

July 11, 2006

Mr. David A. Christian  
Senior Vice President  
and Chief Nuclear Officer  
Virginia Electric and Power Company  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: NORTH ANNA POWER STATION, UNIT NO. 2 (NORTH ANNA 2), REVIEW OF  
STEAM GENERATOR TUBE INSERVICE INSPECTION REPORT FOR THE  
FALL 2005 REFUELING OUTAGE (TAC NO. MD0266)

Dear Mr. Christian:

By letters dated October 21, 2005, and February 28, 2006, Virginia Electric and Power Company (VEPCO) submitted reports summarizing the steam generator (SG) tube inspections performed during the fall 2005 refueling outage at North Anna 2.

The Nuclear Regulatory Commission (NRC) staff's review of VEPCO's SG tube inspection report is enclosed. Based on its review, the NRC staff has concluded that VEPCO has provided the information required by their technical specifications for North Anna 2. The NRC staff's review did not identify any new technical issues that warrant follow-up action.

Sincerely,

*/RA/*

Stephen Monarque, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-339

Enclosure:  
Safety Evaluation

cc w/encl: See next page

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DATE	7/3/2006	7/6/2006	06/01/2006	7/11/2006

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EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REGARDING THE FALL 2005 REFUELING OUTAGE

STEAM GENERATOR TUBE INSERVICE INSPECTION REPORT

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION, UNIT NO. 2

DOCKET NO. 50-339

By letters dated October 21, 2005, and February 28, 2006, Virginia Electric and Power Company (the licensee) submitted reports summarizing the steam generator (SG) tube inspections performed during the fall 2005 refueling outage for SG-B at North Anna Power Station, Unit No. 2 (North Anna 2). These reports were submitted in accordance with Technical Specification (TS) Sections 5.6.7.a, 5.6.7.b, and 5.5.8. A summary of the Nuclear Regulatory Commission (NRC) staff's evaluation of the fall 2005 refueling outage SG tube inspection results is provided below.

North Anna 2 has three replacement Westinghouse Model 54F SGs that are designated A, B, and C. Each SG contains 3,592 thermally treated Inconel 690 tubes, which have an outside diameter of 0.875 inch and a wall thickness of 0.050 inch. The tubes have been hydraulically expanded into the tubesheet and the stainless steel Type 405 tube support plates contain broached quatrefoil holes. These SGs began operation in 1995.

Only SG-B was inspected during the fall 2005 refueling outage. The last inspection of SG-B took place during the fall 1999 refueling outage. The licensee inspected 3592 tubes (100 percent of tubes in SG-B), full length (tube end cold to tube end hot), using a bobbin probe. A +Point™ probe was used to inspect approximately 20 percent (719 tubes) of the tubes in the hot-leg expansion transition region and 100 percent (98 tubes) of the tubes in the U-bend region in Row 1 (top hot leg support to top cold leg support).

The licensee provided the scope, extent, methods, and results of its SG tube inspections in the documents referenced above. Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by the TSs. In addition, the NRC staff concludes that there are no technical issues that warrant follow-up action at this time since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

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Date: July 11, 2006  
North Anna Power Station, Units 1 & 2

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