



**Prairie Island Amendment to Remove Note from
LCO 3.4.12 and LCO 3.4.13**

2.18.2020

Agenda

- Opening Remarks
- Background – LTOP LCO 3.4.12 and LCO 3.4.13 Note 1
- Proposed Changes
- Closing Remarks

Opening Remarks

- The purpose of this meeting is to discuss proposed License Amendment for Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2
- The LAR will clarify requirements for operating Safety Injection (SI) pumps for testing or other evolutions when in the Mode or Other Specified Condition of Applicability of LCO 3.4.12 or LCO 3.4.13
- The proposed change is intended to align the PINGP TS with the underlying LTOP analysis and eliminate redundancy

Background

- Note 1 of LCO 3.4.12 and LCO 3.4.13 reads:

Both safety injection (SI) pumps may be run for ≤ 1 hour while conducting SI system testing provided there is a steam or gas bubble in the pressurizer, the reactor vessel head is on, and at least one isolation valve between the SI pump and the RCS is shut.

Background (cont.)

- The precursor to the Note was introduced to the PINGP custom TS (CTS) with Amendments 38 and 32 in 1979 to provide for running both SI pumps for testing
- In the conversion to ITS, the Note was included to incorporate the CTS provisions for SI testing
- After 2011 NSPM changed SI testing practice from running both trains concurrently to running one train at a time
- In 2019 NSPM implemented a STRIDE under the SFCP that changes SI testing frequency such that only one train is tested each refueling outage

Background (cont.)

- Specifically, Note 1 includes three constraints in order to operate two SI pumps for testing or other evolutions:
 - Pressurizer bubble - Intended to provide a surge volume to provide additional time to react to a postulated event. The associated analysis does not credit a pressurizer bubble
 - Vessel head on – Redundant to modes of applicability. No protection against LTOP
 - Isolation valve closed - redundant to the LCO requirement

Proposed Changes

- Eliminate Note 1 from LCO 3.4.12 and LCO 3.4.13

LCO 3.4.12 LTOP shall be provided with:

- A maximum of one SI pump capable of injecting into the RCS;
- The emergency core cooling system (ECCS) accumulators isolated;
- An OPERABLE Over Pressure Protection System (OPPS) with lift setting within the limits specified in the PTLR; and
- Two OPERABLE pressurizer power operated relief valves (PORVs).

NOTES

- ~~Both SI pumps may be run for ≤ 1 hour while conducting SI system testing providing there is a steam or gas bubble in the pressurizer and at least one isolation valve between the SI pump and the RCS is shut.~~
 - ~~ECCS accumulator may be unisolated when accumulator pressure is less than the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in the PTLR.~~
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LCO 3.4.13 LTOP shall be provided with: 1) no SI Pumps capable of injecting into the RCS; 2) the emergency core cooling system (ECCS) accumulators isolated; and 3) one of the following pressure relief capabilities:

- An Over Pressure Protection System (OPPS) shall be OPERABLE with two pressurizer power operated relief valves (PORVs) with lift settings within the limits specified in the PTLR; or
- The RCS depressurized and an RCS vent of ≥ 3 square inches.

NOTES

- ~~Both safety injection (SI) pumps may be run for ≤ 1 hour while conducting SI system testing provided there is a steam or gas bubble in the pressurizer, the reactor vessel head is on, and at least one isolation valve between the SI pump and the RCS is shut.~~
 - During reduced inventory conditions an SI pump may be run as required to maintain adequate core cooling and RCS inventory.
 - ECCS accumulator may be unisolated when ECCS accumulator pressure is less than the maximum RCS pressure for the existing RCS cold leg temperature allowed by the P/T limit curves provided in the PTLR.
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