

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 15, 2015

Vice President, Operations Entergy Nuclear Operations, Inc. Indian Point Energy Center 450 Broadway, GSB P.O. Box 249 Buchanan, NY 10511-0249

SUBJECT:

INDIAN POINT NUCLEAR GENERATING, UNIT NOS. 2 AND 3 – STAFF REVIEW OF INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC HAZARD IMPLEMENTATING NEAR-TERM TASK FORCE RECOMMENDATION 2.1 (TAC NOS. MF5245 AND MF5246)

## Dear Sir of Madam:

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 22, 2014,<sup>1</sup> and June 25, 2015<sup>2</sup>, Entergy Nuclear Operations, Inc. (Entergy, the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for Indian Point Nuclear Generating, Unit Nos. 2 and 3 (Indian Point). The NRC staff assessed the licensee's implementation of the ESEP guidance through the completion of a reviewer checklist<sup>3</sup>. In support of NRC staff questions, Entergy provided a response dated

<sup>&</sup>lt;sup>1</sup> The December 22, 2014, letter can be found under ADAMS Accession No. ML15008A086.

<sup>&</sup>lt;sup>2</sup> The June 25, 2015, letter can be found under ADAMS Accession No. ML15182A249.

<sup>&</sup>lt;sup>3</sup> The Indian Point ESEP NRC review checklist can be found under ADAMS Accession No. ML15231A392.

April 21, 2015<sup>4</sup>, clarifying submittal information. Based on the NRC staff 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 NRC 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 Indian Point. 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 Section 8.4 of the December 22 2014, letter contains regulatory commitments to complete ESEP activities and submit a results letter to NRC within 60 days following completion of ESEP activities.

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

Sincerely,

Nicholas DiFrancesco, Senior Project Manager

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

Docket Nos. 50-247 and 50-286

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<sup>&</sup>lt;sup>4</sup> The Entergy response to NRC staff questions can be found ADAMS Accession No. ML15118A570.

April 21, 2015,<sup>4</sup> clarifying submittal information. Based on the NRC staff 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.

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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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## ADAMS Accession Number: ML15232A667

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<sup>4.</sup> The Entergy response to NRC staff questions can be found ADAMS Accession No. ML15118A570.