Process Overview for Flooding Walkdowns

Summary:

The NRC requested U.S. nuclear power plants to walkdown their flooding protection measures and identify and address degraded, nonconforming, or unanalyzed conditions. The plants also had to verify their adequate monitoring and maintenance procedures for flood 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. <u>ML12053A340</u>) required U.S. nuclear power plants to perform flood walkdowns.
- The NRC worked with stakeholders to establish guidance for completing the walkdowns:
 - Industry issued flooding walkdown guidance (NEI 12-07), which the NRC endorsed.
 - NRC issued guidance for NRC inspectors (<u>Temporary Instruction 2151/187</u>).
- Nuclear power plants completed their walkdowns and submitted the results in accordance with the objectives in Enclosure 4 of the 10 CFR 50.54(f) letter.
- The NRC staff verified the walkdowns were conducted in accordance with the established guidance through inspections and review of the plants' reports. Plant-specific assessment reports were issued.
- Walkdown findings related to flooding vulnerability were noted in three broad areas:
 - o Inadequate seals that would allow floodwaters into safety related spaces.
 - Procedurally directed actions that could not be accomplished in the time allotted by the final safety analysis report for design basis flooding events.
 - Incomplete procedures that did not provide sufficient direction during design basis flooding events.
- 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:

- Plants prepared a walkdown list of flood protection and mitigation features.
- Plants prepared walkdown packages for item on their list.
- Plants trained the walkdown team.
- Plants walked down the selected protection and mitigation features:
 - o NRC monitored walkdown activities using Temporary Instruction 2151/187.
- Plants reviewed selected protection and mitigation features, as well as related operating procedures, to confirm compliance with licensing basis.
- Plants documented available physical margins and possible deficiencies.
- Plants prepared walkdown report and ensured deficiencies were entered in their corrective action programs.
- NRC staff reviewed walkdown reports to confirm they were completed in accordance with Enclosure 4 of the 10 CFR 50.54(f) letter.

References:

Additional walkdown information can be found on the "<u>Implementation Status</u>" page under the Japan Lessons Learned section of the NRC public Web site.