

Pre-Application Meeting Regarding Potential License  
Amendment Request Related to Operating Power Sources for  
Donald C. Cook Nuclear Plant (CNP), Units 1 and 2

34.5KV Loop Feed Enclosure (LFE) Bus Duct Replacement

*Monday, July 31<sup>st</sup>, 2023*

# Background:

- CNP's existing 34.5kV Loop Feed Enclosure (LFE) 12AB has experienced past instances of failures contributing to the loss of the Train B Reserve Feed, consequently causing the station to enter Tech Spec (TS) Limiting Condition of Operation (LCO) 3.8.1.a.
- A root cause analysis of these incidents revealed that the failures were caused by several factors at the non-segregated phase bus duct of the LFE.
- CNP intends on replacing the LFE non-segregated phase bus duct with a cable bus.
- The current projected schedule for this work exceeds the 72 hour LCO Completion Time of Required Action A.3.
- This modification affects both Units' Train B Reserve Feed and should be installed with both units online due to risk management configuration considerations. Therefore, installation should not be done during a unit outage.

- CNP would like to submit a License Amendment Request (LAR) to revise TS 3.8.1, “AC Sources – Operating,” to provide a one-time extension of the Completion Time of Required Action A.3 (Unit 1 and Unit 2) beyond the current 72 hour Completion Time to allow time for safely replacing the LFE non-segregated phase bus duct with a cable bus.
- Extending the Completion Time on a temporary one-time basis as requested will mitigate the risk of an unnecessary shutdown of one or both CNP units. Also, future issues in which the completion time could not be met would require the shutdown of both units.
- The proposed amendment is risk-informed and follows the guidance in NRC Regulatory Guide (RG) 1.174, “An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis,” Revision 3, and NRC RG 1.177, “Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications,” Revision 2.

- The design for the replacement cable bus is ongoing. Based on the initial projection of a timeline for the work and the identification of possible contingencies, CNP would most likely be asking for the 72 hour LCO Completion Time of Required Action A.3 to be extended to 9 days.
- Submittal of the LAR to allow for NRC review and subsequent issuance of Amendment, to support work being performed in September 2024, is at risk because the modification final design is not yet approved.