

Process Overview for Seismic Walkdowns

Summary:

The NRC requested U.S. nuclear power plants to walkdown their seismic protection measures and identify and address degraded, nonconforming, or unanalyzed conditions. The plants also had to verify their adequate monitoring and maintenance procedures for seismic protection features and report the results to the NRC.

Background:

- NRC's 10 CFR 50.54(f) letter dated March 12, 2012 (ADAMS Accession No. [ML12053A340](#)) requested U.S. nuclear power plants to perform seismic walkdowns.
- The NRC worked with stakeholders to establish guidance for these walkdowns:
 - The NRC endorses industry-developed guidance ([EPRI Report 1025286](#)).
 - NRC inspectors independently verified the licensee's seismic walkdowns were performed in accordance with the guidance using [Temporary Instruction 2151/188](#).
- All plant licensees completed the majority of their walkdowns and submitted reports in 2012, with the exception of some inaccessible areas that can only be inspected during outages. Inspection reports for inaccessible areas were submitted to the NRC in March 2015.
- The NRC staff performed audits and inspections, issued plant-specific assessments, and determined that plant walkdowns were conducted in accordance with the guidance.
- Some issues of very low safety significance were identified in three broad areas:
 - Degraded equipment/hardware (e.g., missing bolts, corrosion, and open s-hooks).
 - Interaction of components during an earthquake.
 - Problems associated with housekeeping procedures and/or implementation (e.g., temporary installations, portable equipment).
- Licensees will correct any deficiencies identified during the walkdowns as part of their corrective action programs. The NRC will review corrective actions under the NRC's inspection program.

Process Overview:

- The licensee identified and selected qualified personnel.
- The licensee selected structures, systems, and components for the seismic walkdown list.
- Licensee performed the seismic walkdowns:
 - Licensees evaluated potentially adverse seismic conditions.
 - Licensees identified deficiencies and added them to their corrective action programs.
 - NRC inspectors independently verified the licensees followed the NRC-endorsed methodology.
- The licensee evaluated seismic equipment list licensing basis and walkdown results.
- Peer reviewers from other plants examined the walkdown process and prepared a report.
- Licensees prepared and submitted walkdown reports to the NRC for review.
- NRC staff reviewed walkdown reports and issued assessments.

References:

Additional walkdown information can be found on the "[Implementation Status](#)" page under the Japan Lessons Learned section of the NRC public Web site.