

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

OCT 1 1 2018

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

Serial No. 18-393
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
ANNUAL SUBMITTAL OF TECHNICAL SPECIFICATIONS BASES CHANGES
PURSUANT TO TECHNICAL SPECIFICATION 6.4.J

Pursuant to Technical Specification 6.4.J, "Technical Specifications (TS) Bases Control Program," Dominion Energy Virginia hereby submits a change to the Bases of the Surry TS implemented between October 1, 2017 and September 30, 2018.

A Basis change to the TS that was not previously submitted to the NRC as part of a License Amendment Request was reviewed and approved by the Facility Safety Review Committee. It was determined that the change did not require a revision to the TS or operating licenses, nor did the change involve a revision to the UFSAR or TS Bases that required NRC prior approval pursuant to 10CFR50.59. This change has been incorporated into the TS Bases. A summary of this change is provided in Attachment 1.

For the period between October 1, 2017 and September 30, 2018, there were no changes that were incorporated into the TS Bases associated NRC-approved License Amendment Requests.

Current TS Bases pages reflecting the change discussed in Attachment 1 are provided in Attachment 2.

If you have any questions regarding this transmittal, please contact Mrs. Candee G. Lovett at (757) 365-2178.

Very truly yours,



Rob M. Garver II
Director Station Safety and Licensing
Surry Power Station

ADD
NRR

Attachments:

1. Summary of TS Bases Changes Not Previously Submitted to the NRC
2. Current TS Bases Pages

Commitments made in this letter: None.

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

Attachment 1

Serial No. 18-393

Summary of TS Bases Changes Not Previously Submitted to the NRC

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

SUMMARY OF TS BASES CHANGES
NOT PREVIOUSLY SUBMITTED TO THE NRC

TS 3.7 Basis Revision (TS Basis Pages TS 3.7-6 and TS 3.7-6a)

A revision was made in the TS 3.7 Basis. The TS 3.7 Basis revision defines the operability requirements for the Open Phase Isolation System. This TS 3.7 Basis revision is related to the TS 3.7 and TS 4.1 revisions for Open Phase Protection approved by TS Amendments 292/292. TS Amendment 292/-- was implemented on Unit 1 on May 23, 2018.

The TS 3.7 Basis change was approved on October 17, 2017 and implemented on Unit 1 on May 23, 2018.

Attachment 2

Serial No. 18-393

Current TS Bases Pages

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

reduces the consequences of a steam line break inside the containment by stopping the entry of feedwater.

Auxiliary Feedwater System Actuation

The automatic initiation of auxiliary feedwater flow to the steam generators by instruments identified in Table 3.7-2 ensures that the Reactor Coolant System decay heat can be removed following loss of main feedwater flow. This is consistent with the requirements of the "TMI-2 Lessons Learned Task Force Status Report," NUREG-0578, item 2.1.7.b.

Loss of Power - 4.16 KV Emergency Bus Negative Sequence Voltage (Open Phase) *[This discussion applicable to Unit 1 only.]*

The Open Phase Isolation System (OPIS) must be operable when an Emergency bus is required to be operable and is fed from an offsite source. Normally, offsite power is provided to the Emergency buses through the Reserve Station Service Transformers (RSSTs); therefore, the OPIS must be operable any time a required Emergency bus is fed from an RSST. With the generator offline and offsite power provided to an Emergency bus through a Main Step-Up Transformer (i.e., back-feed configuration), the OPIS will detect open phase conditions and initiate a transfer of an Emergency bus for specific open phase conditions. Therefore, the OPIS must be operable any time a required Emergency bus is fed from a Main Step-Up Transformer during backfeed.

OPIS relays are installed on each Emergency bus. The OPIS relays are designed with logic which disables protection when the respective Emergency bus normal feeder breaker is open. Thus, the OPIS protection is passive and is not required to be active when an Emergency bus is not being fed from an offsite source (e.g., being powered by an emergency diesel generator.)

Setting Limits

1. The high containment pressure limit is set at about 8% of design containment pressure. Initiation of safety injection protects against loss of coolant⁽²⁾ or steam line break⁽³⁾ accidents as discussed in the safety analysis.

2. The high-high containment pressure limit is set at about 21% of design containment pressure. Initiation of containment spray and steam line isolation protects against large loss-of-coolant⁽²⁾ or steam line break accidents⁽³⁾ as discussed in the safety analysis.
3. The pressurizer low pressure setpoint for safety injection actuation is set substantially below system operating pressure limits. However, it is sufficiently high to protect against a loss-of-coolant accident as shown in the safety analysis.⁽²⁾ The setting limit (in units of psig) is based on nominal atmospheric pressure.
4. The steam line high differential pressure limit is set well below the differential pressure expected in the event of a large steam line break accident as shown in the safety analysis.⁽³⁾
5. The high steam line flow differential pressure setpoint is constant at 40% full flow between no load and 20% load and increasing linearly to 110% of full flow at full load in order to protect against large steam line break accidents. The coincident low T_{avg} setting limit for SIS and steam line isolation initiation is set below its HOT SHUTDOWN value. The coincident steam line pressure setting limit is set below the full load operating pressure. The safety analysis shows that these settings provide protection in the event of a large steam line break.⁽³⁾