# Pre-Submittal Meeting

# License Amendment Request to Revise Wolf Creek Generating Station Technical Specifications to Adopt Risk Informed Completion Times TSTF-505-A, Revision 2, “Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b”

*DATE: October 16th, 2023*

wolf creek nuclear

evergy

# AGENDA

- *Scope of License Amendment Request (LAR)*
- *Variations from TSTF-505-A*
- *Other LAR Changes*
- *Probabilistic Risk Assessment (PRA) Model Technical Adequacy*
- *Configuration Risk Management (CRM) Program*
- *LAR Schedule*
- *Summary*
- *Questions/Comments?*



wolf creek nuclear

evergy

# Scope of License Amendment Request

- License Amendment Request (LAR) is based on TSTF-505-A, Revision 2, and NEI 06-09, “Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines”
- Risk Informed Completion Times (RICTs) apply to 50 TS Required Actions (RAs) at Wolf Creek Generating Station (WCGS)
    - Applicable in Modes 1 and 2
    - No “loss of function” consistent with template
- New TS 5.5 program called the “Risk Informed Completion Time Program”
- LAR informed by approved precedent and those currently under review
- Includes adoption of TSTF-439-A, Revision 2, “Eliminate Second Completion Times Limiting Time From Discovery of Failure to Meet an LCO”

# Variations from TSTF-505

Several types of administrative variations are taken

- RAs with different numbering and slightly different wording with same intent
- TSTF-505 RAs that WCGS TS do not have
- Instrumentation RAs invoked for different Functions or wording that a RICT applies to
- RICTs not applied since Additional Justifications weren't met (e.g., not having a Shutdown PRA), or loss of function could not be confirmed
- Corrections to obvious minor traveler errors and administrative formatting changes
- Various plant-specific differences that are still bounded by related TSTF-505 changes

# Variations from TSTF-505 (continued)

Seven technical variations are being taken

- WCGS TS 3.3.2 Required Action I which requires comparison with Standard Technical Specifications (STS) TS 3.3.2 Condition J meets the criteria for RICT
- WCGS TS 3.3.2 Required Action N does not have a corresponding STS TS, but meets the criteria for RICT
- WCGS TS 3.3.2 Required Action Q does not have a corresponding STS TS, but meets the criteria for RICT
- WCGS TS 3.7.2 Required Action A does not have a corresponding STS TS, but meets the criteria for RICT
- WCGS TS 3.7.2 Required Action B does not have a corresponding STS TS, but meets the criteria for RICT
- WCGS TS 3.7.2 Required Action C does not have a corresponding STS TS, but meets the criteria for RICT
- WCGS TS 3.8.1 Required Action C.1, C.2, C.3, and C.4 do not have a corresponding STS TS, but meets the criteria for RICT

# Deviations from TSTF-505

- Maintenance Rule (MR) Program
  - MR program outlined in TSTF-505 follows guidance defined in NUMARC 93-01
  - Wolf Creek MR program follows guidance defined in NEI 18-10 (MR 2.0)
  - Deviation is noted in LAR enclosure

# Other LAR Changes

TSTF-439 is included

- Traveler is cited as prerequisite for applying RICT to RAs with second Completion Times
- Technical justification is incorporated as a different “stand-alone” section of the LAR
- Affects 10 RAs and Completion Times allowing RICT application
- Six Administrative variations of inconsequential nature
- One Technical Variation for a RA with a second Completion Time not covered by the traveler, but meet the intent for a second Completion Time deletion
- Consistent approach proposed by Callaway Plant and Browns Ferry Nuclear Plants

# Other LAR Changes (continued)

Changes for Consistency With ITS Writer's Guide

- Three opportunistic changes are made on TS pages impacted by TSTF-505 changes that promote consistency with the ITS Writer's Guide

Editorial Corrections

- Three opportunistic changes are made on TS pages impacted by TSTF-505 changes that make certain editorial corrections

# PRA Model Technical Adequacy

The PRA models supporting this submittal have been assessed against the ASME/ANS PRA Standard (RA-Sa-2009 and Part 5 Code Case) and RG 1.200, Revision 2, consistent with NRC RIS 2007-06.

All Facts and Observations (F&O) closure reviews were performed in accordance with the process documented in Appendix X to NEI 05-04, NEI 07-12, NEI 12-13, and NEI 17-07 as accepted by the NRC (ML17079A427), as well as the requirements published in the ASME/ANS PRA Standard (RA-Sa-2009).

# PRA Model Technical Adequacy

- Internal Events and Internal Flood PRA
  - Full scope peer review against ASME/ANS RA-Sa-2009 performed in June 2019
  - Two F&O closure reviews performed in accordance with Appendix X to NEI 05-04 and NEI 17-07. The latest F&O closure occurred in August 2023.
  - No open Finding F&Os*
- Internal Fire PRA
  - The Fire PRA was prepared using the methodology defined in NUREG/CR-6850, “Fire PRA Methodology for Nuclear Power Facilities”
  - Peer review against ASME/ANS RA-Sa-2009 performed in November 2021
    - Peer review included all applicable elements except for technical element SF. Focus scope peer review for SF technical element is scheduled for October 2023.
  - A single F&O closure review was performed in accordance with Appendix E to NEI 17-07 in August 2022
  - No open Finding F&Os**



**F&O Closure report is not finalized yet. Statement made from draft report.*
*** Technical element SF is not yet peer reviewed. All potential findings from this peer review will be discussed in Enclosure 2 of LAR.*

# PRA Model Technical Adequacy

- Seismic Hazard
  - Penalty factor utilized for RICT application
- High Winds Hazard
  - Penalty factor utilized for RICT application
- Other External Hazards
  - External Hazards screening assessment was reviewed against the technical elements in Section 6 of the ASME/ANS PRA standard in September 2015
  - A single F&O closure review was performed in accordance with Appendix E to NEI 17-07 in August 2023*



**F&O Closure report is not finalized yet. Any potentially open Findings will be discussed in Enclosure 2 of LAR.*

# PRA Model Uncertainties and Assumptions

- WCGS followed the process defined in NUREG-1855, EPRI 1016737, and EPRI 1026511
  - Assessment of potential sources of uncertainty key to the RICT application and provided disposition/treatment of uncertainty for the application
  - Identification of plant-specific sources and generic sources for all Hazards per EPRI 1016737
  - Identification of Internal Fire PRA plant-specific sources and generic sources per Appendices of EPRI 1026511
  - Consideration of both parameter and completeness uncertainties

# CRM Program

- A Real-Time Risk Model (CRM Model) similar to existing Maintenance Rule a(4) quantitative Configuration Risk Management Program
  - Incorporates Internal Events, Internal Flooding, and Fire into a One-Top Multi-Hazard Model
  - Uses EPRI Phoenix Risk Monitor Software to develop quantitative results
  - Incorporates RICT Calculation Based on CDF and LERF with maximum 30-day backstop

- Maintenance Rule (MR) Program
  - Current MR program at WCGS follow guidance defined in NEI 18-10 (MR 2.0)

# LAR Schedule

Projected submittal in November 2023 with requested approval within one year

- Submittal timing supports a TSTF-505 audit after completion of the Spring 2024 Refueling Outage
- A 180-day implementation period is proposed

WCNOC plans to submit a 10 CFR 50.69 LAR during the NRC review of the TSTF-505 LAR

- It is expected that there will be efficiencies gained by synergies with these concurrent reviews of the PRA

# Summary

- TSTF-505 LAR is scheduled to be submitted in November 2023 with approval requested in one year
- LAR is consistent with TSTF-505 Model Application
- RICT process will follow NEI 06-09-A
- PRA is technically acceptable for the RICT Application

# Questions/Comments?