



**INDIANA  
MICHIGAN  
POWER**

A unit of American Electric Power

Indiana Michigan Power  
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May 11, 2012

AEP-NRC-2012-34  
10 CFR 50.54(f)  
10 CFR 50.4

Docket Nos.: 50-315  
50-316

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

Donald C. Cook Nuclear Plant Units 1 and 2

60-Day Response to NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident; dated March 12, 2012

Reference: Letter from E. J. Leeds and M. R. Johnson, U. S. Nuclear Regulatory Commission to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident," dated March 12, 2012. Agencywide Documents Access and Management System (ADAMS) Accession Number ML12053A340

On March 12, 2012, the NRC staff issued a letter to Indiana Michigan Power Company (I&M), licensee for the Donald C. Cook Nuclear Power Plant (CNP), Units 1 and 2, entitled, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident." Enclosure 5 of the letter contained specific Requested Actions and Requested Information associated with Recommendation 9.3 for Emergency Preparedness (EP) programs. In accordance with 10 CFR 50.54, "Conditions of licenses," paragraph (f), addressees were requested to submit a written response to the information requests within 90 days.

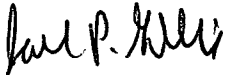
The letter states that if an addressee cannot meet the requested response date, then the addressee must provide a response within 60 days of the date of the letter and describe the alternative course of action that it proposes to take, including the basis of the acceptability of the proposed alternative course of action and estimated completion date. After a careful review of the requested actions and information, we propose to take the alternative course of action described in Enclosure 2 of this letter. The basis for our proposal is explained in Enclosure 3.

ADD  
NRR

Enclosure 1 of this letter provides an affirmation. Newly created regulatory commitments are summarized in Enclosure 4.

Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Manager, at (269) 466-2649.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel P. Gebbie".

Joel P. Gebbie  
Site Vice President

MCS/jmr

- Enclosure 1: Affirmation
- Enclosure 2: Proposed Alternative Course of Action for Responding to Recommendation 9.3  
Information Request
- Enclosure 3: Basis for Proposed Alternative Course of Action for Responding to EP  
Requested Information
- Enclosure 4: Regulatory Commitments

c: J. T. King – MPSC, w/o enclosures  
S. M. Krawec - AEP Ft. Wayne, w/o enclosures  
MDEQ - RMD/RPS, w/o enclosures  
NRC Resident Inspector  
C. D. Pederson - NRC Region III  
P. K. Tam - NRC Washington, DC

AFFIRMATION

AFFIRMATION

I, Joel P. Gebbie, being duly sworn, state that I am Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.


Indiana Michigan Power Company



Joel P. Gebbie  
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 11 DAY OF May, 2012

  
Danielle Burgoyne  
Notary Public

My Commission Expires 04-04-2018

**DANIELLE BURGOYNE**  
Notary Public, State of Michigan  
County of Berrien  
My Commission Expires 04-04-2018  
Acting in the County of Berrien

Enclosure 2 to AEP-NRC-2012-34

Proposed Alternative Course of Action for  
Responding to Recommendation 9.3 Information Request

Proposed Alternative Course of Action for  
Responding to Recommendation 9.3 Information Request

Communications

Request #	Estimated Completion Date	Requested Information
1	10/31/2012	<p>Provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the conditions described. The assessment should:</p> <ul style="list-style-type: none"> <li>▪ Identify any planned or potential improvements to existing onsite communications systems and their required normal and/or backup power supplies,</li> <li>▪ Identify any planned or potential improvements to existing offsite communications systems and their required normal and/or backup power supplies,</li> <li>▪ Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions described above, and</li> <li>▪ Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all AC power</li> </ul>
2	6/11/2012	Describe any interim actions that have been taken or are planned to be taken to enhance existing communications systems power supplies until the communications assessment and the resulting actions are complete.
3	Two dates 9/28/2012 10/31/2012	<p>Provide an implementation schedule of the time needed to conduct and implement the results of the communications assessment.</p> <p>Conduct the communications assessment.</p> <p>Provide an implementation schedule of the time needed to implement the results of the communications assessment.</p>

## Staffing

Request #	Estimated Completion Date	Requested Information
1	<p>Two dates</p> <p>4/30/2013</p> <p>5/23/2014 [4 months prior to beginning of second refueling outage*]</p>	<p>Provide an assessment of the onsite and augmented staff needed to respond to a large scale natural event meeting the conditions described. This assessment should include a discussion of the onsite and augmented staff available to implement the strategies as discussed in the emergency plan and/or described in plant operating procedures. The following functions are requested to be assessed:</p> <ul style="list-style-type: none"> <li>• How onsite staff will move back-up equipment (e.g., pumps, generators) from alternate onsite storage facilities to repair locations at each reactor as described in the order regarding the NTTF Recommendation 4.2. It is requested that consideration be given to the major functional areas of NUREG-0654, Table B-1 such as plant operations and assessment of operational aspects, emergency direction and control, notification/communication, radiological accident assessment, and support of operational accident assessment, as appropriate.</li> <li>• New staff or functions identified as a result of the assessment.</li> <li>• Collateral duties (personnel not being prevented from timely performance of their assigned functions).</li> </ul> <p>Provide onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]</p> <p>Provide onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]</p> <p>* As used within the context of NRC Order EA-12-049. The U1C25 refueling outage is considered to be the first refueling outage as it immediately follows submission of the overall integrated plan on February 28, 2013. U1C26, the second refueling outage, is currently scheduled to start on September 23, 2014.</p>

Request #	Estimated Completion Date	Requested Information
2	<p>Four dates</p> <p>3/29/2013</p> <p>4/23/2014</p> <p>4/30/2013</p> <p>5/23/2014 [4 months prior to beginning of second refueling outage*]</p>	<p>Provide an implementation schedule of the time needed to conduct the onsite and augmented staffing assessment. If any modifications are determined to be appropriate, please include in the schedule the time to implement the changes.</p> <p>1. Conduct the onsite and augmented staffing assessment:</p> <p>The onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]</p> <p>The onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]</p> <p>2. A schedule of the time to needed to implement changes will be provided as follows:</p> <p>Those associated with the Phase 1 staffing assessment.</p> <p>Those associated with the Phase 2 staffing assessment.</p> <p>* As used within the context of NRC Order EA-12-049. The U1C25 refueling outage is considered to be the first refueling outage as it immediately follows submission of the overall integrated plan on February 28, 2013. U1C26, the second refueling outage, is currently scheduled to start on September 23, 2014.</p>
3	6/11/2012	Identify how the augmented staff would be notified given degraded communications capabilities.
4	6/11/2012	Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.



Request #	Estimated Completion Date	Requested Information
5	6/11/2012	Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.
6	Two dates  4/30/2013  5/23/2014 [4 months prior to beginning of second refueling outage*]	<p>Identify changes that have been made or will be made to your emergency plan regarding the on-shift or augmented staffing changes necessary to respond to a loss of all AC power, multi-unit event, including any new or revised agreements with offsite resource providers (e.g., staffing, equipment, transportation, etc.). Changes will be identified as follows:</p> <p>Those associated with the Phase 1 staffing assessment.</p> <p>Those associated with the Phase 2 staffing assessment.</p> <p>* As used within the context of NRC Order EA-12-049. The U1C25 refueling outage is considered to be the first refueling outage as it immediately follows submission of the overall integrated plan on February 28, 2013. U1C26, the second refueling outage, is currently scheduled to start on September 23, 2014.</p>

**Enclosure 3 to AEP-NRC-2012-34**

**Basis for Proposed Alternative Course of Action for Responding to EP Requested Information**

**Basis for Proposed Alternative Course of Action for Responding to EP Requested Information****Communications**

There are two separate responses to the information requests related to communications. The alternative timing of responses to requests #1 and #3 proposed in this letter reflects the higher priority placed by the staff, and approved by the Commission in SRM-SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (76 Fed. Reg. 72,560). The proposed alternative timing is warranted as many of the licensee staff resources necessary for performing the communications assessment are the same resources involved in implementing new EP Rule requirements, responding to Institute of Nuclear Power Operations (INPO) initiatives related to enhancing communications capabilities (e.g., IER 11-4), and maintaining existing EP communications equipment.

In addition, the estimated completion date assigned to information request #3 will promote alignment between the out-year budgeting/funding of future enhancements, and the development of an accurate and complete enhancement implementation schedule.

**Staffing**

As presented in Enclosure 2 of this letter, a 2-phase approach will be used to respond to the information requests associated with Staffing. The table below summarizes this approach.

<b>Plant Type</b>	<b>Phase 1 Staffing Assessment</b> (for functions except those related to NTTF Recommendation 4.2)	<b>Phase 2 Staffing Assessment</b> (for functions related to NTTF Recommendation 4.2)
Multi-unit plants	<ul style="list-style-type: none"><li>• Perform staffing assessment and implement actions as required by recent EP Rule using ISG and NEI 10-05</li><li>• Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01 and material from NEI 10-05; provide results per Enclosure 2 of this letter</li></ul>	Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01; provide results per Enclosure 1 of this letter

The basis for this approach is discussed below.

- For multi-unit plants, the Phase 1 staffing assessment will be performed by March 29, 2013, and provided by April 30, 2013. This assessment will consider all requested functions except those related to Fukushima Near-Term Task Force (NTTF) Recommendation 4.2. An assessment considering these functions will be performed in Phase 2.

The timing of the Phase 1 staffing assessment reflects the higher priority placed by the staff, and approved by the Commission in SRM-SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (76 Fed. Reg. 72,560). In particular, Section IV.A.9 of 10 CFR 50, Appendix E, requires that licensees complete a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. As stated in the EP Rule, this analysis must be completed by December 24, 2012.

Following completion of EP Rule staffing analysis, the staffing assessment associated with the NRC Letter will be performed. Based on staffing analysis experience to date, it is anticipated that a multi-unit staffing analysis will require approximately 3 months to complete and validate. One additional month is allotted for processing of an assessment submittal package.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 1 staffing assessment.

- The Phase 2 staffing assessment will be prepared by April 23, 2014 and provided by May 23, 2014. This assessment will consider the requested functions related to Fukushima Near-Term Task Force (NTTF) Recommendation 4.2.

The industry will be responding to multiple regulatory actions resulting from the recommendations contained in the Fukushima NTTF Report, as modified in related Commission Papers (SECY's) and Staff Requirements Memoranda (SRM). One of these actions, in particular, has the potential to impact emergency response staffing levels. This action is associated with Fukushima NTTF Recommendation 4.2 and subsequently issued as NRC Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events EA-12-049 [the Order]. A summary of the Order is provided below.

This Order requires a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core cooling, containment and spent fuel pool (SFP) cooling. The transition phase requires providing sufficient, portable, onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely.

Additional details on an acceptable approach for complying with this Order will be contained in final Interim Staff Guidance (ISG) scheduled to be issued by the NRC in August 2012.

In response to the Order, each licensee must develop new strategies for mitigating beyond-design-basis external events. To ensure accurate results, the staffing assessment for response functions related to NTTF Recommendation 4.2 must be based on the actions delineated in procedures and guidelines developed in response to the Order.

Once the site-specific actions associated with the new response strategies are defined (e.g., down to the procedure or guideline step level), the staffing needed to perform these actions can be assessed with the necessary level of accuracy.

Based on a review of the planned actions necessary to comply with the Order, an assessment of the staffing for the functions related to NTTF Recommendation 4.2 will be provided by 4 months prior to the first occurrence of a second refueling outage at the site (i.e., the first "second refueling outage") as used within the context of NRC Order EA-12-049.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 2 staffing assessment.

The Phase 2 staffing assessment is one component of the overall work plan necessary to implement the requirements of the Order. I&M, as stated in the Order, "...shall complete full implementation no later than two (2) refueling cycles after submittal of the overall integrated plan, as required in Condition C.1.a, or December 31, 2016, whichever comes first." "Full compliance shall include procedures, guidance, training, and acquisition, staging, or installing of equipment needed for the strategies."

Enclosure 4 to AEP-NRC-2012-34

**Regulatory Commitments**

## Regulatory Commitments

The following table identifies those actions committed to by Indiana Michigan Power Company (I&M) in this document. Any other actions described in this submittal represent intended or planned actions by I&M. They are described to the Nuclear Regulatory Commission (NRC) for the NRC's information and are not regulatory commitments.

Commitment	Date
<p>Communications Request #1</p> <p>Provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the conditions described. The assessment should:</p> <ul style="list-style-type: none"> <li>• Identify any planned or potential improvements to existing onsite communications systems and their required normal and/or backup power supplies,</li> <li>• Identify any planned or potential improvements to existing offsite communications systems and their required normal and/or backup power supplies,</li> <li>• Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions described above, and</li> <li>• Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all AC power</li> </ul>	10/31/2012
<p>Communications Request #2</p> <p>Describe any interim actions that have been taken or are planned to be taken to enhance existing communications systems power supplies until the communications assessment and the resulting actions are complete.</p>	6/11/2012
<p>Communications Request #3</p> <p>Provide an implementation schedule of the time needed to conduct and implement the results of the communications assessment.</p> <p>Conduct the communications assessment.</p> <p>Provide an implementation schedule of the time needed to implement the results of the communications assessment</p>	<p>9/28/2012</p> <p>10/31/2012</p>

Commitment	Date
<p><b>Staffing Request #1</b></p> <p>Provide an assessment of the onsite and augmented staff needed to respond to a large scale natural event meeting the conditions described. This assessment should include a discussion of the onsite and augmented staff available to implement the strategies as discussed in the emergency plan and/or described in plant operating procedures. The following functions are requested to be assessed:</p> <ul style="list-style-type: none"> <li>• How onsite staff will move back-up equipment (e.g., pumps, generators) from alternate onsite storage facilities to repair locations at each reactor as described in the order regarding the NTTF Recommendation 4.2. It is requested that consideration be given to the major functional areas of NUREG-0654, Table B-1 such as plant operations and assessment of operational aspects, emergency direction and control, notification/communication, radiological accident assessment, and support of operational accident assessment, as appropriate.</li> <li>• New staff or functions identified as a result of the assessment.</li> <li>• Collateral duties (personnel not being prevented from timely performance of their assigned functions).</li> </ul> <p>Provide onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]</p> <p>Provide onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]</p> <p>* As used within the context of NRC Order EA-12-049. The U1C25 refueling outage is considered to be the first refueling outage as it immediately follows submission of the overall integrated plan on February 28, 2013. U1C26, the second refueling outage, is currently scheduled to start on September 23, 2014.</p>	<p>4/30/2013</p> <p>5/23/2014 [4 months prior to beginning of second refueling outage*]</p>



Commitment	Date
<p><b>Staffing Request #2</b> Provide an implementation schedule of the time needed to conduct the onsite and augmented staffing assessment. If any modifications are determined to be appropriate, please include in the schedule the time to implement the changes.</p> <p>1. Conduct the onsite and augmented staffing assessment:</p> <p>The onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]</p> <p>The onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]</p> <p>2. A schedule of the time to needed to implement changes will be provided as follows:</p> <p>Those associated with the Phase 1 staffing assessment.</p> <p>Those associated with the Phase 2 staffing assessment.</p> <p>* As used within the context of NRC Order EA-12-049. The U1C25 refueling outage is considered to be the first refueling outage as it immediately follows submission of the overall integrated plan on February 28, 2013. U1C26, the second refueling outage, is currently scheduled to start on September 23, 2014.</p>	<p>3/29/2013</p> <p>4/23/2014</p> <p>4/30/2013</p> <p>5/23/2014</p> <p>[4 months prior to beginning of second refueling outage*]</p>
<p><b>Staffing Request #3</b> Identify how the augmented staff would be notified given degraded communications capabilities.</p>	<p>6/11/2012</p>
<p><b>Staffing Request #4</b> Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.</p>	<p>6/11/2012</p>
<p><b>Staffing Request #5</b> Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.</p>	<p>6/11/2012</p>

Commitment	Date
<p>Staffing Request #6</p> <p>Identify changes that have been made or will be made to your emergency plan regarding the on-shift or augmented staffing changes necessary to respond to a loss of all AC power, multi-unit event, including any new or revised agreements with offsite resource providers (e.g., staffing, equipment, transportation, etc.). Changes will be identified as follows:</p> <p>Those associated with the Phase 1 staffing assessment.</p> <p>Those associated with the Phase 2 staffing assessment.</p> <p>* As used within the context of NRC Order EA-12-049. The U1C25 refueling outage is considered to be the first refueling outage as it immediately follows submission of the overall integrated plan on February 28, 2013. U1C26, the second refueling outage, is currently scheduled to start on September 23, 2014.</p>	<p>4/30/2013</p> <p>5/23/2014</p> <p>[4 months prior to beginning of second refueling outage*]</p>