



U.S. NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

Update on Enhancements of NRC Requirements for Extended Loss of AC Power Events at Nuclear Power Plants

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NRC Mission

To license and regulate the nation's civilian use of byproduct, source and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

Background

- March 11, 2011 Japan Earthquake
- Near-Term Task Force (NTTF)
 - SECY-11-0093, “Near-Term Report and Recommendations for Agency Actions Following the Events in Japan,” (July 12, 2011) (ADAMS Accession No. ML11186A959)
- Commission Direction
 - SRM-SECY-11-0093 (August 19, 2011) (ML112310021)
 - Directed the staff to identify and recommend which NTTF recommendations should be implemented without delay

Mitigating Strategies Order

- EA-12-049, “Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design Basis External Events”
 - Address beyond design basis external events that create extended loss of all ac condition to maintain/restore:
 - Core cooling
 - Containment
 - Spent fuel pool cooling

Mitigating Strategies Order (Cont.)

- JLD-ISG-12-01, “Compliance with Order EA-12-049...”
 - NEI 12-06, “Diverse and Flexible Coping Strategies (FLEX) Implementation Guide”
- LIC-111, Regulatory Audits

Mitigating Strategies Order (Cont.)

- Integrated Plans
 - FLEX Strategies
 - Reliance on Batteries
 - Extended Battery Duty Cycles
 - September 16, 2013 Endorsement Letter
 - Portable Equipment
 - Regional Response Centers
 - Phase 3 Support

Mitigating Strategies Order Status

- February 2013 - Integrated Plans Submitted by Licensees
- February 2014 - Interim Staff Evaluations issued
- March 2014 - Onsite Audits began
- Final Staff Evaluations to be issued once plants have submitted their final integrated plans
- Temporary Instruction Inspections will begin after final staff evaluations have been prepared

Mitigating Strategies Rulemaking

- Requirements issued to power reactor licensees via NRC Order EA-12-049 (and equivalent license conditions) need to be made generically-applicable

Mitigating Strategies Rulemaking Status

- March 20, 2012 - Issued an Advanced Notice of Proposed Rulemaking
- July 23, 2013 - Issued the final Regulatory Basis for rulemaking
- December 2014 - Proposed rule along with Statements of Consideration and Guidance documents expected to be sent to the Commission
- December 2016 - Final rule to be sent to the Commission

References

- Advanced Notice of Proposed Rulemaking - 77 FR 16175
- Regulatory Basis - ML13171A061
- EA-12-049 – ML12054A735
- JLD-ISG-12-01 – ML12229A174
- NEI 12-06 – ML12143A232
- Industry White Paper on Extended Battery Duty Cycles – ML13241A186
- NRC Endorsement of Industry White Paper – ML13241A188