

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

June 9, 2003

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

Serial No.	03-353
NLOS/GDM	R0
Docket Nos.	50-280
	50-281
License Nos.	DPR-32
	DPR-37

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**SURRY POWER STATION UNITS 1 AND 2**  
**PROPOSED TECHNICAL SPECIFICATIONS CHANGE**  
**REVISION OF CORE OPERATING LIMITS REPORT REFERENCES**

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company (Dominion) requests amendments, in the form of changes to the Technical Specifications (TS) to Facility Operating Licenses Numbers DPR-32 and DPR-37 for Surry Power Station Units 1 and 2, respectively. The proposed change makes administrative changes to adopt the format for topical report references as described in Industry/Technical Specifications Task Force Traveler, TSTF-363 Rev. 0, "Revised Topical Report References in Improved Technical Specification (ITS) 5.6.5, COLR." A discussion of the proposed TS change is provided in Attachment 1. The marked-up and proposed TS pages reflecting the proposed change are provided in Attachments 2 and 3, respectively.

We have evaluated the proposed TS change and have determined that it does not involve a significant hazards consideration as defined in 10 CFR 50.92. The basis for this determination is provided in Attachment 1. We have also determined that operation with the proposed change will not result in any significant increase in the amount of effluents that may be released offsite and no significant increase in individual or cumulative occupational radiation exposure will occur. Therefore, the proposed amendment is eligible for categorical exclusion as set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment is needed in connection with the approval of the proposed change.

The proposed TS change is required to permit the use of the recently NRC-approved Studsvik Core Management System Topical Report DOM-NAF-1, and Revision 2 of VEP-FRD-42, Reload Design Methodology Topical Report, for the Fall 2003 Surry Unit 2 core design. Consequently, prompt review of the proposed TS change request is necessary to facilitate core design efforts. This will preclude the need to expend significant resources to design a contingency Surry Unit 2 core in the event the proposed TS change

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were not approved in a timely manner. Therefore, NRC approval of the proposed TS change is requested by September 5, 2003.

If you have any further questions or require additional information, please contact Mr. G. D. Miller at (804) 273-2771.

Very truly yours,



Leslie N. Hartz  
Vice President – Nuclear Engineering

Attachments

Commitment made in this letter: None

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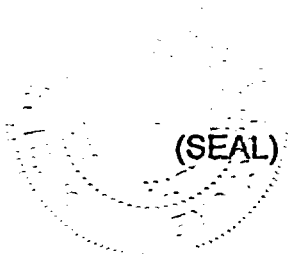
COMMONWEALTH OF VIRGINIA     )  
   )  
COUNTY OF HENRICO             )

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Leslie N. Hartz, who is Vice President - Nuclear Engineering, of Virginia Electric and Power Company. She has affirmed before me that she is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of her knowledge and belief.

Acknowledged before me this 9th day of June, 2003.

My Commission Expires: March 31, 2004.

  
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Notary Public



**Attachment 1**  
**Discussion of Change**

**Surry Power Station**  
**Units 1 and 2**  
**Virginia Electric and Power Company**  
**(Dominion)**

## **DISCUSSION OF CHANGE**

### **Introduction**

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company (Dominion) requests a change to the Technical Specifications (TS) for Surry Power Station Units 1 and 2. The proposed change makes administrative changes to adopt the format for topical report references as described in Industry/Technical Specifications Task Force Traveler, TSTF-363 Rev. 0, "Revised Topical Report References in ITS 5.6.5, COLR." There are no changes to the Bases related to this change.

The proposed change has been reviewed, and it has been determined that no significant hazards consideration exists, as defined in 10 CFR 50.92. In addition, it has been determined that the change qualifies for categorical exclusion from an environmental assessment as set forth in 10 CFR 51.22(c)(9); therefore, no environmental impact statement or environmental assessment is needed in connection with the approval of the proposed change.

### **Background**

Reload design and safety analysis methodology topical reports are updated and/or supplemented periodically for both administrative and technical reasons. If there is a revision number change or a supplement addition to a methodology reference in the Core Operating Limits Report (COLR) section, a Technical Specifications change must be made to reflect the change. Removal of reference revision numbers and dates will reduce the number of administrative Technical Specification changes required in the future due to topical report revisions or supplements, and will eliminate unnecessary expenditure of NRC and Dominion resources.

The format of the COLR section references and the requirement for the inclusion of detailed references are described in NUREG-1431 Vol. 1, Rev. 2 (NRC Standard Technical Specifications) and TSTF-363 Rev. 0. The expectations for COLR references are these:

- 1) In the Technical Specifications, identify the topical reports(s) by number and title, or identify the staff Safety Analysis Report for a plant specific methodology by NRC letter and date.
- 2) The COLR will contain the complete identification for each of the TS referenced topical reports used to prepare the COLR (i.e., report number, title, revision, date, and any supplements).

TSTF-363 explains the purpose for this change:

*"As stated in the letter, this method of referencing topical reports would allow licensees to use current topical reports to support limits in the COLR without having to submit an amendment to the facility operating license every time the topical report*

*is revised. The COLR would provide specific information identifying the particular approved topical reports used to determine the core limits for the particular cycle in the COLR report. This would eliminate unnecessary expenditure of NRC and licensee resources, and would ease the burden of TS submittal and approval needed to license reload fuel."*

There are two topical report revisions currently planned that would require two separate licensing actions without this change. The first is the adoption of Revision 2 of the Reload Design Methodology Topical Report (VEP-FRD-42) currently being reviewed by the NRC (Reference 1). The second is the revision of VEP-FRD-42 to include use of the CASMO and SIMULATE models. The NRC safety evaluation report (SER) for the CASMO/SIMULATE topical report was received March 12, 2003 (Reference 2). Therefore, this change will immediately accomplish the purpose of reducing unnecessary expenditure of NRC and Dominion resources.

### **Description of Proposed Change**

The specific change to the Surry Units 1 and 2 Technical Specifications is proposed as follows:

- Revise TS 6.2.C to eliminate revision numbers and dates from topical reports listed in the REFERENCES section. Delete associated information detailing which limits are associated with each reference.
- Revise TS 6.2.C reference 2f (WCAP-12610-P-A) to reflect the approval status.

The COLR will contain the complete identification for each of the TS referenced topical reports used to prepare the COLR (i.e., report number, title, revision, date, and any supplements). Associated information detailing which limits are associated with each reference will also be relocated to the COLR.

### **Safety Implications of the Proposed Change**

The proposed change to the Surry Technical Specifications is administrative in nature. The proposed change does not alter the operation of the station in any way, nor are any plant modifications being proposed. Furthermore, the current Surry licensing and design bases are not being changed, nor is the margin of safety assumed in the plant accident analyses being affected. Consequently, there is no safety significance associated with the proposed administrative change.

### **Evaluation of Significant Hazards Consideration**

Dominion has reviewed the requirements of 10 CFR 50.92 as they relate to the proposed administrative change to the Surry Power Station Units 1 and 2 Technical Specifications (TS). Due to the strictly administrative nature of the proposed TS change, we have determined that a significant hazards consideration does not exist. The basis for this determination is provided as follows:

1. Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change is administrative in nature and as such does not impact the condition or performance of any plant structure, system or component. The proposed administrative change does not affect the initiators of any previously analyzed event or the assumed mitigation of accident or transient events. As a result, the proposed change to the Surry Technical Specifications does not involve any increase in the probability or the consequences of any accident or malfunction of equipment important to safety previously evaluated since neither accident probabilities nor consequences are being affected by this proposed administrative change.

2. Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change is administrative in nature, and therefore does not involve any changes in station operation or physical modifications to the plant. In addition, no changes are being made in the methods used to respond to plant transients that have been previously analyzed. No changes are being made to plant parameters within which the plant is normally operated or in the setpoints, which initiate protective or mitigative actions, and no new failure modes are being introduced. Therefore, the proposed administrative change to the Surry Technical Specifications does not create the possibility of a new or different kind of accident or malfunction of equipment important to safety from any previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

The proposed change is administrative in nature and does not impact station operation or any plant structure, system or component that is relied upon for accident mitigation. Furthermore, the margin of safety assumed in the plant safety analysis is not affected in any way by the proposed administrative change. Therefore, the proposed change to the Surry Technical Specifications does not involve any reduction in a margin of safety.

**Environmental Assessment**

This amendment request meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) as follows:

(i) The amendment involves no significant hazards consideration.

As described above, the proposed administrative TS change does not involve a significant hazards consideration.

(ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The proposed administrative TS change does not involve the installation of any new equipment or the modification of any equipment that may affect the types or amounts of effluents that may be released offsite. Plant operation is not affected in any manner by this proposed administrative change. Therefore, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

- (iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed administrative TS change does not involve plant physical changes or changes in the method of plant operation. Therefore, there is no significant increase in individual or cumulative occupational radiation exposure.

Based on the above assessment, Dominion concludes that the proposed change meets the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.22 relative to requiring a specific environmental assessment or impact statement by the Commission.

### **Conclusion**

The proposed TS change is administrative in nature. Neither station design nor operation is being affected. The Station Nuclear Safety and Operating Committee (SNSOC) and the Management Safety Review Committee (MSRC) have reviewed the proposed change and have concluded that this change does not involve a significant hazards consideration and will not endanger the health and safety of the public.

### **References**

1. Letter from L. N. Hartz of Virginia Electric and Power Company to the USNRC dated October 8, 2001, "Virginia Electric and Power Company, North Anna Power Station Units 1 and 2, Surry Power Station Units 1 and 2, Dominion's Reload Nuclear Design Methodology Topical Report."
2. Letter from the USNRC to D. A. Christian of Virginia Electric and Power Company dated March 12, 2003, "Virginia Electric and Power Company – Acceptance of Topical Report DOM-NAF-1, "Qualification of the Studsvik Core Management System Reactor Physics Methods for Application to North Anna and Surry Power Stations (TAC NOS. MB5433, MB5434, MB5436, and MB5437)."
3. NUREG-1431 Volume 1, Revision 2.2, "Standard Technical Specifications, Westinghouse Plants," 04/02/2002.
4. Industry/TSTF Standard Technical Specification Change Traveler TSTF-363 Rev. 0, 4/13/2000.

**Attachment 2**

**Mark-up of Technical Specifications Pages**

**Surry Power Station  
Units 1 and 2**

**Virginia Electric and Power Company  
(Dominion)**

The analytical methods used to determine the core operating limits identified above shall be those previously reviewed and approved by the NRC, and identified below. The core operating limits shall be determined so that applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided for information for each reload cycle to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

## REFERENCES

1. VEP-FRD-42, <sup>A</sup>Rev. 1-A, "Reload Nuclear Design Methodology," September 1986  
(Methodology for TS 3.1.E and TS 5.3.A.6.b - Moderator Temperature Coefficient; TS 3.12.A.2 and 3.12.A.3 - Control Bank Insertion Limit, TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor and Nuclear Enthalpy Rise Hot Channel Factor)
- 2a. WCAP-9220-P-A, Rev. 1, "Westinghouse ECCS Evaluation Model - 1981 Version," February 1982 (W Proprietary)  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor)~~
- 2b. WCAP-9561-P-A, ADD. 3, Rev. 1, "BART A-1: A Computer Code for the Best Estimate Analysis of Reflood Transients-Special Report: Thimble Modeling in W ECCS Evaluation Model," July 1986 (W Proprietary)  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor)~~
- 2c. WCAP-10266-P-A, Rev. 2, "The 1981 Version of the Westinghouse ECCS Evaluation Model Using the BASH Code," March 1987 (W Proprietary)  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor)~~

- 2d. WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code," August 1985 (W Proprietary)  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor)~~
- 2e. WCAP-10079-P-A, "NOTRUMP, A Nodal Transient Small Break and General Network Code," August 1985 (W Proprietary)  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor)~~
- 2f. <sup>(P-A)</sup> WCAP-12610y VANTAGE+ Fuel Assembly Report," June 1990 (Westinghouse Proprietary).  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Heat Flux Hot Channel Factor)~~
- 3a. VEP-NE-2-A, "Statistical DNBR Evaluation Methodology," June 1987  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Nuclear Enthalpy Rise Hot Channel Factor)~~
- 3b. VEP-NE-3-A, "Qualification of the WRB-1 CHF Correlation in the Virginia Power COBRA Code," July 1990  
~~(Methodology for TS 3.12.B.1 and TS 3.12.B.2 - Nuclear Enthalpy Rise Hot Channel Factor)~~

**Attachment 3**

**Proposed Technical Specifications Page**

**Surry Power Station  
Units 1 and 2**

**Virginia Electric and Power Company  
(Dominion)**

## **TABULATION OF CHANGES**

**License No. DPR-32 / Docket No. 50-280**

**License No. DPR-37 / Docket No. 50-281**

### **Summary of Change:**

The proposed change will reformat the Core Operating Limits Report (COLR) references listed in the Technical Specifications consistent with Industry/Technical Specification Task Force Traveler, TSTF-363, "Revised Topical Report References in ITS 5.6.5, COLR." Specifically, the proposed change will remove revision numbers, dates and associated limits from Topical Report references in the Technical Specifications and relocate this information to the COLR.

#### **DELETE**

TS 6.2-2

TS 6.2-3

#### **DATED**

03-02-94

7-27-95

#### **SUBSTITUTE**

TS 6.2-2

The analytical methods used to determine the core operating limits identified above shall be those previously reviewed and approved by the NRC, and identified below. The core operating limits shall be determined so that applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided for information for each reload cycle to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

#### REFERENCES

1. VEP-FRD-42-A, "Reload Nuclear Design Methodology"
- 2a. WCAP-9220-P-A, "Westinghouse ECCS Evaluation Model - 1981 Version," (W Proprietary)
- 2b. WCAP-9561-P-A, "BART A-1: A Computer Code for the Best Estimate Analysis of Reflood Transients-Special Report: Thimble Modeling in W ECCS Evaluation Model," (W Proprietary)
- 2c. WCAP-10266-P-A, "The 1981 Version of the Westinghouse ECCS Evaluation Model Using the BASH Code," (W Proprietary)
- 2d. WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code," (W Proprietary)
- 2e. WCAP-10079-P-A, "NOTRUMP, A Nodal Transient Small Break and General Network Code," (W Proprietary)
- 2f. WCAP-12610-P-A, "VANTAGE+ Fuel Assembly Report," (Westinghouse Proprietary)
- 3a. VEP-NE-2-A, "Statistical DNBR Evaluation Methodology"
- 3b. VEP-NE-3-A, "Qualification of the WRB-1 CHF Correlation in the Virginia Power COBRA Code"