



United States Nuclear Regulatory Commission

Protecting People and the Environment

Status of Fukushima Lessons Learned Actions

Joint Steering Committee Meeting
January 14, 2014



Japan Lessons Learned

Purpose/Agenda

- Exchange information between industry and NRC
- Discussion
 - Mitigation Strategies (MS)
 - Flooding
 - Seismic
 - Spent Fuel Pool Instrumentation
 - Status of Recommendations 5 and 8

• Public Comments and Questions





- **Generic Concerns**
 - All closed except for RCP seals
 - NRC providing additional flexibility for Boron Mixing
- **ISEs on or ahead of schedule**
 - Batch 1 issued 11/22/13
 - Batch 2 issued prior to Christmas
 - Batch 3 to be issued by end of the week/early next week
- **Relaxation Requests**
 - Small number approved
 - Align with hardened vent?
- **Other NTTF Interface**
 - Flooding/Seismic (may require OIP revisions)
 - Human Factors (MS vs. other activities)





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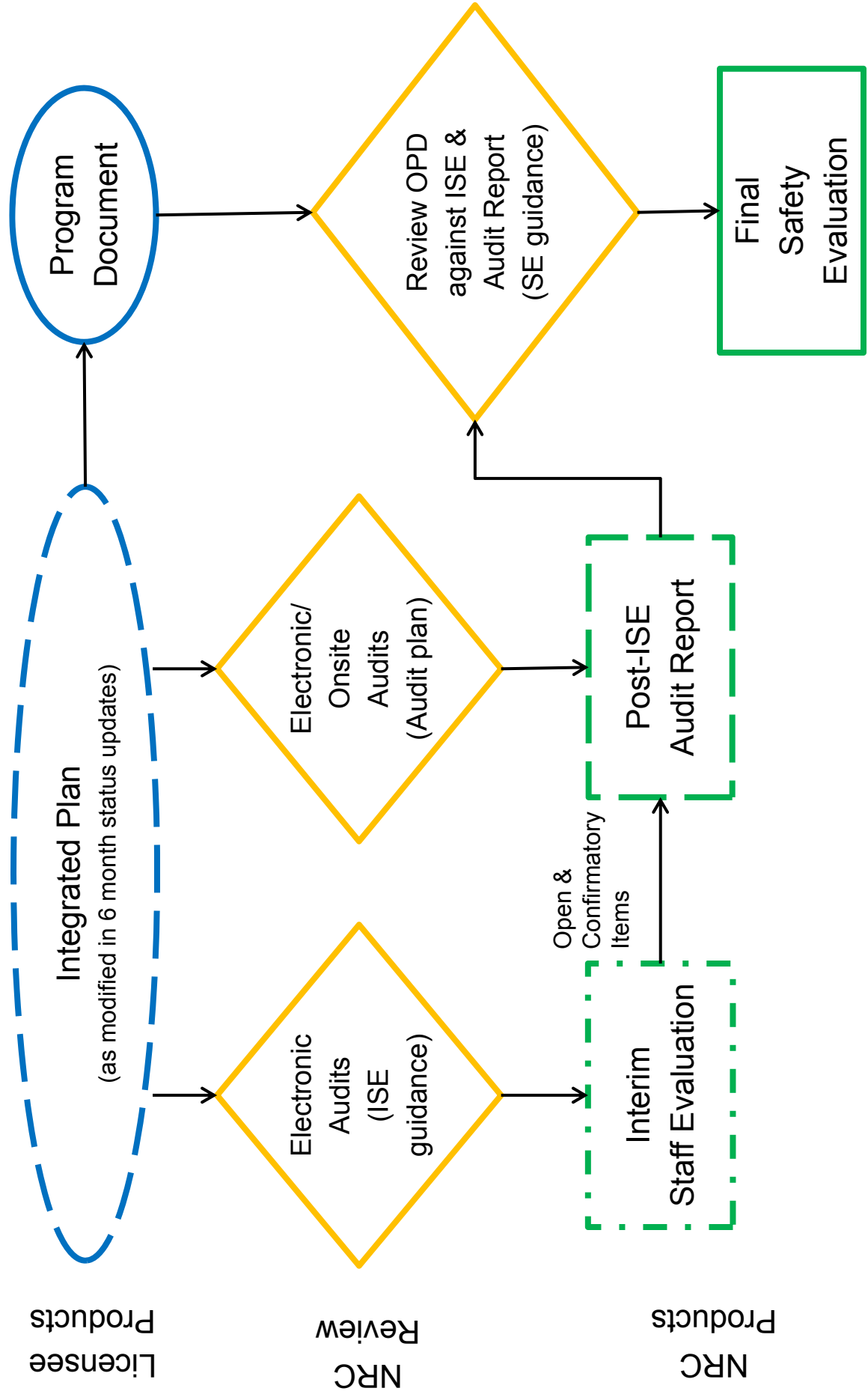
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MS – Next Steps



- **Post-ISE Audits**
 - 2-6 months prior to compliance
 - Early audits as “pilots”
- **Final Safety Evaluation**
 - 3 months after compliance
 - Develop SE guidance/template
- **Post-Compliance Inspection**
 - Draft TI February 2014; Final summer 2014
 - Watts Bar pilot in fall 2014
- **Long-Term Oversight**
 - Evaluating options/ROP applicability
 - Expanded TI pilot to inform decisions

MS – Order Closeout



Licensee Products

NRC Review

NRC Products

Flooding: Available Physical Margin (APM) Request for Additional Information (RAI)



- Staff issued an RAI to licensees requesting information on APM.
- The RAI is consistent with information requested via FAQ30.
- Staff developed the RAI to facilitate consistency and timeliness of the response.



- **Flood Hazard Reevaluations**
 - 22 sites in Category 1: submittals received, reviews ongoing
 - 24 sites in Category 2: due March 2014
- **Dam Failure Assessments (JLD-ISG-2013-01)**
 - Contact NRC if a Federally-owned dam can potentially flood the site
 - 8 sites have contacted the NRC
 - NRC has Interagency Agreement with USACE
 - USACE will provide hydrographs for affected sites
 - Affected sites will be granted additional time to submit their Flood Hazard Reviews



Flood Hazard Reevaluations: Categories



Category 1 Due 03/12/2013		Category 2 Due 03/12/2014		Category 3 Due 03/12/2015	
Callaway	Quad Cities	Arkansas Nuclear One	Fort Calhoun	Bellefonte	Perry
Calvert Cliffs	Salem	Beaver Valley	Robinson	Brunswick	Pilgrim
Comanche Peak	Sequoyah	Braidwood	Farley	Crystal River*	Point Beach
Dresden	Shearon Harris	Browns Ferry	Kewaunee*	Diablo Canyon	Ginna
Fermi	South Texas	Byron	LaSalle	DC Cook	San Onofre*
Grand Gulf	Three Mile Island	Catawba	Monticello	FitzPatrick	Seabrook
Hope Creek	Turkey Point	Clinton	Palo Verde	Limerick	St. Lucie
Indian Point	Vermont Yankee	Columbia	Peach Bottom	Millstone	Surry
Nine Mile Point	Summer	Cooper	Prairie Island	Oyster Creek	Susquehanna
North Anna	Vogtle	Davis-Besse	River Bend	Palisades	Waterford
Oconee	Watts Bar	Duane Arnold	McGuire		
		Hatch	Wolf Creek		



Extended

Requested info on dams

*NRC considering relief to request for information

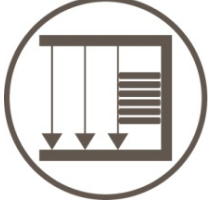
Seismic Activities



- **Seismic Walkdowns**
 - All audit reports issued
 - SA issued December 9, 2013
 - RAI responses received
- **Seismic Hazard Reevaluations (CEUS)**
 - Complete submittals due March 31, 2014
 - Expectations for Interim Evaluations and/or Actions
 - Public meeting planned for January



Spent Fuel Pool Instrumentation



- **Status:**
 - **Success:** All ISEs with RALs sent to licensees on schedule
 - Watts Bar ISE response received and under review
 - NEI scheduling meeting with instrument vendors and NRC to coordinate review of vendor generic information
- **Plans Forward:**
 - Staff plans for completion of Staff Evaluation six months prior to licensee compliance due date



Status of NTTF Recommendations 5 and 8

- NRC requested, by January 2, BWROG and PWROG EPG/SAG Rev 3 and NEI White Paper for use in Onsite Emergency Response Capabilities Rulemaking and Filtering Strategies Rulemaking
- Industry Response:
 - Offered workshop in March – April 2014 on the BWROG’s and PWROG’s EPG/SAG Rev 3.
 - Response to White Paper request planned for mid-February

Upcoming Milestones

- February 2014
 - Finish Issuing Interim Staff Evaluations for Mitigating Strategies Order
 - 6 Month Update to Commission
- March 2014
 - Seismic Reevaluations Due
 - Year 2 Flooding Reevaluations Due



Focus Areas

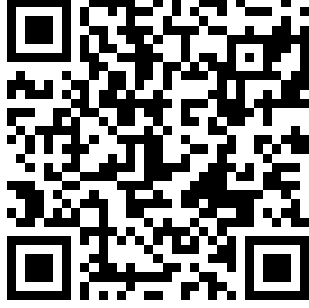
- Review of Focus Areas from November Meeting
 - Flooding Integrated Assessments
 - Mitigation Strategies Generic Concerns
 - March Milestone for Seismic Reevaluations
- Proposed Areas of Focus until the next Joint SC meeting
 - March Milestone for Seismic Reevaluations
 - Safe, Timely, and Effective Implementation of MS and SFP Orders
 - Identification and implementation of interim actions (as needed) for seismic and flooding



Additional Industry Comments



Public Questions





Acronyms

BWROG/PWROG	Boiling/Pressurized Water Reactor Owners' Group
CEUS	Central and Eastern United States
EPG/SAG	Emergency Procedure Guidelines/Severe Accident Guidelines
ISE	Interim Staff Evaluation
FAQ30	Frequently Asked Question #30
JLD-ISG	Japan Lessons-Learned Project Directorate Interim Staff Guidance
MS	Mitigation Strategies
NEI	Nuclear Energy Institute
NTTF	Near Term Task Force
OIP	Overall Integrated Plan
OPD	Overall Program Document
RAI	Request for Additional Information
RCP	Reactor Coolant Pump
ROP	Reactor Oversight Process
SC	Steering Committee
SFP	Spent Fuel Pool
SE	Safety Evaluation
TI	Temporary Instruction
USACE	United States Army Corp of Engineers