

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

10 CFR 50.90

December 13, 2012

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

Serial No. 12-486A  
NL&OS/ETS  
Docket Nos. 50-338/339  
License Nos. NPF-4/7

**VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)**  
**NORTH ANNA POWER STATION UNITS 1 AND 2**  
**SUPPLEMENTAL INFORMATION FOR PROPOSED TECHNICAL SPECIFICATIONS**  
**TO ADOPT TSTF-510, "REVISION TO STEAM GENERATOR PROGRAM**  
**INSPECTION FREQUENCIES AND TUBE SAMPLE SELECTION," USING THE**  
**CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS**

In a July 30, 2012 letter (Serial No. 12-486), Dominion requested amendments, in the form of changes to the Technical Specifications (TS) to Facility Operating License Numbers NPF-4 and NPF-7 for North Anna Power Station Units 1 and 2, respectively. The proposed amendment modifies TS requirements regarding steam generator tube inspections and reporting as described in TSTF-510, Revision 2, "Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection." In a December 12, 2012 telephone call, the NRC staff identified an unjustified deviation from TSTF-510 in the proposed TS change. The deviation, a typographical error, was unintended and is being corrected with the attached revised marked-up and proposed TS pages. Please replace these pages in the original submittal and complete the review of the proposed amendment using the revised pages.

Attachment 1 provides the revised marked-up TS page, and Attachment 2 provides the revised proposed TS page.

The proposed amendment does not involve a Significant Hazards Consideration pursuant to the provisions of 10 CFR 50.92.

Approval of the proposed amendment is requested by July 2013. Once approved, the amendment shall be implemented within 60 days.

A001  
MLR



cc: U.S. Nuclear Regulatory Commission  
Marquis One Tower  
245 Peachtree Center Avenue, NE  
Suite 1200  
Atlanta, Georgia 30303-1257

Mr. J. E. Reasor, Jr.  
Old Dominion Electric Cooperative  
Innsbrook Corporate Center  
4201 Dominion Blvd.  
Suite 300  
Glen Allen, Virginia 23060

State Health Commissioner  
Virginia Department of Health  
James Madison Building - 7<sup>th</sup> floor  
109 Governor Street  
Suite 730  
Richmond, Virginia 23219

NRC Senior Resident Inspector  
North Anna Power Station

Dr. V. Sreenivas  
NRC Project Manager  
U. S. Nuclear Regulatory Commission  
One White Flint North  
Mail Stop O8 G-9A  
11555 Rockville Pike  
Rockville, Maryland 20852-2738

Ms. K. R. Cotton  
NRC Project Manager  
U. S. Nuclear Regulatory Commission  
One White Flint North  
Mail Stop O8 G-9A  
11555 Rockville Pike  
Rockville, Maryland 20852-2738

**Attachment 1**

**Revised Marked-up Technical Specifications Page 5.5-7**

**Virginia Electric and Power Company  
(Dominion)  
North Anna Power Station Units 1 And 2**

5.5 Programs and Manuals

plugging

5.5.8 Steam Generator (SG) Program (continued)

c. Provisions for SG tube ~~repair~~ criteria. Tubes found by inservice inspection to contain flaws with a depth equal to or exceeding 40% of the nominal tube wall thickness shall be plugged.

d. Provisions for SG tube inspections. Periodic SG tube inspections shall be performed. The number and portions of the tubes inspected and methods of inspection shall be performed with the objective of detecting flaws of any type (e.g., volumetric flaws, axial and circumferential cracks) that may be present along the length of the tube, from the tube-to-tubesheet weld at the tube inlet to the tube-to-tubesheet weld at the tube outlet, and that may satisfy the applicable tube ~~repair~~ criteria. The tube-to-tubesheet weld is not part of the tube. In addition to meeting the requirements of d.1, d.2, and d.3 below, the inspection scope, inspection methods, and inspection intervals shall be such as to ensure that SG tube integrity is maintained until the next SG inspection. An assessment of ~~degradation~~ shall be performed to determine the type and location of flaws to which the tubes may be susceptible and, based on this assessment, to determine which inspection methods need to be employed and at what locations.

degradation

installation

1. Inspect 100% of the tubes in each SG during the first refueling outage following SG ~~replacement~~.

2. Inspect ~~100%~~ of the tubes at sequential periods of 144, 108, 72, and, thereafter, 60 effective full power months. The first sequential period shall be considered to begin after the first inservice inspection of the SGs. In addition, inspect 50% of the tubes by the refueling outage nearest the midpoint of the period and the remaining 50% by the refueling outage nearest the end of the period. No SG shall operate for more than 72 effective full power months or three refueling outages (whichever is less) without being inspected.

Replace with Insert A

3. If crack indications are found in any SG tube, then the next inspection for each SG for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever ~~is less~~). If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.

affected and potentially affected

results in more frequent inspections

**Attachment 2**

**Revised Proposed Technical Specifications Page 5.5-8**

**Virginia Electric and Power Company  
(Dominion)  
North Anna Power Station Units 1 And 2**

5.5 Programs and Manuals

---

5.5.8 Steam Generator (SG) Program (continued)

2. (continued)

be inspected in the inspection period after the determination that a new form of degradation could potentially be occurring at this location divided by the total number of times the SG is scheduled to be inspected in the inspection period. Each inspection period defined below may be extended up to 3 effective full power months to include a SG inspection outage in an inspection period and the subsequent inspection period begins at the conclusion of the included SG inspection outage.

- a. After the first refueling outage following SG installation, inspect 100% of the tubes during the next 144 effective full power months. This constitutes the first inspection period;
  - b. During the next 120 effective full power months, inspect 100% of the tubes. This constitutes the second inspection period;
  - c. During the next 96 effective full power months, inspect 100% of the tubes. This constitutes the third inspection period; and
  - d. During the remaining life of the SGs, inspect 100% of the tubes every 72 effective full power months. This constitutes the fourth and subsequent inspection periods.
3. If crack indications are found in any SG tube, then the next inspection for each affected and potentially affected SG for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever results in more frequent inspections). If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.