

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 13, 2009

10CFR50.90

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

Serial No. 09-208
SPS-LIC/CGL 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 LICENSE AMENDMENT REQUEST
CORRECTION TO TECHNICAL SPECIFICATION TABLE 3.7-1 OPERATOR ACTION 3.b

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 License Numbers DPR-32 and DPR-37 for Surry Power Station Units 1 and 2, respectively. The proposed change revises TS Table 3.7-1 Operator Action 3.b and provides direction if the less-than-required-minimum-operable-channels-condition for the nuclear flux intermediate range occurs between 7% and 11% of rated power. This revision is a correction of the information transmitted to the NRC by the September 19, 2007 letter (Serial No. 07-0470), which requested review of revised setting limits and overtemperature ΔT /overpower ΔT time constants. A discussion of the proposed change is provided in Attachment 1. The marked-up and typed proposed TS pages are provided in Attachments 2 and 3, respectively.

We have evaluated the proposed amendment 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 included 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 or any significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment is eligible for categorical exclusion from an environmental assessment 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 has been reviewed and approved by the Facility Safety Review Committee. NRC approval of the proposed license amendment is requested by April 15, 2010 with a 30-day implementation period.

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ATTACHMENT 1
DISCUSSION OF CHANGE

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

DISCUSSION OF CHANGE

1.0 INTRODUCTION

Pursuant to 10 CFR 50.90, Virginia Electric and Power Company (Dominion) requests a revision to the Technical Specifications (TS) for Surry Power Station Units 1 and 2. The proposed change revises TS Table 3.7-1 Operator Action 3.b and provides direction if the less-than-required-minimum-operable-channels-condition for the nuclear flux intermediate range occurs between 7% and 11% of rated power. This revision is a correction of the information transmitted to the NRC by the September 19, 2007 letter (Serial No. 07-0470), which requested review of revised setting limits and overtemperature ΔT /overpower ΔT time constants.

The proposed change has been reviewed, and it has been determined that the change has no adverse safety impact and 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.

2.0 BACKGROUND

On September 19, 2007, Dominion transmitted a letter (Serial No. 07-0470) requesting NRC review and approval of a TS change revising setting limits and overtemperature ΔT /overpower ΔT time constants. The methodology for determining these revised setting limits and time constants was in agreement with Methods 1 and 2 in ISA-RP67.04, Part II. The TS change request in our September 19, 2007 letter was subsequently approved by the NRC by TS Amendments 261/261 on September 17, 2008.

The revision in our September 19, 2007 letter of interest is the following change:

Table 3.7-1, ACTION 3.b prior to implementation of TS Amendments 261/261 stated:

- b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below 10% of RATED POWER, decrease power below P-6 or, increase THERMAL POWER above 10% of RATED POWER within 24 hours.

Table 3.7-1, ACTION 3.b after implementation of TS Amendments 261/261 states:

- b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below 7% of RATED POWER, decrease power below P-6 or, increase THERMAL POWER above 11% of RATED POWER within 24 hours.

TS Amendments 261/261 were implemented on November 5, 2008. Subsequently, during simulator training, a question was raised requesting clarification regarding application of TS Table 3.7-1 Operator Action 3.b, and a Condition Report (CR) was submitted documenting the question. During initial investigation of the CR question, it was recognized that Operator Action 3.b as written does not specify actions to be taken if the less-than-required-minimum-operable-channels-condition for the nuclear flux intermediate range occurs between 7% and 11% of rated power. Furthermore, it was concluded that the actions directed by Operator Action 3.b are inadequate.

NRC Administrative Letter (AL) 98-10 addresses improper or inadequate TS requirements and states that imposition of administrative controls is an acceptable short-term corrective action in response to an improper or inadequate TS. Consistent with this guidance in AL 98-10 to impose administrative controls, revisions were made to the Units 1 and 2 Abnormal Procedures for Nuclear Instrumentation Malfunction providing direction for nuclear flux intermediate range channel inoperability for rated power levels between 7% and 11%. In addition, AL 98-10 indicates that a TS change request with appropriate justification shall be submitted in a timely manner. The purpose of this TS change request is to correct TS Table 3.7-1 Operator Action 3.b.

3.0 PROPOSED CHANGE

The following specific revision is proposed to correct TS Table 3.7-1 Operator Action 3.b.

Table 3.7-1, ACTION 3.b currently states:

- b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below 7% of RATED POWER, decrease power below P-6 or, increase THERMAL POWER above 11% of RATED POWER within 24 hours.

The proposed revision to Table 3.7-1, ACTION 3.b is as follows:

- b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below 11% of RATED POWER, within 24 hours, decrease power below P-6 or increase THERMAL POWER above 11% of RATED POWER.

4.0 TECHNICAL BASIS OF PROPOSED CHANGE

As indicated in the proposed change discussion above, the appropriate action for nuclear flux intermediate range channel inoperability at rated power levels between 7% and 11% is to decrease power below P-6 or increase thermal power above 11% of rated

power, within 24 hours. The 7% of rated power level was inappropriately reflected in Operator Action 3.b in the September 19, 2007 letter (Serial No. 07-0470).

5.0 SIGNIFICANT HAZARDS CONSIDERATION

Virginia Electric and Power Company (Dominion) is proposing a revision to the Technical Specifications (TS) for Surry Power Station Units 1 and 2. The proposed change revises TS Table 3.7-1 Operator Action 3.b and provides direction if the less-than-required-minimum-operable-channels-condition for the nuclear flux intermediate range occurs between 7% and 11% of rated power. Upon discovery that Operator Action 3.b revised by TS Amendments 261/261 did not include direction for inoperability in this power range, administrative controls were put in place to provide the lacking direction in accordance with NRC Administrative Letter 98-10.

Dominion has reviewed the requirements of 10 CFR 50.92 as they relate to the proposed changes to the Surry Power Station Units 1 and 2 TS and has 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?

No. The proposed change revises TS Table 3.7-1 Operator Action 3.b and provides direction if the less-than-required-minimum-operable-channels-condition for the nuclear flux intermediate range occurs between 7% and 11% of rated power. Required action between 7% and 11% of rated power is currently not addressed in the Operator Action 3.b. The proposed TS change does not involve a physical change to any structures, systems, or components (SSCs) at Surry Power Station; nor does it change any of the previously evaluated accidents in the Updated Final Safety Analysis Report (UFSAR). Thus, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

No. The proposed change revises TS Table 3.7-1 Operator Action 3.b, and provides required action between 7% and 11% of rated power, which is currently not addressed in the Operator Action 3.b. The proposed change does not involve a physical change to any SSCs, and there is no impact on their design function. The proposed change does not affect initiators of analyzed events. Therefore, the proposed change does not introduce any new failures that could create the possibility of a new or different kind of accident from any accident previously evaluated.

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

No. The proposed change provides required action for inoperability of nuclear flux intermediate range instrumentation between 7% and 11% of rated power in TS Table 3.7-1 Operator Action 3.b. Margin of safety is established through the design of plant SSCs, the parameters within which the plant is operated, and the establishment of the setpoints for the actuation of equipment relied upon to respond to an event. The proposed change does not impact the condition or performance of SSCs relied upon for accident mitigation or any safety analysis assumptions. Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

6.0 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 Technical Specification 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 TS change does not involve the installation of any new equipment or a physical change to any structures, systems, or components (SSCs) at Surry Power Station. 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 TS change does not involve plant physical changes and does not require any changes to current 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.

7.0 CONCLUSION

The proposed change revises TS Table 3.7-1 Operator Action 3.b and provides direction if the less-than-required-minimum-operable-channels-condition for the nuclear flux intermediate range occurs between 7% and 11% of rated power.

The proposed TS change does not involve the installation of any new equipment or a physical change to any SSCs at Surry Power Station and does not impact any SSC design function. In addition, the proposed change does not affect initiators of analyzed events, does not impact the condition or performance of SSCs relied upon for accident mitigation, and does not impact any safety analysis assumptions.

The Facility Safety Review Committee (FSRC) has reviewed the proposed change, and it has been concluded that this change does not have an adverse impact on safety, does not involve a significant hazards consideration, and will not endanger the health and safety of the public.

8.0 REFERENCES

- 8.1 Letter Serial No. 07-0470, dated September 19, 2007, to U. S. Nuclear Regulatory Commission, "Virginia Electric and Power Company – Surry Power Station Units 1 and 2 – Proposed Technical Specifications Change – Revised Setting Limits and Overtemperature ΔT /Overpower ΔT Time Constants"
- 8.2 Letter from Siva P. Lingam, Office of Nuclear Reactor Regulation, dated September 17, 2008, "Surry Power Station, Unit Nos. 1 and 2, Issuance of Amendments Regarding the Revision to Various Setting Limits and the Overtemperature ΔT /Overpower ΔT Time Constants (TAC Nos. MD6812 and MD6813)"

ATTACHMENT 2

PROPOSED TECHNICAL SPECIFICATIONS PAGE (MARK-UP)

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

TABLE 3.7-1 (Continued)

4. The QUADRANT POWER TILT shall be determined to be within the limit when above 75 percent of RATED POWER with one Power Range Channel inoperable by using the moveable incore detectors to confirm that the normalized symmetric power distribution, obtained from 2 sets of 4 symmetric thimble locations or a full-core flux map, is consistent with the indicated QUADRANT POWER TILT at least once per 12 hours.

With the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels requirement, be in at least HOT SHUTDOWN within 6 hours

ACTION 3.

With the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels requirement and with the THERMAL POWER level:

- a. Below the P-6 (Block of Source Range Reactor Trip) setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint.
- b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below ^{11%}7% of RATED POWER, decrease power below P-6 or increase THERMAL POWER above 11% of RATED POWER, within 24 hours.
- c. Above 11% of RATED POWER, POWER OPERATION may continue.

ATTACHMENT 3

PROPOSED TECHNICAL SPECIFICATIONS PAGE (TYPED)

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

TABLE 3.7-1 (Continued)

4. The QUADRANT POWER TILT shall be determined to be within the limit when above 75 percent of RATED POWER with one Power Range Channel inoperable by using the moveable incore detectors to confirm that the normalized symmetric power distribution, obtained from 2 sets of 4 symmetric thimble locations or a full-core flux map, is consistent with the indicated QUADRANT POWER TILT at least once per 12 hours.

With the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels requirement, be in at least HOT SHUTDOWN within 6 hours

ACTION 3.

With the number of OPERABLE channels one less than required by the Minimum OPERABLE Channels requirement and with the THERMAL POWER level:

- a. Below the P-6 (Block of Source Range Reactor Trip) setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint.
- b. Above the P-6 (Block of Source Range Reactor Trip) setpoint, but below 11% of RATED POWER, within 24 hours, decrease power below P-6 or increase THERMAL POWER above 11% of RATED POWER.
- c. Above 11% of RATED POWER, POWER OPERATION may continue.