

May 20, 2002

MEMORANDUM TO: File

FROM: Omid Tabatabai, Project Manager **/RA/**
License Renewal Section
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

SUBJECT: DOMINION'S RESPONSES TO STAFF'S QUESTIONS DURING A
TELECOMMUNICATION ON SEPTEMBER 26, 2001

On October 4, 2001, Mike Henig of Virginia Electric and Power Company (VEPCo) transmitted an electronic mail (e-mail) to Robert Prato and provided Dominion's responses to the staff's questions during a telecommunication on September 26, 2001, regarding Sections 2.4.1 and 2.4.2 of the applications. The e-mail response from VEPCo is attached.

Attachment: As Stated

cc: PUBLIC

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

Responses To RAIs Regarding LRA Section 2.4
Discussed With The NRC on 9-26-01

RAI 2.4.1-1: North Anna Power Station License Renewal Application (NAPS LRA), Section 2.4.1 states that the containment is divided by the crane wall that supports the polar crane into an outer annulus section and a central section. However, the polar crane and the crane wall are not listed in Table 2.4.1-1 of the NAPS LRA as the components subject to an aging management review (AMR). The polar crane and its support should be within the scope of license renewal in accordance with 10 CFR 54.4(a)(2). Explain whether the polar crane and its support structure should be within the scope of license renewal. This RAI is also applicable to the Surry Plant LRA.

Response:

The crane wall is in the scope of license renewal and is described in Tables 2.4.1-1 of the NAPS and SPS LRAs as “walls”.

The containment polar crane is listed in Sections 2.4.12 of the NAPS and SPS LRAs as being in the scope of license renewal. The polar crane components and its structural members that support the containment polar cranes are listed in Tables 2.4.12-1 of the NAPS and SPS LRA.

RAI 2.4.1-2: NAPS LRA, Section 2.4.1 states that the personnel access hatch has an inner and an outer door that are maintained in the closed position by interlocking tooth closure mechanisms. Explain whether the operating mechanism of the personnel hatch that perform a passive function associated with maintaining the hatch in a closed position (e.g., gears, latches, and hinges, and equalizing valves) are subject to an AMR. This RAI is also applicable to the Surry Plant LRA.

Response:

For the personnel access hatch, the components that guide the personnel access hatch doors into position are not required in order to maintain the doors in a closed position and, therefore, do not perform an intended function and are not in scope. The feature of the hatch that keeps the door in place while shut (interlocking tooth closure) does perform an intended function (PB) and is in scope. For the design of the personnel access hatch, latches and hinges are not required to keep the door in place while shut; therefore, these components are not in scope. There are no gears associated with the personnel access hatch.

The equalizing valves for the personnel access hatch doors are also in scope and are subject to an AMR. The equalizing valves are identified in Table 2.4.1-1 as valve bodies.

RAI 2.4.1-3: NAPS LRA, Table 2.4.1-1 lists, among others, the fuel transfer tube and its protection shield, and the gate valve, as the components subject to an AMR. However, the table does not list some of the attachments of the fuel transfer tube, such as the sleeves

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that are welded to the liner plate and blind flanges that cover the tube when the fuel transfer tube is not in use. Also, NAPS LRA, Section 2.4.1 does not describe these components. The staff considers that these components should be within the scope of license renewal because they perform an intended function to preserve the containment pressure boundary. Provide information on these attachments and explain whether they should be subject to an AMR. This RAI is also applicable to the Surry plant LRA.

Response:

The fuel transfer tube sleeves are in scope and are identified as mechanical penetrations in Table 2.4.1-1. The blind flanges are evaluated along with the fuel transfer tube, since they are subject to same environment and the same material. The blind flanges are not identified as individual items.

RAI 2.4.2-1: NAPS LRA, Section 2.4.2 describes the structures and structural components of the auxiliary building, cable vault, cable tunnel, pipe tunnel, and motor control center room. However, the following structural components described in this section are not listed in Table 2.4.2-1 of the NAPS LRA for an AMR: fire and EQ doors, fire barrier penetrations, fire barrier seals, and membrane roofing system. Verify the table to ensure its completeness or provide reasons why these components should not be listed in the table. This RAI is also applicable to the Surry Plant LRA.

Response:

Fire and EQ doors, fire barrier penetration seals are in scope and are covered in Section 2.4.11-Miscellaneous Structural Commodities. Refer to Table 2.4.11-1.

Membrane roofing is not included in the Table 2.4.2-1 because it is not required to perform any intended function.

RAI 2.4.2-2: NAPS LRA, Section 2.4.2, states that the auxiliary building is comprised of a reinforced concrete foundation mat and below grade reinforced concrete walls (substructure), etc. However, the applicant did not explain whether the foundation mat and the lower portion of the walls have expansion joints, water-stops or waterproofing membranes. The staff considers that water-stops are important in maintaining the integrity of the concrete components to which they connect. The groundwater in-leakage into the concrete construction joints could occur as a result of degradation of the water-stops. Provide information on structural sealant for the below-grade construction joints and explain whether the water stops should be treated as a unique commodity subject to an AMR.

Response:

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Waterstops are in scope; however, as discussed in NAPS Appendix C, Section C2.4, page C-9, waterstops are not defined as unique components, but are considered part of the concrete structure to which they connect.