

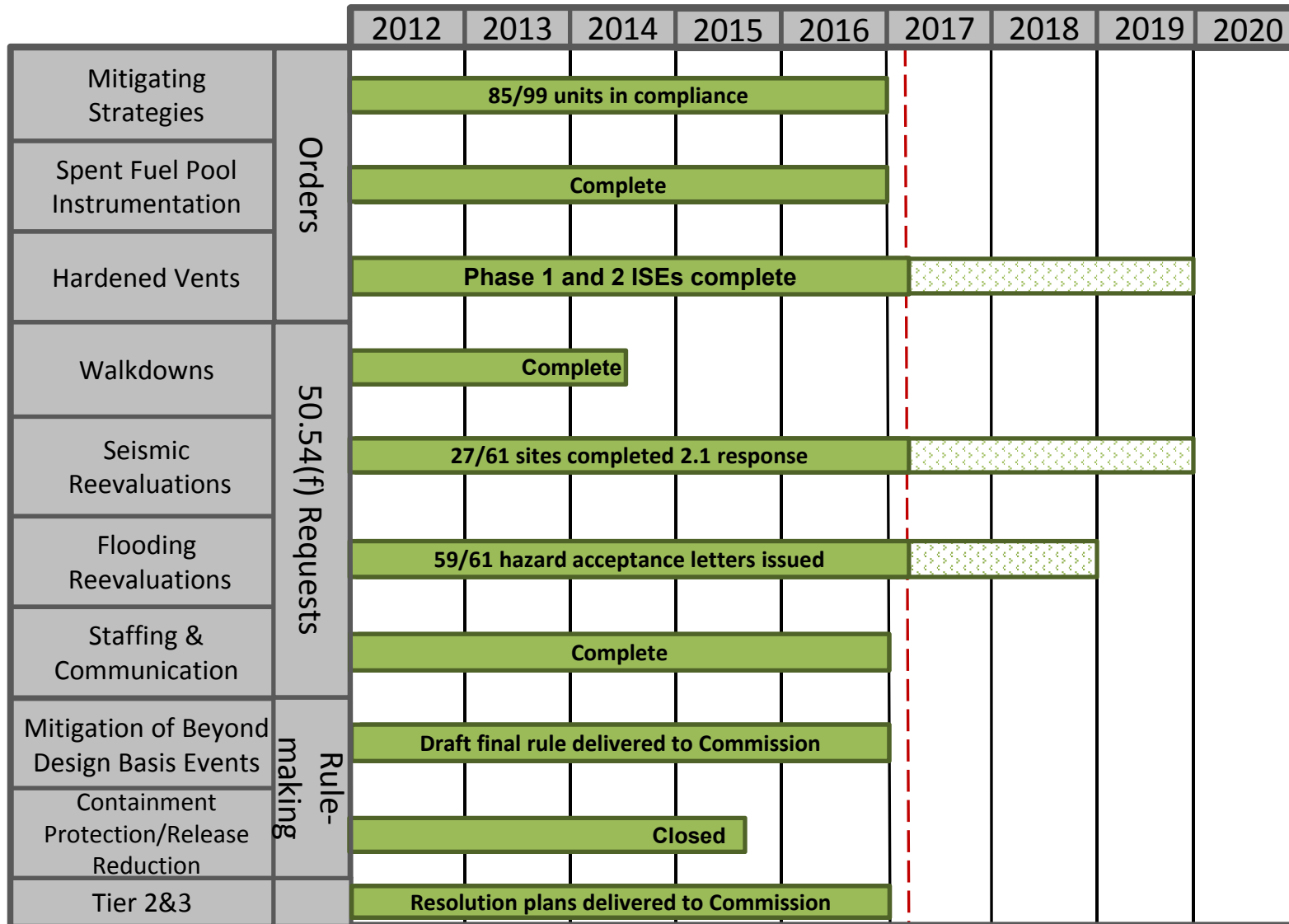


# Japan Lessons-Learned Division Perspectives

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U.S. Nuclear Regulatory Commission



# Status of Activities



Today  \*For illustrative purposes only



# **NRC Panel on Inspection Lessons Learned**

Session Chair:

Mandy Halter: Japan Lessons Learned Division, NRR

Panel Members:

Tony Brown: *Special Advisor, JLD*

Bill Cook: *Senior Reactor Analyst, Region I*

Reinaldo Rodriguez: *Senior Project Engineer, Region II*

Bruce Bartlett: *Senior Project Engineer, Region III*

Ryan Alexander: *Senior Project Engineer, Region IV*



# Topics

- Safety Evaluation and Inspection Process Overview
- Best Practices (licensees and inspectors)
- Issues Identified During the Inspections
- Observations
- Upcoming Inspection Schedule



# Process Overview

- Staff goal: inspection completed within 12 months from date of compliance
- Process improvements implemented to improve safety evaluation timeliness
  - Checklists
  - FIP acceptance reviews
- Significant coordination between JLD and regions
  - Onsite and/or offsite support during inspections
- Cross-regional panel utilized for consistency



# Best Practices

- Day 1 – Overview Presentation and ELAP Tabletop or Simulator Scenario
- Provide licensee with daily inspection plan for resource/support planning
- Strategy walk-throughs followed by targeted inventory checks
- Verify DC load shed impact
- Verify potential hazards impact (flooding, high winds, winter storms) on strategy implementation (personnel and equipment deployment)
- Computer demonstration of multi-source dose assessment capability
- Ensure current revision of procedures provided to the team (hard copies for tabletops and walkdowns)

# Issues Identified

- Lack of preventive maintenance plan for some equipment:
  - Preventive Maintenance on FLEX low pressure/high flow pumps (licensee identified)
  - Periodic functionality checks for communications equipment
  - Periodic replacement program for the high-temperature hoses (limited shelf life)
- Validation of installed connections and routing, and procedural implementation :
  - Hose bend radius and stress
  - Clearance for adapter needed for steam generator makeup connection
  - Configuration control associated with electrical conduit connections
  - ELAP response inadvertently trips Phase 1 pumps (licensee identified)



# Observations

- FSG quality – examples of typographical errors, inconsistent label references, links to deleted steps in other procedures
- References to 50.54(x) in FSGs
- Ensure adequate documentation of FLEX generator phase rotation checks
- FLEX storage buildings temperature checks – periodic monitoring checks with limits and actions to take as necessary
- Potential use of additional margin in analysis to provide more time for operators to assess initial conditions and attempt recovery actions
- Other validation issues that did not rise to level of finding
  - Additional hose bend radius examples, missing tools, mislabeled components





# Upcoming Inspections

- 1Q/2017
  - Sequoyah – Week of March 6; R. Rodriguez, Team Lead (TL)
  - Grand Gulf – Week of March 6; R. Alexander, TL
  - Surry – Week of March 13; S. Freeman, TL
  - Davis Besse – Week of March 13; S. Sheldon, TL
- 2Q/2017
  - Calvert Cliffs – Week of April 17; C. Cahill, TL
  - Point Beach – Week of May 8; S. Sheldon, TL
  - Comanche Peak – Week of May 15; R. Alexander, TL
  - Seabrook – Week of May 22; F. Arner, TL
  - River Bend – Week of May 22; J. Mateychick, TL
  - VC Summer – Week of June 19; P. McKenna, TL



# Upcoming Inspections

- 3Q/2017
  - St. Lucie – Week of July 17; S. Freeman, TL
  - Callaway – Week of August 28; R. Alexander TL
- 4Q/2017
  - Diablo Canyon – Week of November 13; J. Mateychick, TL
  - Vogtle – Week of November 13; TBD TL



# Upcoming Inspections

- 2017 (all tentative)
  - Prairie Island
  - Indian Point
  - Nine Mile Point
  - Three Mile Is.
  - Oyster Creek
  - Byron
  - Duane Arnold
  - South Texas
  - Hope Creek
  - Catawba
  - Beaver Valley
  - Dresden
  - Waterford
- 2018 (all tentative)
  - Fitzpatrick
  - Peach Bottom
  - Brunswick
  - Hatch
  - Farley
  - Oconee
  - Braidwood
  - Monticello
  - LaSalle
  - Quad Cities
  - Wolf Creek
  - Cooper
  - Columbia
- 2019 (all tentative)
  - Limerick
  - Susquehanna
  - Browns Ferry





# Questions?

