

**May 7, 2015**

ATTACHED ARE SLIDES/HANDOUTS  
WHICH WERE PRESENTED AT THE  
PROBABALISTIC SAFETY ASSESSMENT 2015  
CONFERENCE

# Status and Path Forward on Near-Term Task Force Recommendation 2.1 - Seismic

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U.S. Nuclear Regulatory Commission

April 2015

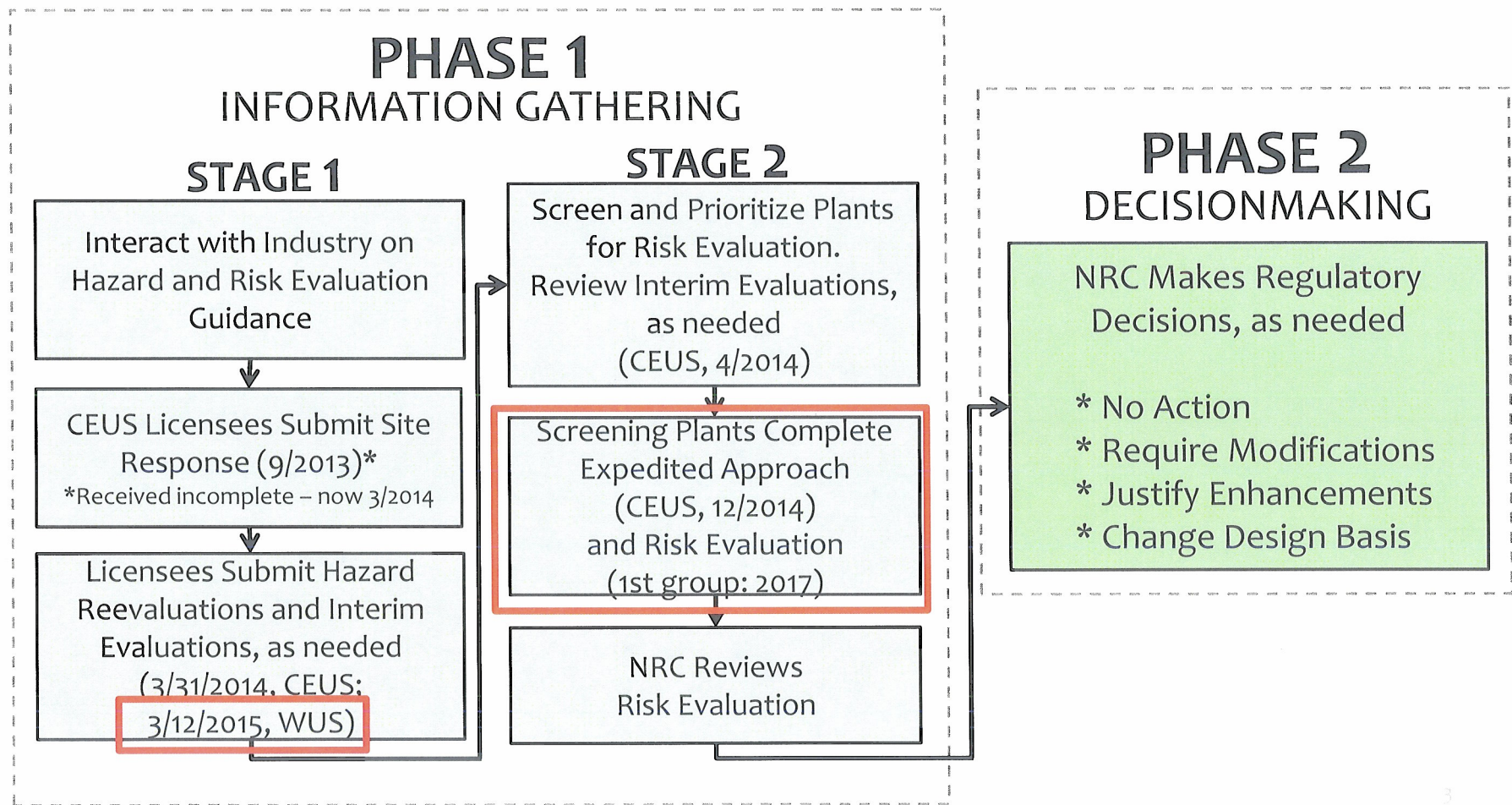


# Outline

- \* Seismic Recommendation 2.1 Process Overview
- \* Site Response and Hazard Reevaluations
- \* Interim Evaluations
- \* Screening and Prioritization
- \* Expedited Evaluations
- \* Phase 2 Regulatory Actions

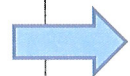
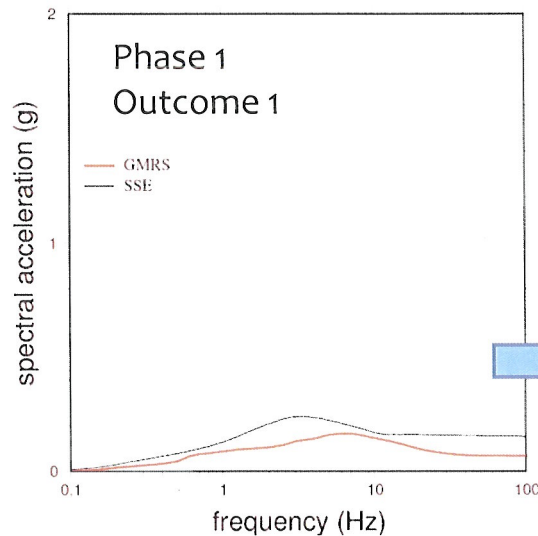
# Seismic Recommendation 2.1 Process

Ensures clarity, consistency, and risk-informed regulatory decisions using established NRC processes

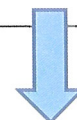
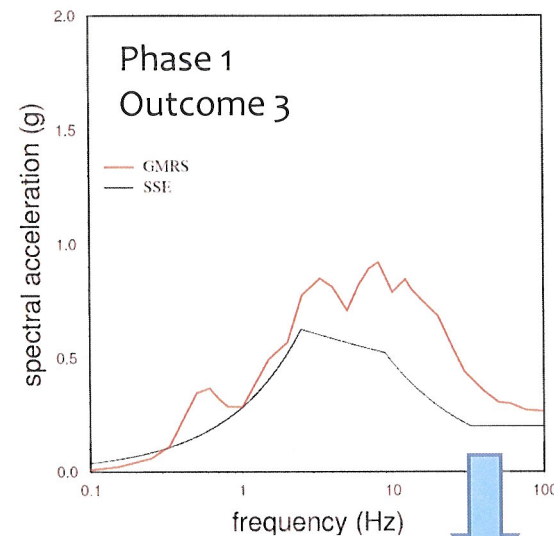




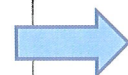
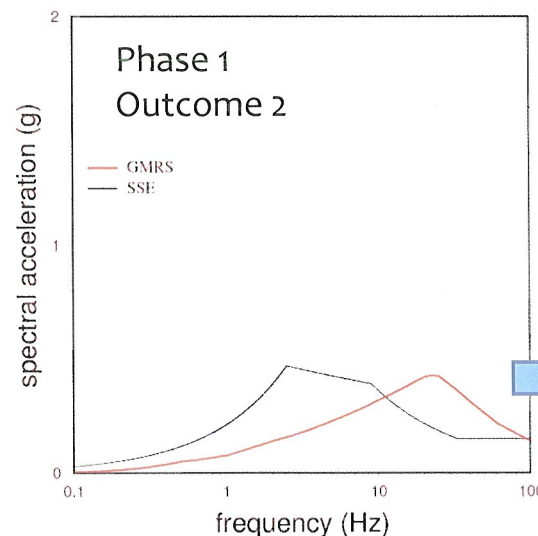
# Site Response & Hazard Reevaluation



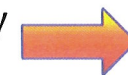
No Further  
Analysis &  
No Phase 2



Expedited Seismic Evaluation Process &  
Seismic Risk Evaluation Required

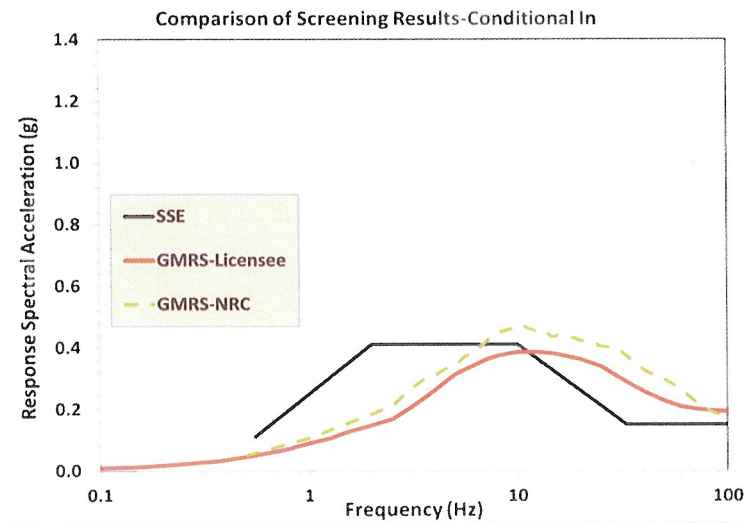
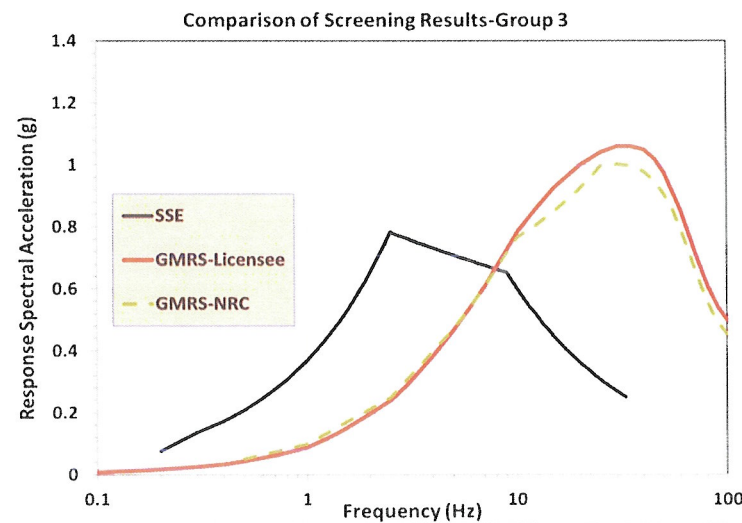
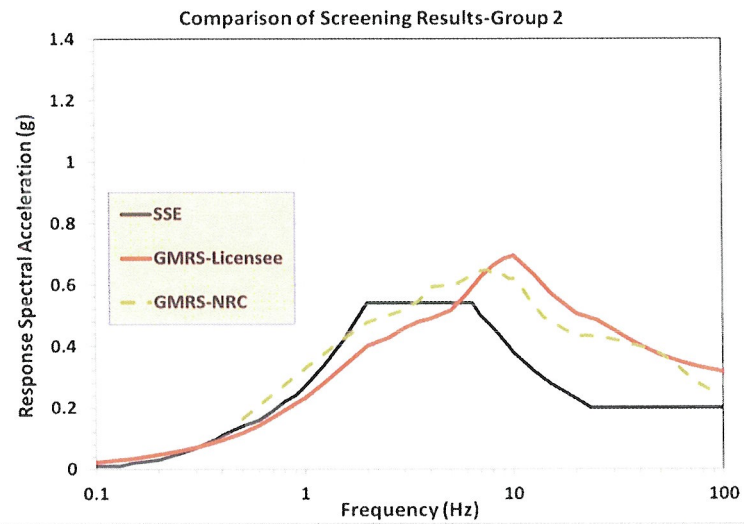
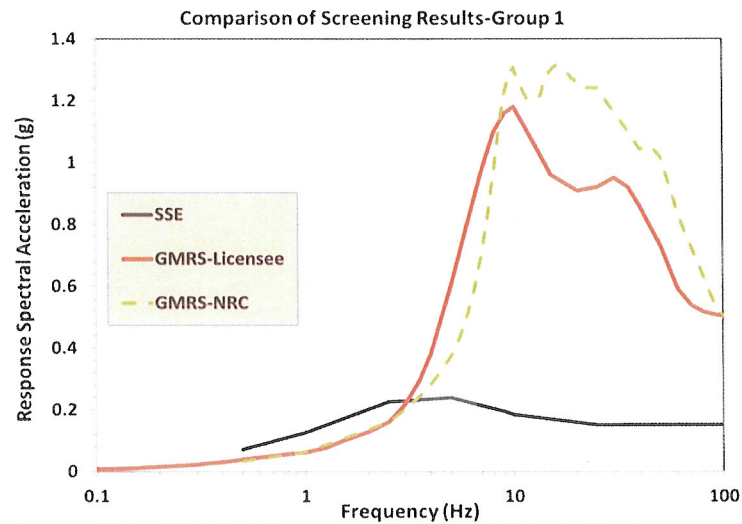


Industry High Frequency  
Sensitivity Analysis



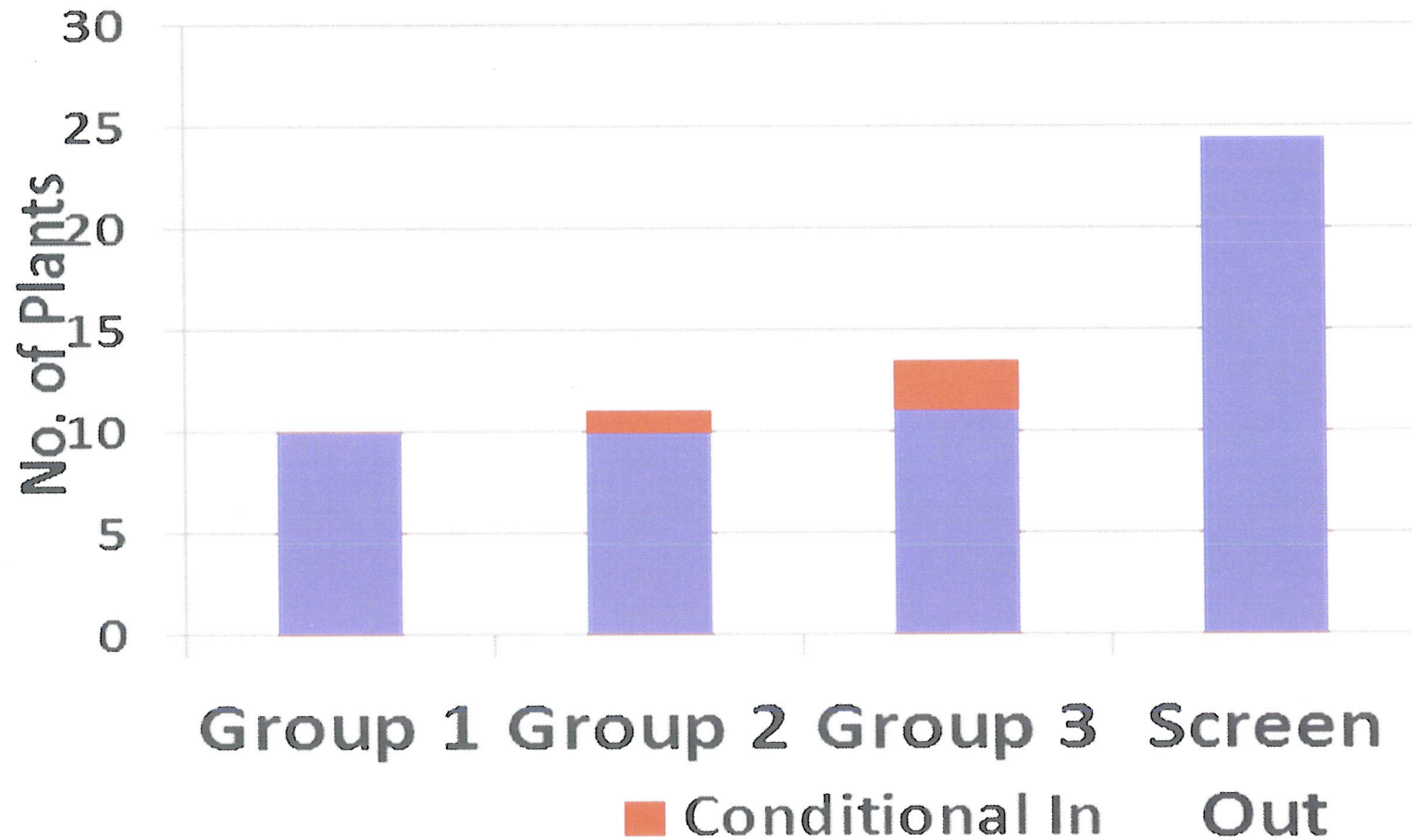
**Phase 2**  
Decisionmaking

# Screening & Prioritization

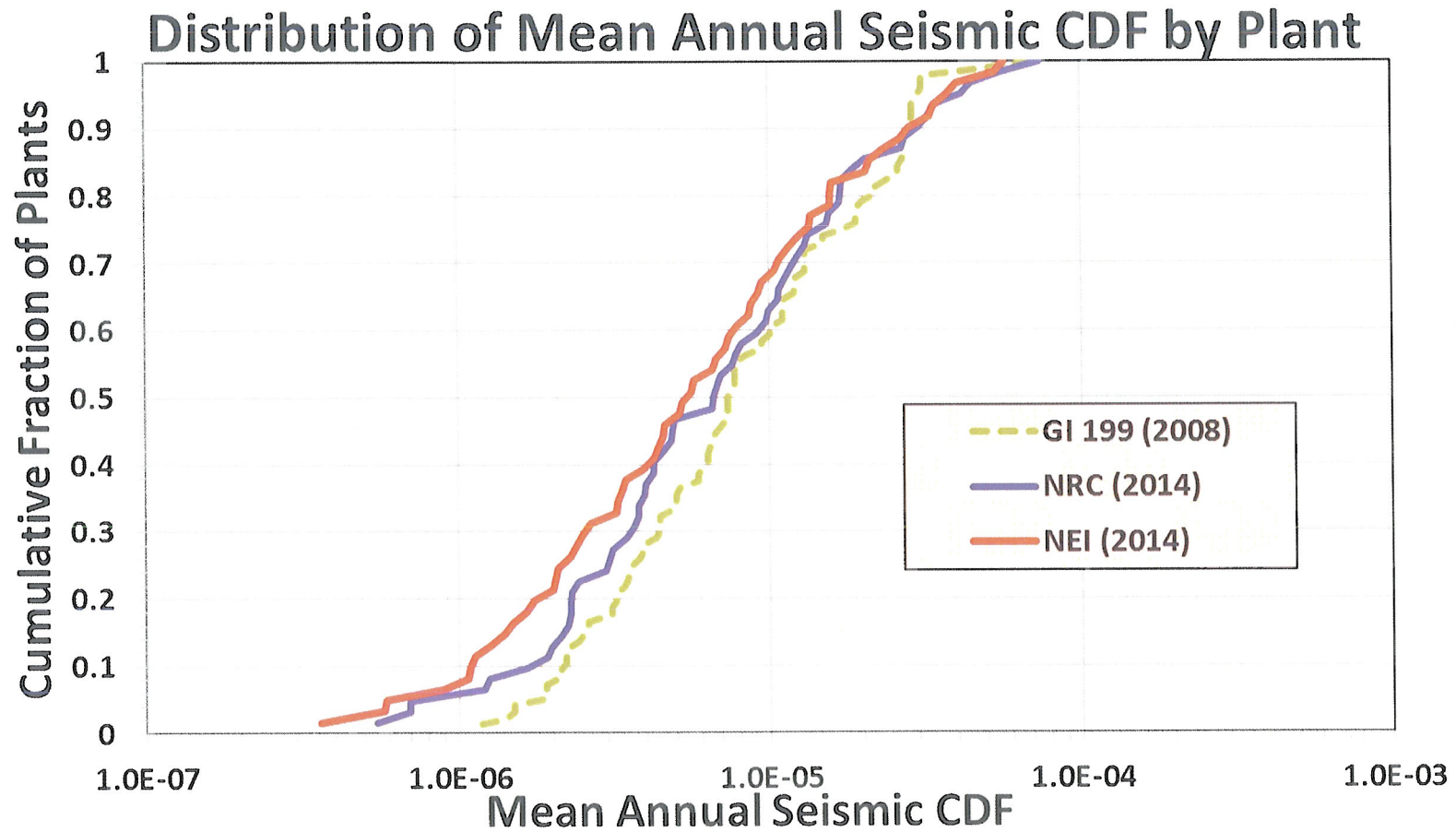




# Screening & Prioritization Results



# Interim Evaluations



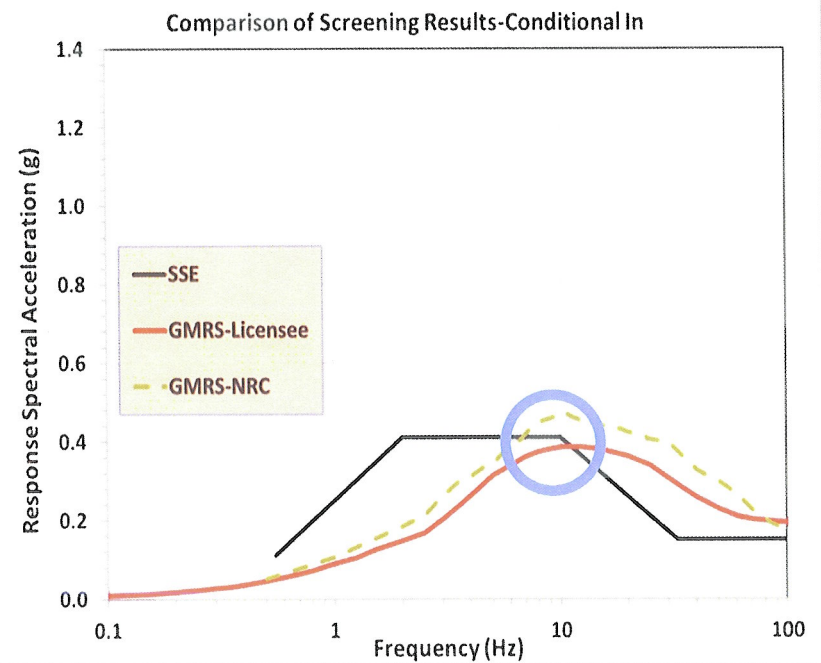
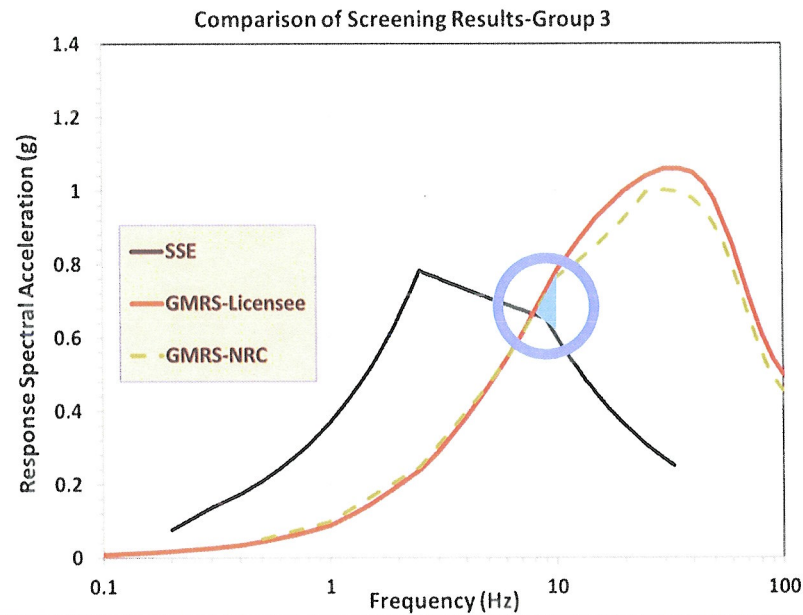


# Expedited Reviews

Supports time needed to perform the detailed analyses for screened-in plants

- \* **Short-term Evaluations** – evaluation of selected plant equipment to determine if prompt modifications are warranted
- \* **Utilizes FLEX Strategies for Loss of AC Power** – installed plant equipment capacities up to 2x SSE (or GMRS/SSE ratio in 1-10Hz range)
- \* **Identify Modifications** – SSCs that do not meet thresholds have proposed modifications within 2 years (unless need outage)
- \* **Staff Near Completion of Reviews** – may result in some Group 3 and Conditionally Screened-In Plants being screened out of PRA

# Example Reconsiderations



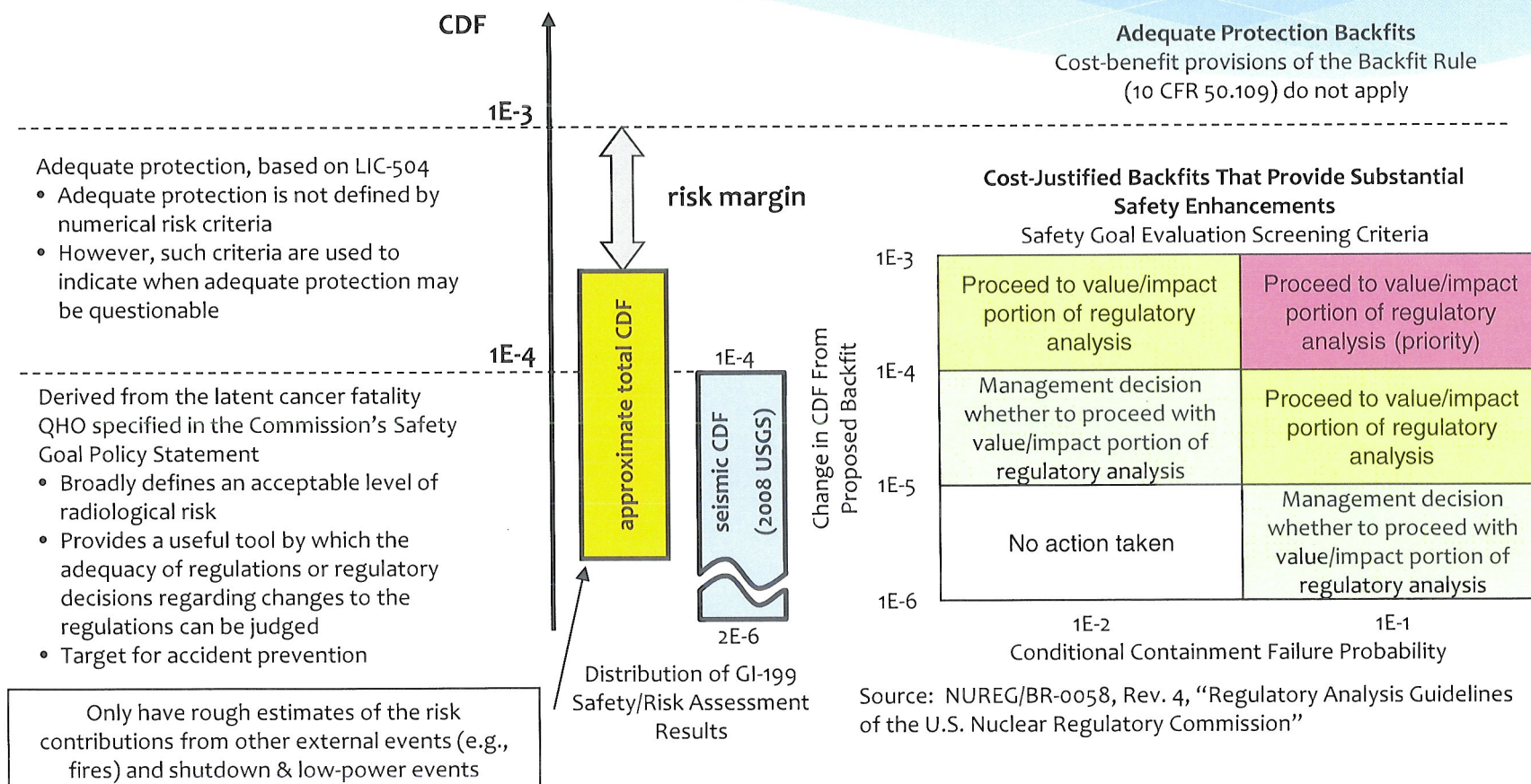


# Regulatory Actions in Response to Recommendation 2.1

Regulatory actions are plant-specific and depend on hazard level and existing capabilities

- \* **No further action** – maintain current design & licensing basis
- \* **Order modifications** – adequate protection
- \* **Perform cost-benefit analysis** – safety enhancements
- \* **Change design basis** – impact on licensing basis

# No need to Reinvent the Wheel- The Current Backfit Process





# Summary

- \* The process for NTTF Recommendation 2.1 – Seismic is structured and prioritized
- \* Decisions will use the available information and existing guidance
- \* High quality Probabilistic Risk Assessments and submittals enable reliable/traceable decisionmaking
- \* Continuous engagement/communication between NRC, industry, and stakeholders is critical to success



# THANK YOU !!

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PSA 2015  
December 2015





# Acronyms

CDF	Core Damage Frequency
CEUS	Central and Eastern United States
NTTF	Near Term Task Force
PRA	Probabilistic Risk Assessment
RG	Regulatory Guide
WUS	Western United States