



# Additional Actions for Backup Reactor Trip and Engineered Safety Feature Actuation Instrumentation – Farley Nuclear Plant (FNP)

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# Agenda Items

1. Introductions
2. Meeting Kick-off
3. Purpose of Proposed LAR
4. Precedence
5. Proposed Change
6. License Amendment Request Content



# Purpose of License Amendment Request



# Purpose

- Current Reactor Trip System (RTS) and Engineered Safety Feature Actuation System (ESFAS) instrumentation technical specification (TS) action requirements make no distinction between primary and backup trip/actuation instrumentation.
- With a few exceptions (e.g., intermediate and source range monitoring), when multiple channels of an instrument function are inoperable, current TS actions do not provide any time to troubleshoot and repair the inoperable channels regardless whether the instrument function is credited as the primary instrument function or a backup instrument function.



# Purpose

- Currently, this condition requires application of LCO 3.0.3 regardless of the instrument function.
- A unit shutdown under this condition for backup instrumentation is considered overly restrictive because a reactor trip or ESFAS initiation on these backup instrument functions is not credited as a primary trip or initiation function in the FNP accident or transient analysis.



Precedent

The image features a complex geometric composition of overlapping gray shapes. A large, light gray triangle is positioned in the upper left, with the word 'Precedent' centered within it. This triangle overlaps with a darker gray triangle that extends from the bottom left towards the center. To the right, a medium gray rectangle overlaps with a dark gray triangle that points towards the bottom right. The background is a light gray, and the overall composition is minimalist and abstract.



## Recent Precedent

- Following license amendments issued to SNC on November 7, 2018 for FNP Units 1 and 2, License Amendments 211 and 218, respectively (NRC ADAMS Accession No. ML18271A207), it was noted by SNC personnel that there are a number of RTS and ESFAS instrument functions that meet the same criteria as the ESFAS high steam flow instruments (i.e., these instrument functions are not assumed as the primary trip/actuation instrument function in any accident or transient analysis).
- The NRC staff approval for FNP License Amendments 211 (Unit 1) and 218 (Unit 2) was based on the same justification that the related instrumentation is not assumed in any safety or transient analysis.

The image features a complex, abstract geometric composition. It consists of several overlapping, semi-transparent gray shapes of varying shades, creating a layered effect. The shapes include triangles, quadrilaterals, and larger irregular polygons. The overall aesthetic is clean and modern, with a focus on geometric forms and light gradients. The text 'Proposed Change' is centered in the upper-left quadrant of the composition.

Proposed Change





## Proposed Change

Add additional actions in TS 3.3.1, “RTS Instrumentation,” and TS 3.3.2, “ESFAS Instrumentation,” that allow 72 hours to restore channels to Operable status when multiple channels of a backup instrument function are inoperable.



# Proposed Change

Instrument Functions affected:

- RTS Functions:
  - Function 9, Pressurizer Water Level – High
  - Function 12, Reactor Coolant Pump (RCP) Undervoltage
  - Function 13, RCP Underfrequency
  - Function 15.a, Turbine trip on Low Auto Stop Oil Pressure
  - Function 15.b, Turbine trip on Turbine Throttle Valve Closure
- ESFAS Functions:
  - Function 1.e(2), Safety Injection on High Differential Pressure Between Steam Lines
  - Function 4.e, Steam Lin Isolation on High Steam Flow in Two Steam Lines (Modify Condition M)



# License Amendment Request Content



# License Amendment Request Content

Enclosure:

Basis for Proposed Change

Attachments

1. Technical Specification Marked-up Pages
2. Revised Technical Specification Pages
3. Technical Specification Bases Markup-up Pages (For Information Only)



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