

NRC Commission Briefing Industry Lessons Learned from Fukushima Daiichi

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Presented by: Jim Scarola
Industry Fukushima Response Steering
Committee Chairman

Industry Actions In Response to Fukushima

- US response is built on an existing culture of continuous improvement
- Operational focus continues to be maintained as the highest priority
- Differences in geographical natural hazards are not used as barriers to learn
- Priorities are set to deliver the greatest improvements in public safety at the earliest point in time

2011 – Assist, Understand, Establish the Infrastructure to Improve

- CEO / CNO Early Engagement & Coordination
- Industry Steering Committee established
- Technical support dispatched to Japan
- Readiness of portable equipment re-established
- Flooding walk-downs performed and barriers strengthened
- Sequence of events created to facilitate a common basis for lessons learned
- Forums established to share international learnings

2012 – Prioritizing and Focusing to Deliver Early Improvements

- FLEX established for response to the extreme events
- Actions taken for areas of low physical margin to flooding hazards
- Addition set of portable equipment specified and ordered for all US nuclear sites
- Industry Response Protocol developed to coordinate assistance in extreme events
- Response center created at INPO to provide a central coordination point for industry support

2013 – Implementation and Moving Beyond the Hardware with Lessons

- Created an expedited approach to strengthen the seismic response capabilities
- Defined guidance to execute integrated assessments for extreme flooding conditions
- Performed technical analysis needed to establish optimum filtering strategies
- Commenced plant modifications to further facilitate FLEX strategies
- Transitioned the focus from hardware to human lessons with CNO visit to Japan

2014 – Reducing the Variability in Implementation Progress and Sustaining the Gains

- Conducting site review visits to strengthen implementation progress
- Creating programs, processes, and procedures to sustain the improvements
- Developing program documents to capture and distinguish the appropriate transition from design basis events to beyond design basis events
- National response centers placed in-service

Conclusion – Added Safety Margin

- Improved the organizational knowledge and control of the design features for natural events
- Adding another significant layer of safety with FLEX
- Fortifying the response plans and training for extreme events
- Created an industry response structure for extreme events
- Strengthening the capability of leaders and maintained a clear command and control structure
- Utilizing independent reviews to further improve