



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

November 16, 2016

Mr. Thomas A. Vehec  
Site Vice President  
Next Era Energy  
Duane Arnold Energy Center  
3277 DAEC Road  
Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER - 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 (CAC NO. MF7794)

Dear Mr. Vehec:

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 a prolonged station blackout (SBO) 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, requested licensee 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 plant operating procedures, including new staff or functions resulting from the assessment, identified collateral duties, an implementation schedule to perform the assessments, 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. The Phase 1 staffing assessment requested licensees to evaluate their ability to respond to a multi-unit extended loss of alternating current (ac) power (ELAP) event utilizing existing processes and procedures. Licensees were not requested to submit Phase 1 staffing assessments for single-unit sites.

Licensees were also requested to submit a Phase 2 staffing assessment for NRC staff review, 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 NRC Order EA-12-049, "Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events [BDBEE]" (ADAMS Accession No. ML12054A736).

Licensees were requested to provide their Phase 2 staffing assessments to the NRC no later than 4 months prior to the beginning of their second refueling outage (as used in the context of NRC Order EA-12-049). By letter dated June 3, 2016, (ADAMS Accession No. ML16159A235), NextEra Energy Duane Arnold, LLC (the licensee) submitted its Phase 2 staffing assessment for Duane Arnold Energy Center to the NRC in response to the 50.54(f) letter. By letter dated September 15, 2016 (ADAMS Accession No. ML16260A402), the licensee submitted additional information as a supplement to its initial submittal.

The NRC staff reviewed the licensee's initial Phase 2 staffing assessment, supplemental staffing assessment information, and previously submitted supplemental information (ADAMS Accession Nos. ML12165A473 and ML12135A291) 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 the licensee assessed its current onsite minimum staffing levels to identify any enhancements needed to respond following a beyond-design-basis large-scale natural event, and to ensure that the strategies contained in the existing emergency plan and plant operating procedures, such as those used in response to a SBO, can be performed by the site staff. Consistent with the assumptions stated in Section 2 of NEI 12-01, the licensee's assessment assumed that a large-scale natural event causes: (1) an ELAP, (2) all units on the site to be affected, and (3) access to the site to be impeded for a minimum of 6 hours. The licensee also assessed its capability to perform the site-specific functions related to the strategies developed in response to Order EA-12-049. The licensee conducted independent reviews and concluded, based on its staffing assessment, that the existing on-shift minimum staff is sufficient to implement the loss of all ac power event response strategies, including those strategies developed to support the requirements of Order EA-12-049, while supporting performance of the required emergency planning duties without unacceptable collateral duties.

The NRC staff reviewed the licensee's initial Phase 2 staffing assessment and supplemental information to verify the assessment's conclusion that the licensee's existing emergency response resources, as described in its emergency plan, are sufficient to perform the required plant actions and emergency plan functions, and implement the event response strategies that were developed in response to 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 the licensee's Phase 2 staffing submittal adequately addresses the response strategies needed to respond to a BDBEE using its procedures and guidelines. The NRC staff will verify the implementation of the licensee's staffing capabilities through the inspection program.

T. Vehec

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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 that reads "Mandy K. Halter". The signature is written in a cursive, flowing style.

Mandy K. Halter, Acting Chief  
Orders Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

Docket No. 50-331

cc: Distribution via Listserv

T. Vehec

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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/**

Mandy K. Halter, Acting Chief  
Orders Management Branch  
Japan Lessons-Learned Division  
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Docket No. 50-331

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**ADAMS Accession No.: ML16302A431**

**\*via email**

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