



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 30, 2014

Mr. Thomas Joyce
President and Chief Nuclear Officer
PSEG Nuclear
P.O. Box 236, N09
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNITS 1 AND 2 - CLOSEOUT OF
GENERIC LETTER 2004-02, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE
ON EMERGENCY RECIRCULATION DURING DESIGN BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS" (TAC NOS. MC4712 AND MC4713)

Dear Mr. Joyce:

The U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML042360586) dated September 13, 2004, requesting that licensees address the issues raised by Generic Safety Issue 191, "Assessment of Debris Accumulation on Pressurized Water Reactor Sump Performance."

The stated purpose of GL 2004-02 was focused on demonstrating compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors." Specifically, the GL requested addressees to perform an evaluation of the emergency core cooling system (ECCS) and containment spray system (CSS) recirculation. Additionally, it requested addressees take additional action, if necessary, to ensure system function, in light of the potential susceptibility of pressurized-water reactor sump screens to block during a design basis accident requiring recirculation operation of the ECCS or CSS, and due to the potential for additional adverse effects due to debris blockage of flowpaths necessary for ECCS and CSS recirculation and containment drainage.

By letters dated March 4, 2005, September 1, 2005, June 7, 2006, and February 2, 2007 (ADAMS Accession Nos. ML050740368, ML052510438, ML061640118, and ML070440138, respectively), PSEG Nuclear LLC (PSEG), provided responses to GL 2004-02 for the Salem Nuclear Generating Station, Units 1 and 2. In order for the NRC staff to complete its review, by letter dated February 9, 2006 (ADAMS Accession No. ML060380101), the NRC issued a request for additional information (RAI).

By letter dated February 29, 2008 (ADAMS Accession No. ML080800469), the licensee provided responses to the RAIs. The NRC staff reviewed the responses and concluded that further additional information was required. By letter dated December 17, 2008 (ADAMS Accession No. ML083300079), the NRC issued a second set of RAIs.

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By letter dated March 31, 2009 (ADAMS Accession No. ML091000557), the licensee provided responses to the second set of RAIs. The NRC staff reviewed the responses and concluded again that additional information was required. By letter dated February 4, 2010 (ADAMS Accession No. ML100220520), the NRC issued a third set of RAIs.

By letters dated April 27, 2012, April 22, 2013, and July 11, 2013 (ADAMS Accession Nos. ML121290536, ML13114A048, and ML13192A417, respectively), the licensee responded to the third set of RAIs.

The NRC staff performed a thorough review of all PSEG responses and RAI supplements to GL 2004-02. The NRC staff conclusions have been documented (ADAMS Accession No. ML14113A221). Based on the NRC staff conclusions, the NRC staff finds that PSEG has provided adequate information as requested by GL 2004-02. The NRC staff finds the information provided demonstrates that debris will not inhibit the ECCS or CSS performance of its intended function in accordance with 10 CFR 50.46 to assure adequate long-term core cooling following a design-basis accident. Therefore, the NRC staff finds the licensee's responses to GL 2004-04 are adequate and considers GL 2004-02 closed for the Salem Nuclear Generating Station, Units 1 and 2. No further information or action is requested of the licensee.

If you have any questions, please feel free to contact me at 301-415-3100 or via e-mail at John.Lamb@nrc.gov.

Sincerely,



John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

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If you have any questions, please feel free to contact me at 301-415-3100 or via e-mail at John.Lamb@nrc.gov.

Sincerely,

/RA/

John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

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