



August 2024



License Amendment Request to Revise Point Beach Operating License to Allow Use of the EPRI Alternative Seismic Approach for 10 CFR 50.69 Risk-Informed Categorization

Participants

Keith Vincent, Manager – Fleet Reliability and Risk Manager, NextEra

Eric Schultz, Manager – Point Beach Regulatory Affairs

Kim Locke, Principal Analyst – Point Beach Regulatory Affairs

Jerry Phillabaum, Principal Engineer – Fleet Licensing, NextEra

Justin Wheat – Consultant

Agenda

- Scope of Request
- PRA Model Technical Adequacy
- Seismic Approach & Precedent
- Current Schedule
- Summary & Closing Remarks

E. Adoption of 10 CFR 50.69, "Risk-Informed categorization and treatment of structures, systems, and components for nuclear power plants"

4. NextEra Energy Point Beach is approved to implement 10 CFR 50.69 using the processes for categorization of Risk-Informed Safety Class (RISC)-1, RISC-2, RISC-3, and RISC-4 structures, systems, and components (SSCs) using: Probabilistic Risk Assessment (PRA) models to evaluate risk associated with internal events, including internal flooding, and internal fire; the shutdown safety assessment process to assess shutdown risk; the Arkansas Nuclear One, Unit 2 (AN0-2) passive categorization method to assess passive component risk for Class 2 and Class 3 SSCs and their associated supports; and the results of non-PRA evaluations that are based on the IPEEE Screening Assessment for External Hazards, i.e., seismic margin analysis (SMA) to evaluate seismic risk, and a screening of other external hazards updated using the external hazard screening significance process identified in ASME/ANS PRA Standard RA-Sa-2009; as specified in License Amendment No. 265 dated November 26, 2018.

In addition, NextEra Energy Point Beach is approved to implement 10 CFR 50.69 using the alternative seismic approach described in NextEra Energy Point Beach letter L-2024-120, dated September X, 2024, for categorization of RISC-1, RISC-2, RISC 3, and RISC-4 SSCs, as specified in License Amendment No. [XXX] dated [DATE].

Scope

Submit a LAR to revise the existing 10 CFR 50.69 License Condition:

- Allows use of the alternate seismic approach, as described in the LAR, for 50.69 categorization (underlined blue text)

~~2. Prior to implementation of the provisions of 10 CFR 50.69, NextEra Energy Point Beach shall complete the items below:~~

- ~~a. Item A in Attachment 1, List of Categorization Prerequisites, to NextEra Energy Point Beach letter NRC 2017-0043, "License Amendment Request 287, Application to Adopt 10 CFR 50.69, 'Risk-Informed Categorization and Treatment of Structures, Systems, and Components (SSCs) for Nuclear Power Plants,' " dated August 31, 2017; and~~
- ~~b. Attachment 1, Point Beach 10 CFR 50.69 PRA Implementation Items, in NextEra Energy Point Beach letter NRC 2018-0044, "Supplement to Response to Request for Additional Information Regarding License Amendment Request 287, Application to Adopt 10 CFR 50.69, 'Risk-informed Categorization and Treatment of Structures, System, and Components (SSCs) for Nuclear Power Plants,' " dated September 28, 2018.~~

~~3. Prior NRC approval, under 10 CFR 50.90, is required for a change to the categorization process specified above (e.g., change from a seismic margins approach to a seismic probabilistic risk assessment approach).~~

Scope

Submit a LAR to revise the existing 10 CFR 50.69 License Condition:

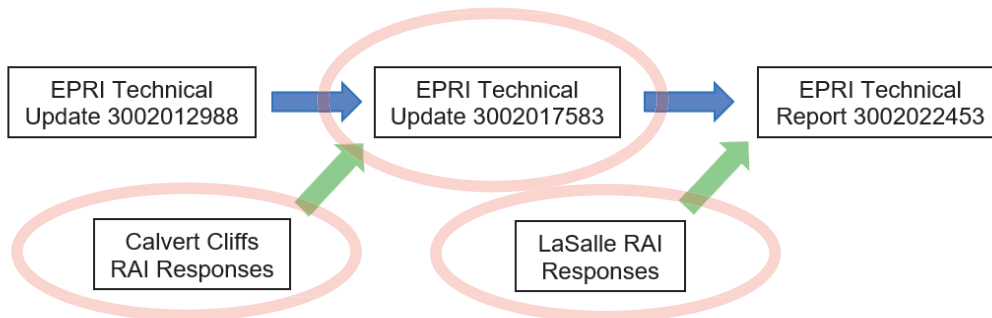
- Removes requirements to complete implementation items; all provisions have been met (~~stricken through red text~~)

PRA Technical Adequacy

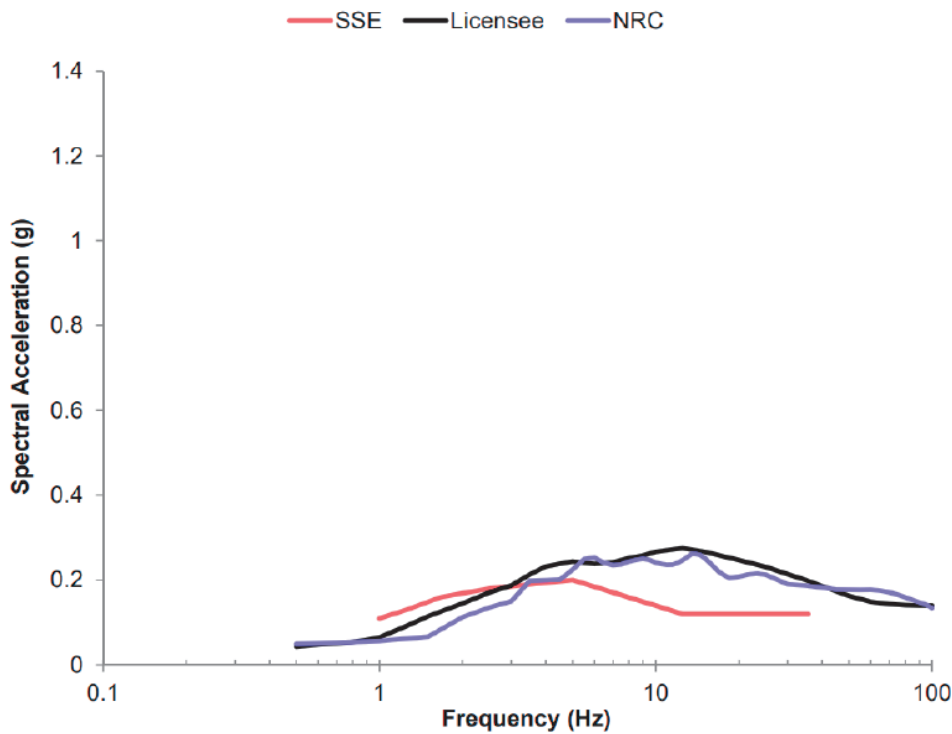
- Point Beach Nuclear Plant (PBNP) internal events, including internal flooding, and fire PRA models were assessed as part of the original 10 CFR 50.69 LAR:
 - 10 CFR 50.69 LAR – ML17243A201 (August 2017)
 - NRC Amendments 262 & 265 – ML18289A378 (November 2018)
- PRA models were also assessed as part of requesting approval for the risk-informed completion time (RICT) program:
 - RICT LAR – ML22140A131 (May 2022)
 - Enclosure 2 of the LAR provided peer review history – ML22140A142
 - NRC Amendments 271 & 273 – ML23103A133 (June 2023)

Alternative Seismic Approach during Categorization

- PBNP will follow the same approach as that which was approved for LaSalle (except for site-specific information).
- Brunswick LAR used as a model to revise the 50.69 license condition to add the alternate seismic approach while retaining SMA approach (ML23229A456 / ML24108A070).
- The alternate seismic approach is described in EPRI 3002017583 and in the LAR.
- LAR incorporates relevant RAIs (e.g., LaSalle RAIs, Calvert Cliffs RAIs).



Point Beach is a Tier 2 Site



- The GMRS exceeds the SSE in a portion of the response spectrum between 1.0 Hz and 10 Hz.
- PBNP did not develop an SPRA in response to the NRC's review of insights from the Fukushima Dai-ichi accident.
- PBNP meets Tier 2 criteria per EPRI 3002017583

Current Schedule

- Plan is to submit LAR on the docket in September 2024
- Approval requested within one year after acceptance
- Plan to implement the amendment within 60 days

Summary and Closing Remarks

- PRA models are technically adequate and have been reviewed by the NRC in previous applications.
- LAR requests approval to adopt an alternative seismic approach during 10 CFR 50.69 risk-informed categorization, in addition to the currently licensed SMA approach.
- LAR is consistent with precedent (Brunswick LAR, LaSalle process).
- PBNP is considered a Tier 2 site per EPRI 3002017583.
- LAR implements learnings from other submittals (e.g., St. Lucie RAIs).



Questions?

