

April 18, 2016

AEP-NRC-2016-31
10 CFR 50.90

Docket Nos. 50-316

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

Donald C. Cook Nuclear Plant Unit 2
Supplement to the Response to Request for Additional Information Regarding the
License Amendment Request to Revise Technical Specification 3.3.2,
Engineered Safety Feature Actuation System (ESFAS) Instrumentation

References:

1. Letter from Q. S. Lies, Indiana Michigan Power Company (I&M), to U. S. Nuclear Regulatory Commission (NRC), "Donald C. Cook Nuclear Plant Unit 2 License Amendment Request Regarding Technical Specification 3.3.2, Engineered Safety Feature Actuation System (ESFAS) Instrumentation," dated October 19, 2015, Agencywide Documents Access and Management System (ADAMS) Accession No. ML15293A497.
2. E-mail capture from A. W. Dietrich, NRC, to H. L. Kish, I&M, "D.C. Cook Nuclear Plant, Unit 2-SBPB Request for Additional Information Concerning ESFAS LAR (CAC No. MF6984)," dated December 10, 2015, ADAMS Accession No. ML15344A350.
3. Letter from Q. S. Lies, I&M, to NRC, "Donald C. Cook Nuclear Plant Unit 2 Response to Request for Additional Information Regarding the License Amendment Request to Revise Technical Specification 3.3.2, Engineered Safety Feature Actuation System (ESFAS) Instrumentation," dated January 21, 2016, ADAMS Accession No. ML16028A144.

This letter provides Indiana Michigan Power Company's (I&M), licensee for Donald C. Cook Nuclear Plant (CNP) Unit 2, supplement to the response to the Request for Additional Information (RAI) by the U. S. Nuclear Regulatory Commission (NRC) regarding a license amendment request (LAR) to revise Unit 2 Technical Specification (TS) 3.3.2, Engineered Safety Feature Actuation System (ESFAS) Instrumentation.

By Reference 1, I&M submitted a request to amend the TSs to CNP Unit 2 Renewed Facility Operating License DPR-74. I&M proposes to modify TS 3.3.2 requirements for the ESFAS instrumentation by adding a new Condition for inoperable required channels for main feedwater pump trips, and by adding a footnote to the Applicable Mode column of TS Table 3.3.2-1 to reflect applicability in Mode 2. By Reference 2, the NRC transmitted an RAI from the Balance of Plant Branch regarding the LAR submitted by I&M in Reference 1.

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In Reference 3, I&M responded to the NRC's RAI from Reference 2. On March 17, 2016, I&M conducted a telephone conference with the NRC regarding the RAI response provided by Reference 3. Based on the discussion during the phone conference, I&M is supplementing Reference 3 with a revision to the RAI response.

Enclosure 1 to this letter provides an affirmation statement. Enclosure 2 to this letter provides I&M's supplement to the RAI response in Reference 3. Copies of this letter are being transmitted to the Michigan Public Service Commission and Michigan Department of Environmental Quality, in accordance with the requirements of 10 CFR 50.91.

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

Sincerely,



Q. Shane Lies
Site Vice President

TLC/ml

Enclosures:

1. Affirmation
2. Supplement to the Response to Request for Additional Information Regarding the License Amendment Request to Revise Technical Specification 3.3.2, Engineered Safety Feature Actuation System Instrumentation

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

Enclosure 1 to AEP-NRC-2016-31

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 18 DAY OF April, 2016


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-2016-31

Supplement to the Response to Request for Additional Information Regarding the License Amendment Request to Revise Technical Specification 3.3.2, Engineered Safety Feature Actuation System Instrumentation

By letter dated October 19, 2015, (Reference 1), Indiana Michigan Power Company (I&M), the licensee for the Donald C. Cook Nuclear Plant (CNP), Unit 2, submitted a license amendment request (LAR). The proposed amendment would modify Technical Specification (TS) 3.3.2, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation," by adding a new Condition for inoperable required channels for main feedwater (MFW) pump trips, and by adding a footnote to the Applicable Mode column of TS Table 3.3.2-1 to reflect applicability in Mode 2.

By e-mail dated December 10, 2015 (Reference 2), the U. S. Nuclear Regulatory Commission (NRC) communicated a request for additional information (RAI) from the Balance of Plant Branch (SBPB) of the Office of Nuclear Reactor Regulation. By letter dated January 21, 2016 (Reference 3), I&M provided a response to the NRC RAI. On March 17, 2016, I&M conducted a telephone conference with the NRC regarding the RAI response provided by Reference 3. Based on the discussion during the phone conference, I&M is supplementing Reference 3 with a revision to the RAI response.

This response provides supplemental information that addresses the concerns expressed by the NRC in the March 17, 2016, telephone conference and supersedes some of the information provided in Reference 3, as specified below. In the next section, the RAIs are restated, followed by a description of specific information from the original RAI response that is being revised.

RAI-SBPB-1

Section 3.1 of the license amendment request (LAR) states that "loss of both anticipatory trip channels does not place the plant in an unanalyzed condition and, therefore, the plant should not be required to enter TS [technical specification] Limiting Condition of Operation (LCO) 3.0.3." The LAR does not explain how starting one main feedwater pump causes a loss of both anticipatory trip channels, nor does it provide the definition of a channel.

- a). Clarify the above statement, since starting a main feedwater pump results in a loss of only one anticipatory trip channel.*
- b) Explain the concern regarding being required to enter TS LCO 3.0.3.*
- c) Define each Engineered Safety Feature Actuation System (ESFAS) Function 6.g channel by identifying associated contacts and relays. Explain whether proposed TS Bases should be clarified regarding the composition of each channel.*

In the response to RAI-SBPB-1(a), I&M proposed revising the originally requested Condition H wording. After discussing this proposed revision with the NRC staff, I&M determined the Condition H wording in the original LAR was more appropriate. Therefore, I&M's response to RAI-SBPB-1(a) is revised with this letter by removing the third and fourth sentences. In addition, Enclosure 3 of the RAI response in Reference 3 is superseded by this response such that CNP Unit 2 TS Page 3.3.2-3 is requested to be revised as described in Enclosure 3 of the original LAR. This results in Condition H wording as described in Enclosures 2 and 3 of the original LAR (Reference 1), which reads, "One or more Main Feedwater Pump trip channel(s) inoperable." The complete response to RAI-SBPB-1(a) reads as follows:

- a) In the second paragraph of the Summary in Section 3.1, referenced in RAI-SBPB-1 above, the phrase, "loss of both anticipatory trip channels" refers to loss of the channels for a degraded condition, something other than starting a MFW pump. As shown in Figure 1 of Enclosure 2 to Reference 1, in order for the actuation trains for auxiliary feedwater pumps to initiate an automatic start, both MFW pump trip channels must be activated.

In the response to RAI-SBPB-1(b), I&M discussed entry into LCO 3.0.3, in which I&M stated that a separate entry into Condition H was allowed for each Unit 2 MFW pump. In order to address NRC staff comments, I&M's response to RAI-SBPB-1(b) is revised with this letter by removing the second sentence. The complete response to RAI-SBPB-1(b) reads as follows:

- b) Regarding LCO 3.0.3 entry, it has been determined that entry into LCO 3.0.3 would not be required for CNP Unit 2 because there is only one trip channel per pump. In addition, if the loss of both anticipatory trip channels is due to a degraded condition, that should not warrant entry into LCO 3.0.3 because the anticipatory MFW pump trip is not credited in the accident analysis.

There are no changes proposed for the original response to RAI-SBPB-1(c).

RAI-SBPB-2

The LAR states that starting a main feedwater pump makes the associated ESFAS Function 6.g channel inoperable until it is supplying feedwater to the steam generators. The LAR proposes adding new Condition H and Note H.1. Note H.1 allows one ESFAS Function 6.g channel on one main feedwater pump to be inoperable for 4 hours.

Proposed Note H.1 becomes pertinent after entering Condition H. The value and purpose of Note H.1 is questionable because the proposed Condition H already provides for the channel to be inoperable for up to 48 hours. The purpose of Condition H is also questionable because Condition B already allows one channel to be inoperable for 48 hours.

- a) *Explain the intended purpose of the proposed TS changes.*
- b) *Explain how the proposed TS changes accomplish the intended purpose. Alternatively, revise the proposed TS changes.*

There are no changes proposed for the original response to RAI-SBPB-2(a) or (b).

REFERENCES

1. Letter from Q. S. Lies, I&M, to NRC, "Donald C. Cook Nuclear Plant Unit 2 License Amendment Request Regarding Technical Specification 3.3.2, Engineered Safety Feature Actuation System (ESFAS) Instrumentation," dated October 19, 2015, Agencywide Documents Access and Management System (ADAMS) Accession No. ML15293A497
2. E-mail capture from A. W. Dietrich, NRC, to H. L. Kish, I&M, "D.C. Cook Nuclear Plant, Unit 2-SBPB Request for Additional Information Concerning ESFAS LAR (CAC No. MF6984)," dated December 10, 2015, ADAMS Accession No. ML15344A350
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