



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

August 25, 2015

Mr. Lawrence J. Weber  
Senior Vice President and Chief  
Nuclear Officer  
Indiana Michigan Power Company  
Nuclear Generation Group  
One Cook Place  
Bridgman, MI 49106

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2 – STAFF REVIEW OF  
INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC  
HAZARD IMPLEMENTATING NEAR-TERM TASK FORCE  
RECOMMENDATION 2.1 (TAC NOS. MF5236 AND MF5237)

Dear Mr. Weber:

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 18, 2014<sup>1</sup>, Indiana Michigan Power Company (I&M, the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for Donald C. Cook Nuclear Plant, Units 1 and 2 (CNP). 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, I&M provided a response dated June 22, 2015<sup>3</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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<sup>1</sup> The December 18, 2014, letter can be found under ADAMS Accession No. ML14357A053.

<sup>2</sup> The CNP ESEP NRC review checklist can be found under ADAMS Accession No. ML15196A022.

<sup>3</sup> The I&M response to NRC staff questions can be found ADAMS Accession No. ML15173A217.

L. Weber

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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 up to 1.93 times the safe shutdown earthquake for CNP. 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 18, 2014, letter contains a summary of actions to complete ESEP activities. Actions 1 and 2 to complete walkdowns of inaccessible items and evaluate those components were completed prior to this letter. Commitments for actions 3 and 4 to complete modifications not requiring an outage by December 31, 2016, and modifications requiring an outage by U1C28 Fall 2017 for Unit 1 and U2C23 Fall 2016 for Unit 2 are documented under I&M letter dated April 25, 2013<sup>4</sup>. By letter dated August 6, 2015<sup>5</sup>, I&M committed to submit a results letter to NRC within 60 days following completion of all ESEP modifications.

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 Nos. 50-315 and 50-316

cc: Distribution via Listserv

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<sup>4</sup> The April 25, 2013, letter can be found under ADAMS Accession No. ML13121A059.

<sup>5</sup> The August 6, 2015, letter can be found under ADAMS Accession No. ML15223A200.

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 up to 1.93 times the safe shutdown earthquake for CNP. 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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If you have any questions, please contact me at (301) 415-1115 or via e-mail at [Nicholas.DiFrancesco@nrc.gov](mailto:Nicholas.DiFrancesco@nrc.gov).

Sincerely,

**/RA/**

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

Docket Nos. 50-315 and 50-316

cc: Distribution via Listserv

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**ADAMS Accession Number: ML 15232A411**

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