

December 28, 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: SURRY POWER STATION, UNIT NOS. 1 AND 2, REQUEST FOR  
ADDITIONAL INFORMATION (RAI) REGARDING THE PROPOSAL TO  
REVISE TECHNICAL SPECIFICATION SURVEILLANCE REQUIREMENTS  
FOR THE INSPECTION OF THE CONTAINMENT RECIRCULATION SUMP  
(TAC NOS. MD3168 AND MD3169)

Dear Mr. Christian:

By letter dated October 3, 2006, Virginia Electric and Power Company (the licensee), submitted a license amendment request regarding the revision of the Technical Specification (TS) Surveillance Requirements (SR), for the inspection of the containment recirculation sump. The proposed license amendment will revise the TS SR to: (1) change the required frequency of containment sump inspections, and (2) replace specific terminology associated with the existing sump screen design with generic terminology applicable to both the existing design and the replacement strainer being installed in response to the Nuclear Regulatory Commission's (NRC's) Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." The NRC staff is reviewing the submittal and has determined that additional information is required to complete its evaluation.

The NRC staff's RAI is enclosed. The licensee is requested to provide a response to the RAI within 30 days.

Sincerely,

**/RA/**

Siva P. Lingam, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-280 and 50-281

Enclosure:  
RAI

cc w/encl: See next page

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REQUEST FOR ADDITIONAL INFORMATION  
REGARDING REVISION OF TECHNICAL SPECIFICATION  
SURVEILLANCE REQUIREMENTS AMENDMENT  
ASSOCIATED WITH CONTAINMENT SUMP  
SURRY POWER STATION, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-280 AND 50-281

1. The language in the proposed Technical Specifications (TSs) 4.5.D and 4.11.C.5.c and their associated TS Basis discussions does not clearly identify the scope of these surveillance requirements. Specific components are referenced in the existing TSs 4.5.D and 4.11.C.5.c (i.e., pump wells, engineered safeguards suction inlets, containment sump, trash racks, and screens). The proposed TS change would replace these specific references with generic wording (i.e., containment sump components). The applicable TS Basis descriptions would also be modified to include the generic phrase "containment sump components," without identifying the specific components within the scope of the surveillance.

The Nuclear Regulatory Commission (NRC) staff considers it essential that the proposed TS surveillance requirements 4.5.D and 4.11.C.5.c and/or the associated TS Basis descriptions identify the specific components that are within the scope of the surveillance inspection to provide a clear and inspectable requirement. Please provide additional description within proposed TSs 4.5.D and 4.11.C.5.c and/or the associated TS Basis discussions to address the NRC staff's concern, or else provide justification for the adequacy of the generic wording of the proposed TS requirements and basis discussions in light of the discussion above.

2. Please identify the scope of the proposed containment sump suction inlet periodic inspection required by TS 4.5.D, including a list of the components and/or structures covered by the inspections for potential debris restrictions, structural distress, and abnormal corrosion.

If the proposed requirement involves a reduction in the scope of the current surveillance inspection, then justification should also be provided to support the proposed reduction in inspection scope.

3. Please identify the scope of the proposed containment sump suction inlet periodic inspection required by TS 4.11.C.5.c, including a list of the components and/or structures covered by the inspections for potential debris restrictions, structural distress, and abnormal corrosion.

If the proposed requirement involves a reduction in the scope of the current surveillance inspection, then justification should also be provided to support the proposed reduction

Enclosure

in inspection scope.

4. The submittal states that, with one subsequent modification, the current containment sump surveillance requirements (i.e., TSs 4.5.D and 4.11.C.5.c ) were implemented following the identification of debris in the sump and of degraded conditions associated with the sump that are documented in Licensee Event Report (LER) 88-017-01, dated November 7, 1988. However, the submittal does not provide an indication of whether the historical results of the current sump inspections support a reduction in frequency (i.e., deletion of the requirement for performing the inspection following major maintenance activities in containment). Therefore, the NRC staff requests additional information concerning the results of past containment sump inspections performed after the completion of clean up and modification activities associated with LER 88-017-01. Specifically, the NRC staff requests a description of the types and quantities of debris or foreign materials that have been found in the containment sumps and the presumed means by which the debris or foreign materials entered sumps.
5. The TS Basis discussion for TS 4.5 indicates that flow tests are performed for the internal recirculation spray pumps through the installation of a temporary dike and physical modifications to the pump discharge piping. Please describe whether this flow test has previously resulted in debris entering the containment sumps and what level of verification is/will be performed following this test to ensure that no debris is present downstream of the screens/replacement strainers.
6. The NRC staff noted that the potential for dynamic effects associated with the strainer replacement modification was not specifically addressed in the submittal. In particular, the submittal noted that the trash rack will be removed and that the replacement strainer will be installed on the containment floor around the existing containment sump pit. The NRC staff seeks reasonable assurance that these planned modifications have been adequately evaluated with respect to the dynamic effects of a piping rupture, including jet impingement, whipping pipes, and missile impacts. Please provide additional justification to demonstrate that the proposed strainer modification satisfies NRC requirements with respect to dynamic effects.

Surry Power Station, Units 1 & 2

cc:

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