

Update on Tier 1 Activities

This enclosure includes an update on significant activities associated with Tier 1 recommendations. Background and historical information on U.S. Nuclear Regulatory Commission (NRC) and licensee activities on these recommendations can be found in SECY-15-0059, Enclosure 1, "Update on Tier 1 Activities" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15069A552).

Mitigation Strategies Order (EA-12-049)

On March 12, 2012, the NRC issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (ADAMS Accession No. ML12056A045). The Order addresses and expands on Recommendation 4.2 of SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan" (ADAMS Accession No. ML11186A950), hereafter called the Near-Term Task Force (NTTF) report. The Order requires a three-phased approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core cooling, containment, and spent fuel pool (SFP) cooling capabilities. The transition phase requires providing sufficient portable onsite equipment and consumables to maintain or restore these functions until they can be maintained with offsite equipment and support. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely.

Licensees are required to notify the NRC when full compliance with the Order is achieved. Once all units at a site are in compliance, NRC staff will issue a final safety evaluation (SE) (within 6 months) and inspect (within 1 year) for compliance with the Order using temporary instruction (TI) 2515/191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multiunit Dose Assessment Plans" (ADAMS Accession No. ML14273A444).

Substantial progress towards full implementation of Order EA-12-049 has been made during the previous 6 months:

- The NRC staff completed 20 audits to review the closeout of open and confirmatory items identified in the interim staff evaluations (ISEs). A total of 49 of 61 audits have been completed. The NRC staff expects to complete the remaining audits by August 2016.
- The licensees for 8 of the 61 sites have notified the NRC that they are in compliance with Order EA-12-049. The NRC staff expects that most sites will be in compliance no later than December 2016 as originally scheduled, with the exceptions noted in the discussion below.
- The NRC staff has completed one final SE for Watts Bar Nuclear Plant, Units 1 and 2 (Watts Bar). This is the first of 61 site SEs to be completed.

Enclosure

- The NRC staff has completed one inspection per TI 2515/191 (for Watts Bar) to verify the licensee is in compliance with Order EA-12-049. This is the first of 61 site inspections to be completed.

The Order established a schedule for all licensees to achieve full compliance within two refueling outages after submittal of their integrated plans and no later than December 2016. Licensees for nine sites, boiling water reactors (BWRs) with Mark I and II containment designs, have asked for, and been granted, schedule relaxation to align with the schedule requirements of Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions" (ADAMS Accession No. ML13130A067). For BWRs with Mark I and II containments, mitigation strategies rely on the installation of the severe accident-capable vents to remove heat from the containment and maintain the function of equipment used for the initial phase of the Order. Schedule relaxation for these nine sites was needed because the final installation of the vents per Order EA-13-109 will not be completed before December 2016. Although the full compliance date for these sites will extend past December 2016 with this schedule relaxation, all other aspects of Order EA-12-049 will be in place before December 2016. Modifications necessary to withstand the reevaluated seismic and flooding hazards may go beyond December 2016 for some plants where the reevaluated levels far exceed the design basis.

Spent Fuel Pool Instrumentation Order (EA-12-051)

On March 12, 2012, the NRC issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation" (ADAMS Accession No. ML12056A044), requiring all U.S. nuclear power plants to install reliable water level measurement instrumentation in their SFPs. The Order addresses and expands on Recommendation 7.1 of the NTF report. The instrumentation must remotely monitor at least three distinct SFP water levels: (1) normal level, (2) low level but still high enough to shield workers above the pools from radiation, and (3) a very low level near the top of the spent fuel rods (indicating that more water should be added without delay).

Licensees are required to notify the NRC when full compliance is achieved. Once all units at a site are in compliance, the NRC staff will issue a final SE (within 6 months) and inspect (within 1 year) for compliance with the Order using TI 2515/191.

Substantial progress towards full implementation of Order EA-12-051 has been made during the previous 6 months:

- The NRC staff completed 20 audits to close-out open items and requests for additional information from the ISEs. A total of 49 of 61 site audits have been completed. The NRC staff expects to complete the remaining audits by August 2016.
- The licensees for 22 of the 61 sites notified the NRC that they are in compliance with Order EA-12-051. The NRC staff expects that licensee compliance with Order EA-12-051 will be achieved at all sites before the end of December 2016.
- The NRC staff completed one SE (for Watts Bar). This is the first of 61 site SEs to be completed.

- The NRC staff has completed one inspection per TI 2515/191 (for Watts Bar) to verify the licensee is in compliance with Order EA-12-051. This is the first of 61 site inspections to be completed.

Flooding and Seismic Hazard Walkdowns

On March 12, 2012, NRC staff issued a request for information pursuant to Title 10 of the *Code of Federal Regulations* Part 50, Section 50.54(f) (hereafter referred to as the 50.54(f) letter) asking licensees of U.S. nuclear power plants to walk down their installed flooding-protection, seismic-protection, and hazard-mitigation features and review associated manual actions. This portion of the 50.54(f) letter addresses and expands on Recommendation 2.3 of the NTTF report.

The operating reactor fleet completed the plant walkdowns (except for those portions of the seismic walkdowns that were not accessible at power) and submitted their walkdown reports by November 2012. The NRC staff completed staff assessment reports by July 2014. The NRC staff assessments determined that the plant walkdowns consistently followed the intent of the NRC-endorsed guidance, thereby verifying that the walkdowns met the objectives of the 50.54(f) letter. Subsequently, all seismic walkdowns on inaccessible items were completed. The NRC staff will document the reviews of the inaccessible walkdown items in the fourth quarter of 2015, and will then close this recommendation.

Seismic Hazard Reevaluations

The NRC's March 12, 2012, 50.54(f) letter required licensees for the U.S. nuclear power plants to use current regulations and guidance to reevaluate the seismic hazards that could affect their sites. If these newly reevaluated hazards are not bounded by the current design-basis, the licensee is required to determine whether interim protection measures are needed while a longer-term evaluation of the impacts of these hazards is completed. This portion of the 50.54(f) letter addresses and expands on the seismic reevaluations discussed in Recommendation 2.1 of the NTTF report.

Comanche Peak Nuclear Power Plant, Units 1 and 2; Grand Gulf Nuclear Station, Unit 1; St. Lucie Plant, Units 1 and 2; South Texas Project, Units 1 and 2; and Turkey Point Nuclear Generating, Units 3 and 4, have completed all aspects of this part of the 50.54(f) letter based on their low seismic hazard. As such, the NRC staff has determined that the seismic hazard reevaluation activities are completed for these sites.

The NRC staff and licensees completed the following seismic hazard evaluation activities during the previous 6 months:

- The NRC staff completed the initial screening review of the seismic hazard reports for the operating Central and Eastern United States (CEUS) sites in May 2014. Since then, two CEUS sites requested to submit revised hazard reports. Cooper Nuclear Station corrected a staff-identified technical error in the licensee's original hazard calculation and re-submitted their report in February 2015. H.B. Robinson Steam Electric Plant, Unit No. 2, updated its geophysical data and hazard information and re-submitted their report in July 2015.

- The NRC staff has provided feedback to the CEUS sites on the acceptability of their reevaluated seismic hazard for use in developing seismic risk evaluations on December 10, 2014. The staff has issued 28 staff assessments as of August 27, 2015, and continues to prioritize the issuance of assessments for those sites which are performing seismic risk evaluations.
- All three western United States (WUS) sites (Columbia Generating Station; Diablo Canyon Power Plant, Units 1 and 2; and Palo Verde Nuclear Generating Station, Units 1, 2, and 3) submitted their seismic hazard reports in March 2015. The NRC staff has issued requests for additional information for all three sites, and held a public meeting with each licensee to support their review.
- The NRC staff issued the results of the screening and prioritization review for the three WUS sites on May 13, 2015 (ADAMS Accession No. ML15113B344).
 - Columbia and Diablo Canyon screened-in and have been assigned to priority Group 1. The NRC staff issued a letter (ADAMS Accession No. ML15173A428) to Diablo Canyon on July 14, 2015, stating that the information previously received from the licensee in the Long-Term Seismic Program is an acceptable alternative to an expedited seismic evaluation process (ESEP) review.
 - Palo Verde conditionally screened-in and has been assigned to priority Group 3. The NRC staff expects to complete the review and make a final screening determination in October 2015.
- The NRC staff completed the initial technical review of the 33 CEUS ESEP reports. At least 13 licensees have committed to completing limited plant modifications (e.g., replacement of relays, strengthening of anchorages for components, or removal of structural interference around valves and conduit). The NRC staff expects the modifications not requiring an outage to be completed by December 2016.
- The NRC staff has issued 28 review response letters on the CEUS ESEP report, as of September 23, 2015. The NRC staff letters document the results of the staff's review and conclude that the licensee's interim actions meet the intent of the guidance and that they have demonstrated additional assurance of plant safety while the longer-term seismic evaluation is being completed.

Future work to be completed includes:

- The NRC staff is currently developing guidance to support the proposed rule on mitigation of beyond-design-basis events (MBDBE) as it relates to the reevaluated seismic and flooding hazards. The staff expects to issue Draft Regulatory Guide DG-1301 (ADAMS Accession No. ML13168A031) for public comment with the proposed MBDBE rule in the fourth quarter of 2015. The guidance will be used by licensees to assess mitigating strategies against the reevaluated seismic hazard.
- The NRC staff is assessing whether it is necessary for plants with limited levels of seismic exceedance to carry out a seismic risk evaluation. NRC staff expects to

complete this assessment by October 2015 and issue a letter to document the staff's review that will specify those plants that will be granted relief from doing a seismic risk evaluation. This action will confirm the final decisions on which plants will be required to perform a seismic risk evaluation.

- The Nuclear Energy Institute (NEI) is developing guidance that will be used by licensees to complete the limited scope evaluations (SFP evaluations, high- and low-frequency confirmations) based on the ESEP reviews. As part of the guidance, NEI is developing common technical bases that many licensees could apply to their plants rather than to perform site-specific evaluations for the high frequency evaluations and spent fuel pool evaluations. The NRC staff endorsed the NEI guidance on the limited-scope high-frequency evaluations by letter dated September 17, 2015 (ADAMS Accession No. ML15218A569).
 - Fifty six sites are expected to perform limited-scope evaluations of high-frequency issues (e.g., for effects on electrical relays).
 - Forty four sites are expected to perform limited-scope SFP evaluations.
 - Two sites are expected to perform limited-scope evaluations of low-frequency issues (e.g., for effects on water storage tanks).
- In October 2015, the NRC staff expects to issue the remaining Groups 1–3 CEUS sites' seismic hazard staff assessments.
- In early 2016, the NRC staff expects to issue a letter to the WUS licensees that screened-in for a seismic risk evaluation informing those licensees of the suitability of their reevaluated seismic hazard for use in the development of seismic risk evaluations and other seismic evaluations.
- In December 2015, the NRC staff expects to complete its review of CEUS licensees' ESEP submittals and issue final response letters. Thirteen licensees identified limited plant modifications in their ESEP reports. The NRC staff expects that the identified modifications not requiring an outage will be completed by December 2016. The WUS licensee's ESEP submittals, if needed, are due in January 2016.

Flooding Hazard Reevaluations

The NRC's March 12, 2012, 50.54(f) letter required all U.S. power reactor licensees and holders of construction permits in active or deferred status to reevaluate the flooding hazards that could affect their sites. This portion of the 50.54(f) letter addresses and expands on the flooding reevaluations discussed in Recommendation 2.1 of the NTTF report.

In COMSECY-14-0037, "Integration of Mitigating Strategies for Beyond-Design-Basis External Events and the Reevaluation of Flooding Hazards" (ADAMS Accession No. ML14309A256), the NRC staff requested Commission direction to more clearly define the relationship between Order EA-12-049, the related MBDBE rulemaking, and the flood hazard reevaluations and assessments. In the staff requirements memorandum (SRM) to COMSECY-14-0037 (ADAMS

Accession No. ML15089A236), the Commission affirmed that licensees for operating nuclear power plants need to address the reevaluated flooding hazards within their mitigating strategies. The Commission also directed the NRC staff to supply a plan for achieving closure of the flooding portion of NTTF Recommendation 2.1 to the Commission for its review and approval. On June 30, 2015, the NRC staff provided a plan to the Commission in COMSECY-15-0019, "Closure Plan for the Reevaluation of Flooding Hazards for Operating Nuclear Power Plants" (ADAMS Accession No. ML15153A104). On July 28, 2015, the Commission approved the plan in the SRM to COMSECY-15-0019 (ADAMS Accession No. ML15209A682).

The action plan identifies two primary activities that define the response to flooding issues. These are:

- 1) Ensure licensees put into effect mitigating strategies to address reevaluated flooding hazards, and
- 2) Develop a graded approach to identify the need for, and prioritization and scope of, plant-specific integrated assessments and evaluation of plant-specific regulatory actions.

The plans for ensuring that the reevaluated flooding hazards are addressed within mitigating strategies, as described in COMSECY-15-0019, are being put into effect.

- The NEI is preparing industry guidance (Appendix G to NEI 12-06, "Diverse and Flexible Coping Strategies Implementation Guide") to provide the information needed to ensure mitigating strategies address the reevaluated flooding hazards.
- The NRC staff expects to endorse NEI 12-06, Appendix G, with any necessary exceptions and clarifications, in a revision to interim staff guidance JLD-ISG-2012-01 on compliance with Order EA-12-049, to be issued in late 2015.
- The NRC staff expects to issue letters to licensees on the final outcome of the staff's review of the licensees' flood hazard reevaluations. The letters document that each licensee's flood hazard reevaluation results, including any changes made by the licensee as a result of the NRC review, are appropriate for use in developing mitigating strategies to satisfy Order EA-12-049 and the proposed MBDBE rule.
 - The letters are being issued to licensees in three prioritized groupings, with a group of letters issued in September 2015, a group to be issued by December 2015, and a group of letters (which are dependent on information from the U.S. Army Corps of Engineers) to be issued by December 2016. As of October 2, 2015, the NRC staff had issued 18 flooding hazard information letters and 12 flood hazard staff assessments.
- If necessary, licensees are modifying or upgrading their mitigating strategies to ensure they can be implemented under the reevaluated flood hazard condition. The NRC staff expects that most licensees will complete their mitigating strategies assessment and related actions by December 2016.

The plans for closing NTTF Recommendation 2.1 are also described in COMSECY-15-0019. The NRC staff is addressing the issues associated with the flooding hazard reevaluations (Phase 1) and related decisionmaking (Phase 2) of NTTF Recommendation 2.1 by using a graded approach to narrow the list of potential plants subject to an integrated assessment.

Key elements of the plan include:

- Revise interim staff guidance JLD-ISG-2012-05 by June 2016. Current guidance for performing an integrated assessment is given in interim staff guidance JLD-ISG-2012-05, "Guidance for Performing the Integrated Assessment for External Flooding." The NRC staff is working with the industry to determine the most efficient and effective way to revise the integrated assessment guidance.
- Most of the sites with flooding hazards exceeding the design-basis flood will screen-out from the integrated assessments and licensees will instead do focused evaluations to ensure appropriate actions are taken, and that these actions are effective and reasonable. Most of these focused evaluations will be submitted by December 2016.
- A limited number of plants will submit revised flooding reevaluations by late 2016 and the associated integrated assessments by late 2017.
- The NRC staff will evaluate the integrated assessments and determine the need for further regulatory action. The final plan for the decision-making criteria as part of Phase 2 will be established following development of guidance and further stakeholder interactions.

Emergency Preparedness Staffing and Communications

The NRC's March 12, 2012, 50.54(f) letter required licensees to assess their means to power communications equipment onsite and offsite during a prolonged station blackout event, and to assess and implement enhancements to help ensure that communications can be maintained during such an event. Also, licensees were to assess the staffing required to fill all necessary positions to respond to a multiunit event with impeded access to the site. This portion of the 50.54(f) letter addresses and expands on the emergency preparedness staffing and communications discussed in Recommendation 9.3 of the NTTF report.

All licensees submitted their communications assessments and NRC staff issued safety assessments documenting the staff's review.

Licensees are responding to the staffing portion of the 50.54(f) letter in two phases to account for the implementation of mitigation strategies. Phase 1 staffing assessments are based on existing station blackout coping strategies with an assumption of multiple reactors being affected concurrently. All Phase 1 staffing assessments have been submitted and the NRC staff has issued all Phase 1 staffing assessment response letters.

In Phase 2, licensees will assess the staffing necessary to carry out the mitigating strategies developed in response to NTTF Recommendation 4.2. Thus, Phase 2 of the staffing

assessment will occur in conjunction with the implementation of Mitigation Strategies Order EA-12-049.

Substantial progress toward completion of the emergency preparedness staffing assessments has been made during the previous 6 months:

- Fifty of 61 Phase 2 staffing assessments were received.
- The NRC staff issued 39 of 61 Phase 2 staffing assessment response letters.
- The NRC staff has completed one inspection per TI 2515/191 (for Watts Bar) to verify that licensee is in compliance. Sixty of 61 inspections remain to be completed.

Future work to be completed includes:

- The NRC staff expects to receive the remaining Phase 2 staffing assessments by December 31, 2015.
- The NRC staff will issue response letters within 4 months of receiving the assessment.
- The staff will use TI 2515/191 to inspect activities completed in this area in conjunction with the inspections for Orders EA-12-049 and EA-12-051.

Proposed rulemaking concerning emergency preparedness staffing and communications is included in the MBDBE consolidated rulemaking activity approved in the SRM to SECY-14-0046, "Staff Requirements: "Fifth 6-Month Status Update on Response to Lessons Learned from Japan's March 11, 2011, Great Tohoku Earthquake and Subsequent Tsunami" (ADAMS Accession No. ML14218A703).

Mitigation of Beyond-Design-Basis Events Rulemaking

The NRC staff continues to make progress in developing the MBDBE rulemaking. The rulemaking will consolidate the work on NTF Recommendations 4, 7, 8, and portions of Recommendations 9, 10, and 11. The proposed rule will address multiple ongoing post-Fukushima actions:

- Makes Orders EA-12-049 and EA-12-051 generically applicable.
- Includes proposed requirements associated with staffing and communication capabilities and multi-source term assessments.
- Includes proposed requirements for reevaluated seismic and flooding hazards (a point that was clarified with respect to flooding in COMSECY-14-0037, "Integration of Mitigating Strategies for Beyond-Design-Basis External Events and the Reevaluation of Flooding Hazards").
- Addresses concerns raised by several petitions for rulemaking related to the accident.

The major MBDBE rulemaking milestones are:

- The proposed rule was delivered to the Commission on April 30, 2015, in SECY-15-0065, “Proposed Rulemaking: Mitigation of Beyond-Design-Basis Events (RIN 3150-AJ49)” (ADAMS Accession No. ML15049A201).
- Supporting draft staff guidance (citing industry guidance) will be issued with the proposed rule in the fourth quarter of calendar year 2015.
- The final rule will be delivered to the Commission by December 31, 2016.

Using the normal rulemaking process, NRC staff will seek public comments and meet with the Advisory Committee on Reactor Safeguards (ACRS) and the public to discuss the rulemaking. On July 9, 2015, industry, public stakeholders, and the NRC staff briefed the Commission on the proposed MBDBE rulemaking. Commission direction on the proposed rulemaking package was provided to the staff on August 27, 2015, in the SRM to SECY-15-0065 (ADAMS Accession No. ML15239A767). The NRC staff anticipates providing the revised proposed rulemaking package to the Commission (at least 10 days prior to publication in the *Federal Register*) in the fourth quarter of 2015.

Reliable Hardened Containment Vents for Boiling Water Reactors with Mark I and II Designs (Order EA-12-050 and Order EA-13-109)

On March 12, 2012, the NRC issued Order EA-12-050, “Order Modifying Licenses with Regard to Reliable Hardened Containment Vents” (ADAMS Accession No. ML12054A696), requiring all operating BWRs in the U.S. with Mark I and II containments to install a reliable hardened vent. Subsequently, NRC staff considered the possibility of venting after reactor core damage occurs and submitted SECY-12-0157, “Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments” (ADAMS Accession No. ML12345A030) to the Commission. In the SRM to SECY-12-0157 (ADAMS Accession No. ML13078A017), the Commission directed the NRC staff to require licensees with Mark I and II containments to “upgrade or replace the reliable hardened vents required by Order EA-12-050 with a containment venting system designed and installed to remain functional during severe accident conditions.” In response to that SRM, NRC staff issued Order EA-13-109, “Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions” (ADAMS Accession No. ML13130A067), to ensure that those vents will remain functional in the conditions that could exist in the event of reactor core damage. Order EA-13-109 supersedes Order EA-12-050, and addresses and expands on Recommendation 5.1 of the NTF report.

Order EA-13-109 contains two distinct phases of implementation. Phase 1 requires affected licensees to upgrade the venting capabilities from the containment wetwell to provide a reliable hardened vent to help prevent core damage. The vent must also remain functional during severe accident conditions. Phase 2 requires affected licensees to: (a) increase protection for severe accident conditions through installation of a reliable severe-accident-capable drywell vent system, or (b) develop a reliable containment venting strategy that makes it unlikely that there would be the need to vent from the containment drywell during severe accident conditions. For both phases, licensees will submit an overall integrated plan (OIP), NRC staff will conduct any necessary audits and then issue an ISE. In accordance with the requirements of the Order,

licensees will notify the NRC when full compliance is achieved with Phases 1 and 2. Once all units at a site are in compliance, the NRC staff will issue a final SE and inspect compliance with the Order.

Substantial progress towards full implementation of Order EA-13-109 has been made during the previous 6 months:

- The NRC staff issued nine Phase 1 ISEs (18 of 19 ISEs are complete). In lieu of a Phase 1 OIP, on June 2, 2014, the Oyster Creek Nuclear Generating Station (Oyster Creek) asked for an extension to comply with Order EA-13-109 (further discussed below). The NRC staff is currently evaluating the extension request.
- The NRC staff issued interim staff guidance JLD-ISG-2015-01, "Compliance with Phase 2 of Order EA-13-109" (ADAMS Accession No. ML15104A118) to endorse, with exceptions and clarifications, NEI 13-02, Revision 1, "Industry Guidance for Compliance with Order EA-13-109."

Future work to be completed includes:

- The NRC staff expects to receive all Phase 2 OIPs by December 31, 2015.
- The NRC staff will review the Phase 2 OIPs, conduct audits (if necessary) of licensee progress toward compliance with Phase 2, and then issue ISEs.
- The NRC staff will inspect compliance with the Order.

Order EA-13-109 established a schedule for applicable licensees to achieve full compliance with Phase 1 of the Order by June 30, 2018, and full compliance with Phase 2 of the Order by June 30, 2019. The NRC has rescinded Order EA-13-109 for the Vermont Yankee Nuclear Power Station, which has permanently shut down. Oyster Creek has asked for an extension for compliance with this Order until January 31, 2020. Exelon Generation Company, LLC, plans to permanently shut down Oyster Creek and cease operations by December 31, 2019. The NRC staff is currently evaluating this extension request. The NRC staff expects that all other applicable licensees will meet the compliance dates specified in the Order.

Containment Protection and Release Reduction Rulemaking

In addition to directing the NRC staff to require installation of severe-accident-capable venting systems for Mark I and II containments (discussed above), in the SRM to SECY-12-0157 (ADAMS Accession No. ML13078A017) the Commission also directed the NRC staff to develop the regulatory basis and proceed with a rulemaking for filtering strategies with drywell filtration and severe accident management of BWRs with Mark I and II containments.

Using the normal rulemaking process, NRC staff developed a Commission information paper and the draft Containment Protection and Release Reduction rulemaking regulatory basis, which were provided to the Commission on June 19, 2015, in SECY-15-0085 (ADAMS Accession No. ML15022A218). The Commission subsequently converted this paper into a notation vote paper. The NRC staff met with the ACRS Subcommittee on July 7, 2015, to

discuss the paper and the draft regulatory basis, and again on August 18, 2015. In the SRM to SECY-15-0085 (ADAMS Accession No. ML15231A471), dated August 19, 2015, the Commission approved Alternative 1, discontinuing rulemaking activities, leaving Order EA-13-109 in place without additional regulatory actions; and disapproved issuing a *Federal Register* notice requesting public comment on the draft regulatory basis. A subsequent meeting with the ACRS full committee was held on September 9, 2015. NRC staff from the Office of Nuclear Regulatory Research is currently preparing a NUREG report to document the technical analysis completed, including risk evaluation, accident progression and source term calculations, and offsite consequence calculations.

Enhancements to the Capability to Prevent or Mitigate Seismically-Induced Fires and Floods

This lessons learned activity originated from NTF Recommendation 3, and was intended to evaluate potential enhancements to the capability to prevent or mitigate seismically-induced fires and floods. In the SRM to SECY-11-0137, "Staff Requirements: Prioritization of Recommended Actions to Be Taken in Response to Fukushima Lessons Learned" (ADAMS Accession No. ML113490055), the Commission directed the staff to start developing probabilistic risk analysis methods to evaluate potential enhancements to plants' capabilities to prevent or mitigate seismically-induced fires and floods as part of Tier 1 activities. However, to be consistent with the program plan for NTF Recommendation 3 in Enclosure 3 to SECY-12-0095, "Tier 3 Program Plans and 6-Month Status Update in Response to Lessons Learned from Japan's March 11, 2011, Great Tohoku Earthquake and Subsequent Tsunami" (ADAMS Accession No. ML12208A210), and as directed by the Commission, carrying out the broader evaluation (i.e., beyond the Probabilistic Risk Assessment methods) of potential enhancements to the capability to prevent or mitigate seismically-induced fires and floods would remain a longer-term Tier 3 activity.

An update on both the Tier 1 and 3 components of this recommendation will be provided to the Commission in October 2015 in a SECY paper that will address all the open Tier 3 recommendations.