

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 10, 2015

Mr. C. R. Pierce Regulatory Affairs Director Southern Nuclear Operating Co., Inc. P. O. Box 1295 / Bin 038 Birmingham, AL 35201-1295

SUBJECT:

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – STAFF REVIEW OF INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC HAZARD IMPLEMENTATION OF THE NEAR-TERM TASK FORCE RECOMMENDATION 2.1 (TAC NOS. MF5271 AND MF5272)

Dear Mr. Pierce:

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* Part 50, Section 50.54(f) (hereafter referred to as the 50.54(f) letter). The request was issued as part of implementing lessons-learned from the accident at the Fukushima Dai-ichi nuclear power plant. Enclosure 1 to the 50.54(f) letter requested that licensees reevaluate seismic hazards at their sites using present-day methodologies and guidance. Enclosure 1, Item 6, of the 50.54(f) letter requested that licensees identify "interim evaluation and actions taken or planned to address the higher seismic hazard relative to the design basis as appropriate, prior to completion of the [seismic] risk evaluation." In addition to the interim evaluation provided in the March 2014 Seismic Screening and Hazard report, the licensees for the Central and Eastern United States committed to providing the Expedited Seismic Evaluation Process (ESEP) report, an interim evaluation, by December 31, 2014.

By letters dated December 30, 2014<sup>1</sup>, Southern Nuclear Operating Company, Inc. (SNC, the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for Vogtle Electric Generating Plant, Units 1 and 2 (Vogtle). The NRC staff assessed the licensee's implementation of the ESEP guidance through the completion of a reviewer checklist<sup>2</sup>. In support of NRC staff questions, Southern provided a response dated April 24, 2015<sup>3</sup>, clarifying submittal information. Based on the NRC staff's review of the ESEP report and responses to the staff's questions, the NRC staff concludes that the licensee's implementation of the interim evaluation meets the intent of the guidance.

The staff concludes that, through the implementation of the ESEP guidance, the licensee

<sup>&</sup>lt;sup>1</sup> The December 30, 2014, letter can be found under ADAMS Accession No. ML15049A517.

<sup>&</sup>lt;sup>2</sup> The Voatle ESEP NRC review checklist can be found under ADAMS Accession No. ML15215A137.

<sup>&</sup>lt;sup>3</sup> The SNC response to NRC staff questions can be found ADAMS Accession No. ML15114A446.

identified and evaluated the seismic capacity of certain key installed mitigating strategies equipment that is used for core cooling and containment functions to cope with scenarios that involve a loss of all alternating current power and loss of access to the ultimate heat sink to withstand a seismic event two times the safe shutdown earthquake for Vogtle, Units 1 and 2. The licensee's ESEP assessment provides additional assurance, which supports continued plant safety while the longer-term seismic evaluation is completed to support regulatory decision making. The NRC staff concludes that the licensee responded appropriately to Enclosure 1, Item (6) of the 50.54(f) letter. Application of this review is limited to the interim evaluation as part of the Recommendation 2.1 Seismic review.

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The NRC staff notes that Enclosure 3 of the December 30, 2014, letter contains regulatory commitments to complete walkdowns, evaluations and any necessary modifications not requiring an outage by December 2016 and submit results letters to NRC within 90 days following completion of ESEP activities.

If you have any questions, please contact me at (301) 415-1617 or via e-mail at Frankie. Vega@nrc.gov.

Sincerely,

Frankie G. Vega, Project Manager Hazards Management Branch Japan Lessons-Learned Division Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

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C. Pierce - 2 -

identified and evaluated the seismic capacity of certain key installed mitigating strategies equipment that is used for core cooling and containment functions to cope with scenarios that involve a loss of all alternating current power and loss of access to the ultimate heat sink to withstand a seismic event two times the safe shutdown earthquake for Vogtle, Units 1 and 2. The licensee's ESEP assessment provides additional assurance, which supports continued plant safety while the longer-term seismic evaluation is completed to support regulatory decision making. The NRC staff concludes that the licensee responded appropriately to Enclosure 1, Item (6) of the 50.54(f) letter. Application of this review is limited to the interim evaluation as part of the Recommendation 2.1 Seismic review.

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Sincerely,

## /RA/

Frankie G. Vega, Project Manager Hazards Management Branch Japan Lessons-Learned Division Office of Nuclear Reactor Regulation

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