Millstone 2
10 CFR 50.69
License Amendment Request
Pre-Submittal Meeting

Dominion Energy®

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.
- A subsequent Peer Review was performed in 2018 following the ILRT submittal and Request for Additional Information concerning credit for peer reviews prior to the standard. The model has now been reviewed against all elements of the ASME/ANS RA-Sa-2009 standard, as endorsed by RG 1.200, Revision 2.
- 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 License Amendment Request (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).
- The use of this method was previously approved by the NRC in the Vogtle 10 CFR 50.69 application.
- All 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).

Seismic SSEL per NEI 00-04

- The Seismic SSEL, as submitted in response to IPEEE, will be used to address seismic input for categorization per NEI 00-04.
- An as-built, as-operated review of the SSEL list has been performed and no changes to the list are required at this time.
- The list will be re-reviewed during periodic updates for plant design changes, calculations, or procedure changes to determine if defined shutdown path components remain valid. Updates will be performed as required.
- Millstone will consider EPRI Technical Report (3002012988) for seismic and submit a supplement if deemed applicable.

Schedule

- Draft LAR has been sent to NEI Coordinating Committee for review and comments have been incorporated
- NRC Pre-Submittal Meeting
- Site Facility Safety Review Committee Review targeted for 11/15/2018
- LAR Submittal to the NRC expected by end of November 2018