

December 16, 2014

AEP-NRC-2014-91  
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Docket No.: 50-315  
50-316

U. S. Nuclear Regulatory Commission  
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11555 Rockville Pike  
Rockville, MD 20852

Donald C. Cook Nuclear Plant Units 1 and 2  
Update to Communications Assessment Implementation Actions and Timeline - Fukushima Dai-ichi  
Near-Term Task Force Recommendation 9.3, "Emergency Preparedness"

References:

1. Letter from E. J. Leeds and M. R. Johnson, U.S. Nuclear Regulatory Commission (NRC), 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 Management Systems (ADAMS) Accession No. ML12056A046.
2. Letter from J. P. Gebbie, Indiana Michigan Power Company (I&M), to NRC, "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," AEP-NRC-2012-34, dated May 11, 2012, ADAMS Accession No. ML12142A110.
3. Letter from P. S. Tam, NRC, to L. J. Weber, I&M, "Donald C. Cook Nuclear Plant, Units 1 and 2 - Review of 60-Day Response to Request for Information Regarding Recommendation 9.3 of the Near-Term Task Force Related to the Fukushima Dai-ichi Nuclear Power Plant Accident (TAC Nos. ME8683 and ME8684)," dated June 8, 2012, ADAMS Accession No. ML12145A640.

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4. Letter from M. H. Carlson, I&M, to the NRC, "Donald C. Cook Nuclear Plant Units 1 and 2, Communications Assessment Requested by Nuclear Regulatory Commission 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," AEP-NRC-2012-83, dated October 31, 2012, ADAMS Accession No. ML12318A176.
5. Letter from T. J. Wengert, NRC, to L. J. Weber, I&M, " Donald C. Cook Nuclear Plant, Units 1 And 2 - Staff Assessment in Response to Recommendation 9.3 of The Near Term Task Force Related to the Fukushima Dai-ichi Nuclear Power Plant Accident (TAC Nos. ME9950 and ME9951)," dated June 6, 2013, ADAMS Accession No. ML 13148A294.

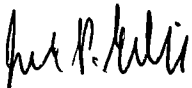
By Reference 1, the U. S. Nuclear Regulatory Commission (NRC) requested that licensees provide an assessment of their current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event resulting in a loss of all alternating current power. By Reference 2, Indiana Michigan Power Company (I&M) provided a response to the Reference 1 Request for Information. I&M's response proposed an alternative course of action and estimated completion date for the Donald C. Cook Nuclear Plant (CNP), Unit 1 and Unit 2. By Reference 3, the NRC approved the alternative course of action. By Reference 4, I&M transmitted the communication assessment performed in accordance with the approved alternative.

The communication assessment identified recommendations to further evaluate or enhance the CNP communications capabilities, and identified actions to be evaluated as part of the mitigation strategies for beyond design basis events. Enclosure 3 of Reference 4 provided an implementation timeline for the recommended evaluations and enhancements. Reference 5 transmitted an NRC Safety Assessment which included a review of the enhancements. The Safety Assessment documented the NRC staff's conclusion that the enhancements, in conjunction with other communication system attributes, would help ensure that communications are maintained. As tabulated in Enclosure 2 to this letter, I&M has either completed the recommended communications enhancement or determined that the enhancement is not needed. I&M considers that the conclusion documented in Reference 5 remains valid.

Enclosure 1 to this letter provides an affirmation. Enclosure 2 provides the updated enhancement implementation timeline.

This letter contains no new or revised regulatory commitments. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Manager, at (269) 466-2649.

Sincerely,



Joel P. Gebbie  
Site Vice President

JRW/amp

Enclosures: 1. Affirmation  
2. Updated Implementation Timeline

c: M. L. Chawla, NRC Washington, DC  
J. T. King, MPSC, w/o enclosures  
E. J. Leeds, NRR, NRC  
MDEQ – RMD/RPS  
NRC Resident Inspector  
C. D. Pederson, NRC Region III  
A. J. Williamson, AEP Ft. Wayne, w/o enclosures

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 document with the U. S. 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.

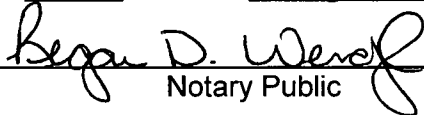
Indiana Michigan Power Company



Joel P. Gebbie  
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 16<sup>th</sup> DAY OF December, 2014

  
\_\_\_\_\_  
Notary Public

My Commission Expires 01/21/2018

Enclosure 2 to AEP-NRC-2014-91

Updated Implementation Timeline

The following table provides an updated status for the Donald C. Cook Nuclear Plant (CNP) Communication Assessment recommended enhancements presented in Enclosure 3, "Communications Assessment Implementation Timeline," of the letter from M. H. Carlson, Indiana Michigan Power Company (I&M), to U. S. Nuclear Regulatory Commission (NRC), dated October 31, 2012, Agencywide Documents Access Management Systems Accession No. ML12318A176.

<b>Communications Assessment Implementation Timeline</b>	
<b>Recommendation Stated in I&amp;M Letter dated October 31, 2012</b>	<b>Updated Status</b>
Supplement direct telephone lines linking the CNP Emergency Facilities to the Berrien County Emergency Operations Center (BCEOC) with satellite phones for the postulated loss of the public phone system infrastructure.	<u>Complete as Stated</u> - Satellite phones are available to provide offsite communication. The satellite phones are periodically checked to assure their availability for communication among key emergency response functions including the BCEOC, the Lake Township Fire Department, the Emergency Operations Facility (EOF), the Technical Support Center (TSC), offsite survey teams, onsite survey teams, security, and the Shift Manager complex.
Evaluate capabilities of offsite radio communications including:	
1. Verifying the ability of existing 450 Megahertz (MHz) trunked radios to function in "point-to-point" mode.	<u>Complete as Modified</u> - As noted above, satellite phones are available to provide offsite communication. Therefore, the 450 Mhz portable radios need not be part of a trunked radio system. However, these radios do have the capability of communicating point-to-point.
2. Mapping of radio reception in the Emergency Planning Zone (EPZ) and to the Emergency Operation Centers without the repeater in service.	<u>Not Needed</u> - As noted above, satellite phones are available to provide offsite communication. Therefore, mapping of radio reception in the EPZ and to the Emergency Operation Centers without the repeater in service is not necessary to support the FLEX strategies.
3. Assuring the survivability for the offsite radio repeater and antennae.	<u>Not Needed</u> - As noted above, satellite phones are available to provide offsite communication. Therefore, the offsite repeater and antennae need not be survivable for all Beyond Design Basis External Events (BDBEE) to support the diverse and flexible mitigation (FLEX) strategies.

<b>Communications Assessment Implementation Timeline</b>	
<b>Recommendation Stated in I&amp;M Letter dated October 31, 2012</b>	<b>Updated Status</b>
<p>Determine feasibility for the following future actions associated with FLEX:</p> <ol style="list-style-type: none"> <li>1. Provide additional battery backup for the Public Address (PA) system.</li>   <li>2. Provide capability for hooking up alternate power generator for the intra-plant 450 MHz radio system.</li> </ol>	<p><u>Not Needed</u> - The PA system receives power from the Critical Control Room Power Supply (CCRP). In the event of an extended loss of alternating current (AC) power (ELAP) condition, the CCRP will automatically switch to a backup battery reserve capable of 12 hour operation. The FLEX validation process determined that power can be restored to the battery chargers within 3 hours and 35 minutes, using the 600 volts alternating current (VAC), 500 kilowatts (kW) portable diesel generator (DG). Therefore, additional battery backup is not needed to support the FLEX strategies.</p> <p><u>Not Needed</u> - The stated action referred to the radio system normally used for day-to-day plant operation. The FLEX strategies rely on separate dedicated FLEX radios served by Portable Tactical Repeaters (PTR) and Bi-Directional Amplifiers (BDA) which would be deployed at strategic locations in the plant. This would provide radio coverage to the expected response areas without reliance on the radio system normally used for day to day plant operation.</p> <p>The PTRs and BDAs are powered by batteries to ensure operability during an ELAP event. There are battery chargers located in the FLEX Storage Building. Procedure 1-OHP-4027-FSG-501, "FLEX Equipment Staging" includes the deployment of a DG to provide power to the battery charging stations. Therefore, the capability for hooking up alternate power generator for the intra-plant 450 MHz radio system is not needed to support the FLEX strategies</p>

<b>Communications Assessment Implementation Timeline</b>	
<b>Recommendation Stated in I&amp;M Letter dated October 31, 2012</b>	<b>Updated Status</b>
3. Provide capability for hooking up alternate power generator for the PA system.	<u>Complete as Stated</u> – As noted above, the PA system receives power from the CCRP which will be automatically switched over to a backup battery reserve capable of 12 hour operation in the event of an ELAP. As also noted above, the 600 VAC, 500 kW portable DG can be used to provide power to the battery chargers within the 12 hour period.
4. Harden exterior antennae to the extent necessary to provide reasonable assurance of survivability.	<u>Not Needed</u> - The FLEX communication strategy does not rely on the existing exterior antenna. The deployment of PTRs and BDAs as described above will assure adequate in plant radio communication. Therefore, the hardening of the exterior antennae is not needed to support the FLEX strategies.
5. Provide survivable offsite 450 MHz radio system (including repeater and antennae) or portable repeater equipment.	<u>Not Needed</u> - The offsite repeater and antennae may not be survivable for all BDBEEs. However, as described above, satellite phones will be available to provide offsite communication. Therefore the offsite repeater and antennae need not be survivable for all BDBEEs to support the FLEX strategies.
Provide alternate power supplies for the following locations (assuming survivability) at a minimum:	
1. The EOF, which also has an existing DG.	<u>Not Needed</u> - The EOF is located in the Buchanan Office Building and receives power from two 12 kilovolt (kV) power lines. If one 12 kV line is lost, an automatic transfer switch will shift to the other line. If both lines are lost, an existing 400kW DG will automatically start and supply emergency power. Two uninterruptable power supply (UPS) systems would provide power for a short duration for certain EOF communication equipment and the Local Area Network (LAN) servers if the generator was briefly unavailable.
2. The Operations Support Center (OSC).	<u>Not Needed</u> - The OSC has not been shown to be survivable for all BDBEEs assessed for CNP. The OSC function may be re-located based on habitability concerns. The procedure for activation and operation of the OSC designates the



<b>Communications Assessment Implementation Timeline</b>	
<b>Recommendation Stated in I&amp;M Letter dated October 31, 2012</b>	<b>Updated Status</b>
	<p>Radiation Protection Access Control Building or other onsite location as an alternate location for the OSC as directed by the Radiation Protection Director and the OSC Manager. Personnel manning the primary or alternate onsite OSC can utilize the FLEX radio system and satellite phones. As noted in the letter from J. P. Gebbie, I&amp;M, to NRC, dated May 23, 2014, transmitting the CNP On-Shift Staffing Assessment Report, if access to designated emergency response facilities is not possible, OSC personnel may also respond to the EOF. Power supplies for the EOF are discussed in the updated status items preceding and following this item. Therefore, an alternate power supply to the OSC is not needed to support the FLEX strategies.</p>
<p>Provide standalone UPS units for equipment in the EOF and TSC that will be needed to manage the emergency. (computers, multi-line telephones, and portable phones).</p>	<p><u>Complete as Stated</u> - A UPS system feeds the 120V AC distribution panels to support the essential TSC loads, (e.g. computers, multi-line telephones, etc.). The UPS system consists of a battery, two battery chargers, two inverters, and two 120V AC distribution panels.</p> <p>As noted above, there are 12 kV power lines and a DG providing redundant power supplies to the EOF. Additionally, two UPS systems would provide power for certain EOF communication equipment and LAN servers. As also noted above, satellite phones (battery powered) would also be available in the EOF. These provision are considered to provide adequate assurance of EOF communication capabilities.</p>
<p>Provide a dedicated source of backup power (portable generator) for charging batteries for handheld radios.</p>	<p><u>Complete as Stated</u> - Per 1-OHP-4027-FSG-501, "FLEX Equipment Staging," a 26 kW DG is available in the Turbine Building. This generator can be used to power portable charging stations for the radios. Additionally, portable charging stations are available in the FLEX Storage Building and may be staged near any available power source inside or outside the building. Power can be provided to the FLEX Storage Building by portable generators.</p>

<b>Communications Assessment Implementation Timeline</b>	
<b>Recommendation Stated in I&amp;M Letter dated October 31, 2012</b>	<b>Updated Status</b>
Update training programs to address emergency communications equipment consistent with implementation of FLEX.	<u>Complete as Stated</u> - A formal hands-on study guide (FX-I-004, "FLEX Portable Communications") utilizing actual communication equipment and knowledge demonstrations for the new FLEX communication equipment was developed, and was administered to applicable Operations and Fire Protection personnel.