



Pre-Submittal Meeting

Palisades Nuclear Plant Open Phase Detection Closure Plan



April 29, 2025

Meeting Agenda

- Introductions
- Purpose & Outcome
- Background
- Closure Plan
- Regulatory Approach
- Schedule
- Questions

Introductions



- U.S Nuclear Regulatory Committee (NRC) Staff
- Holtec Decommissioning International, LLC (HDI)
 - Jean Fleming – Holtec International, Vice President of Licensing and Regulatory Affairs
 - Michael Schultheis – Holtec Palisades LLC, Director of Regulatory and Site Strategies
 - Joe Jerz – Holtec Palisades LLC , Engineering Director
 - Kate Chenier - Holtec Palisades LLC , Engineering Design Manager
 - Johann Britting – Holtec Palisades LLC, Licensing Engineer

Purpose & Outcome

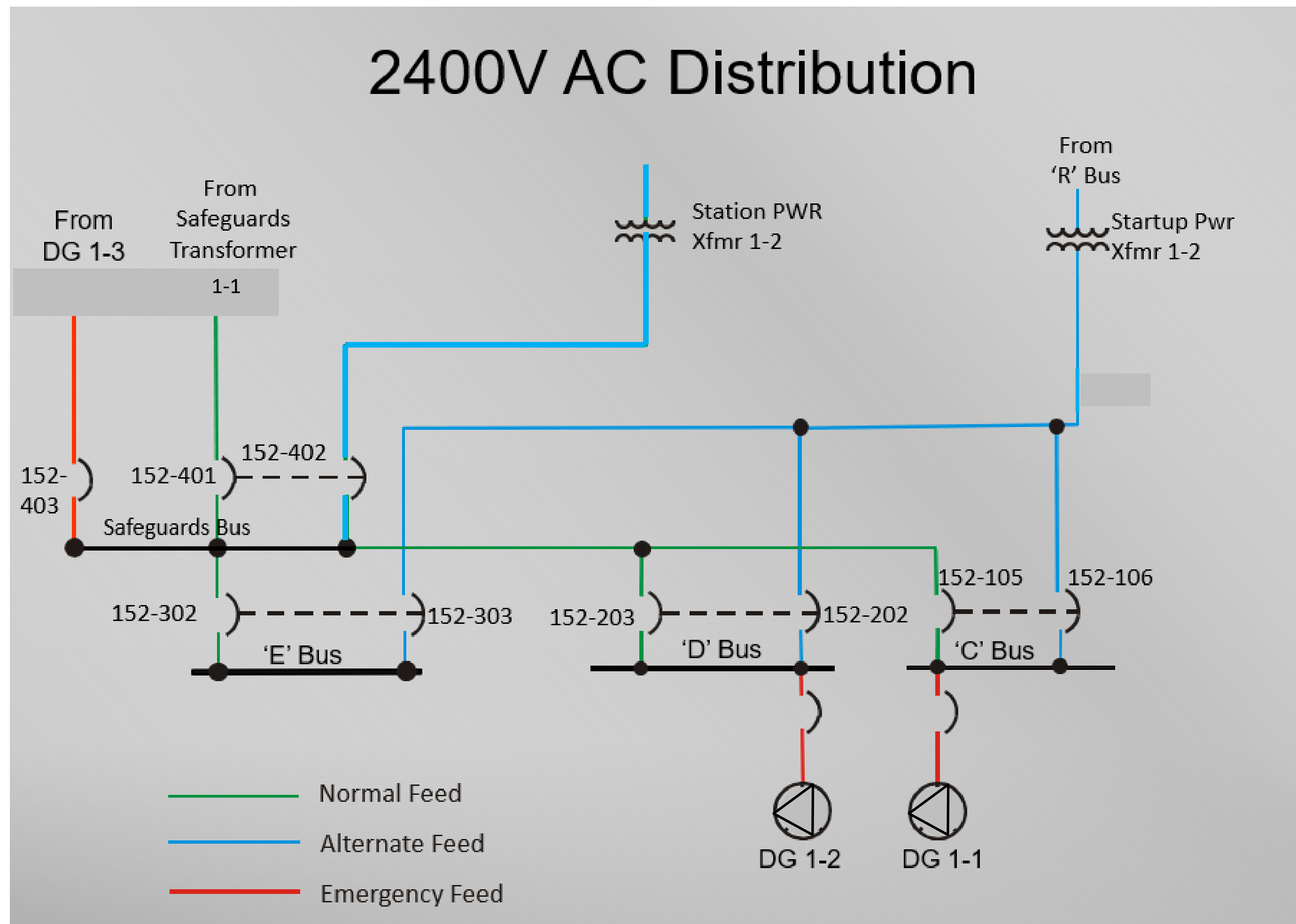
■ Purpose:

- Inform NRC of Palisades Nuclear Plant (PNP) plans to resume work on Open Phase Detection
- Provide a summary of Open Phase Detection activities completed prior to placing the plant in decommissioning status.
- Present key elements of the Open Phase Detection closure plan

■ Outcome:

- Solicit NRC Staff questions and comments on proposed closure plan
- Provide schedule information to support NRC resource allocation

Background



Background

- 2012 – NRC issued Bulletin 2012-01, “Design Vulnerability in Electric Power System” (ML12074A115)
- 2012 – Entergy Nuclear Operations, Inc. letter to NRC, PNP 2012-093, “90-Day Response to NRC Bulletin 2012-01, *Design Vulnerability in Electric Power System*,” dated October 25, 2012 (ML12300A063).
 - Entergy made plans to implement a hardware modification to eliminate the vulnerability to an undetected open phase condition on the offsite power circuits at Palisades Nuclear Plant (PNP).
- 2013 – NEI letter to the NRC, “Industry Initiative on Open Phase Condition” (ML13333A147)
- 2014 – NEI letter to the NRC, “Regulatory Issues Related to Open Phase Conditions, dated August 14, 2014 (ML14226A805, ML14226A806)
- 2014 – NEI letter to Entergy Nuclear Operations, Inc, “Guidance for Deviations to the Open Phase Condition (OPC) Initiative” (APC 14-25) dated October 14, 2014

Background



- 2015 – NEI letter to NRC, “Industry Initiative on Open Phase Condition, Revision 1” (Project Number: 689), dated March 16, 2015.
- 2018 - Entergy Nuclear Operations, Inc. letter to NRC, “Schedule Change to Open Phase Condition Detection Implementation”, (CNRO2018-00053) dated December 20, 2018 (ML18354A823).
- 2018 – Open Phase Detection System was installed on Startup Transformer 1-2 (EX-04) during the 1R26 refueling outage in Fall of 2018.
- 2021 – Entergy Nuclear Operations, Inc. letter to NRC, “Schedule Change to Open Phase Condition Detection Implementation”, (PNP 2021-017) dated April 1, 2021 (ML21091A062).

Closure Plan



- Re-develop Engineering Change Plan to install Open Phase Detection on the 345kV side of Safet guards Transformer 1-1 (EX-07). This will be installed in the next Refuel Outage window.

Schedule



Milestone	Date
Redevelop Design Change Package	2Q2027
Implement Design Change Package	4Q2027
Monitor Data Report	2Q2028
Final Adjustments after Monitoring Period	3Q2028
Design Change Closeout	3Q2028
Update Design Basis Information	3Q2028

Questions

- NRC Staff Questions, Comments & Feedback

Thank You



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