

Update on Tier 2 Activities

Emergency Preparedness

The U.S. Nuclear Regulatory Commission (NRC) prioritized three items related to emergency preparedness (EP) as Tier 2. These items are:

- To hold periodic training and exercises for multiunit and prolonged station blackout (SBO) scenarios and to practice (simulate) the identification and acquisition of offsite resources, to the extent possible;
- To ensure that EP equipment and facilities are sufficient for dealing with multiunit and prolonged SBO scenarios; and
- To add guidance to the emergency plan that documents how to perform a multiunit dose assessment (including releases from spent fuel pools) using the licensee's site-specific dose-assessment software and approach.

As discussed in COMSECY-13-0010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12339A262), NRC staff completed a reevaluation of the options to resolve the Tier 2 Near-Term Task Force (NTTF) Recommendation 9.3 items. NRC staff assessed the objectives of the Tier 2 NTTF Recommendation 9.3 items against the current guidance and known approaches towards resolving all NTTF recommendations, and the staff informed its reevaluation through stakeholder engagement. NRC staff determined that the activities that industry has committed to undertake under Order EA-12-049 (that addresses NTTF Recommendation 4 and stemmed from NTTF Recommendation 4.2), if done properly, will resolve two of the three Tier 2 NTTF Recommendation 9.3 items. These items are: periodic training and exercises, and EP equipment and facilities for multiunit and prolonged SBO. The remaining Tier 2 NTTF Recommendation 9.3 item, multiunit dose assessment capability, is not within the scope of Order EA-12-049 activities.

Additionally, COMSECY-13-0010 highlighted licensees' plans to provide information about their multiunit, multisource dose assessment capability, or a schedule for implementing such a capability; and noted that associated implementation would occur by the end of calendar year 2014. Sixty-one power reactor sites submitted plans to implement an automated capability by December 31, 2014, and one power reactor site indicated it would implement an automated capability by May 30, 2015. In the interim, that site has the ability to perform multisource dose assessment through manual calculations until an automated capability can be implemented.

NRC staff has reviewed all licensee submittals on this topic. Staff issued response letters on or before April 2, 2014, noting that as part of the implementation of new multiunit, multisource dose assessment capabilities, there is a need for an appropriate level of site procedures and training to ensure adequate integration and licensee staff familiarity, and that implementation of dose assessment capabilities would be verified through the inspection program.

Emergency preparedness activities within the scope of EA-12-049 (periodic training and exercises and EP equipment and facilities for multiunit and prolonged SBO) will be inspected using Temporary Instruction 2515/191, "Inspection of the Licensee's Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing Plans."

In accordance with the staff requirements memorandum (SRM) that approved the staff's consolidated rulemaking proposal in SECY-14-0046 (ADAMS Accession No. ML14190A347), all three Tier 2 emergency preparedness related items will be addressed through the proposed Mitigation of Beyond-Design-Basis Events (MBDBE) rulemaking. Since November 2013, and continuing through this reporting period, the NRC staff has been working with external stakeholders to review and provide feedback on the associated guidance, including Nuclear Energy Institute (NEI) 13-06, "Enhancements to Emergency Response Capabilities for Beyond Design Basis Accidents and Events," and NEI 14-01, "Emergency Response Procedures and Guidelines for Extreme Events and Severe Accidents." Specific guidance regarding training, drills and exercises, equipment and facilities, and multiunit, multisource dose assessment is included in NEI 13-06. The staff anticipates endorsing these guidance documents, with clarifications and exceptions as appropriate, as part of the proposed MBDBE rulemaking.

Consideration of Other Natural External Hazards

By letter dated October 13, 2011 (ADAMS Accession No. ML11284A136), the Advisory Committee on Reactor Safeguards recommended expanding Recommendation 2.1 to include natural external hazards other than seismic and flooding hazards. The Consolidated Appropriations Act, Pub. L. 112-074, directed the NRC to require reactor licensees to reevaluate the external hazards at their sites and to require updates to their design-basis, if necessary. Reevaluation of other natural external hazards was prioritized as a Tier 2 activity because of the lack of availability of the critical skill sets on the part of both NRC staff and external stakeholders, and because the staff considered the seismic and flooding reevaluations to be of relatively higher priority.

The project plan for this activity was provided in Enclosure 3 of SECY-12-0025. The project plan calls for the NRC staff to follow the same general process as used for the Tier 1 seismic and flooding reevaluations. As with the reevaluations of seismic and flooding hazards, the staff will assess how the revised estimates for other external events will be addressed within requirements for mitigating strategies for beyond-design-basis external events and possible plant-specific modifications.

NRC staff held no public meetings or produced any project-significant documents during the last six months. However, NRC staff has begun limited scope internal discussions on this topic.