



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

February 5, 2019

Mr. Joel P. Gebbie  
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, UNIT NOS. 1 AND 2 – ISSUANCE OF  
AMENDMENTS 343 and 325 REGARDING THE BATTERY MONITORING AND  
MAINTENANCE PROGRAM (EPID L-2018-LLA-0246)**

Dear Mr. Gebbie:

The U.S. Nuclear Regulatory Commission has issued the enclosed amendment No. 343 to Renewed Facility Operating License No. DPR-58 and amendment No. 325 to Renewed Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant (CNP), Unit Nos. 1 and 2, respectively. The amendments are in response to your application dated September 5, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18250A185).

The amendments revise the CNP technical specification 5.5.15, "Battery Monitoring and Maintenance Program," to align with the latest Institute of Electrical and Electronics Engineers (IEEE) Standard (Std.) for maintenance and testing of the safety-related batteries. Specifically, the proposed change replaces all the references to the IEEE Std. 450-1995, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications," with the updated IEEE Std. 450-2010, as endorsed, with certain clarifying regulatory positions, in Regulatory Guide 1.129, Revision 3.

J. Gebbie

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A copy of our related safety evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sujata Goetz', is written over the typed name.

Sujata Goetz, Project Manager  
Plant Licensing Branch III  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures:

1. Amendment No.343 to DPR-58
2. Amendment No.325 to DPR-74
3. Safety Evaluation

cc: Listserv



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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 343  
License No. DPR-58

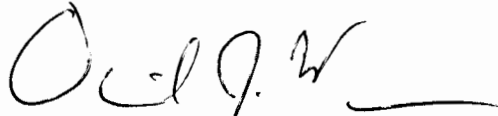
1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Indiana Michigan Power Company (the licensee), dated September 5, 2018, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-58 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 343, are hereby incorporated in this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read 'D. J. Wrona', with a long horizontal flourish extending to the right.

David J. Wrona, Chief  
Plant Licensing Branch III  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Operating License

Date of Issuance: February 5, 2019

ATTACHMENT TO LICENSE AMENDMENT NO. 343

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

TO RENEWED FACILITY OPERATING LICENSE NO. DPR-58

DOCKET NO. 50-315

Replace the following pages of Renewed Facility Operating License DPR-58 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

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and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not to exceed 3304 megawatts thermal in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 343, are hereby incorporated in this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Less than Four Loop Operation

The licensee shall not operate the reactor at power levels above P-7 (as defined in Table 3.3.1-1 of Specification 3.3.1 of Appendix A to this renewed operating license) with less than four reactor coolant loops in operation until (a) safety analyses for less than four loop operation have been submitted, and (b) approval for less than four loop operation at power levels above P-7 has been granted by the Commission by amendment of this license.

(4) Fire Protection Program

Indiana Michigan Power Company shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee's amendment request dated July 1, 2011, as supplemented by letters dated September 2, 2011, April 27, 2012, June 29, 2012, August 9, 2012, October 15, 2012, November 9, 2012, January 14, 2013, February 1, 2013,

## 5.5 Programs and Manuals

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### 5.5.15 Battery Monitoring and Maintenance Program

This program provides for battery restoration and maintenance, based on the recommendations of IEEE Standard 450-2010, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications," as endorsed, with certain regulatory positions, in Regulatory Guide 1.129, Revision 3, or of the battery manufacturer including the following:

- a. Actions to restore battery cells with float voltage < 2.13 V; and
- b. Actions to equalize and test battery cells that had been discovered with electrolyte level below the minimum established design limit.

### 5.5.16 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Emergency Ventilation (CREV) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem total effective dose equivalent (TEDE) for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air leakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.

The following is an exception to Section C.1 and C.2 of Regulatory Guide 1.197, Revision 0:

The appropriate application of ASTM E741-00 required by C.1.1 may include minor exceptions to the test methodology. These exceptions shall be documented in the test report.



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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 325  
License No. DPR-74

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Indiana Michigan Power Company (the licensee), dated September 5, 2018, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-74 is hereby amended to read as follows:

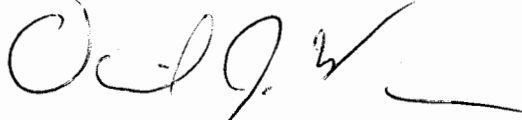
(2) Technical Specifications

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 325, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.



3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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David J. Wrona, Chief  
Plant Licensing Branch III  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Operating License

Date of Issuance: February 5, 2019

ATTACHMENT TO LICENSE AMENDMENT NO. 325

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

TO RENEWED FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NO. 50-316

Replace the following pages of Renewed Facility Operating License DPR-74 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

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radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not to exceed 3468 megawatts thermal in accordance with the conditions specified herein and in Attachment 1 to the renewed operating license. The preoperational tests, startup tests and other items identified in Attachment 1 to this renewed operating license shall be completed. Attachment 1 is an integral part of this renewed operating license.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 325, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Additional Conditions

(a) Deleted by Amendment No. 76

(b) Deleted by Amendment No. 2

(c) Leak Testing of Emergency Core Cooling System Valves

Indiana Michigan Power Company shall prior to completion of the first inservice testing interval leak test each of the two valves in series in the

## 5.5 Programs and Manuals

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### 5.5.14 Containment Leakage Rate Testing Program

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in NEI 94-01, Revision 3-A, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50, Appendix J," dated July 2012, and Section 4.1, "Limitations and Conditions for NEI TR 94-01, Revision 2," of the NRC Safety Evaluation Report in NEI 94-01, Revision 2-A, dated October 2008.
- b. The containment design pressure is 12 psig. For the Containment Leakage Rate Testing Program,  $P_a$  is 12.0 psig.
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be 0.18% of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  1. Containment leakage rate acceptance criterion is  $1.0 L_a$ . During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are  $\leq 0.60 L_a$  for the Type B and C tests and  $\leq 0.75 L_a$  for Type A tests.
  2. Air lock testing acceptance criterion is overall air lock leakage rate is  $\leq 0.05 L_a$  when tested at  $\geq P_a$ .
- e. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

### 5.5.15 Battery Monitoring and Maintenance Program

This program provides for battery restoration and maintenance, based on the recommendations of IEEE Standard 450-2010, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications," as endorsed, with certain regulatory positions, in Regulatory Guide 1.129, Revision 3, or of the battery manufacturer including the following:

- a. Actions to restore battery cells with float voltage  $< 2.13$  V; and
- b. Actions to equalize and test battery cells that had been discovered with electrolyte level below the minimum established design limit.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 343 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-58

AND

AMENDMENT NO. 325 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated September 5, 2018 (Agencywide Documents Access management System (ADAMS) Accession No. ML18250A185), Indiana Michigan Power Company (I&M, the licensee), requested changes to the licenses for Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2 (CNP). The proposed changes would revise the CNP technical specification (TS) 5.5.15, "Battery Monitoring and Maintenance Program" (BMMP), to align with the latest Institute of Electrical and Electronics Engineers (IEEE) Standard (Std.) for maintenance and testing of the safety-related batteries. Specifically, the proposed change would replace the reference of the IEEE Std. 450-1995, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications," with the updated IEEE Std. 450-2010, as endorsed, with certain clarifying regulatory positions, in Regulatory Guide (RG) 1.129, Revision 3 in TS 5.5.15. The proposed change to the IEEE Std. 450-2010 revision would also impact the performance of certain TS surveillance requirements (SRs) that are currently performed in accordance with the recommendations of IEEE Std. 450-1995.

2.0 REGULATORY EVALUATION

2.1 System Description

Section 2.1, "System Design and Operation," of the license amendment request (LAR) provides the description of the system:

The Train AB & CD batteries supply 250-volt direct current (DC) power for operation of turbine generator emergency auxiliaries, switchgear, annunciators, vital bus inverters, motor operated valves, and emergency lighting. The batteries are central power station type designed for continuous duty. The battery system [Train AB & CD] for each unit consists of two separately located sets of 116 lead acid cells connected in series. Each

cell is of the sealed type, assembled in a shock absorbing clear plastic container, with covers bonded in place to form a leak proof seal. The batteries are mounted on protected, corrosion resistant steel racks for security and to facilitate maintenance. The Trains AB and CD battery each has its own active normal charger and a wired standby charger.

The Train N battery supplies 250-volt DC power for the operation of the turbine driven auxiliary feedwater system and the Anticipated Transient Without Scram Mitigation System Actuation Circuitry inverter. The battery is a central power station type designed for continuous duty. The battery consists of 117 lead acid cells connected in series. The battery is of the sealed type, assembled in a shock absorbing, clear plastic container, with covers bonded in place to form a leak proof seal. The battery is mounted on protected, corrosion resistant steel racks for security and to facilitate maintenance. The battery system contains two battery chargers [normal and standby]. Transfer from one charger to the other is manual. No automatic transfer between chargers is provided. The Train N battery is physically and electrically isolated from the other plant batteries.

According to the CNP Updated Safety Analysis Report (UFSAR), Chapter 8, and the LAR, trains AB, CD, and N are safety-related. Transfer between the chargers for the trains AB and CD batteries can only be done manually.

During normal operation, the 250 Volt (V) DC load is supplied from the battery chargers with the batteries floating on the system. Upon loss of station alternating current power, the entire DC load is powered from the battery. For the loss of offsite power event, trains A and B batteries are sized for 3 hours of continuous operation, predicated upon the continuous operation of all required DC emergency equipment; and the train N battery is capable of serving the turbine-driven auxiliary feed pump for as long as the steam supply to the turbine is available. For a station blackout event, trains A, B, and N batteries are sized for 4 hours of continuous operation of all required DC emergency equipment.

The BMMP in TS 5.5.15 requires maintenance and monitoring of the CNP, Unit Nos. 1 and 2, safety-related batteries in accordance with the recommendations of IEEE Std. 450-1995.

## 2.2 Proposed Changes

In section 2.4 of the LAR, "Description of the Proposed Change," the licensee states that the proposed change would replace all references to the IEEE Std. 450-1995 with the updated IEEE Std. 450-2010. The licensee further stated that the proposed change would encompass compliance with RG 1.129 in its entirety, including the IEEE Stds. referenced in RG 1.129.

Proposed change to the text in TS 5.5.15

Current CNP, Unit Nos. 1 and 2, TS 5.5.15 states:

This program provides for battery restoration and maintenance, based on the recommendations of IEEE Standard 450-1995, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications," or of the battery manufacturer including the following:

- a. Actions to restore battery cells with float voltage < 2.13 V; and

- b. Actions to equalize and test battery cell that had been discovered with electrolyte level below the minimum established design limit.

Revised CNP Unit Nos. 1 and 2, TS 5.5.15, would state:

This program provides for battery restoration and maintenance, based on the recommendations of IEEE Standard 450-2010, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications," as endorsed, with certain regulatory positions, in Regulatory Guide 1.129, Revision 3, or of the battery manufacturer including the following:

- a. Actions to restore battery cells with float voltage < 2.13 V; and
- b. Actions to equalize and test battery cell that had been discovered with electrolyte level below the minimum established design limit.

### 2.3 Regulatory Acceptance Criteria

The U.S. Nuclear Regulatory Commission (NRC or Commission) staff applied the following requirements to evaluate the LAR:

As described in the CNP, Unit Nos. 1 and 2, UFSAR, section 1.4, CNP was designed and constructed to meet the intent of the Atomic Energy Commission (AEC) Proposed General Design Criteria (PGDC), published on July 11, 1967. Based on the AEC PGDC, CNP developed Plant Specific Design Criteria (PSDC) that define the principal criteria and safety objectives for the design of CNP. The following PSDC are relevant to the proposed amendment:

PSDC, Criterion 25, "Demonstration of Functional Operability of Protection Systems" states:

Means shall be included for suitable testing of the active components of protection systems while the reactor is in operation to determine if failure or loss of redundancy has occurred.

The CNP stated in its LAR that it tests the safety-related batteries during surveillance activities to determine the operability of the batteries while the reactor is in operation.

Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(c)(3) requires that the TS include SRs which are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation (LCOs) will be met. The CNP SFCP provides the necessary administrative controls to ensure that surveillance frequencies relocated to the SFCP will meet the LCOs.

Section (a)(1) of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," requires, in part, that nuclear power plants monitor the performance or condition of structures, systems, or components (SSCs), against licensee-established goals, in a manner sufficient to provide reasonable assurance that these SSCs, including safety-related SSCs, are capable of fulfilling their intended functions. CNP monitors the performance of its safety-related batteries under the BMMP.

The NRC staff considered the following guidance documents to evaluate the LAR:

The RG 1.129, "Maintenance, Testing, and Replacement of Vented Lead-Acid Storage Batteries for Nuclear Power Plants," Revision 3, September 2013, provides guidance for the maintenance and testing for batteries. This guidance is used to develop SRs for batteries.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Staff Evaluation

The licensee proposed to change the reference of the IEEE Std. 450-1995 to the IEEE Std. 450-2010 in the TS 5.5.15, to allow CNP to use float current readings instead of specific gravity readings to monitor the state of charge of the batteries. In Section 3.0, "Technical Evaluation," of the LAR, the licensee stated that CNP currently records specific gravity readings as part of monthly, quarterly, and yearly surveillance activities implementing the BMMP in TS 5.5.15 because they are recommended by IEEE Std. 450-1995. According to the IEEE Std. 450-1995, the specific gravity readings of all lead-acid battery cells provide an indication of the state of charge of the batteries. The updated IEEE Std. 450-2010 recommends the (stabilized) float charging current readings as a preferable method for determining the state of charge of certain lead-acid batteries including lead-calcium batteries.

The licensee also stated that CNP uses lead-calcium cells for all of its TS required batteries, and currently takes and records (stabilized) float current measurements to establish the battery state of charge post testing in SR 3.8.4.3 (battery service test) and SR 3.8.6.6 (battery performance or modified performance test).

In addition, in Section 2.4 of the LAR, the licensee stated that the battery vendor "concurs that the updated IEEE Std. 450-2010 is in compliance with the current vendor manual recommendations for battery monitoring and maintenance." The NRC staff finds that the use of battery stabilized float current to determine the state of charge of the CNP TS batteries is acceptable because it is an effective method for the CNP TS lead-calcium batteries and is consistent with the recommendations of IEEE Std. 450-2010, as endorsed in RG 1.129, Revision 3. Therefore, the NRC staff finds the proposed reference of the IEEE Std. 450-2010 revision in TS 5.5.15, acceptable because the BMMP will allow CNP to continue monitoring the performance of its safety-related batteries to assure that they are capable of fulfilling their intended functions, as required by 10 CFR 50.65(a)(1) and the TS.

In Section 3.0 of the LAR, the licensee provided a discussion of the impact of the proposed change to the IEEE Std. 450-2010 on the affected SR 3.8.4.1, SR 3.8.4.3, and SRs 3.8.6.1- 3.8.6.6. The licensee stated that the existing surveillance frequencies of SR 3.8.4.1, SR 3.8.4.3, and SR 3.8.6.1 - SR 3.8.6.5 that are controlled under the CNP SFCP would not change because these surveillance frequencies are consistent with the recommendations of IEEE Std. 450-2010, as endorsed in RG 1.129, Revision 3. The licensee further stated that the surveillance frequency for SR 3.8.6.6 that is controlled under the SFCP would be revised based on the recommendations of the IEEE Std. 450-2010.

According to CNP TS 5.5.17, "Surveillance Frequency Control Program," the SFCP ensures that the SRs specified in the TSs are performed at intervals sufficient to assure the associated limiting conditions for operation (LCO) are met. TS 5.5.17.b requires that changes to the surveillance frequencies listed in SFCP be made in accordance with Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1. Since



the frequency of performing SR 3.8.6.6 controlled under the SFCP will be impacted by the proposed change to the IEEE Std. 450-2010 revision, the NRC staff finds that the change to the frequency of SR 3.8.6.6 in the SFCP will be made in accordance with NEI 04-10, Revision 1, as required by the TS 5.5.17.b. Therefore, the NRC staff finds that the change of the IEEE Std. 450-1995 to the IEEE Std. 450-2010 is acceptable for SR 3.8.6.6 because the frequency of SR 3.8.6.6 in the SFCP will assure that the associated LCO is met, as required by 10 CFR 50.36(c)(3).

Based on the licensee's technical evaluation in Section 3.0 of the LAR, the proposed change from the IEEE Std. 450-1995 to the IEEE Std. 450-2010, as endorsed in RG 1.129, Revision 3, would not impact CNP's testing of the safety-related batteries during normal operation. Therefore, the NRC staff finds that CNP will continue to meet PSDC Criterion 25 since the battery testing in accordance with the IEEE Std. 450-2010, will not impact CNP's means for suitable testing of its safety-related batteries while the reactor is in operation.

### 3.2 Staff Conclusion

The NRC staff reviewed the proposed change to the CNP, Unit Nos. 1 and 2, TS which replaced the existing IEEE Std. 450-1995 with IEEE Std. 450-2010, as endorsed with certain clarifying regulatory positions, in RG 1.129, Revision 3. The proposed change would impact the TS 5.5.15, and the frequencies of certain TS SRs that are currently performed in accordance with the recommendations of IEEE Std. 450-1995.

The NRC staff finds the proposed IEEE Std. 450-2010, as endorsed with certain clarifying regulatory positions in RG 1.129, Revision 3, in TS 5.5.15, acceptable because the BMMP will allow CNP to continue monitoring the performance of its safety-related batteries to assure that the batteries are capable of fulfilling their intended functions, as required by 10 CFR 50.65(a)(1). In addition, the NRC finds the change from the IEEE Std. 450-1995 to the 2010 revision for the affected TS SRs acceptable because changes to the frequencies of these SRs will be made in accordance with the CNP SFCP to assure that the associated LCOs are met, as required by 10 CFR 50.36(c)(3).

The NRC staff finds that CNP will continue to meet PSDC Criterion 25 since the proposed change to the IEEE Std. 450-2010, as endorsed in RG 1.129, Revision 3, does not impact CNP's existing means for suitable testing of its safety-related batteries while the reactor is in operation.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendments on December 11, 2018. The State official had no comments.

### 6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no

significant hazards consideration and there has been no public comment on such finding published in the *Federal Register* on November 6, 2018 (83 FR 55574). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

## 7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

## 8.0 REFERENCES

Principal Contributor: Adakou Foli

Date of Issuance: February 5, 2019

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