

November 14, 2001

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
NORTH ANNA NUCLEAR STATION, UNITS 1 AND 2, AND SURRY NUCLEAR  
STATION, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION

Dear Mr. Christian:

By letter dated May 29, 2001, Virginia Electric and Power Company (Dominion) submitted for Nuclear Regulatory Commission (NRC) review an application, pursuant to 10 CFR Part 54, to renew the operating licenses for the North Anna Nuclear Station, Units 1 and 2, and Surry Nuclear Station, Units 1 and 2. The NRC staff is reviewing the information contained in this license renewal application and has identified, in the enclosure, areas where additional information is needed to complete its review. Specifically, the enclosed request for additional information (RAI) is from Section 2.3.1, "Reactor Coolant Systems", and Section 2.3.2, "Engineered Safety Features Systems."

Please provide a schedule by letter, or electronic mail for the submittal of your response within 30 days of the receipt of this letter. Additionally, the staff would be willing to meet with Dominion prior to the submittal of the response to provide clarification of the staff's request for additional information.

Sincerely,

**/RA/**

Robert J. Prato, Project Manager  
License Renewal and Standardization Branch  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338, 50-339, 50-280, and 50-281

Enclosure: As stated

cc w/encl: See next page

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**Request for Additional Information**  
**North Anna Nuclear Station, Units 1 and 2, and**  
**Surry Nuclear Station, Units 1 and 2**

- RAI 2.3.1-1 In both LRAs, Section 2.3.1, the applicant states that two concentric, hollow, metallic O-rings between the closure head flange and the reactor vessel flange form an inner and outer seal. Furthermore, it was stated in the UFSAR that leakage through the reactor vessel head flange will leak between the double O-ring seal to the leakoff provided. Leakage into this leakoff path will cause high temperature in this line, which will actuate an alarm in the control room. On the bases of the staff's experience with license renewal, the staff has generally concluded that the inner O-ring, the leakoff lines, and the outer O-ring all support the reactor vessel closure head flange pressure boundary. Although in select cases the staff has accepted a site-specific technical justification, in general, the leakoff lines require an aging management review. Please provide a site-specific technical justification for both NAS and SPS as to why aging management is not required, or perform an aging management review for these components.
- RAI 2.3.2.4-1 It was stated in the UFSAR that a modified design incorporating vortex suppressing devices was developed so that the containment sump will be free of any harmful vortices for any postulated operating conditions. The modifications made to the sump involved the installation of two layers of floor grating in the sump and the installation of perforated vortex breakers inside the cylindrical screens (Sections 3A.79 and 6.2.2.4.3 of the North Anna UFSAR). These components do not appear to have been described in the LRA, and are not included within the scope of license renewal. The staff requests that the applicant provide a technical justification for its exclusion, or that the applicant submit an aging management review for these components. In addition, if similar components (screens/vortex suppressors) are employed inside tanks at pump suction lines, then the applicant should also identify those components, and submit an AMR for those components.