

***NRC Commissioner Briefing  
on Fukushima  
Nuclear Utility Status Report***

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Industry Fukushima Response

Steering Committee

# ***Response Plan***

## ***The Way Forward***

- Coordinate the technical capabilities in support and response to the event
- Remain focused on daily operational excellence to avoid inappropriately displacing all other initiatives
- Validate existing beyond-design basis event response capabilities
- Improve safety by developing and applying lessons

# ***Industry Engagement***

- INPO – support / sequence of events / lessons learned / operational initiatives
- EPRI – technical analysis / technical strategies / technical solutions
- OEMs & Owners Groups – operational strategies specific to design
- NEI – design changes / prioritization / stakeholder communication and coordination
- Utilities – all of the above and timely execution

# ***Major Accomplishments***

- B.5.b equipment readiness affirmed by inspection and test
- Initial inspections completed for flooding and seismic vulnerabilities
- Station blackout procedures and equipment readiness validated
- Periodic maintenance and drills verified to exist or established

# ***Major Accomplishments***

- Fuel pool monitoring enhanced
- Design features and procedural guidance for station response to loss of AC power validated
- FLEX equipment specified and purchased
- Industry response protocol issued

# ***Major Work in Progress***

- Regional response capability proposals in review
- Flooding guidance established / training conducted / walk-downs have commenced
- Seismic guidance established / training conducted / walk-downs have commenced

# ***Major Work in Progress***

- Flooding and seismic design update scope and methodology in development
- EP rule actions progressing on schedule
- Integration of EOPs, SAMGs, EDMGs and FLEX in development
- Fuel pool level instrumentation in design
- Continuing to assess organizational lessons

# ***Remaining Issues***

- Loss of Ultimate Heat Sink - downstream dam failure analysis in or out of flooding scope
- Defined process for assessing the impact of new seismic and flooding hazards on the plant licensing basis

# ***Remaining Issues***

- Severe accident mitigation and subsequent filtering strategies
- 10 year design basis update vs. driven by significance and availability of new information

# ***Delivering On Improved Safety***

- Initiatives outside Fukushima should not be uniformly relegated to a lesser priority – operator fundamentals / fire protection / material management / security / etc.
- Execution activities are in the field and must continue to be well-managed to avoid unintended consequences

# ***Delivering On Improved Safety***

- Lessons have a collective benefit and burden; most benefit is obtained in actions already underway
- Scope control is required to execute current initiatives and rulemaking on a reasonable schedule
- Completion strategy must be defined to transition to the new normal
- Steering committees have been very effective and should continue

# ***Acronyms***

- **FLEX** – A phased strategy inclusive of diverse and flexible equipment to mitigate the impact of extreme events
  - Enhances capability to prevent fuel damage with the complete loss of electrical power
  - Multiple sets of reasonably protected portable equipment to provide
    - Coolant to reactor & spent fuel pool
    - Containment Integrity
    - Power critical instrumentation
  - Off-site support centers

# ***Acronyms***

- INPO – Institute of Nuclear Power Operations
- EPRI – Electric Power Research Institute
- OEM – Original Equipment Manufacturer
- NEI – Nuclear Energy Institute
- EOP – Emergency Operating Procedure
- SAMG – Severe Accident Mitigation Guideline
- EDMG – Extreme Damage Mitigation Guidelines
- B.5.b – Section of security order issued following 9/11/01 terrorist events