

August 8, 2001

Mr. David A. Christian
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5000 Dominion Boulevard
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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 the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete its review. Specifically, the enclosed questions are from the electrical and instrumentation and control scoping results, and the buried piping and valve inspection activities, Sections 2.5 and B.2.1.1.

Please provide a schedule by letter, or electronic mail for the submittal of your responses 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 responses to provide clarifications of the staff's requests 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, UNITS 1 AND 2, AND SURRY, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION**

Section 2.5, Electrical and Instrumentation and Controls System Scoping and Screening Results

- 2.5-1 The screening results in both license renewal application (LRA) for Section 2.5 do not include any electrical components listed in NEI 95-10 (Appendix B) and the Standard Review Plan (Table 2.1-5) associated with the offsite power system. These are components such as switchyard bus, transmission conductors, switchyard insulators and transmission line insulators. 10 CFR 54.4(a)(3) requires that all systems, structures, and components (SSCs) relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulation for station blackout (10 CFR 50.63) be included within the scope of Part 54. In 10 CFR 50.63 it's required that each light-water-cooled nuclear power plant licensed to operate be able to withstand and recover from a station blackout of a specified duration that is based upon factors that include the expected frequency of loss of offsite power and the probable time needed to recover offsite power. At North Anna and Surry the specified duration was determined based upon evaluations that followed the guidance in NRC Regulatory Guide 1.155 and NUMARC 87-00, and included the plants' offsite power characteristics. These characteristics helped determine the probable time needed to recover offsite power (coping duration). The resulting four hour coping duration at North Anna and Surry is, therefore, based on the likelihood of recovering offsite power within four hours following its loss. Therefore, identify where in the LRA these Station Blackout SSCs are included within the scope of license renewal, or provide a technical justification for excluding the Station Blackout SSCs from the screening results.
- 2.5-2 The cables and connectors have been evaluated as commodities across system boundaries using the spaces approach. In both LRAs, Section 2.5.2, the applicant states that the evaluation boundary generally includes all cables and connectors in these areas to provide the complete coverage of cables and connectors in the scope of license renewal. The word "generally" is a concern in this statement. Identify any cables and connectors located within these spaces that have been excluded from the scope of license renewal and identify the technical basis for the exclusion.

B2.1.1 Buried Piping and Valve Inspection Activities

- B2.1.1-1 Scoping - In the SPS LRA, page B-9, the applicant states that SPS 1 and 2 utilizes buried copper-nickel pipe. Explain why this material is not included as one of the representative samples for the material/burial condition combinations provided on Page B-8.

Enclosure

- B2.1.1-2 Detection of Aging Effects - Identify the grade of copper-nickel material used in buried component applications at Surry and verify that this grade of copper-nickel material is not susceptible to changes in material properties (such as selective leaching) when exposed to underground conditions.
- B2.1.1-3 Operating Experience - The applicant states that significant external degradation of buried piping due to effects of aging requiring aging management has not been found. This statement is based on the experience that has been gained through the Work Control Process with respect to buried fire protection piping (all four units) and service water system piping (NAS 1 and 2). Please describe the operating experience for all four units, including any failure of buried components due to aging or failure of coating material. Include the means by which the aging or coating failure was detected and any corrective actions taken to prevent future aging/failures.

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