

ATTACHMENT 2

PROPOSED TECHNICAL SPECIFICATIONS CHANGE
NORTH ANNA UNIT 2

VIRGINIA ELECTRIC AND POWER COMPANY

TABLE 4.4-1
MINIMUM NUMBER OF STEAM GENERATORS TO BE
INSPECTED DURING INSERVICE INSPECTION

| Preservice Inspection | No | Yes |
|---|------------------|------------------|
| No. of Steam Generators per Unit | Three | Three |
| First Inservice Inspection | All | One |
| Second & Subsequent Inservice Inspections | One ¹ | One ² |

Table Notation:

1. The inservice inspection may be limited to one steam generator on a rotating schedule encompassing 3 N % of the tubes (where N is the number of steam generators in the plant) if the results of the first or previous inspections indicate that all steam generators are performing in a like manner. Note that under some circumstances, the operating conditions in one or more steam generators may be found to be more severe than those in other steam generators. Under such circumstances the sample sequence shall be modified to inspect the most severe conditions.
2. Each of the other two steam generators not inspected during the first inservice inspections shall be inspected during the second and third inspections. The fourth and subsequent inspections shall follow the instructions described in 1 above.

ATTACHMENT 3

SIGNIFICANT HAZARDS CONSIDERATION

VIRGINIA ELECTRIC AND POWER COMPANY

Significant Hazards Consideration

Steam Generator Inspection Scope Reduction North Anna Power Station Unit 2

This proposed change to the North Anna Power Station Unit 2 Technical Specifications has been evaluated against the criteria described in 10 CFR 50.92 and it has been determined that the proposed amendment to the operating license involves no significant hazards consideration.

The proposed change is to reduce from two to one the minimum number of steam generators required to be opened for inspection during the first refueling outage following a steam generator replacement. Technical Specifications surveillance requirements 4.4.5.0 through 4.4.5.5 for inspection of the steam generator tubes ensure that the structural integrity of this portion of the Reactor Coolant System will be maintained. Accordingly, the purpose of Technical Specification 4.4.5.1 is to require periodic sample inspections of steam generators. The initial inspection after steam generator replacement combined with the subsequent inservice inspections serve to provide reasonable assurance of detection of structural degradation of the tubes. The proposed Technical Specifications change does not affect or change this basis. However, the requirement that two steam generators be opened and inspected during the first refueling outage after steam generator replacement is considered unnecessary.

The North Anna Unit 2 steam generators were replaced during the first quarter of 1995. The purpose of steam generator replacement was to restore the integrity of the steam generator tubes to a level equivalent to new steam generators. In reality, replacement steam generator components incorporate a large number of design improvements which reflect the "state-of-the-art" technology that currently exists for steam generator design. These design improvements will improve the long-term maintainability and reliability of the replacement steam generators.

The replacement steam generator components for North Anna have been manufactured using current codes and manufacturing techniques without compromising the requirements of the original code thus reflecting current technology in the areas of design, fabrication, and materials. Design changes and enhancements made to replacement steam generator components address the operating experience of the industry and the original steam generators and enhance the overall reliability and maintainability of the steam generators. These enhancements do not adversely affect the mechanical or thermal-hydraulic performance of the steam generators. Thus, the replacement steam generators are considered superior to the original steam generators in terms of design and materials.

The proposed change to the Technical Specifications does not involve modifications to any of the existing equipment or affect the operation of any existing systems. The reactor coolant system reliability and operation are unchanged and, therefore, remain in accordance with the descriptions found in the UFSAR.

The proposed Technical Specifications change does not affect or change any limiting conditions for operation (LCO) or any other surveillance requirements in the Technical Specifications and the Basis for the surveillance requirement remains unchanged. An inspection of the minimum required number of tubes will still be performed prior to returning the steam generators to service. Although the proposed change reduces the number of steam generators required to be opened for inspection, the minimum number of tubes required to be examined during the inspection is not being changed. Thus, the minimum inspected tube population size has not changed.

The North Anna Unit 1 steam generators were replaced in 1993 using essentially the same design and materials as used for the North Anna Unit 2 replacement. The first inservice inspection for the Unit 1 replacement steam generators was performed in the fall of 1994. As expected, the results of the North Anna Unit 1 inspection identified no signs of deterioration.

The North Anna Unit 1 and Unit 2 steam generators utilize Alloy 690 thermally treated (TT) tubing. Alloy 690 TT tubing material has been utilized in service in domestic replacement steam generators since 1989. As stated above, Alloy 690 TT is generally accepted as the currently available steam generator tube material of choice due to its significant resistance to stress corrosion cracking. To date, there have been no reported instances of localized tube wall corrosion induced degradation involving Alloy 690 TT tube material.

Approval of this change request will also reduce radiation exposure of those personnel involved in opening and closing the steam generator manways and setting up the tube inspection equipment.

Conclusions

We have evaluated the proposed change against the criteria described in 10 CFR 50.92 and concluded that the proposed Technical Specifications change does not pose a significant hazards consideration.

The proposed Technical Specifications change does not affect the assumptions, design parameters, or results of any UFSAR accident analysis and the proposed amendment does not add or modify any existing equipment. Therefore, the proposed Technical Specifications change would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change to the Technical Specifications does not involve modifications to any of the existing equipment or affect the operation of any existing systems. The

absence of any hardware or software changes means that the accident initiators remain unaffected, so no unique accident possibility is created. Therefore, the proposed Technical Specifications change would not create the possibility of a new or different kind of accident from any accident previously evaluated.

Although the proposed change will reduce the minimum number of steam generators required to be opened for inspection during the first refueling outage following steam generator replacement, the revised Technical Specification surveillance will continue to ensure that a sampling of steam generator tubes will be inspected. The operability of the steam generators will also continue to be verified by periodic inservice inspections. Therefore, since equipment reliability will be maintained, the proposed Technical Specifications change will not involve a significant reduction in a margin of safety.