



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

December 17, 2014

Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2 - RESPONSE REGARDING PHASE 2 STAFFING SUBMITTALS ASSOCIATED WITH NEAR-TERM TASK FORCE RECOMMENDATION 9.3 RELATED TO THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT (TAC NO. MF5016)

Dear Mr. Shea:

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the U.S. Nuclear Regulatory Commission (NRC) issued a Request for Information pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 50.54(f) (hereafter referred to as the 50.54(f) letter), regarding Recommendations 2.1 (seismic and flooding evaluations), 2.3 (seismic and flooding walkdowns), and 9.3 (emergency preparedness communication and staffing) of the Near-Term Task Force (NTTF) review of insights from the Fukushima Dai-ichi accident. With respect to Recommendation 9.3, Enclosure 5 to the NRC's letter requested licensees and holders of construction permits to assess their means to power communications equipment onsite and offsite during an extended loss of alternating current (ac) power (ELAP) event and to perform a staffing assessment to determine the staff required to fill all necessary positions in response to a multi-unit event.

The 50.54(f) letter in part, required responses pursuant to the provisions of 10 CFR 50.54(f) pertaining to onsite and augmented staff availability to implement the strategies discussed in the emergency plan and/or plant operating procedures, including new staff or functions resulting from the assessment, any identified collateral duties, an implementation schedule to perform the assessments, any identified modifications, and any changes that have been made or will be made to the emergency plan regarding on-shift or augmented staffing. In addition, NTTF Recommendation 9.3 has a dependency on the implementation of NTTF Recommendation 4.2 (mitigating strategies). As a result of this dependency, licensees responded to the 50.54(f) letter in phases. For the Phase I staffing assessments, licensees evaluated their ability to respond to a multi-unit ELAP event utilizing existing processes and procedures. The Tennessee Valley Authority (TVA) did not provide a Phase 1 Staffing Assessment for Watts Bar Nuclear Plant (WBN, Watts Bar), Unit 1 because at the time WBN, Unit 1 was considered a single-unit site and only multi-unit sites were requested to provide a Phase 1 Staffing Assessment.

Licensees and construction permit holders were also to submit for NRC staff review a Phase 2 staffing assessment which provides an assessment of the staffing necessary to perform the functions related to the strategies developed in response to NTTF Recommendation 4.2 and the

resulting Order EA-12-049, "Order to Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (ADAMS Accession No. ML12054A736). Licensees were requested to provide their Phase 2 Staffing Assessments to the NRC no later than four months prior to the beginning of their second refueling outage (as used in the context of Order EA-12-049). By letter dated October 6, 2014 (ADAMS Accession No. ML14280A258), TVA submitted its Phase 2 staffing assessment for WBN Units 1 and 2 to the NRC in response to the 50.54(f) letter.

The NRC staff reviewed TVA's Phase 2 assessment for staffing in accordance with the assumptions and guidelines of Sections 2.2, 2.3, and 3 of the Nuclear Energy Institute (NEI) guidance document NEI 12-01, "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities," (ADAMS Accession No. ML12125A412), which was endorsed by the NRC staff by letter dated May 15, 2012, (ADAMS Accession No. ML12131A043). The NRC staff noted that TVA assessed the proposed onsite minimum staffing levels at WBN to respond to an event following a beyond-design-basis large-scale natural event to identify any needed enhancements to ensure that the strategies contained in the existing emergency plan and/or plant operating procedures, such as those used in response to an ELAP, can be performed by the site staff. TVA's assessment assumed that a large-scale natural event causes: (1) all units on the site to be affected, (2) an ELAP, and (3) access to the site to be impeded for a minimum of six hours. TVA also assessed WBN's capability to perform the site specific functions related to the strategies developed in response to NRC Recommendation 4.2 and the resulting Order EA-12-049. TVA conducted independent reviews and concluded, based on this staffing assessment, that the proposed on-shift minimum staff is sufficient to implement the existing loss of all ac power, multi-unit event response strategies, including those strategies developed to support the requirements of NRC Order EA-12-049, while supporting performance of the required emergency planning duties without unacceptable collateral duties.

The NRC staff reviewed TVA's Phase 2 staffing submittal for WBN Units 1 and 2 and found that the proposed emergency response resources, as described in the WBN emergency plan, are sufficient to perform the required plant actions and emergency plan functions, and implement the multi-unit event response strategies that were developed in response to NRC Order EA-12-049 without the assignment of collateral duties that would impact the performance of assigned emergency plan functions.

As a result, the NRC staff concludes that TVA's Phase 2 staffing submittal adequately addresses the response strategies needed to respond to a beyond-design-basis external event using procedures and guidelines at WBN. The NRC staff will verify the implementation of TVA's staffing capabilities through the inspection program.

J. Shea

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If you have any questions regarding this letter, please contact Stephen Philpott at (301) 415-2365 or via email at Stephen.Philpott@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Roque-Cruz', written in a cursive style.

Carla P. Roque-Cruz, Acting Branch Chief
Orders Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

Docket Nos. 50-390 and 50-391

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J. Shea

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If you have any questions regarding this letter, please contact Stephen Philpott at (301) 415-2365 or via email at Stephen.Philpott@nrc.gov.

Sincerely,

/RA/

Carla P. Roque-Cruz, Acting Branch Chief
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