Pre-Submittal Meeting to Discuss Upcoming NextEra Energy License Amendment Request for a One-Time Extension to TS 3.8.1.1.a Completion Time

April 30, 2024

Participants

Sheryl Sweet – Fleet Licensing

Ken Mack – NextEra Licensing Fleet Manager

Keith Vincent, Manager – Fleet Reliability and Risk Manager

William Barr – Seabrook Operations Unit Supervisor

Matt Levander – Seabrook Regulatory Affairs Manager

Agenda

- Purpose
- TS 3.8.1.1.a LAR Overview
- Impetus for Request
- PRA Insights Model
- Anticipated Schedule
- Closing Remarks

Purpose

One-time TS 3.8.1.1.a Completion Time (CT) Extension from 72 hours to 240 hours

- **Would allow completion of RFO activities up through low-power physics testing for duration of main generator breaker replacement.**
  - FERC-Required Main Generator Breaker Replacement for Upgraded Transmission Line
    - Enhances Grid Reliability and Power Wheeling
  - Breaker Replacement Requires One Qualified Offsite AC Power Source Out-of-Service
  - AC Power Provided to the Station via the Reserve Auxiliary Transformers (RATs)
  - RFO Activities Would Occur in Parallel with Breaker Replacement (MODE 4 thru MODE 2)
    - Complete MODE 2 Low Power Physics Testing during Breaker Replacement
    - Return to MODE 3 until Breaker Replaced or 240 hour Expiration

Technical Specification 3.8.1.1.a
AC Sources – Operating Markup in red

3/4.8 ELECTRICAL POWER SOURCES

3/4.8.1 A.C.SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E Distribution System

APPLICABILTY: MODES 1, 2, 3, AND 4.

Technical Specification 3.8.1.1.a
AC Sources – Operating Markup in red

ACTION:

3. Restore at least two offsite circuits to OPERABLE status within 72* hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

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* A one-time Allowed Outage Time (AOT) extension for an inoperable offsite circuit allows 240 hours to restore the inoperable Unit Auxiliary Transformers to OPERABLE status. Compensatory measures within NextEra Energy Seabrook, LLC letter L-2024-061, shall be implemented and shall remain in effect during the extended AOT period. The one-time AOT extension shall expire upon completion of the maintenance to restore the Unit Auxiliary Transformers to OPERABLE status or by 240 hours, whichever occurs earliest.

Impetus for Request

- Importation of additional 1200 MW through the 345kV Larrabee Road Substation to Seabrook Station
- Circuit will carry 2510 additional amps when the Seabrook main Generator is tied-in
- Current main generator breaker cannot interrupt the higher amp circuit
- A new SF6, gas type, main generator breaker that has interrupting capability is being installed
- Seabrook requests enough time to perform startup activities in conjunction with breaker replacement with a qualified offsite circuit out of service

Deterministic Risk Assessment

- Extension of the UAT's allowed outage time of 72 hours to 240 hours has a minor impact on the PRA results and the increase is within NRC limits established by Reg. Guide 1.177.
- High degree of redundancy for emergency buses, has low risk significance with the Unit Auxiliary Transformers out of service
- Overall risk in Seabrook SM7.31, with guarded emergency diesel generators, supplemental emergency power system, and remaining power sources, remains green in MODE 4
- Seabrook Request 24-01818 for grid stability is in place for Eversource, National Grid and Central Maine Power Company

Precedent

- **Watts Bar - Issuance of Amendment Regarding Alternating Current Sources, dated September 29, 2015**
- **Palo Verde - Issuance of Amendment Regarding Revision to Technical Specification 3.8.1, "AC Sources – Operating (Emergency Conditions), dated December 23, 2016**
- **Quad Cities - Issuance of Amendments No. 298 and 294 Regarding Increased Completion Time in Technical Specification 3.8.1.B.4 (Emergency Circumstances), dated December 17, 2023**

Schedule

Refueling Outage OR23 is scheduled from October 5, 2024 until November 10, 2024

One-time Licensing Amendment Request expected to be submitted May 3, 2024

Seabrook requests approval by September 30, 2024

Closing Remarks

- Main generator breaker replacement is a FERC directive to improve grid stability
- Seabrook will maintain adequate safety margin and defense-in-depth to protect onsite and offsite equipment during the requested allowed outage time. During the scheduled repair, risk significant configurations will be avoided and risk monitoring strategies will be maintained.
- Seabrook will revert to current Technical Specifications should unexpected issues cause a deviation from the repair schedule in excess of 240 hours.

Questions