

PRE-APPLICATION MEETING FOR PRAIRIE ISLAND TS 5.6.6, PTLR, LAR

February 18, 2022

Agenda

Purpose

Background

LAR Details

Schedule

Purpose

Discuss proposed license amendments to adopt approved methods in Technical Specifications (TS) 5.6.6, "Reactor Coolant System (RCS) Pressure and Temperature Limits Report (PTLR)."

Background

- NSPM pulled surveillance capsules from the reactor vessel in the most recent Unit 1 (2020) and Unit 2 (2021) refueling outages.
- Review of Westinghouse draft report for the analysis of the Unit 1 surveillance capsule identified that there was a legacy error in calculations with respect to the location of weld W2.

4

LAR Details

- The proposed amendments would revise PINGP TS 5.6.6 to include more recent analytical methods that have been found acceptable by the NRC.
 - Update the approved analytical method to determine RCS pressure and temperature limits and overpressure protection system (OPPS) setpoints from WCAP-14040-NP-A, Rev 2, to that in WCAP-14040-NP-A, Rev 4.
 - Update the approved analytical method for calculating neutron fluence to the Westinghouse methodology provided in WCAP-18124-NP-A, Rev 0, to allow this method as an alternative to section 2.2 of WCAP-14040, Rev 4.
- NSPM plans to include with the LAR the revised Unit 1 heatup and cooldown curves using the proposed methods.
 - NSPM expects the Unit 2 heatup and cooldown curves will be bounded by the Unit 1 curves.

LAR Details (continued) Technical Specification Markups

b. The analytical methods used to determine the RCS pressure and temperature limits and Cold Overpressure Mitigation System setpoints shall be those previously reviewed and approved by the NRC, specifically those described in the following document:

WCAP-14040-NP-A, Revision <u>24</u>, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Limit Curves" (includes any exemption granted by NRC to ASME Code Case N 514). Insert

Insert

WCAP-18124-NP-A, Revision 0, "Fluence Determination with RAPTOR-M3G and FERRET," July 2012, may be used as an alternative to Section 2.2 of WCAP-14040-NP-A, Revision 4.

LAR Details (continued)

- Precedent: Beaver Valley Units 1 and 2 amendments 313 and 203
 - Comments on extended beltline comparing PINGP to Beaver Valley.
 - Supplement 1 to WCAP-18124, Rev 0, addresses extended beltline generically and is currently in NRC review and expected before the new Unit 1 heatup and cooldown curves are completed.
 - The Beaver Valley fluence calculation resulted in more material in the extended beltline. PINGP will not have new material within the extended beltline.

Schedule

- March 2022 Submit Unit 1 Capsule Report
- August 2022 Submit PTLR LAR
- March 2023 Submit Unit 2 Capsule Report
- July 2023 Submit Unit 2 heatup and cooldown curves
- September 2023 Submit PTLR revision

