



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

November 17, 2014

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
3R Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT, 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. MC4717 AND MC4718)

Dear Mr. Shea:

The U.S. Nuclear Regulatory (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 and, if necessary, take additional action to ensure system function in light of the potential susceptibility of pressurized-water reactor sump screens to blockage during a design-basis accident requiring recirculation operation of the ECCS or CSS and in consideration of potential adverse effects due to debris blockage of flowpaths necessary for ECCS and CSS recirculation and containment drainage.

By letters dated March 7, 2005 (ADAMS Accession No. ML050700255), July 21, 2005 (ADAMS Accession No. ML0052080065), September 1, 2005 (ADAMS Accession No. ML052500298), and September 30, 2005 (ADAMS Accession No. ML052850352), Tennessee Valley Authority (TVA, the licensee) provided responses to GL-2004-02 for the Sequoyah Nuclear Plant Units 1 and 2. In order for the NRC staff to complete its review, by letter dated February 10, 2006 (ADAMS Accession No. ML060370480), the NRC issued a request for additional information (RAI).

By letter dated April 11, 2006 (ADAMS Accession No. ML061020313), the licensee provided responses to the RAIs. In addition, by letters dated November 28, 2007 (ADAMS Accession No. ML073370317), and February 29, 2008 (ADAMS Accession No. ML080640205) the licensee provided supplemental responses to GL 2004-02. The NRC staff reviewed the supplemental information and RAI responses and concluded that additional information was still

J. Shea

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required. By letter dated November 25, 2008 (ADAMS Accession No. ML083230823) the NRC issued a second set of RAIs.

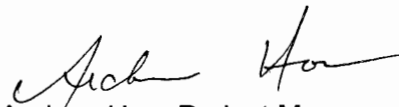
By letter dated February 23, 2009 (ADAMS Accession No. ML090540857), the licensee provided responses to the second set of RAIs. The NRC staff reviewed the RAI responses and supplemental information, concluded again that additional information was required. By letter dated October 14, 2009 (ADAMS Accession No. ML092780335), the NRC issued a third set of RAIs.

By letters dated April 1, 2010 (ADAMS Accession No. ML100960020), June 2, 2011 (ADAMS Accession No. ML11158A045), and June 27, 2014 (ADAMS Accession No. ML14182A576), the licensee responded to the third set of RAIs, and provided supplemental information.

The NRC staff performed a thorough review of all TVA responses and RAI supplements to GL 2004-02. The NRC staff conclusions have been documented (ADAMS Accession No. ML14283A513). Based on the NRC staff conclusions, the NRC staff finds that TVA 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 Sequoyah Nuclear Plant, Units 1 and 2. No further information or action is requested of the licensee.

If you have any questions, please call me at 301-415-8480.

Sincerely,



Andrew Hon, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

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/RA/

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ADAMS Accession Nos.: PKG ML14290A368		LTR ML14283A526		Report ML 14283A513
OFFICE	NRR/LPL2-2/PM	NRR/LPL2-2/PM	NRR/LPL2-2/LA	NRR/PGCB/BC
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DATE	11/05/14	10/27/14	11/17/14	11/05/14
OFFICE	NRR/SSIB/BC	NRR/LPL2-2/BC	NRR/LPL2-2/PM	
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