



SNUG - NRC Areas of Interest

Summer Meeting 2012 – Chattanooga, TN

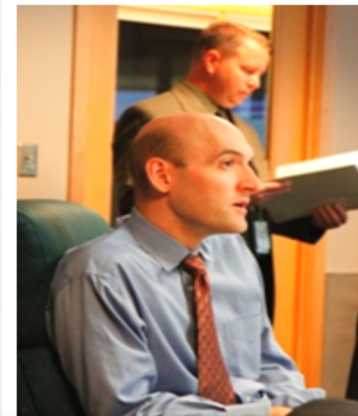
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Topics for Discussion

- FUKUSHIMA LESSONS LEARNED ACTIONS
– SEISMIC FOCUS
- NRC ACTIONS AND PERSPECTIVES FROM
THE NORTH ANNA RESTART FOLLOWING
THE AUGUST 23, 2011 EARTHQUAKE
- NRC TEMPORARY INSPECTION (TI)
PROCEDURE FOR REVIEWING SNUBBER
INSPECTION PROGRAMS

Fukushima Response

Executive, Reactor Safety, Protective Measures, Safeguards, Public Affairs, and Liaison Teams



Identifying Lessons Learned

- July 2011
 - Near-Term Task Force (NTTF) report issued
- September/October 2011
 - NTTF recommendations prioritized into three tiers
- March 2012
 - Tier 1 orders and requests for information issued on March 12, 2012

Actions Taken

- **Orders**

- EA-12-049 – Mitigating strategies beyond design basis events

- EA-12-050 – Hardened vents for Mark I and II containments

- EA-12-051 – Spent fuel pool instrumentation

- **Request for Information (RFI) under 50.54(f)**

- Seismic and flooding walkdowns

- Seismic and flooding reevaluations

- Enhanced EP staffing and communications

- **Rulemakings initiated**

- Station blackout (SBO)

- Integration of emergency procedures

Next Steps

- Develop implementation guidance for the orders and requests for information
- Continue rulemaking process
- Provide the Commission with staff's plan to address longer term recommendations in July 2012

Seismically-Focused Issues

- Seismic Walkdowns
 - Conduct walkdowns of SSCs to verify conformance with current licensing basis
 - Degraded or nonconforming conditions should be addressed by corrective action program
 - Guidance was endorsed May 31
- Seismic Hazard Reevaluations
 - Determine seismic hazard using present-day methods and guidance
 - If reevaluated hazard exceeds existing design assumptions, a *risk evaluation* is required
 - Guidance expected to be complete November 2012

Seismic-Related Schedules

- Seismic Walkdowns
 - Results due 180 days after guidance is endorsed
 - Industry guidance was endorsed on May 31 (due Nov 27)
- Seismic Hazard Reevaluations
 - Central and Eastern U.S. plants due 1.5 years after RFI
 - Western U.S. plants due 3 years after RFI
 - If a risk evaluation is required:
 - High Priority due 3 years after reevaluated hazard
 - Low Priority due 4 years after reevaluated hazard

North Anna Restart – NRC Inspections

- Initial Licensee Response
- Augmented Inspection Team (AIT)
- Restart Readiness Inspection
- Start-up Monitoring

Technical Reviews – Restart Requirements

- Appendix A to 10 CFR Part 100
 - Appendix A to Part 100 – Paragraph V(a)(2) states,
“If vibratory ground motion exceeding that of the Operating Basis Earthquake occurs, shutdown of the nuclear plant will be required.
 - *Prior to resuming operations, the licensee will be required to demonstrate to the Commission that no functional damage occurred to those features necessary for continued operation without undue risk to the health and safety of the public.”*

NRC Technical Review

- Regulatory Guidance
 - Actions Prior to Restart
 - Challenges with Determining the Need and Requirements for Testing Snubbers Prior to Restart
 - Long Term Actions

Key Technical Areas of Review

- Reactor Vessel Internals
 - Reactor Systems
 - Mechanical/Structural
 - Instrument & Controls
 - Electrical Engineering
 - Piping & Supports (snubbers)
- Fuels
 - Pumps and Valves
 - Balance of Plant
 - Containment
 - Steam Generators
 - Fire Protection

Technical Review Summary

- NRC Safety Reviews Completed as Part of the Restart Decision Making Process
- Ensured that Licensee Demonstrated that the Plant was Safe to Operate Before Restart Approved

NRR Startup Decision

- Director of NRR Approved Restart
- Licensee Received Restart Approval on November 11, 2011 after Shutdown of 80 Days

NRR Confirmatory Action Letter (CAL)

- Ten Long Term Actions in CAL
- Systems, Structures, and Components to be Evaluated per NRC Regulatory Guide 1.167 and EPRI NP-6695
- CAL included Plan to Characterize the Seismic Source and any Special Ground Motion Effects
- North Anna Final Safety Analysis Report (FSAR) and Individual Plant Examination of External Events (IPEEE) to be Updated

Proposed NRC TI for Reviewing Snubber Programs

- TI follows up on actions related to RIS 2010-06 and EGM 2010-01
- Actions taken should have been completed by June 01, 2012 or alternative/relief requests submitted to the NRC

NRC Snubber Program Inspection TI

- General Snubber Program Review
- Sample Visual Examination of Snubbers and Record Review
- Sample Review of Snubber Testing Program
- Review of Snubber Service Life Monitoring Program

Questions?