

Surry
10 CFR 50.69
License Amendment Request
Pre-Submittal Meeting with NRC
September 9, 2019

Agenda

- Introduction/Opening remarks
- Surry 50.69 submittal overview
 - PRA Technical Adequacy
 - Deviations from NEI 00-04
 - ☐ Fire Risk
 - ☐ Passive Categorization
 - ☐ Seismic Justification
- Schedule
- Closing Remarks

PRA Technical Adequacy – Current PRA Models

Model - Internal Events (With Internal Flooding)

- Probabilistic Risk Assessment (PRA) model technical adequacy has been previously evaluated by the Staff for TSTF-425 and Integrated Leak Rate Testing (ILRT).
- Facts & Observations (F&O) closure peer review was performed in March 2018 in accordance with the NEI 05-04 Appendix X approach.
- Peer Review closed all F&Os meeting closure requirements. Additionally upgrades were verified to have been peer reviewed.
- Changes to the as-built, as-operated plant are reviewed periodically to determine if model impacts require an off-cycle update.
- Sensitivity studies will be performed in accordance with NEI 00-04 for areas such as Human Reliability Analysis (HRA) and Common Cause Failures (CCF).
- Additional sensitivity studies will be performed to address applicable open F&Os from peer reviews and key assumptions/uncertainties.

Deviations from NEI 00-04

Fire Risk

- NEI 00-04 provides two options: 1) Fire PRA, 2) System, Structure or Component (SSC) list developed from the Individual Plant Examinations of External Events (IPEEE) Fire Induced Vulnerability Evaluation (FIVE).
- Dominion Energy proposes using the Appendix R Safe Shutdown Equipment List (SSEL) in lieu of the IPEEE FIVE.
- Appendix R is a living program subjected to periodic regulatory inspection.
- SSC candidate safety-significance determined by the Fire SSEL. This includes SSCs credited for mitigation of Multiple Spurious Operations (MSOs) and any deviations/exemptions taken from the fire protection program.
- Use of Appendix R was previously submitted by TVA in the Sequoyah 50.69 LAR and Millstone 2 50.69 LAR.

Deviations from NEI 00-04

Passive Categorization

- Passive components and the passive function of active components will be evaluated using the Arkansas Nuclear One (ANO) Risk-Informed Repair/Replacement Activities (RI-RRA) method.
- The use of this method was previously approved by the NRC in the Vogtle 10 CFR 50.69 application.
- ASME Code Class 1 SSCs with a pressure retaining function, as well as supports, will be assigned as high safety significant (HSS) for passive categorization. This will result in HSS for its risk-informed safety classification and cannot be changed by the integrated decision-making panel (IDP).

Deviations from NEI 00-04

Seismic Justification Referencing EPRI TR 3002012988

- Surry will reference EPRI Technical Report (3002012988) for seismic considerations in the categorization process.
- Surry will document justification for being a “Tier 1 Plant” and provide justification to the Integrated Decision Making Panel (IDP).
- Conclusions and results from existing seismic studies, as they apply to the system being categorized, will be included in information provided to the IDP.
- Surry will review and incorporate lessons learned and additional considerations from the lead Tier 1 plant, Calvert Cliffs.

Schedule

- Draft License Amendment Request (LAR) will be sent to NEI Coordinating Committee for review and comments will be dispositioned prior to submittal.
- Site Facility Safety Review Committee review targeted for 10/15/2019.
- LAR Submittal to the NRC expected by end of October 2019.