in our April 11, 2000 letter. The double revision bar on the marked up page in Attachment 1 identifies the revisions due to the reanalysis submitted by our July 31, 2001 letter.

Should you have any questions regarding the TS Basis change, please contact us.

Very truly yours,



E. S. Grecheck  
Vice President – Nuclear Support Services

Attachments:

1. Marked-up TS 3.10 Basis Page
2. Proposed TS 3.10 Basis Page

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission  
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Mr. R. A. Musser  
NRC Senior Resident Inspector  
Surry Power Station

Commissioner  
Department of Radiological Health  
Room 240  
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**ATTACHMENT 1**  
**(to Serial No. 01-037D)**

**Marked-up TS 3.10 Basis Page**

**Surry Power Station Units 1 and 2**  
**Dominion**

Upon each completion of core loading and installation of the reactor vessel head, specific mechanical and electrical tests will be performed prior to initial criticality.

The fuel handling accident has been analyzed based on the methodology outlined in Draft Regulatory Guide ~~DG-10811.25~~ 1.183. The analysis assumes 100% release of the gap activity from the ~~highest powered~~ assembly with maximum gap activity is released after a 100-hour decay period following operation at 2605 MWt.

Detailed procedures and checks insure that fuel assemblies are loaded in the proper locations in the core. As an additional check, the movable incore detector system will be used to verify proper power distribution. This system is capable of revealing any assembly enrichment error or loading error which could cause power shapes to be peaked in excess of design value.

#### References

UFSAR Section 5.2	Containment Isolation
UFSAR Section 6.3	Consequence Limiting Safeguards
UFSAR Section 9.12	Fuel Handling System
UFSAR Section 11.3	Radiation Protection
UFSAR Section 13.3	Table 13.3-1
UFSAR Section 14.4.1	Fuel Handling Accidents
FSAR Supplement:	Volume I: Question 3.2

**ATTACHMENT 2**  
**(to Serial No. 01-037D)**

**Proposed TS 3.10 Basis Page**

**Surry Power Station Units 1 and 2**  
**Dominion**

Upon each completion of core loading and installation of the reactor vessel head, specific mechanical and electrical tests will be performed prior to initial criticality.

The fuel handling accident has been analyzed based on the methodology outlined in Regulatory Guide 1.183. The analysis assumes 100% release of the gap activity from the assembly with maximum gap activity after a 100-hour decay period following operation at 2605 MWt.

Detailed procedures and checks insure that fuel assemblies are loaded in the proper locations in the core. As an additional check, the movable incore detector system will be used to verify proper power distribution. This system is capable of revealing any assembly enrichment error or loading error which could cause power shapes to be peaked in excess of design value.

#### References

UFSAR Section 5.2	Containment Isolation
UFSAR Section 6.3	Consequence Limiting Safeguards
UFSAR Section 9.12	Fuel Handling System
UFSAR Section 11.3	Radiation Protection
UFSAR Section 13.3	Table 13.3-1
UFSAR Section 14.4.1	Fuel Handling Accidents
FSAR Supplement:	Volume I: Question 3.2