

Preliminary Process for the Treatment of Reevaluated Seismic and Flooding Hazard Information

Public Meeting
February 28, 2019

Agenda

- Purpose and Background
- Highlights of Preliminary Process
- Elements of Preliminary Process
- Questions and Feedback
- Next Steps
- Wrapup

Purpose

- Solicit Stakeholder Feedback on Treatment of Reevaluated Seismic and Flooding Hazard Information in 50.54(f) Determinations
- Draft document¹ outlines preliminary process

¹ ADAMS Accession No. ML19037A443

Background

- On March 12, 2012², NRC issued a request for information under 10 CFR 50.54(f) – or “50.54(f) letter”
 - Enclosures 1 and 2 requested licensees to reevaluate seismic and flood hazards, respectively
 - Licensees used present-day methods and regulatory guidance
 - Letter outlines a 2 phase approach
 - Phase 1 – licensee provides reevaluated hazard information
 - Phase 2 – NRC considers reevaluated hazard information and makes a decision on whether a license should be modified, suspended, or revoked

²ADAMS Accession No. ML12053A340

Background (Cont.)

- Licensee responses to the 50.54(f) letter, Enclosure 1 (reevaluated seismic hazard information), included:
 - Seismic hazard screening report – all sites
 - Other evaluations as needed:
 - Expedited seismic evaluation program
 - Spent-fuel pool (SFP) seismic integrity evaluations
 - Seismic high frequency (HF) confirmations
 - Seismic Probabilistic Risk Assessment (SPRA) reports
- Licensee responses to the 50.54(f) letter, Enclosure 2 (reevaluated flood hazard information), included:
 - Flooding hazard reevaluation report – all sites
 - Other evaluations as needed: Flooding focused evaluations (FEs) or flooding integrated assessments (IAs)

Background (Cont.)

- Licensees also provided seismic and flooding mitigation strategies assessments (MSAs) based on reevaluated hazard information
- Majority of seismic and flooding reevaluated hazard information has been reviewed by the staff
- Status of plant-specific Fukushima lessons learned activities (including reevaluated seismic and flood hazards) can be found at:
 - <https://www.nrc.gov/reactors/operating/ops-experience/japan-dashboard/japan-plants.html>

Background (Cont.)

- Commission direction was provided in the staff requirements memorandum (SRM) dated January 24, 2019³, associated with SECY-16-0142 - Mitigation of Beyond-Design-Basis Events (MBDBE) rule⁴
 - The draft final MBDBE rule contained provisions requiring mitigation strategies to address the reevaluated seismic and flood hazards on a generic basis
 - Provisions were removed from the approved final MBDBE rule as described in the SRM
 - The SRM directs the staff to use the 50.54(f) process to take the needed actions, if any, to ensure that each plant is able to withstand the effects of the reevaluated flooding and seismic hazards

³ ADAMS Accession No. ML19023A038

⁴ ADAMS Accession No. ML16291A186

Highlights of Preliminary Process

- Seismic Evaluations
 - SPRA report reviews will continue as scheduled
 - Additional regulatory actions for non-SPRA sites do not appear to be needed
- Flooding Evaluations
 - Staff plans to engage licensees for 21 sites to clarify the status of actions described in flooding MSA and FE/IA submittals
 - Staff will continue to review flooding FEs and flooding IAs
- Staff does not plan to issue staff assessments for any remaining seismic and flooding MSAs
 - If information is needed to support a staff decision, it will be identified during the staff's review of SPRA reports or flooding FE/IAs

Highlights of Preliminary Process (Cont.)

- Letter(s) to industry envisioned documenting staff's Phase 2 determination
- First letter proposes to bin sites:
 - Category 1 – no additional clarity needed from licensees; no additional regulatory actions are needed
 - Category 2 – additional clarity needed from licensees
 - Category 3 – staff review ongoing
 - Category 4 – deferred sites

Elements of Preliminary Process

- Seismic Evaluations
 - Based on latest information, staff's preliminary process results with sites in either Category 1 (no additional clarifications needed), Category 3 (under review), or Category 4 (deferred)
 - Staff revisited previously reviewed SFP integrity evaluations, HF confirmations, seismic MSAs, and SPRA reports
 - Staff preliminary determination is additional regulatory actions are not needed for sites whose staff assessments have been completed
 - Staff will continue to review SPRA reports
 - 4 SPRA report reviews completed – no regulatory actions identified
 - 4 SPRA report reviews underway
 - 8 additional SPRA reports expected
 - SFP integrity already reviewed

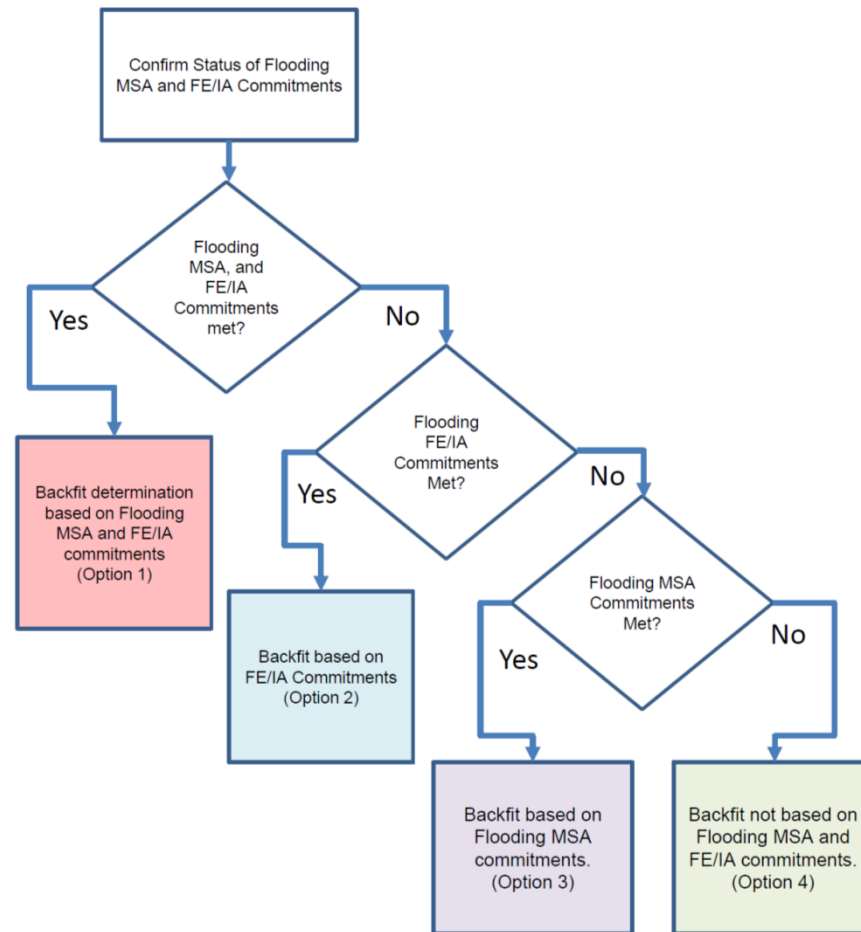
Elements of Preliminary Process (Cont.)

- Flooding Evaluations
 - Staff's preliminary process review results in:
 - 26 sites in Category 1 – no additional clarity needed
 - 21 sites in Category 2 - additional clarity needed
 - 9 sites in Category 3 – under review
 - 5 sites in Category 4 – deferred
 - For Category 3 sites, if staff identifies a need for clarification related to mitigation strategies, staff will pursue questions as part of flooding FE/IA reviews
 - The process for addressing Category 2 sites is outlined in draft document
 - Provides 4 options (see next slide)

Elements of Preliminary Process (Cont.)

Flooding Category 2
(additional clarification
needed) Options⁵:

- Option 1 – Backfit based on flooding MSA and FE/IA Commitments
- Option 2 – Backfit based solely on FE/IA Commitments
- Option 3- Backfit based solely on flooding MSA Commitments
- Option 4 – Backfit not based on either flooding MSA or FE/IA Commitments



⁵The staff will not rely on commitments where a question of adequate protection of public health and safety exists.

Elements of Preliminary Process (Cont.)

- Milestones
 - March 22, 2019, email comments due
 - Mid-2019 - staff confirmation of the status of commitments for flooding Category 2 plants
 - Mid-2019 - letter binning sites issued
 - Category 2 sites clarification activities may not be completed before issuance of letter
 - In such cases, a licensee will receive a separate letter after clarification issues have been resolved
 - Staff will proceed with issuing the letter before completion of reviews of flooding FE/IAs and SPRAs (i.e., Category 3 efforts completed)
 - In such a case the staff's assessment of the flooding FE/IA and SPRA will document the review and the staff's backfit determination

QUESTION AND ANSWER SESSION

Next Steps

- NRC Staff will assess comments received during the meeting
- Additional comments can be provided via email to:
50.54f_Seismic.Resource@nrc.gov
 - Comments received by March 22, 2019, will be considered
- Staff contacts for additional information
 - Joe Sebrosky, joseph.sebrosky@nrc.gov, 301-415-1132
 - Juan Uribe, juan. Uribe@nrc.gov, 301-415-3809
 - Milton Valentin-Olmeda, milton.valentin@nrc.gov, 301-415-2864
- Process will be adjusted, as appropriate, based on stakeholder feedback
 - Letter to industry will be issued based on revised process
 - Letter will include binning of sites
 - Target for issuance of letter is mid-2019