

February 26, 2019

AEP-NRC-2019-01
10 CFR 50.90

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Donald C. Cook Nuclear Plant, Units 1 and 2
APPLICATION TO REVISE TECHNICAL SPECIFICATIONS TO
ADOPT TSTF-563, REVISION 0, "REVISE INSTRUMENT TESTING DEFINITIONS TO
INCORPORATE THE SURVEILLANCE FREQUENCY CONTROL PROGRAM"

Pursuant to 10 CFR 50.90, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP), is submitting a request for an amendment to the Technical Specifications (TS) for CNP Units 1 and 2.

I&M requests adoption of TSTF-563, "Revise Instrument Testing Definitions to Incorporate the Surveillance Frequency Control Program." TSTF-563 revises the TS definitions of Channel Calibration, Channel Operational Test, and Trip Actuating Device Operational Test, which currently permit performance by means of any series of sequential, overlapping, or total channel steps, to allow the required frequency for testing the components or devices in each step to be determined in accordance with the TS Surveillance Frequency Control Program.

Enclosure 1 provides an affirmation statement pertaining to the information contained herein. Enclosure 2 provides a description and assessment of the proposed changes. Enclosures 3 and 4 provide Unit 1 and Unit 2 TS pages, respectively, marked to show the proposed changes. New clean Unit 1 and Unit 2 TS pages with proposed changes incorporated will be provided to the Nuclear Regulatory Commission (NRC) Licensing Project Manager when requested.

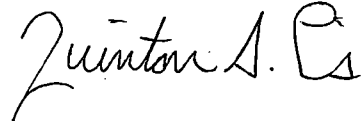
I&M would like to request NRC review and approval of the proposed changes commensurate with the NRC's normal review schedule. Once approved, the amendment shall be implemented within 60 days.

In accordance with 10 CFR 50.91, a copy of this application, with enclosures, is being provided to the designated Michigan state officials.

A001
NRR

There are no new regulatory commitments made in this letter. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Director, at (269) 466-2649.

Sincerely,



Q. Shane Lies
Site Vice President
Indiana Michigan Power Company

BMC/ml

Enclosures:

1. Affirmation
2. Description and Assessment of the Technical Specification Changes
3. Donald C. Cook Nuclear Plant Unit 1 Technical Specification Pages Marked To Show Proposed Changes
4. Donald C. Cook Nuclear Plant Unit 2 Technical Specification Pages Marked To Show Proposed Changes

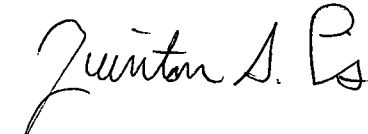
c: R. J. Ancona – MPSC
R. F. Kuntz – NRC, Washington, D.C.
MDEQ – RMD/RPS
NRC Resident Inspector
D. J. Roberts – NRC Region III
A. J. Williamson – AEP Ft. Wayne, w/o enclosures

Enclosure 1 to AEP-NRC-2019-01

AFFIRMATION

I, Q. Shane Lies, being duly sworn, state that I am the Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request 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.

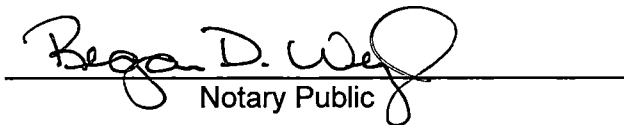
Indiana Michigan Power Company



Q. Shane Lies
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 26 DAY OF February 2019


Notary Public

My Commission Expires 01/21/2025

Enclosure 2 to AEP-NRC-2019-01

Description and Assessment of Technical Specification Changes

1.0 DESCRIPTION

Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP), requests adoption of TSTF-563, "Revise Instrument Testing Definitions to Incorporate the Surveillance Frequency Control Program," into the Technical Specifications (TS) for CNP Units 1 and 2. TSTF-563 revises the TS definitions of Channel Calibration, Channel Operational Test, and Trip Actuating Device Operational Test, which currently permit performance by means of any series of sequential, overlapping, or total channel steps, to allow the required frequency for testing the components or devices in each step to be determined in accordance with the TS Surveillance Frequency Control Program.

2.0 ASSESSMENT

2.1 Applicability of Safety Evaluation

I&M has reviewed the safety evaluation for TSTF-563 provided to the Technical Specifications Task Force in a letter dated December 4, 2018. This review included a review of the Nuclear Regulatory Commission (NRC) staff's evaluation, as well as the information provided in TSTF-563. As described herein, I&M has concluded that the justifications presented in TSTF-563 and the safety evaluation prepared by the NRC staff are applicable to CNP Units 1 and 2, and justify this amendment for the incorporation of the changes to the CNP Units 1 and 2 TS.

A Surveillance Frequency Control Program was incorporated into the CNP Units 1 and 2 TS in a license amendment dated March 31, 2017, (NRC Agency Documents Access and Management System Accession No. ML17045A150).

2.2 Optional Changes and Variations

I&M is not proposing any variations from the TS changes described in the TSTF-563 or the applicable parts of the NRC staff's safety evaluation dated December 4, 2018.

The traveler discusses the applicable regulatory requirements and guidance, including the 10 CFR 50, Appendix A, General Design Criteria (GDC). CNP Units 1 and 2 were not licensed to the 10 CFR 50, Appendix A, GDC. The CNP equivalents of the referenced GDC are the Plant-Specific Design Criteria (PSDC), discussed in Section 1.4 of the CNP Updated Final Safety Analysis Report. These criteria are based on the Atomic Energy Commission proposed GDC published in the Federal Register on July 11, 1967.

TSTF-563 references 10 CFR-50, Appendix A, GDC 13, "Instrumentation and Control." GDC 13 is similar to PSDC 12, "Instrumentation and Control Systems."

TSTF-563 references 10 CFR-50, Appendix A, GDC 21, "Protection System Reliability and Testability." GDC 21 is similar to PSDC 19, "Protection Systems Reliability," Criterion 20, "Protection Systems Redundancy and Independence," and Criterion 25, "Demonstration of Functional Operability of Protection Systems."

Following implementation of the proposed change, CNP Units 1 and 2 will remain in compliance with PSDC 12, 19, 20, and 25. Therefore, this difference does not alter the conclusion that the proposed change is applicable to CNP.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Analysis

Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP), requests adoption of TSTF-563, "Revise Instrument Testing Definitions to Incorporate the Surveillance Frequency Control Program," into the Technical Specifications (TS) for CNP Units 1 and 2. TSTF-563 revises the TS definitions of Channel Calibration, Channel Operational Test (COT), and Trip Actuating Device Operational Test (TADOT), which currently permit performance by means of any series of sequential, overlapping, or total channel steps, to allow the required frequency for testing the components or devices in each step to be determined in accordance with the TS Surveillance Frequency Control Program.

I&M has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. ***Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?***

Response: No

The proposed change revises the TS definitions of Channel Calibration, COT, and TADOT to allow the frequency for testing the components or devices in each step to be determined in accordance with the TS Surveillance Frequency Control Program. All components in the channel continue to be tested. The frequency at which a channel test is performed is not an initiator of any accident previously evaluated, so the probability of an accident is not affected by the proposed change. The channels surveilled in accordance with the affected definitions continue to be required to be operable and the acceptance criteria of the surveillances are unchanged. As a result, any mitigating functions assumed in the accident analysis will continue to be performed.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. ***Does the proposed amendment create the possibility of a new or different kind of accident from any previously evaluated?***

Response: No

The proposed change revises the TS definitions of Channel Calibration, COT, and TADOT to allow the frequency for testing the components or devices in each step to be determined in accordance with the TS Surveillance Frequency Control Program. The design function or operation of the components involved are not affected and there is no physical alteration of the plant (i.e., no new or different type of equipment will be installed). No credible new failure mechanisms, malfunctions, or accident initiators not considered in the design and licensing bases are introduced. The changes do not alter assumptions made in the safety analysis. The proposed changes are consistent with the safety analysis assumptions.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. ***Does the proposed amendment involve a significant reduction in a margin of safety?***

Response: No

The proposed change revises the TS definitions of Channel Calibration, COT, and TADOT to allow the frequency for testing the components or devices in each step to be determined in accordance with the TS Surveillance Frequency Control Program. The Surveillance Frequency Control Program assures sufficient safety margins are maintained, and that design, operation, surveillance methods, and acceptance criteria specified in applicable codes and standards (or alternatives approved for use by the NRC) will continue to be met as described in the plants' licensing basis. The proposed change does not adversely affect existing plant safety margins, or the reliability of the equipment assumed to operate in the safety analysis. As such, there are no changes being made to safety analysis assumptions, safety limits, or limiting safety system settings that would adversely affect plant safety as a result of the proposed change. Margins of safety are unaffected by the method of determining surveillance test intervals under an NRC-approved licensee-controlled program.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, I&M concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

3.2 Conclusion

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations,

and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

4.0 ENVIRONMENTAL EVALUATION

The proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

Enclosure 3 to AEP-NRC-2019-01

**Donald C. Cook Nuclear Plant Unit 1 Technical Specification Pages Marked to Show
Proposed Changes**

1.0 USE AND APPLICATION

1.1 Definitions

NOTE

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

<u>Term</u>	<u>Definition</u>
ACTIONS	ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
ACTUATION LOGIC TEST	An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state required for OPERABILITY of a logic circuit and the verification of the required logic output. The ACTUATION LOGIC TEST, as a minimum, shall include a continuity check of output devices.
AXIAL FLUX DIFFERENCE (AFD)	AFD shall be the difference in normalized flux signals between the top and bottom halves of a two section excore neutron detector.
CHANNEL CALIBRATION	A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds within the necessary range and accuracy to known values of the parameter that the channel monitors. The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an in-place qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps, and each step must be performed within the Frequency in the Surveillance Frequency Control Program for the devices included in the step.
CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.

1.1 Definitions

CHANNEL OPERATIONAL TEST (COT)

A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY of all devices in the channel required for channel OPERABILITY. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints required for channel OPERABILITY such that the setpoints are within the necessary range and accuracy. The COT may be performed by means of any series of sequential, overlapping, or total channel steps, and each step must be performed within the Frequency in the Surveillance Frequency Control Program for the devices included in the step.

CORE ALTERATION

CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

CORE OPERATING LIMITS REPORT (COLR)

The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific parameter limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Unit operation within these limits is addressed in individual Specifications.

DOSE EQUIVALENT I-131

DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries per gram) that alone would produce the same dose when inhaled as the combined activities of iodine isotopes I-131, I-132, I-133, I-134, and I-135 actually present. The determination of DOSE EQUIVALENT I-131 shall be performed using thyroid dose conversion factors from Committed Dose Equivalent (CDE) or Committed Effective Dose Equivalent (CEDE) dose conversion factors from Table 2.1 of EPA Federal Guidance Report No. 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion."

DOSE EQUIVALENT XE-133

DOSE EQUIVALENT XE-133 shall be that concentration of Xe-133 (microcuries per gram) that alone would produce the same acute dose to the whole body as the combined activities of noble gas nuclides Kr-85m, Kr-85, Kr-87, Kr-88, Xe-131m, Xe-133m, Xe-133, Xe-135m, Xe-135, and Xe-138 actually present. If a specific noble gas nuclide is not detected, it should be assumed to be present at the minimum detectable activity. The determination of DOSE EQUIVALENT XE-133 shall be performed using effective

1.1 Definitions

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)

A TADOT shall consist of operating the trip actuating device and verifying the OPERABILITY of all devices in the channel required for trip actuating device OPERABILITY. The TADOT shall include adjustment, as necessary, of the trip actuating device so that it actuates at the required setpoint within the necessary accuracy. The TADOT may be performed by means of any series of sequential, overlapping, or total channel steps, and each step must be performed within the Frequency in the Surveillance Frequency Control Program for the devices included in the step.

Enclosure 4 to AEP-NRC-2019-01

**Donald C. Cook Nuclear Plant Unit 2 Technical Specification Pages Marked to Show
Proposed Changes**

1.0 USE AND APPLICATION

1.1 Definitions

NOTE

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

<u>Term</u>	<u>Definition</u>
ACTIONS	ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
ACTUATION LOGIC TEST	An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state required for OPERABILITY of a logic circuit and the verification of the required logic output. The ACTUATION LOGIC TEST, as a minimum, shall include a continuity check of output devices.
AXIAL FLUX DIFFERENCE (AFD)	AFD shall be the difference in normalized flux signals between the top and bottom halves of a two section excore neutron detector.
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CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.

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CORE ALTERATION

CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

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