

## Update on Tier 2 Activities

### Spent Fuel Pool Instrumentation and Makeup Capability

#### *Status Update*

The Tier 2 activities related to spent fuel pool instrumentation and makeup capability come directly from the Near-Term Task Force (NTTF) report. These activities are:

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| Recommendation 7.2 | Order licensees to provide safety-related alternating current (ac) electrical power for the spent fuel pool makeup system;   |
| Recommendation 7.3 | Order licensees to revise their technical specifications to address requirements to have one train of onsite emergency electrical power operable for spent fuel pool makeup and spent fuel pool instrumentation when there is irradiated fuel in the spent fuel pool, regardless of the operational mode of the reactor; |
| Recommendation 7.4 | Order licensees to have an installed seismically qualified means to spray water into the spent fuel pools, including an easily accessible connection to supply the water (e.g., using a portable pump or pumper truck) at grade outside the building; and  |
| Recommendation 7.5 | Initiate rulemaking or licensing activities or both to require the actions related to the spent fuel pool described in detailed recommendations 7.1–7.4.   |

In COMSECY-13-0002, “Consolidation of Japan Lessons Learned Near-Term Task Force Recommendations 4 and 7 Regulatory Activities,” dated January 25, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13011A034), the staff proposed that these Tier 2 items be addressed within the implementation activities for the mitigation strategies order, as well as be addressed in the Station Blackout Mitigation Strategies (SBOMS) rulemaking. The staff made this proposal because it found that the new mitigation strategies could satisfy the underlying purpose of these Tier 2 items for enhanced spent fuel pool makeup and spray capability. The Commission approved the staff’s proposal on March 4, 2013. Therefore, with these activities now subsumed within the mitigation strategies activities, the staff no longer intends to provide updates on these items as independent Tier 2 activities.

#### *Transition to Line Organization Oversight*

On June 11, 2013, an evaluation of the readiness for the Tier 2 spent fuel pool makeup capabilities items to be fully transitioned to line organization oversight was presented to the Steering Committee as part of the broader evaluation for the mitigation strategies order because

these items have been subsumed. The Steering Committee determined that the activities are ready for transition.

The line organization ownership will reside within both the Office of Nuclear Reactor Regulation (NRR) and Office of New Reactors (NRO), with lead responsibility split between issues related to operating reactors and new reactors, respectively. Champions have been designated in both offices.

The staff considers this activity mature; regulatory action (the mitigation strategies order) has already been taken, implementation is underway, and a clear path forward has been established. Communication with stakeholders is expected to continue at a high level using existing processes. The staff believes that issues that might arise can be effectively resolved within the line organization(s). Furthermore, the staff recognizes the close relationship of these activities to the SBOMS rulemaking activity. In its coordination role, the Japan Lessons-Learned Project Directorate (JLD) will help ensure that the working groups and champions for each of these activities exchange information and effectively coordinate actions that might impact one another.

### Emergency Preparedness

#### *Status Update*

Three items related to emergency preparedness (EP) were prioritized as Tier 2. These items are:

- (1) Conduct periodic training and exercises for multiunit and prolonged station blackout (SBO) scenarios. Practice (simulate) the identification and acquisition of offsite resources, to the extent possible;
- (2) Ensure that EP equipment and facilities are sufficient for dealing with multiunit and prolonged SBO scenarios; and
- (3) 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.

In COMSECY-13-0010, "Schedule and Plans for Tier 2 Order on Emergency Preparedness for Japan Lessons Learned," dated March 27, 2013 (ADAMS Accession No. ML12339A262), the staff requested Commission approval to implement the first and second items under the mitigation strategies order; the staff found that these items were already being adequately addressed by the ongoing implementation efforts for mitigation strategies and therefore did not need to be addressed as independent Tier 2 items. For the third item, the staff requested Commission approval to implement it by having each licensee document their commitment to obtain multiunit dose assessment capability by the end of 2014. The Commission approved the staff's requests in Staff Requirements Memorandum (SRM)-COMSECY-13-0010, dated April 30, 2013 (ADAMS Accession No. ML13120A339). Licensees have already provided the staff submittals outlining their current multiunit/multisource capability as well as a schedule (for those who did not have the capability) and intent to achieve implementation of the dose assessment

capability by the end of 2014. To make this capability an NRC requirement, the staff intends to include it in the rulemaking planned for Tier 3 EP-related topics.

Note that the staff no longer intends to provide independent updates on the first and second items because they have been subsumed by the mitigation strategies order activities.

#### *Transition to Line Organization Oversight*

On June 11, 2013, an evaluation of the readiness for the first and second EP items to be fully transitioned to line organization oversight was presented to the Steering Committee as part of the broader evaluation for the mitigation strategies order because these items are now being fully addressed under that order. On June 18, 2013, an evaluation of the readiness for the multiunit dose assessment item to be fully transitioned to line organization oversight was presented to the Steering Committee. For all of the items, the Steering Committee agreed that they are ready for transition.

The line organization ownership will reside within NRR and the Office of Nuclear Security and Incident Response (NSIR), with NRR having responsibility for the items incorporated under the mitigation strategies order and NSIR having responsibility for the multiunit dose assessment item. Champions have been designated in both offices. Any interoffice issues can be coordinated using existing processes.

The staff considers these items mature and ready for transition to line organization management because a clear path forward has been established and licensees are beginning to take action to achieve implementation. Communication with stakeholders is expected to continue at a high level using existing processes. The staff believes that issues that might arise can be effectively resolved within the line organizations. In its coordination role, the JLD will help ensure that appropriate offices exchange information and effectively coordinate actions that might impact one another.

#### Consideration of Other Natural External Hazards

##### *Status Update*

The Advisory Committee on Reactor Safeguards (ACRS) recommended expanding NTF Recommendation 2.1 to include natural external hazards other than seismic and flooding in a letter dated October 13, 2011 (ADAMS Accession No. ML11284A136). The Consolidated Appropriations Act, Public Law 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 for both the NRC staff and external stakeholders, and because the NRC staff considered the seismic and flooding reevaluations to be of higher priority.

The project plan for this activity was provided in Enclosure 3 of SECY-12-0095. The project plan calls for the staff to follow the same process as used for the Tier 1 seismic and flooding reevaluations. The staff expects to restart stakeholder interactions that occurred in February 2012 to discuss the technical basis and acceptance criteria for conducting a reevaluation of site-

specific external natural hazards to help define the guidelines for the application of current regulatory guidance and methodologies at operating reactors. The staff plans to develop and issue a request for information to licensees pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(f) to (1) reevaluate site-specific external natural hazards using the guidance discussed above, and (2) identify actions that have been taken, or are planned, to address plant-specific issues associated with the updated natural external hazards (including potential changes to the licensing or design basis of a plant). Licensee responses will then be evaluated and appropriate regulatory action taken to resolve issues associated with updated site-specific natural external hazards.

The staff expects to begin work on this topic as soon as significant resources become available, following implementation of Tier 1 actions related to seismic and flooding hazard walkdowns and reevaluations.

#### *Transition to Line Organization Oversight*

On July 2, 2013, an evaluation of the readiness for the Other External Hazards recommendation to be fully transitioned to line organization oversight was presented to the Steering Committee. The Steering Committee agreed that the activity is ready for transition.

The line organization ownership will reside within both NRR and NRO, with NRR taking the programmatic lead and NRO taking the technical lead. The Director of NRO's Division of Site Safety and Environmental Analysis Division has been designated as the champion. Any interoffice issues can be coordinated using existing processes.

The staff considers this activity ready for transition to line organization management because it will follow the regulatory process used for the flooding and seismic reevaluations. Communication with stakeholders is expected to resume using existing processes. The staff believes that issues that might arise can be effectively resolved within the line organizations. In its coordination role, the JLD will help ensure that NRR and NRO exchange information and effectively coordinate actions that might impact one another.