

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 14, 2015

Mr. Fadi Diya Senior Vice President and Chief Nuclear Officer Ameren Missouri Callaway Plant P.O. 620 Fulton, MO 65251

SUBJECT:

CALLAWAY PLANT, UNIT 1 – STAFF REVIEW OF INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC HAZARD IMPLEMENTING NEAR-TERM TASK FORCE RECOMMENDATION 2.1 (TAC NO. MF5230)

Dear Mr. Diya:

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 letter dated December 22, 2014<sup>1</sup>, Union Electric Company, doing business as Ameren Missouri (UE, the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for Callaway Plant, Unit 1 (Callaway). 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, Ameren Missouri provided responses dated June 3, 2015<sup>3</sup> and September 9, 2015<sup>4</sup>, clarifying submittal information. Based on the NRC staff review of the

<sup>&</sup>lt;sup>1</sup> The December 22, 2014, letter can be found under ADAMS Accession No. ML14363A311.

<sup>&</sup>lt;sup>2</sup> The Callaway ESEP NRC review checklist can be found under ADAMS Accession No. ML15281A004.

<sup>&</sup>lt;sup>3</sup> The Ameren Missouri response to NRC staff questions can be found ADAMS Accession No. ML15155A459.

<sup>&</sup>lt;sup>4</sup> The Ameren Missouri response to NRC staff questions can be found ADAMS Accession Nos. ML15259A322 and ML15259A323, respectively.

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 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 Callaway. 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.

The NRC staff notes that regulatory commitments are listed in section 8.4 of the ESEP report, as updated in the September 9, 2015, letter, including a letter to NRC stating that all ESEP modifications are complete no later than 60-days following completion of any required modifications, and no later than 60-days following completion of Refueling Outage 22, fall 2017.

If you have any questions, please contact me at (301) 415-1115 or via e-mail at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

Nicholas J. DiFrancesco, Senior Project Manager

Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

Docket No. 50-483

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Sincerely,

/RA/

Nicholas DiFrancesco, Senior Project Manager Hazards Management Branch Japan Lessons-Learned Division Office of Nuclear Reactor Regulation

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