

Industry Recommendations on Near-Term Actions in Response to Fukushima

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Industry Actions Since March 11

- Verified measures to manage extreme events
- Increased operator awareness and safety margins for spent fuel cooling and makeup
- Evaluating the extension of coping durations for extended loss of AC power
- Developing detailed timeline of Fukushima event
- Developed governance, goals and principles to guide industry response

2. Seismic and Flooding Design Bases

- Walk down seismic and flooding protection against current design basis requirements (2.3)
 - Develop procedures & acceptance criteria
 - Obtain NRC concurrence
 - Report results to NRC
- Use Generic Issue 199 as a model for potential updates to plant design bases (2.1)
 - Establish protocol for evaluating new and significant information on seismic and flooding

4. Extended Loss of AC Power

- Pursue an Advanced Notice of Proposed Rulemaking (ANPR) to revise §50.63 (4.1)
- Assure sufficient equipment is available to meet §50.54 (hh)(2) requirements for a multi-unit event (4.2)
 - Protect portable equipment from external events using appropriate commercial standards

5. Hardened Vents

- Assure adequate accessibility, and the ability to operate, BWR Mk 1 hardened vent valves assuming no AC power
- Report results to NRC and implement any warranted improvements

7. Spent Fuel Pools

- Assure ability to monitor spent fuel pool level and temperature remotely assuming extended loss of AC power
 - Provide diverse power supply for monitoring
 - Safety-related power supply would not have changed situation at Fukushima

8. EOPs, SAMGs and EDMGs

- Assure appropriate training on SAMGs and EDMGs
 - Operators and Emergency Response Personnel
- Standard should be one of familiarity, not proficiency, commensurate with the likelihood of events
- Integration of procedures and guidelines is a longer-term activity

General Recommendations

Going Forward

- Must maintain current plant focus on safety and reliability
- Post-Fukushima actions must be integrated and prioritized with other important actions
- Given diversity of plant designs, locations and threats, implementation should be flexible, risk-informed and performance-based
- Continue to develop lessons-learned from Fukushima