

February 10, 2009

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

SUBJECT: NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2 - REPORT ON RESULTS OF THE NUCLEAR REGULATORY COMMISSION STAFF'S AUDIT OF CHEMICAL EFFECTS-RELATED ACTIONS TO ADDRESS GENERIC LETTER 2004-02 (TAC NOS. MC4696 AND MC4697)

Dear Mr. Christian:

Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," requested that all pressurized-water reactor licensees (1) evaluate the adequacy of the emergency sump recirculation function with respect to potentially adverse effects associated with post-accident debris, and (2) implement any plant modifications determined to be necessary. Virginia Electric and Power Company (Dominion, the licensee), which operates North Anna Power Station, Unit Nos. 1 and 2 (NAPS 1 and 2), has conducted an evaluation of recirculation sump performance for NAPS 1 and 2. At the time of the subject audit, Dominion had installed new sump strainers in both units.

Consistent with the discussion in the "Reasons for Information Request" section of GL 2004-02, the Nuclear Regulatory Commission (NRC) staff performed sample audits of nine licensees to verify that licensees have adequately resolved the concerns in GL 2004-02. In July 2007, the NRC staff conducted an audit of the new sump design, associated analyses, and testing for NAPS, focusing the audit on Unit 2 (available in the Agencywide Document Access and Management System (ADAMS), Accession No. ML072740400). Since the licensees' chemical effects evaluations were not complete during the earlier nine audits, the NRC staff concluded that it would be appropriate to perform additional audits focusing on chemical effects.

The enclosed audit report provides feedback to Dominion on its GL 2004-02 corrective actions and supporting analyses in the chemical effects area.

The licensee was very supportive during all phases of the audit, as Dominion provided appropriate office space, office equipment, and had the appropriate technical staff present to promptly address NRC staff questions. The licensee's support during the preparation and conduct of the audit was helpful to the fullest extent possible.

D. Christian

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Although there are no open items resulting from this chemical effects audit, the enclosed audit report does not reach a conclusion regarding the overall adequacy of Dominion's GL 2004-02 corrective actions. Dominion's GL 2004-02 final supplemental response is expected to provide a comprehensive description of Dominion's corrective actions and supporting analyses and evaluations.

Sincerely,

*/RA/*

John Stang, Senior Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure:  
As stated

cc w/encls: Distribution via Listserv

D. Christian

- 2 -

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**ADAMS Accession Nos. Pkg ML090410626**

(Letter ML090410602, Audit Report ML090410618)

\*transmitted by memo dated

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