

November 15, 2007

MEMORANDUM TO: Evangelos C. Marinos, Chief,  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: Michael L. Scott, Chief /RA/  
Safety Issue Resolution Branch  
Division of Safety Systems  
Office of Nuclear Reactor Regulation

SUBJECT: NORTH ANNA POWER STATION: REPORT ON RESULTS OF STAFF  
AUDIT OF CORRECTIVE ACTIONS TO ADDRESS GENERIC  
LETTER 2004-02 (TAC NOS. MC4696, MC4697)

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. Dominion, which operates the North Anna Power Station (NAPS), 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 Unit 2 and planned installation during fall of 2007 for Unit 1.

Consistent with the discussion in the "Reasons for Information Request" Section of GL 2004-02, the NRC staff is using sample audits to help verify that licensee's have resolved the concerns in the generic letter. The staff has conducted an audit of the new sump design, associated analyses, and testing for NAPS, focusing the audit on Unit 2. With the assistance of the DORL Project Manager for NAPS, SSIB has forwarded the draft report to Dominion. Dominion, after consultation with its contractors and vendors for GL 2004-02 corrective actions, has confirmed that there is no proprietary information contained in the audit report.

This memorandum transmits the enclosed audit report to the Division of Operator Reactor Licensing for forwarding to the licensee. The enclosed audit report provides Dominion feedback on its GL 2004-02 corrective actions and supporting analyses. Also, when made publicly available, this audit report will serve as a vehicle to inform other pressurized water reactor licensees of the staff's technical positions.

The licensee was very supportive during all phases of the audit. Consideration was given by Dominion in providing appropriate office space, supplies, and equipment and facilitating the engineered safety features tour taken by audit team members. The licensee's support during the preparation, conduct and report writing phases of the audit was helpful to the fullest extent possible.

The enclosed audit report does not reach a conclusion regarding overall adequacy of Dominion's GL 2004-02 corrective actions. Dominion's end-of-CY 2007 GL 2004-02 supplemental response is expected to respond to the open items in the enclosed audit report

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and to the GL 2004-02 requests for additional information, as well as provide a comprehensive description of Dominion's corrective actions and supporting analyses and evaluations. In early CY 2008 staff consideration of this audit report and Dominion's end-of-CY 2007 GL 2004-02 supplemental response will result in a letter to Dominion assessing the overall adequacy of the NAPS GL 2004-02 corrective actions.

The audit team did not evaluate whether the licensee has identified and submitted all appropriate licensing documents for its GL 2004-02 corrective actions. The licensee's maintenance of its licensing basis is within the scope of the Reactor Oversight Program. The audit team did not evaluate the completion of the licensee's implementation of GL 2004-02 corrective actions that it has committed to take. That is also within the scope of the Reactor Oversight Program under TI 2515/166, "Pressurized Water Reactor Containment Sump Blockage."

Docket Nos: 50-338 and 50-339

Enclosure:

North Anna Power Station Corrective Actions for Generic Letter 2004-02 Audit Report

The enclosed audit report does not reach a conclusion regarding overall adequacy of Dominion's GL 2004-02 corrective actions. Dominion's end-of-CY 2007 GL 2004-02 supplemental response is expected to respond to the open items in the enclosed audit report and to the GL 2004-02 requests for additional information, as well as provide a comprehensive description of Dominion's corrective actions and supporting analyses and evaluations. In early CY 2008 staff consideration of this audit report and Dominion's end-of-CY 2007 GL 2004-02 supplemental response will result in a letter to Dominion assessing the overall adequacy of the NAPS GL 2004-02 corrective actions.

The audit team did not evaluate whether the licensee has identified and submitted all appropriate licensing documents for its GL 2004-02 corrective actions. The licensee's maintenance of its licensing basis is within the scope of the Reactor Oversight Program. The audit team did not evaluate the completion of the licensee's implementation of GL 2004-02 corrective actions that it has committed to take. That is also within the scope of the Reactor Oversight Program under TI 2515/166, "Pressurized Water Reactor Containment Sump Blockage."

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