

## Japan Lessons Learned (ARCHIVED)

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On March 11, 2011, a 9.0-magnitude earthquake struck Japan and was followed by a 45-foot tsunami, resulting in extensive damage to the nuclear power reactors at the Fukushima Dai-ichi facility. The NRC has taken significant action to enhance the safety of reactors in the United States based on the lessons learned from this accident. This page is intended to serve as a navigation hub to follow the NRC's progress in implementing the many different lessons-learned activities.

- Reflections on Fukushima: NRC Senior Leadership Visit to Japan, 2014 (NUREG/KM-0008) [/reading-rm/doccollections/nuregs/knowledge/km0008/]
- Post Fukushima Order Implementation Status (January 8, 2021) [/docs/ML2105/ML21055A547.pdf]
- Post Fukushima Flooding and Seismic Hazard Reevaluation Status (January 8, 2021) [/docs/ML2105/ML21055A556.pdf]
- Resolution of Post-Fukushima Tier 2, Tier 3, and Non-Tiered Activities [/docs/ML1810/ML18101B396.pdf]



[/reactors/operating/opsexperience/japandashboard/priorities.html] What Are the Lessons Learned from Fukushima? [/reactors/operating/ops-experience/japan-dashboard/priorities.html]



[/reactors/operating/opsexperience/japandashboard/japanplants.html] Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/opsexperience/japandashboard/japan-plants.html]



[/reactors/operating/opsexperience/japandashboard/mitigationstrategies.html] Mitigation Strategies [/reactors/operating/opsexperience/japandashboard/mitigationstrategies.html]



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[/reactors/operating/opsexperience/japandashboard/seismicreevaluations.html] Seismic Reevaluations [/reactors/operating/opsexperience/japandashboard/seismicreevaluations.html]



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[/reactors/operating/opsexperience/japandashboard/walkdowns.html] Plant Walkdowns of Seismic & Flooding Protection Features [/reactors/operating/ops-experience/japan-dashboard/walkdowns.html]



[/reactors/operating/opsexperience/japandashboard/emergpreparedness.html] Emergency Preparedness – Staffing & Communications [/reactors/operating/ops-experience/japan-dashboard/emerg-preparedness.html]



[/reactors/operating/opsexperience/japandashboard/emergencyprocedures.html] Mitigation of
Beyond-Design-Basis
Events Rulemaking
[/reactors/operating/opsexperience/japandashboard/emergencyprocedures.html]



Regulatory Framework (Recommendation 1) [/reactors/operating/ops-experience/japan-dashboard/regulatory-framework.html]



framework.html]

[/reactors/operating/opsexperience/japandashboard/reflibrary.html] Reference Library [/reactors/operating/ops-experience/japan-dashboard/ref-library.html]

Page Last Reviewed/Updated Thursday, March 11, 2021



NRC created this graphic to help the public identify our work on implementing the lessons we've learned from Fukushima. The bonsai tree represents Japanese culture, with the green foliage in the shape of Japan's islands representing hope and growth. The red sun comes from Japan's flag, and the base of the logo represents a solid foundation of cooperation and understanding.



## What are the Lessons Learned from Fukushima? (ARCHIVED)

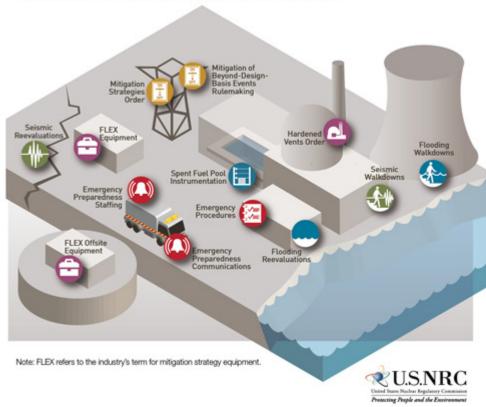
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After the Fukushima accident, a task force of senior NRC staff reviewed the circumstances of the event to determine what lessons

could be learned. In July 2011, the task force provided recommendations to enhance U.S. reactor safety [/docs/ML1118/ML111861807.pdf] , and these became the foundation of the NRC's post-Fukushima activities. The Commission then approved a three-tiered prioritization of the recommendations as summarized below (note that Recommendation 1 [/reactors/operating/ops-experience/japan-dashboard/regulatory-framework.html] is being addressed outside of the three tiers).

### NRC Post-Fukushima Safety Enhancements



Printable Version [/reactors/operating/ops-experience/japan-dashboard/post-fukushima-safety.pdf]

- Tier 1 Activities [#tier-01]
- Post Fukushima Tier 2, Tier 3 and Non-Tiered Activities [#post]

### **Tier 1 Activities**

Activity	Brief Description	NRC Addressing by
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Mitigation Strategies		
[/reactors/operating/ops-experience/japan-	To enhance the capability to maintain plant safety during a prolonged loss of electrical power.	Order
dashboard/mitigation-strategies.html]		
Containment Venting System		
[/reactors/operating/ops-experience/japan-	To provide a reliable hardened containment vent system for boiling water reactors (BWRs) with Mark I or Mark II containment designs.	Order
dashboard/hardened-vents.html]		
Spent Fuel Pool Instrumentation		
[/reactors/operating/ops-experience/japan-	To provide a reliable wide-range indication of water level in spent fuel storage pools.	Order
dashboard/spent-fuel.html]		
Seismic Reevaluations		
[/reactors/operating/ops-experience/japan-	To reanalyze potential seismic effects using present-day information to determine if safety upgrades are needed.	Request for Information
dashboard/seismic-reevaluations.html]		
Flooding Hazard Reevaluations		
[/reactors/operating/ops-experience/japan-	To reanalyze potential flooding effects using present-day information to determine if safety upgrades are needed.	Request for Information
dashboard/flooding.html]		
Seismic and Flooding Walkdowns		
[/reactors/operating/ops-experience/japan-	To inspect existing plant protection features against seismic and flooding events, and correct any degraded conditions	Request for Information
dashboard/walkdowns.html]		

Emergency Preparedness – Staffing and Communications  [/reactors/operating/ops-experience/japan-dashboard/emerg-preparedness.html]	To assess staffing needs and communications capabilities to effectively respond to an event affecting multiple reactors at a site.	Request for Information
Station Blackout Mitigation Strategies  [/reactors/operating/ops-experience/japan-dashboard/emergency-procedures.html#station]	To enhance the capability to maintain plant safety during a prolonged loss of electrical power.	Rulemaking
Onsite Emergency Response Capabilities  [/reactors/operating/ops-experience/japan-dashboard/emergency-procedures.html#onsite]	To strengthen and integrate different types of emergency procedures and capabilities at plants.	Rulemaking
Filtration and Confinement Strategies  [/reactors/operating/ops-experience/japan-dashboard/hardened-vents.html]	To evaluate potential strategies that may further confine or filter radioactive material if core damage occurs	Rulemaking

### Post Fukushima Tier 2, Tier 3 and Non-Tiered Activities

In October 2015, the NRC staff developed an overall approach and specific project plans to resolve the remaining non-Tier 1 Near Term Task Force (NTTF) recommendations, as well as other activities with a direct nexus to Fukushima, by the end of 2016. The staff's evaluation considered existing requirements and voluntary measures, the overall risk posed by the issue, and insights gained during work on the Tier 1 activities, to determine if a recommendation would provide a substantial safety improvement if implemented. For the majority of the remaining recommendations, the staff's evaluation determined that the NRC's existing regulatory framework and requirements are adequate and that no further regulatory action or analysis is needed. Through this effort, all non-Tier 1 recommendations have been resolved. See Resolution of Post Fukushima Tier 2, Tier 3, and Non Tiered Activities [/docs/ML1810/ML18101B396.pdf] for a discussion on how each non-Tier 1 recommendations have been addressed.



## **Mitigation Strategies (ARCHIVED)**

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### **Mitigation Strategies Order**

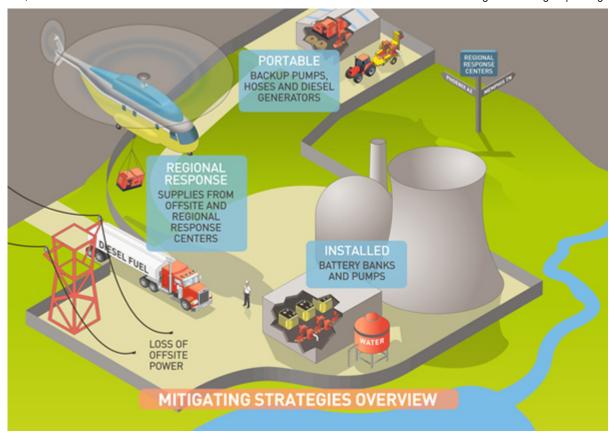


At Fukushima, flooding from the tsunami disabled internal electrical power systems after the earthquake had cut off external power

sources, leaving the plants with only a few hours' worth of battery power. Nuclear power plants need electrical power 24 hours per day, even when the nuclear reactors are shut down, to run equipment that cools the reactor core and spent nuclear fuel. The NRC issued a Mitigation Strategies Order on March 12, 2012, requiring all U.S. nuclear power plants to implement strategies that will allow them to cope without their permanent electrical power sources for an indefinite amount of time These strategies must keep the reactor core and spent fuel cool, as well as protect the thick concrete containment buildings that surround each reactor. The mitigation strategies are expected to use a combination of currently installed equipment (e.g., steam-powered pumps), additional portable equipment that is stored on-site, and equipment that can be flown in or trucked in from support centers.

Process Overview [/docs/ML1506/ML15068A393.pdf]

Mitigating Strategies: Safely Responding to Extreme Events (NUREG/BR-0523) [/reading-rm/doc-collections/nuregs/brochures/br0523/]



#### **Related Documents:**

- NRC Order on Mitigation Strategies (EA-12-049) [/docs/ML1205/ML12054A735.pdf] (March 12, 2012)
- NRC-issued guidance for Mitigation Strategies Order (JLD-ISG-2012-01), Revision 2 [/docs/ML1700/ML17005A188.pdf] (February 8, 2017)
- Industry-issued guidance for Mitigation Strategies Order (NEI 12-06), Revision 4 [/docs/ML1635/ML16354B421.pdf] (December 2016)

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.



# Hardened Vents and Filtration (for Boiling Water Reactors with Mark I and Mark II containment designs) (ARCHIVED)

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The Fukushima accident disabled the plants' ability to cool their reactor cores, causing heat and pressure to build within the concrete

containment buildings that surround the reactors. This buildup eventually damaged the buildings and made it easier for radioactive material to reach the environment. The NRC issued an Order on March 12, 2012, requiring all U.S. nuclear power plants with the Fukushima-style containment design to install a reliable, hardened vent that can remove heat and pressure before potential damage to a reactor core occurs. This not only helps preserve the integrity of the containment building, but can also help delay reactor core damage or melting. After issuing the order, additional NRC evaluations examined the benefits of venting *after* reactor core damage occurs. In June 2013, the NRC modified the Order to ensure those vents will remain functional in the conditions following reactor core damage. The NRC considered revising its regulations through the rulemaking process [/about-nrc/regulatory/rulemaking.html] to include strategies for filtering or otherwise confining radioactive material that gets released as a reactor core is damaged. In August 2015, the Commission directed the staff not to proceed further with the rulemaking.

Process Overview [/docs/ML1525/ML15257A378.pdf]

#### **Related Documents:**

- Original NRC Order on Reliable Hardened Vents (EA-12-050) [/docs/ML1205/ML12054A694.pdf] (March 12, 2012)
- Modified NRC Order for Containment Venting Systems (EA-13-109) supersedes original Order [/docs/ML1314/ML13143A321.pdf] (June 6, 2013)

- NRC-issued guidance for original Reliable Hardened Vents Order (JLD-ISG-2012-02) [/docs/ML1222/ML12229A475.pdf] (August 29, 2012)
- Consideration Of Additional Requirements For Containment Venting Systems (SECY-12-0157) [/reading-rm/doc-collections/commission/secys/2012/2012-0157scy.pdf] (November 26, 2012)
- Commission Decision on Additional Requirements for Containment Venting Systems (SRM-SECY-12-0157) [/reading-rm/doc-collections/commission/srm/2012/2012-0157srm.pdf] (March 19, 2013)
- NRC-issued guidance for modified Reliable Hardened Vents Order (JLD-ISG-2013-02) [/docs/ML1330/ML13304B836.pdf] (November 14, 2013)
- Industry-issued guidance for compliance with Order EA-13-109: BWR Mark I & II Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (NEI Report 13-02) [/docs/ML1331/ML13316A853.pdf] (November 2013)
- NRC-issued guidance for Compliance with Phase 2 of Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened
  Containment Vents Capable of Operation under Severe Accident Conditions (JLD-ISG-2015-01) [/docs/ML1510/ML15104A118.pdf] (April
  2015)
- Industry-issued guidance for compliance with Order EA-13-109: BWR Mark I & II Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (NEI Report 13-02, Rev 1) [/docs/ML1511/ML15113B318.pdf] (April 2015)
- All documents related to the Containment Protection and Release Reduction rulemaking are available in Docket NRC-2013-0075 [http://www.regulations.gov/#!docketDetail;D=NRC-2013-0075] on Regulations.gov
- SECY-15-0085 [/docs/ML1502/ML15022A218.html], Evaluation of the Containment Protection & Release Reduction for Mark I and Mark II Boiling Water Reactors Rulemaking Activities (June 18, 2015)
- Staff Requirements Memorandum [/docs/ML1523/ML15231A471.pdf] for SECY-15-0085 (August 19, 2015)

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.

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# **Spent Fuel Pool Instrumentation Order (ARCHIVED)**

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During the accident at Fukushima, the plants lost their ability to cool the spent fuel pools. Plant operators couldn't determine how

much water was in the pools during the accident, which was a problem. If enough water boiled away or was otherwise lost, the spent fuel rods could emerge from the receding water and potentially release significant amounts of radiation. Weeks later it was learned that the spent fuel was always covered, but the information gap diverted significant attention and extremely limited resources from more important tasks during the accident. The NRC issued an Order on March 12, 2012, requiring all U.S. nuclear power plants to install water level instrumentation in their spent fuel pools. The instrumentation must remotely report at least three distinct water levels: 1) normal level; 2) low level but still enough to shield workers above the pools from radiation; and 3) a level near the top of the spent fuel rods where more water should be added without delay.

Process Overview [/docs/ML1506/ML15068A403.pdf]

#### Related Documents:

- NRC Order on Spent Fuel Pool Instrumentation (EA-12-051) [/docs/ML1205/ML12056A044.pdf] (March 12, 2012)
- NRC-issued guidance for Spent Fuel Pool Instrumentation Order (JLD-ISG-2012-03) [/docs/ML1222/ML12221A339.pdf] (August 29, 2012)
- Industry-issued guidance for Spent Fuel Pool Instrumentation (NEI 12-02) [/docs/ML1224/ML12240A307.pdf] (August 2012)

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.



## Seismic Reevaluations (ARCHIVED)

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Operating reactor sites are using present-day information to reevaluate the earthquake effects—or hazards—that could impact their

site. These newly reevaluated hazards, if worse than what the plant had originally calculated, will be analyzed to determine if plant structures, systems, and/or components need to be updated to protect against the new hazard. The NRC will review each step in the analysis process and take action to require plant changes as necessary.

Process Overview [/docs/ML1506/ML15068A397.pdf]

#### **Related Documents:**

- NRC Request for Information letter related to seismic, flooding and emergency preparedness [/docs/ML1205/ML12053A340.pdf] (March 12, 2012)
- NRC-issued guidance for performing a Seismic Margin Assessment (JLD-ISG-2012-04) [/docs/ML1228/ML12286A029.pdf] (November 16, 2012)
- Industry-issued guidance for screening, prioritization, and implementation details (SPID) (EPRI Report 1025287)
   [/docs/ML1233/ML12333A170.pdf] (November 2012)
- NRC endorsement of guidance for screening, prioritization, and implementation details (SPID) [/docs/ML1231/ML12319A074.pdf] (February 15, 2013)

- Industry-issued guidance on expedited approach for seismic reevaluations (EPRI Draft Report 3002000704) [/docs/ML1310/ML13101A345.html]
   (April 2013)
- NRC endorsement of industry's expedited approach for seismic reevaluations [/docs/ML1310/ML13106A331.pdf] (May 7, 2013)
- Industry letter on Relay Chatter Reviews for Seismic Hazard Screening [/docs/ML1328/ML13281A308.pdf] (October 3, 2013)
- NRC letter to industry with guidance on the content of seismic reevaluation submittals [/docs/ML1403/ML14030A046.pdf] (February 20, 2014)
- Industry-issued letter on seismic risk evaluations for plants in the Central and Eastern United States [/docs/ML1408/ML14083A596.html] (CEUS)
   (March 12, 2014)
- NRC letter regarding Seismic Screening and Prioritization Results for CEUS Licensees [/docs/ML1411/ML14111A147.pdf] (May 9, 2014)
- Probabilistic Seismic Hazard Analysis: Background Information [/docs/ML1414/ML14140A648.pdf] (May 20, 2014)
- NRC memo providing preliminary staff ground motion response spectra for CEUS Licensees [/docs/ML1413/ML14136A126.pdf] (May 21, 2014)
- NRC letter regarding development of Seismic Risk Evaluations [/docs/ML1430/ML14307B707.pdf] (December 10, 2014)
- NRC response letter to licensees related to expedited approach commitment change [/docs/ML1431/ML14310A033.pdf] (December 15, 2014)
- NRC letter regarding Seismic Screening and Prioritization Results for WUS Licensees [/docs/ML1511/ML15113B344.pdf] (May 13, 2015)
- Industry-issued High Frequency Program Application Guidance and Schedule [/docs/ML1522/ML15223A095.html] (July 30, 2015)
- NRC Endorsement of Industry High Frequency Program: Application Guidance [/docs/ML1521/ML15218A569.pdf] (September 17, 2015)
- NRC letter on final determination regarding Seismic Probabilistic Risk Assessments [/docs/ML1519/ML15194A015.pdf] (October 27, 2015)
- NRC letter regarding review of limited high frequency exceedance sites [/docs/ML1536/ML15364A544.pdf] (February 18, 2016)
- Industry-issued Spent Fuel Pool Evaluation Guidance for Low to Moderate Hazard Sites [/docs/ML1605/ML16055A017.pdf] (February 23, 2016)
- NRC endorsement of Spent Fuel Pool Evaluation Guidance for Low to Moderate Hazard Sites [/docs/ML1535/ML15350A158.pdf] (March 17, 2016)

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.



## Flooding Reevaluations (ARCHIVED)

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Operating reactor sites are using present-day information to reevaluate the flooding effects—or hazards—that could impact their site.

These newly reevaluated hazards, if worse than what the plant had originally calculated, will be analyzed to determine if plant structures, systems, and/or components need to be updated to protect against the new hazard. The NRC will review each step in the analysis process and take action to require plant changes as necessary.

- Process Overview [/docs/ML1525/ML15257A389.pdf]
- Flooding Sources and Protection [/reactors/operating/ops-experience/japan-dashboard/flooding-sources.html]

#### **Related Documents:**

- NRC Request for Information letter related to seismic, flooding and emergency preparedness [/docs/ML1205/ML12053A340.pdf] (March 12, 2012)
- NRC prioritization of plants for completing flood hazard reevaluations [/docs/ML1209/ML12097A509.pdf] (May 11, 2012)
- NRC-issued guidance for performing an integrated assessment for external flooding (JLD-ISG-2012-05) [/docs/ML1231/ML12311A214.pdf]
   (November 30, 2012)
- NRC-issued guidance for performing a tsunami, surge, or seiche hazard assessment (JLD-ISG-2012-06) [/docs/ML1231/ML12314A412.pdf]
   (January 4, 2013)
- NRC letter to industry describing when an integrated assessment is expected [/docs/ML1232/ML12326A912.pdf] (December 3, 2012)
- NRC letter to industry with guidance on the content of flooding reevaluation submittals [/docs/ML1304/ML13044A561.pdf] (March 1, 2013)

- NRC-issued guidance for assessing flooding hazards due to dam failure (JLD-ISG-2013-01) [/docs/ML1315/ML13151A153.pdf] (July 29, 2013)
- NRC staff proposed plan to integrate flooding hazards and mitigation strategies (COMSECY-14-0037) [/docs/ML1423/ML14238A616.pdf]
- Commission response to proposed plans (SRM-COMSECY-14-0037) [/docs/ML1508/ML15089A236.pdf]
- NRC Staff Action Plan to implement the proposed plan (COMSECY-15-0019) [/docs/ML1515/ML15153A104.html]
- Commission approval for implementation of NRC Staff Action Plan (SRM-COMSECY-15-0019) [/docs/ML1520/ML15209A682.pdf]
- NEI 16-05, External Flooding Assessment Guidelines, Revision 1 [/docs/ML1616/ML16165A176.html]
- NRC-issued guidance for performing focused evaluations and integrated assessments (JLD-ISG-16-01) [/docs/ML1616/ML16162A301.pdf]

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.



# Plant Walkdowns of Seismic and Flooding Protection Features (ARCHIVED)

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In light of the effects from the extreme earthquake and tsunami of March 11, 2011, on the nuclear power plants at Fukushima, the

NRC concluded U.S. nuclear power plants needed to reaffirm their existing ability to resist quakes and flooding. On March 12, 2012, the NRC asked U.S. nuclear power plants to perform a detailed inspection, or "walkdown," of their currently installed seismic and flooding protection features. The plants had to ensure the features met current requirements, and also identify, correct, and report any degraded conditions. The plants completed their walkdowns by November 2012; NRC inspectors have done follow-up inspections and the agency has issued plant-specific assessments of the licensee's walkdown reports.

#### Related Documents:

Process Overview – Seismic Walkdowns [/docs/ML1511/ML15119A463.pdf]

#### Seismic Walkdowns

NRC Request for Information letter related to seismic, flooding and emergency preparedness [/docs/ML1205/ML12053A340.pdf] (March 12, 2012)

- Industry-issued guidance (with NRC endorsement) for conducting seismic walkdowns (EPRI Report 1025286) [/docs/ML1218/ML12188A031.pdf]
   (June 2012)
- Guidance for NRC inspectors to review the seismic walkdowns (Temporary Instruction 2515/188) [/docs/ML1215/ML12156A052.pdf] (July 6, 2012)

Process Overview - Flooding Walkdowns [/docs/ML1506/ML15068A385.pdf]

#### Flooding Walkdowns

- NRC Request for Information letter related to seismic, flooding and emergency preparedness [/docs/ML1205/ML12053A340.pdf] (March 12, 2012)
- Industry-issued guidance (with NRC endorsement) for conducting flooding walkdowns (NEI 12-07) [/docs/ML1217/ML12173A215.pdf] (May 2012)
- Guidance for NRC inspectors to review the flooding walkdowns (Temporary Instruction 2515/187) [/docs/ML1212/ML12129A108.pdf] (June 27, 2012)

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.



# Emergency Preparedness – Staffing and Communications (ARCHIVED)

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The accident at Fukushima highlighted how complicated emergency response can be if multiple reactors on the same site are

affected at the same time and electrical power is unavailable. In response, the NRC asked U.S. nuclear power plants to assess how many emergency staff they will need to respond to a large accident that may affect multiple reactors at their site, and make changes to their emergency plans as necessary. The NRC also asked the plants to assess and ensure that they can power the communications equipment these staff will need to effectively respond to such an accident. This includes power for radios for response teams, cellular telephones, and satellite telephones.

Process Overview [/docs/ML1506/ML15068A346.pdf]

#### **Related Documents:**

- NRC Request for Information letter related to seismic, flooding and emergency preparedness [/docs/ML1205/ML12053A340.pdf] (March 12, 2012)
- Industry-issued guidance for Emergency Preparedness staffing and communications (NEI 12-01) [/docs/ML1212/ML12125A412.pdf] (May 2012)
- NRC endorsement of NEI 12-01 [/docs/ML1213/ML12131A043.pdf] (May 15, 2012)

For plant-specific documents, visit our Plant-Specific Japan Lessons-Learned Activities [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html] page.



# Mitigation of Beyond-Design-Basis Events Proposed Rule issued for Public Comment (ARCHIVED)

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#### Quick Links:

- How do I comment? [#comment]
- What's included in the rule? [#rule]
- How does this relate to Fukushima Daiichi? [#daiichi]
- What is the NRC's rulemaking process? [/about-nrc/regulatory/rulemaking.html]
- What else is the NRC doing to address the lessons-learned? [/reactors/operating/ops-experience/japan-dashboard.html]



The March 11, 2011, accident at the Fukushima Dai-ichi nuclear power plant in Japan was caused by an earthquake and tsunami that significantly exceeded the design basis of the facility. The tsunami flooded important safety systems at the plant, resulting in an extended loss of electrical power. This loss of electrical power prevented operators from adequately cooling the reactor cores, which led to overheating, core damage, and the release of radioactive materials to the environment.

The NRC took a number of actions following the accident to strengthen the protection of U.S. nuclear plants against events that could exceed a plant's design basis. These included issuing orders and requiring licensees to conduct several evaluations. Now the NRC is moving forward in making permanent some of the lessons we've learned from the Fukushima nuclear accident through the development of a new regulation. The Commission has directed the staff to seek public comments on a proposed rule [/docs/ML1504/ML15049A201.html] for mitigating "beyond design basis events," which can be stronger than a plant's current design. The Commission made a few changes to the proposed rule, which consolidates several of the most safety significant recommendations of the NRC's task force report [/docs/ML1118/ML111861807.pdf] from shortly after the events at Fukushima.

The public can comment on the proposed rule until February 11, 2016. To view the proposed rule or submit comments, go to http://www.regulations.gov [http://www.regulations.gov/] and search for Docket ID NRC-2014-0240. You may also e-mail comments to Rulemaking.Comments@nrc.gov [mailto:Rulemaking.Comments@nrc.gov] . The staff is also planning a public meeting during the comment period, and we'll post the meeting notice on our public website [/pmns/mtg] .

The staff will consider the public's comments on the proposed rule and expects to provide a final rule to the Commission for its consideration in December 2016. The NRC staff expects the rule, if approved, would require plants to fully comply within approximately two years (2019-2020), with the exact date varying from plant to plant. Although that seems far away, much of the safety benefit from the rule is already achieved by two orders that are discussed below. Nearly all U.S. plants will comply with those orders by the end of 2016. Safety is being enhanced well before the final rule.

This proposed rule would apply the requirements of two existing orders, Mitigating Strategies (EA-12-049) [http://public-blog.nrc-gateway.gov/2014/04/02/addressing-the-unpredictable-through-mitigation-strategies/] and Spent Fuel Pool Instrumentation (EA-12-051), [http://public-blog.nrc-gateway.gov/2013/12/26/keeping-proper-track-of-spent-fuel-pool-conditions/] to any operating or future U.S. nuclear power plant. The Mitigating Strategies Order ensures that a plant will have sufficient procedures, strategies, and equipment to indefinitely cool the reactor core and spent fuel, as well as protect the reactor's containment, if it loses power. The Spent Fuel Pool Instrumentation Order requires that the plants ensure they can monitor spent fuel pool water levels. These two orders are already being implemented across the nuclear fleet.

The proposed rule also incorporates many other task force recommendations. It also address the concerns of several Fukushima-related petitions that were submitted by members of the public to change the NRC's regulations. These additional issues include:

• Mitigating Strategies (Recommendation 4) and Spent Fuel Pool Instrumentation (Recommendation 7):

The previously-issued orders would be written into the NRC's permanent rules, so that their requirements would apply to any future reactors.

• Onsite Emergency Response Capabilities (Recommendation 8):

Plants have a variety of response guidelines (FLEX support guidelines, emergency operating procedures, etc.), each of which would be used by licensees depending on the specific situation. The proposed rule would ensure plants can smoothly transition between the different types of response guidelines.

• Emergency Plans to Address prolonged Station Blackout and Multiunit Events (part of Recommendation 9):

The proposed rule clarifies requirements for plants to be able to monitor and assess potential radiation doses from events involving more than one reactor or spent fuel pool at once. Plants are currently implementing this ability through a voluntary initiative. The proposed rule also simplifies technology requirements for the Emergency Response Data System (ERDS), one method for plants to communicate with the NRC during an event. Licensees voluntarily modernized the system (Recommendation 9.4).

Command and Control Structure and Qualification (Recommendation 10.2)

The proposed rule ensures plants' decision-makers are properly qualified and have the proper level of authority and oversight.

• Enhanced Onsite Emergency Response Resources (Recommendation 11.1)

The proposed rule requires plants to have enough onsite resources to address all units at a site during a prolonged station blackout and also that they be able to deliver equipment to the site despite damage to offsite roads, etc., and infrastructure.

 Petitions for Rulemaking from the Natural Resources Defense Council (NRDC) (PRM-50-97, PRM-50-98, PRM-50-101, and PRN-50-102) and Mr. Thomas Popik (PRM-50-96)

Collectively, the NRDC petitions for rulemaking rely solely on Near-Term Task Force Report Recommendations 4, 7, 8, and 9, discussed above. The rulemaking addresses Mr. Popik's petition to the extent that it establishes a means of assuring long-term cooling and unattended water makeup to spent fuel pools. Separate from this rulemaking, the NRC will further consider whether requirements are needed for licensees to address geomagnetic storms, which was another part of Mr. Popik's petition.

Furthermore, the proposed rule incorporates information from the plants' reevaluated earthquake and flooding hazards. Each plant's mitigating strategies, which are used to meet the rule's requirements, must address the reevaluated hazards.

One of the changes the Commission directed the staff to make in the proposed rule involves the treatment of Severe Accident Management Guidelines, or SAMGs, which a plant would use in responding to very unlikely accidents that involve damage to the reactor. The Commission directed that the SAMGs should continue to be implemented voluntarily. Based on the Commission's direction, the NRC will provide periodic oversight of SAMGs through its Reactor Oversight Process. Another Commission change to the proposed rule removes proposed design requirements for new reactor applicants. Instead, the new reactors would be subject to the same performance-based criteria that applies to the currently-licensed fleet.

Process Overview [/docs/ML1525/ML15257A390.pdf]

### **Related Documents:**

- Consolidation of Post-Fukushima Rulemaking Activities (SECY-14-0046 enclosure 6) is available in ADAMS at ML14064A544 [/docs/ML1406/ML14064A544.pdf] (April 17, 2014); Approval of Consolidation (SRM-SECY-0046) at ML14190A347 [/docs/ML1419/ML14190A347.pdf] (July 9, 2014).
- SECY-15-0065 [/docs/ML1504/ML15049A201.html], Proposed Rule: Mitigation of Beyond-Design-Basis Events (April 30, 2015)
- Staff Requirements Memorandum for SECY-15-0065 (August 27, 2015) [/docs/ML1523/ML15239A767.pdf]

Consolidation of Mitigation Strategies Order, SBOMS Rulemaking, and Spent Fuel Pool Makeup Capability (COMSECY-13-0002) [/reading-rm/doc-collections/commission/comm-secy/2013/2013-0002comscy.pdf] (January 25, 2013); Approval of Consolidation (SRM-COMSECY-13-0002) [/reading-rm/doc-collections/commission/comm-secy/2013/2013-0002comsrm.pdf] (March 4, 2013)

Learn more about the NRC's rulemaking process [/about-nrc/regulatory/rulemaking.html] .



# The NRC's Regulatory Framework (Recommendation 1) (ARCHIVED)

Note: This is an archived web page. For the most up-to-date information, see the new Post-Fukushima Safety Enhancements [/reactors/operating/ops-experience/post-fukushima-safety-enhancements.html] page.



The NRC requires U.S. nuclear power plants to be designed and built to safely withstand a set of unlikely but harmful events such as

equipment failure, pipe breaks, and severe weather; these are called design-basis requirements. The nuclear power plants at Fukushima experienced flooding and seismic events that went beyond the design-basis levels set by the Japanese regulator. The NRC's Near Term Task Force, in their examination of the Fukushima event, recognized that the NRC's design-basis requirements needed to be enhanced to deal with events that are very unlikely but beyond the current design-basis requirements. As a result, the task force recommended that the NRC establish a logical, systematic, and coherent regulatory framework that appropriately balances multiple layers of protection and risk considerations to deal with events beyond the current NRC design basis.

In December 2013, the NRC staff proposed three improvement activities in response to Recommendation 1. The Commission disapproved proceeding with two of the proposed improvement activities, but directed the staff to re-evaluate those activities within the context of the Risk Management Regulatory Framework initiative. No further action will be taken under the Japan Lessons Learned implementation effort.

#### **Related Documents:**

All related documents are available in Docket NRC-2012-0173 [https://www.regulations.gov/#!docketDetail;D=NRC-2012-0173]
 Regulations.gov

on

- U.S. Nuclear Regulatory Commission Staff Recommendation for the Disposition of Recommendation 1 of the Near-Term Task Force Report (SECY-13-0132) [/reading-rm/doc-collections/commission/secys/2013/2013-0132scy.pdf] (December 6, 2013)
- Commission Decision on Staff Recommendation for the Disposition of Recommendation 1 of the Near-Term Task Force Report (SRM-SECY-13-0132) [/reading-rm/doc-collections/commission/srm/2013/2013-0132srm.pdf] (May 19, 2014)



## Reference Library (ARCHIVED)

Note: This is an archived web page. For the most up-to-date information, see the new Post-Fukushima Safety Enhancements [/reactors/operating/ops-experience/post-fukushima-safety-enhancements.html] page.



### **Additional Information and Resources**

For additional information and resources, see the following pages:

- Timeline [/reactors/operating/ops-experience/japan/japan-timeline.html] and Event Backgrounder [/reading-rm/doc-collections/fact-sheets/japan-events.html]
- Plant-Specific Japan Lessons-Learned Activities
  - By Plants [/reactors/operating/ops-experience/japan-dashboard/japan-plants.html]
  - By Orders and Request for Information [/reactors/operating/ops-experience/japan-dashboard/priorities.html]
- Japan Task Force Report [/docs/ML1118/ML111861807.pdf]
- Japan Lessons Learned Division [/reactors/operating/ops-experience/japan/japan-lessons-learned.html]
- Public Meetings/Presentations [/reactors/operating/ops-experience/japan/japan-meeting-briefing.html]
- Actions in Response to the Japan Nuclear Accident:
  - Commission Briefings [/reactors/operating/ops-experience/japan/japan-commission-briefing.html]
  - Additional and International Reports [/reactors/operating/ops-experience/japan/japan-international-reports.html]
- TEPCO Status Reports [http://www.tepco.co.jp/en/press/corp-com/release/index-e.html]

- External Sources of Information About the Japan Nuclear Accident at Fukushima Dai-ichi [/reactors/operating/ops-experience/japan/japan-other-sources.html]
- FOIAs and Operations Center Transcripts [/reading-rm/foia/japan-foia-info.html]
- Related Blog Postings [http://public-blog.nrc-gateway.gov/?s=Japan]



# Implementing Lessons Learned from Fukushima: Public Meetings/Presentations

Subscribe To Page Updates [Javascript:window.Open('Https://Public.Govdelivery.Com/Accounts/USNRC/Subscriber/Topics?Qsp=USNRC\_3','Popup','

The U.S. Nuclear Regulatory Commission (NRC) has a long-standing practice of conducting its regulatory responsibilities in an open manner, and keeping the public informed of the agency's regulatory, licensing, and oversight activities. For that reason, the NRC is committed to informing the public about its Lessons Learned from Fukushima [/reactors/operating/ops-experience/japan-dashboard.html] . For general information about the available opportunities for public involvement in NRC activities, see Public Meetings and Involvement [/public-involve.html] , Hearing Opportunities and License Applications [/about-nrc/regulatory/adjudicatory/hearing-license-applications.html] , and NUREG/BR-0215 [/reading-rm/doc-collections/nuregs/brochures/br0215/] , "Public Involvement in the Regulatory Process." For more specific information about public meetings and presentations that the NRC staff has conducted to discuss topics related to the Japan nuclear accident, see the following chronological listings on this page:

To see the list of upcoming public meetings, please see the Public Meeting Schedule [/pmns/mtg]

**2000s**: | 2015 [/reactors/operating/ops-experience/japan/japan-meeting-briefing.html#2015] | 2014 [/reactors/operating/ops-experience/japan/japan-meeting-briefing.html#2014] | 2013 [/reactors/operating/ops-experience/japan/japan-meeting-briefing.html#2013] | 2012 [/reactors/operating/ops-experience/japan/japan-meeting-briefing.html#2011]

This page includes links to files in non-HTML format. See Plugins, Viewers, and Other Tools [/site-help/plug-ins.html] for more information.

## **2015 Public Meetings and Presentations**

Date	Subject
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06/17/2015 [/docs/ML1516/ML15168A186.pdf]	The purpose of this meeting is to discuss NEI's proposed Appendix G to NEI 12-06 as guidance for implementation of reevaluated flooding hazard information with mitigating strategies related to the Near-Term Task Force Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011.
06/15/2015 [/docs/ML1516/ML15166A167.pdf]	The purpose of this meeting is to continue discussions between the NRC and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons-learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan.
06/09/2015 [/docs/ML1516/ML15160A391.pdf]	The purpose of the meeting is to support the ongoing staff review of the seismic hazard reevaluation report (Near-Term Task Force Recommendation 2.1 - Seismic) for Palo Verde Nuclear Generating Station.
06/04/2015 [/docs/ML1515/ML15155A759.pdf]	The purpose of the meeting is to support the ongoing staff review of the seismic hazard reevaluation report (Near-Term Task Force Recommendation 2.1 - Seismic) for Columbia Generating Station.
05/21/2015 [/docs/ML1514/ML15141A129.pdf]	The purpose of this meeting is to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011.
05/21/2015 [/docs/ML1513/ML15139A339.pdf]	The purpose of this meeting is to discuss activities related to implementation of Japan Lessons-learned Near-Term Task Force Recommendation 2.1, Seismic.
04/28/2015 [/docs/ML1511/ML15118A021.pdf]	The purpose of the meeting is to support the ongoing staff review of the seismic hazard reevaluations report (Near-Term Task Force Recommendation 2.1 – Seismic) for Diablo Canyon Power Plant, Units 1 and 2.
03/31/2015 [/docs/ML1506/ML15065A209.pdf]	The purpose of this meeting is to continue discussions between the NRC and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons-learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan.
03/31/2015 [/docs/ML1507/ML15079A298.pdf]	The purpose of this meeting is to discuss proposed revisions to the high frequency evaluation approach associated with implementation of Japan Lessons-learned NTTF Recommendation 2.1, Seismic.
03/30/2015 [/docs/ML1508/ML15089A025.pdf]	The purpose of this meeting is to discuss activities related to implementation of Japan Lessons-learned NTTF Recommendation 2.1, Seismic.
03/24/2015 [/docs/ML1508/ML15082A187.pdf]	The purpose of this meeting is to discuss Local Intense Precipitation white paper for Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML1118/ML111861807.pdf] . Specifically NTTF Recommendation 2.1, flooding.
03/16/2015 [/docs/ML1506/ML15062A588.pdf]	The purpose of this webinar meeting is to continue discussions on activities directed by the Commission in a staff requirements memorandum (SRM) dated March 19, 2013, SRM-SECY-12-0157, "Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments." [/docs/ML1307/ML13078A017.pdf] These discussions are related to the NRC's Implementation of Order EA-13-109, which addressed Recommendation 5.1 of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML1118/ML111861807.pdf]

03/13/2015 [/docs/ML1507/ML15071A299.pdf]	The purpose of this meeting is to discuss the Nuclear Regulatory Commission Staff's preliminary assessment of the applicability of Fukushima lessons learned to facilities other than operating power reactors. The facilities and licensees included in the assessment are: spent fuel storage installations, fuel facilities, irradiators, low-level waste disposal facilities, radioactive materials users, and decommissioned power reactors and complex material facilities and research and test reactors.  Staff's Preliminary Assessment [/docs/ML1504/ML15042A367.pdf] Handouts [/docs/ML1507/ML15070A530.pdf] Audio Files (The agenda found in the meeting notice provides more information regarding the topics covered) Sessions covering spent fuel storage and transportation, decommissioned reactors, complex material facilities, and fuel cycle facilities (Part 1 [/reactors/operating/ops-experience/japan/03-13-15-public-meeting-part1.mp3]) Sessions covering material users, irradiators, low level waste facilities, uranium recovery facilities, uranium mill tailings and research and test reactors (Part 2 [/reactors/operating/ops-experience/japan/03-13-15-public-meeting-part2.mp3]) Afternoon open question and comment session that was scheduled from 1:00 pm to 3:00 pm (Part 3 [/reactors/operating/ops-experience/japan/03-13-15-public-meeting-part3.mp3])
02/11/2015 [/docs/ML1503/ML15030A150.pdf]	The purpose of this meeting is to discuss seismic hazard reevaluations associated with implementation of Japan Lessons-learned NTTF Recommendation 2.1, Seismic
01/28/2015 [/docs/ML1502/ML15028A288.pdf]	Follow-up meeting to discuss additional revisions to guidance document NEI 12-06 related to licensees' mitigating strategies in response to Order EA-12-049.

## **2014 Public Meetings and Presentations**

Date	Subject
12/04/2014 [/docs/ML1433/ML14337A781.pdf]	The purpose of this meeting is to continue discussions between the NRC and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons-learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan.
12/04/2014 [/docs/ML1432/ML14328A297.pdf]	Discuss with NEI regarding the upcoming WUS Seismic Hazard Submittals
12/03/2014 [/docs/ML1432/ML14328A057.pdf]	Duke Energy will provide a status of its response to the staff's request for additional information related to the Oconee flood hazard reevaluation report [/docs/ML1425/ML14258B222.pdf]

11/20/2014 [/docs/ML1431/ML14311A050.pdf]	The purpose of this webinar meeting is to continue discussions on Implementation of Order EA-13-109, "Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions" [/docs/ML1313/ML13130A067.pdf] , which addressed Recommendation 5.1 of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML118/ML111861807.pdf] . The meeting will focus on issues related to implementation of Order EA-13-109 including Phase 2 compliance development and deliverable milestones. The staff will also provide their comments on proposed changes to the guidance document NEI 13-02, "Industry Guidance for Compliance with Order EA-13-109" [/docs/ML1429/ML14294A789.pdf] .
11/19/2014 [/docs/ML1432/ML14323A359.pdf]	To discuss the NEI proposed revision to guidance document NEI 12-06 related to licensees' mitigating strategies in response to Order EA-12-049.
10/31/2014 [/docs/ML1428/ML14283A496.pdf]	The purpose of this webinar meeting is to continue discussions on activities directed by the Commission in a staff requirements' memorandum (SRM) dated March 19, 2013, SRM-SECY-12-0157, "Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II containments" [/docs/ML1307/ML13078A017.pdf] . These discussions are related to the NRC's Implementation of Order EA-13-109.
10/27/2014 [/docs/ML1430/ML14300A225.pdf]	The purpose of this meeting is to discuss seismic hazard reevaluations associated with implementation of Japan Lessons-learned NTTF Recommendation 2.1, Seismic
10/15/2014 [/docs/ML1427/ML14279A061.pdf]	The purpose of this meeting is to discuss Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML1118/ML111861807.pdf] , specifically NTTF Recommendation 2.1, Flooding.
10/07/2014 [/public-involve/public-meetings/webcast-live.html]	Briefing on the Status of Near-Term Task Force Recommendation 2 for Seismic Hazard Reevaluations
09/25/2014 [/docs/ML1426/ML14267A490.pdf]	The purpose of this webinar meeting is to continue discussions on activities directed by the Commission in a staff requirements' memorandum (SRM) dated March 19, 2013, SRM-SECY-12-0157, "Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II containments" [/docs/ML1307/ML13078A017.pdf] . These discussions are related to the NRC's Implementation of Order EA-13-109
09/23/2014 [/docs/ML1425/ML14252A090.pdf]	The purpose of this meeting is to continue discussions between the NRC and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons-learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan.
09/18/2014 [/docs/ML1425/ML14258A123.pdf]	The purpose of this meeting is to discuss phase 2 decision criteria for the flooding hazard reevaluations of Recommendation 2.1, and the relationship to mitigating strategies related to the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML1118/ML111861807.pdf]
09/11/2014 [/docs/ML1424/ML14240A078.pdf]	The purpose of this webinar meeting is to continue discussions on activities directed by the Commission in a staff requirements' memorandum (SRM) dated March 19, 2013, SRM-SECY-12-0157, "Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II containments" [/docs/ML1307/ML13078A017.pdf] . These discussions are related to the NRC's Implementation of Order EA-13-109, which addressed Recommendation 5.1 of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML1118/ML111861807.pdf] .

08/26/2014 [/docs/ML1421/ML14211A075.pdf]	Discuss preliminary proposed rule language related to Near-Term Task Force Recommendations 4,7,8, and elements of 9,10, and 11 available at www.regulations.gov, docket ID NRC-2011-0299 or NRC-2012-0031. NOTE: This activity has also been referred to as the Consolidated Rulemaking.	
08/21/2014 [/docs/ML1421/ML14219A069.pdf]	The purpose of this meeting is to discuss the filtering strategies rulemaking.	
08/21/2014 [/docs/ML1421/ML14219A587.pdf]	The purpose of this meeting is to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 [/docs/ML1118/ML111861807.pdf]	
08/13/2014 [/docs/ML1421/ML14212A791.pdf]	The purpose of the meeting is to discuss the Expedited Seismic Evaluation Process (ESEP) submittal template associated with Near-Term Task Force Recommendation 2.1 "Seismic"	
08/07/2014 [/docs/ML1420/ML14204A069.pdf]	The purpose of this webinar meeting is to continue discussions on activities directed by the Commission in a staff requirements memorandum dated March 19, 2013, regarding severe accident capable containment venting systems. These discussions are related to NRC licensee's implementation of Order EA-13-109, which addressed Recommendation 5.1 of the NRC's Near-Term Task Force report, entitled "Enhancing Reactor Safety in the 21st Century," issued July 12, 2011 [/docs/ML1118/ML111861807.pdf] .	
07/23/2014 [/docs/ML1420/ML14202A341.pdf]	The purpose of this meeting is to discuss implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force Recommendations for Enhancing Reactor Safety in the 21st Century Report, Issued July 12, 2011 [/docs/ML1118/ML111861807.pdf]	
07/14/2014 [/docs/ML1419/ML14191A002.pdf]	To discuss the U.S. Army Corps of Engineers flooding hazard reevaluation for the Susquehanna River associated with Peach Bottom Atomic Power Station Units 2 and 3.	
07/09/2014 [/docs/ML1418/ML14182A182.pdf]	The purpose of the meeting is to discuss issues resulting from the staff's screening and prioritization for the Donald C. Cook Nuclear Plant, Units 1 and 2 related to the seismic risk evaluations (NTTF Recommendation 2.1 – Seismic).	
07/02/2014 [/docs/ML1416/ML14163A531.pdf]	Discuss NRC Temporary Instruction 2515/191, "Inspection of the Licensee's Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communications/Staffing Plans"	
07/01/2014 [/docs/ML1417/ML14171A354.pdf]	Discuss issues resulting from the staff's screening and prioritization of several Tennessee Valley Authority facilities for seismic risk evaluations related to Recommendation 2.1 of the Near-Term	
06/30/2014 [/docs/ML1416/ML14169A430.pdf]	Discuss issues resulting from the staff's screening and prioritization of several Duke Progress Energy facilities for seismic risk evaluations related to Recommendation 2.1 of the Near-Term	
06/26/2014 [/docs/ML1417/ML14171A181.pdf]	Discuss issues resulting from the staff's screening and prioritization of several Southern Nuclear Operating Company facilities for seismic risk evaluations related to Recommendation 2.1 of the Near-Term	
06/25/2014 [/docs/ML1416/ML14168A027.pdf]	Discuss issues resulting from the staff's screening and prioritization of the Surry Power Station for a seismic risk evaluation related to Recommendation 2.1 of the Near-Term Task Force	

06/19/2014 [/docs/ML1416/ML14161A617.pdf]	NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan
06/19/2014 [/docs/ML1417/ML14170A296.pdf]	Discuss issues resulting from the staff's screening and prioritization of several Entergy facilities for seismic risk evaluations related to Recommendation 2.1 of the Near-Term
06/18/2014 - 06/19/2014 [/docs/ML1415/ML14155A009.pdf]	Discuss Filtering Strategies of Boiling Water Reactors with Mark I and Mark II Containments Rulemaking and Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (Order EA-13-109)
06/17/2014 [/docs/ML1416/ML14167A548.pdf]	Discuss issues resulting from the staff's screening and prioritization of several Exelon facilities for seismic risk evaluations related to Recommendation 2.1 of the Near-Term Task Force
06/12/2014 [/docs/ML1416/ML14163A126.pdf]	Discuss issues resulting from the staff's screening and prioritization of the Salem Nuclear Generating Station for a seismic risk evaluation related to Recommendation 2.1 of the Near-Term Task Force
06/12/2014 [/docs/ML1415/ML14153A094.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force
06/06/2014 [/docs/ML1414/ML14148A490.pdf]	Discuss the flooding hazard reevaluation reports submitted by First Energy Nuclear Operating Company for Beaver Valley Power Station, Units 1 and 2, by letter dated March 11, 2014 and for Davis-Besse Unit 1, by letter dated March 11, 2014
05/22/2014 [/docs/ML1414/ML14142A051.pdf]	Discuss the Grand Gulf Nuclear Station, Unit 1, response to the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force
05/22/2014 [/docs/ML1413/ML14132A335.pdf]	Discuss the flooding hazard reevaluation extension requests submitted by Omaha Public Power District and Nebraska Public Power District for Fort Calhoun Station, Unit 1, and Cooper Nuclear Station on February 26, 2014
05/22/2014 [/docs/ML1412/ML14120A306.pdf]	Discuss the flooding hazard reevaluation extension request submitted by Entergy Operations, Inc., for Arkansas Nuclear One, Units 1 and 2, on March 12, 2014
05/16/2014 [/docs/ML1412/ML14126A100.pdf]	Discuss the flooding hazard reevaluation extension request submitted by Southern Nuclear Company, associated with the Joseph M. Farley plant, dated February 28, 2014
05/16/2014 [/docs/ML1412/ML14121A446.pdf]	Discuss the flooding hazard reevaluation extension requests submitted by Northern States Power Company - Minnesota, doing business as Xcel Energy, Inc., associated with the Monticello Nuclear Generating Plant and Prairie Island Nuclear Generating Plant
05/15/2014 [/docs/ML1412/ML14126A832.pdf]	Discuss implementation of the seismic hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force
05/15/2014 [/docs/ML1411/ML14112A249.pdf]	NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan
05/14/2014 [/docs/ML1412/ML14120A331.pdf]	Discuss the flooding hazard reevaluation extension request submitted by Arizona Public Service Company for Palo Verde Nuclear Generating Station, Units 1, 2, and 3, dated March 10, 2014, as supplemented April 24, 2014

Discuss the roles of the Strategic Alliance for Flex Emergency Response (SAFER) and the Regional Response Centers in the licensee mitigating strategies response to Order EA-12-049 and the program description that will be submitted to the NRC staff for review	
Discuss the flooding hazard reevaluation extension request submitted by Exelon for Peach Bottom Atomic Power Station, Units 2 and 3, dated March 12, 2014	
Discuss the flooding hazard reevaluation extension requests submitted by Omaha Public Power District (OPPD) and Nebraska Public Power District (NPPD) for Fort Calhoun Station, Unit 1 (FCS), and Cooper Nuclear Station (CNS) on February 26, 2014	
Discuss Implementation of Near-Term Task Force Recommendation 2.1, Flooding Hazard Reevaluations, Related to the Fukushima Dai-ichi Nuclear Power Plant Accident	
Webinar to Discuss Activities Associated with Implementation of Near-Term Task Force Recommendation 5.1 Related to Containment Venting Systems	
NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan	
Discuss Preliminary Proposed Rule Language Related to Near-Term Task Force Recommendations 4, 8, and 9	
Discuss Activities Associated with Implementation of Near-Term Task Force Recommendation 5.1 Related to Containment Venting Systems	
Discuss Guidance Development for Periodic Training and Drills, Emergency Preparedness Equipment and Facilities Related to Issues Associated with Near-Term Task Force Recommendations 4, 8, and 9.3	
Webinar to Discuss Activities Associated with Implementation of Near-Term Task Force Recommendation 5.1 Related to Containment Venting Systems	
NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan	
Discuss industry responses to the interim staff evaluations on Spent Fuel Pool Instrumentation	
Discuss implementation of the seismic hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force	
Discuss activities associated with the implementation of near-term task force Recommendation 5.1, related to containment venting systems with a focus on interim staff guidance JLD-ISG-2013-02 and draft template for use by licensees in responding to Order EA-13-109	
Discuss implementation of the seismic hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force	

01/15/2014 [/docs/ML1335/ML13357A112.pdf]	Discuss activities associated with the implementation of near-term task force Recommendation 5.1, related to containment venting systems with a focus on interim staff guidance JLD-ISG-2013-02 and draft template for use by licensees in responding to Order EA-13-109
01/14/2014 [/docs/ML1334/ML13347A906.pdf]	NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan
01/14/2014 Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Tas [/docs/ML1335/ML13357A176.pdf]	

#### **2013 Public Meetings and Presentations**

Date	Subject	
12/19/2013 [/docs/ML1333/ML13330A520.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force	
12/12/2013 [/docs/ML1332/ML13324B146.pdf]	Discuss the regulatory basis and proposed rule extension, core damage event trees and containment event trees, and the assumptions and status of the MELCOR and MAAP analyses associated with filtering strategies rulemaking	
12/05/2013 [/docs/ML1332/ML13324A116.pdf]	Discuss activities associated with the implementation of near-term task force Recommendation 5.1, related to containment venting systems with a focus on interim staff guidance JLD-ISG-2013-02 and draft template for use by licensees in responding to Order EA-13-109	
11/26/2013 [/docs/ML1331/ML13319A656.pdf]	Discuss industry responses to the interim staff evaluations on Spent Fuel Pool Instrumentation	
11/19/2013 [/docs/ML1331/ML13317B123.pdf]	Discuss the preliminary proposed rule for Onsite Emergency Response Capabilities in response to Recommendation 8 of the Near-Term Task Force and the Draft Nuclear Energy Industry (NEI)-developed guidance for the implementation of multi-unit dose assessment capabilities, periodic training and drills/exercise, and equipment and facilities to respond to respond to a multi-unit event with a loss of all alternating circuit (ac) power	
11/14/2013 [/docs/ML1331/ML13310A304.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force	
11/07/2013 [/docs/ML1329/ML13296A146.pdf]	NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan	
11/06/2013 [/docs/ML1327/ML13277A561.pdf]	Discuss the implementation of the seismic hazard Discuss the proprietary Emergency Procedures Guidelines/Severe Accident Guidelines (EPG/SAG), Revision 3 with industry to assist in the NRC's technical analysis for the filtering strategies rulemaking	

11/05/2013 [/docs/ML1330/ML13303A950.pdf]	Discuss the implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force	
10/30/2013 [/docs/ML1329/ML13298A279.pdf]	Continue discussions on the generic questions requested as part of Recommendation 2.3 (seismic) of the Near- Term Task Force	
10/30/2013 [/docs/ML1329/ML13298A119.pdf]	Discuss implementation of the flooding protection walkdowns performed as part of Recommendation 2.3 of the Near-Term Task Force	
10/24/2013 [/docs/ML1327/ML13275A319.pdf]	Discuss implementation of the flooding hazard reevaluations performed as part of Recommendation 2.1 of the Near-Term Task Force	
09/23/2013 [/docs/ML1325/ML13254A317.pdf]	Continue discussions on selected activities directed by the Commission in Staff Requirements memorandum dated March 19, 2013, regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force	
09/19/2013 [/docs/ML1324/ML13248A022.pdf]	NRC and Nuclear Energy Institute (NEI) Joint Steering Committee meeting on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan	
09/19/2013 [/docs/ML1325/ML13252A264.pdf]	Filtering strategies rulemaking	
09/18/2013 [/docs/ML1324/ML13242A235.pdf]	Provide external stakeholders with information on the NRC staffs' activities regarding whether regulatory action is needed to require expedited transfer of spent fuel to dry cask storage and the use of the spent fuel pool study and other sources of information in the staff's assessments	
09/16/2013 [/docs/ML1324/ML13247A789.pdf]	Continued discussions on seismic hazard submittals associated with Recommendation 2.1 of the Near-Term Task Force	
09/12/2013 [/docs/ML1324/ML13247A350.pdf]	Discuss the status of the Seismic Walkdown Report reviews for implementation of Recommendation 2.3 of the Near-Term Task Force	
09/12/2013 [/docs/ML1324/ML13240A382.pdf]	Follow-up discussions related to generic concerns associated with integrated plan submittals for Order EA-12-049, Mitigation Strategies	
09/05/2013 [/docs/ML1324/ML13242A306.pdf]	Discuss with stakeholders the use of manual calculations in order to perform multiunit dose assessments	
09/05/2013 [/docs/ML1324/ML13242A268.pdf]	Discuss with stakeholders the reliance of the anticipated release date of NRC's Radiological Assessment System for Consequence Analysis (RASCAL) software in order to perform multiunit dose assessments	
09/05/2013 [/docs/ML1322/ML13226A128.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force	
08/29/2013 [/docs/ML1320/ML13204A041.pdf]	Discuss implementation of Recommendation 2.1 of the Near-Term Task Force	

08/22/2013 [/docs/ML1322/ML13226A229.pdf]	Continue discussions on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japans
08/22/2013 [/docs/ML1322/ML13224A284.pdf]	Provide external stakeholders with information on the NRC staffs' analysis regarding whether regulatory action is needed to require expedited transfer of spent fuel to dry cask storage
08/22/2013 [/docs/ML1323/ML13231A087.html]	Provide external stakeholders with information on the NRC staffs' analysis regarding whether regulatory action is needed to require expedited transfer of spent fuel to dry cask storage
08/21/2013 [/docs/ML1322/ML13220A339.pdf]	Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force
08/15/2013 [/docs/ML1320/ML13204A038.pdf]	Discuss status of the ongoing Seismic Walkdown Report reviews for implementation of Recommendation 2.3 of the Near-Term Task Force
08/14/2013 [/docs/ML1321/ML13210A132.pdf]	Discuss the filtering strategies rulemaking
08/12/2013 [/docs/ML1321/ML13210A405.pdf]	Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force
08/08/2013 [/docs/ML1319/ML13190A456.pdf]	Discuss the multiunit dose assessment submittals received by the NRC and the expected content of multiunit dose assessment implementation guidance, and periodic training and drills/exercises and emergency preparedness equipment and facilities to respond to a multiunit event with a loss of all AC power
08/06/2013 [/docs/ML1316/ML13164A194.pdf]	Discuss the Electric Power Research Institute (EPRI) ground motion model (GMM) update project related to implementation of the seismic hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force
08/01/2013 [/docs/ML1320/ML13204A020.pdf]	Discuss with industry the delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force
07/23/2013 [/docs/ML1319/ML13197A164.pdf]	Discuss the battery cycle generic concern associated with integrated plan submittals for Japan Lessons-Learned Directorate Order EA-12-049, Mitigation Strategies
07/22/2013 [/docs/ML1319/ML13197A100.pdf]	Discuss generic concerns associated with integrated plan submittals for Japan Lessons-Learned Project Directorate Order EA-12-049, Mitigation Strategies
07/22/2013 [/docs/ML1319/ML13197A041.pdf]	Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force
07/18/2013 [/docs/ML1318/ML13184A017.pdf]	Discuss generic concerns associated with integrated plan submittals for Japan Lessons-Learned Project Directorate Order EA-12-049, Mitigation Strategies
07/16/2013 [/docs/ML1317/ML13171A343.pdf]	Continue discussions between the NRC and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan
07/11/2013 [/docs/ML1317/ML13175A112.pdf]	Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force

Continue discussions on selected activities regarding severe accident capable containment venting systems [vidocs/ML1317/ML13175A137.pdf] O7/01/2013 [vidocs/ML1316/ML13169A368.pdf] O6/26/2013 [vidocs/ML13166ML13168A304.pdf] Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force O6/20/2013 [vidocs/ML1315/ML13166A101.pdf] Discussions to clarify any questions on the Spent Fuel Pool instrumentation Request for Additional Information O6/3/2013 [vidocs/ML1312/ML13128A039.pdf] Discuss implementation of the flooding hazard reevaluations of Recommendation 5.1 of the Near-Term Task Force O6/06/2013 [vidocs/ML1312/ML13136A288.pdf] Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Discuss implementation of Recommendation 2.1 of the Near-Term Task Force Discuss Revenue and Discuss Process of Recommendation 2.1 of the Near-Term Task Discuss Revenue and Discuss Process of Recommendation 2.2 of the Near-Term Task Force Discuss Revenue Additional Discuss Process of Recommendation 2.3 of the Near-Term Task Force Discuss Revenue Additional Discuss Process of Process Process Process of Process Pr	
[/docs/ML1316/ML3169A368.pdf] Force  Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Forces  O6/20/2013 [/docs/ML1315/ML13156A101.pdf] Discussions to clarify any questions on the Spent Fuel Pool instrumentation Request for Additional Information  O6/13/2013 Begin discussions following expected issuance of an Order in June 2013 regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force  O6/06/2013 [/docs/ML1312/ML13128A039.pdf] Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  O6/05/2013 [/docs/ML1313/ML13136A288.pdf] Discuss the update to the ground motion model (GMM) project related to implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  O5/13/2013 [/docs/ML1312/ML13128A031.pdf] Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  O5/13/2013 [/docs/ML1312/ML13121A314.pdf] Discuss with external stakeholders the NRC staffs draft regulatory basis for the Station Blackout Mittigation Strategies Rulemaking while the public comment period is open  O5/07/2013 [/docs/ML1311/ML13119A542.pdf] Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWRGO) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  O6/02/2013 [/docs/ML1310/ML13109A238.pdf]  O4/18/2013 [/docs/ML1308/ML13088A149.pdf]  Discuss generic issues associated with the review of integrated plan submittals associated	Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force
related to implementation of Recommendation 5.1 of the Near-Term Task Forces	
Discussions to claim any questions on the Spent Fuel Pool Institutientation Request for Additional Information	Continue discussions on selected activities regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Forces
containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force  06/06/2013 [/docs/ML1312/ML13128A039.pdf]  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss the update to the ground motion model (GMM) project related to implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss the update to the ground motion model (GMM) project related to implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss with external stakeholders the NRC staffs draft regulatory basis for the Station Blackout Mitigation Strategies Rulemaking while the public comment period is open  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with June 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task For	Discussions to clarify any questions on the Spent Fuel Pool instrumentation Request for Additional Information
[/docs/ML1312/ML13128A039.pdf] Force  Discuss the update to the ground motion model (GMM) project related to implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss with external stakeholders the NRC staff's draft regulatory basis for the Station Blackout Mitigation Strategies Rulemaking while the public comment period is open  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA-12-04, as well an NEI developed template associated with the next 6-month status update  Discuss PRC contents as the public comment project related to the implementation of Recommendation 2.2 of the Near-Term Task Force  Discuss PRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report 12, 2013 meeting with the Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives on	Begin discussions following expected issuance of an Order in June 2013 regarding severe accident capable containment venting systems related to implementation of Recommendation 5.1 of the Near-Term Task Force
[/docs/ML1313/ML13136A288.pdf] reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Discuss with external stakeholders the NRC staff's draft regulatory basis for the Station Blackout Mitigation Strategies Rulemaking while the public comment period is open  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  D5/02/2013 [/docs/ML1310/ML13107B220.pdf]  O4/125/2013 [/docs/ML1310/ML13109A238.pdf]  Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA-12-049, as well an NEI developed template associated with the next 6-month status update  O4/12/2013  Discuss ML1308/ML130	
[/docs/ML1312/ML13128A031.pdf] Force  Discuss with external stakeholders the NRC staff's draft regulatory basis for the Station Blackout Mitigation Strategies Rulemaking while the public comment period is open  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Discuss eneric issues associated with the review of integrated plan submittals associated with JLD Order EA- [/docs/ML1308/ML1308/ML13088A149.pdf]  Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA- [/docs/ML1308/ML130	Discuss the update to the ground motion model (GMM) project related to implementation of the seismic hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force
[/docs/ML1312/ML13121A314.pdf]  Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  The purpose of this meeting is to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA- [/docs/ML1308/ML1308/ML13088A149.pdf]  Continue further discussions following March 29, 2013 meeting with the Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to the implementation	
submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force  O5/06/2013 [/docs/ML1311/ML13119A067.pdf]  Continue further discussions following April 12, 2013, meeting with the Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  O5/02/2013 [/docs/ML1310/ML13107B220.pdf]  The purpose of this meeting is to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force  Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  O4/18/2013 [/docs/ML1308/ML13088A149.pdf]  Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA- 12-049, as well an NEI developed template associated with the next 6-month status update  Continue further discussions following March 29, 2013 meeting with the Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to the implementation	
Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROĞ) representatives on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force    O5/02/2013	Discuss NRC concerns regarding delayed walkdown items identified in the November 2013 Walkdown Report submittals associated with implementation of Recommendation 2.3 of the Near-Term Task Force
[/docs/ML1310/ML13107B220.pdf] Recommendation 2.1 of the Near-Term Task Force  04/25/2013 [/docs/ML1310/ML13109A238.pdf] Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force  04/18/2013 [/docs/ML1308/ML13088A149.pdf] Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA- 12-049, as well an NEI developed template associated with the next 6-month status update  04/12/2013 [/docs/ML1308/ML13087AE70 pdf] Continue further discussions following March 29, 2013 meeting with the Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to the implementation	Power Research Institute (EPRI), and Boiling Water Reactor Owners Group (BWROG) representatives on
[/docs/ML1310/ML13109A238.pdf] Recommendation 5.1 of the Near-Term Task Force  04/18/2013 Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA- 12-049, as well an NEI developed template associated with the next 6-month status update  04/12/2013 Continue further discussions following March 29, 2013 meeting with the Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to the implementation	The purpose of this meeting is to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force
[/docs/ML1308/ML13088A149.pdf] 12-049, as well an NEI developed template associated with the next 6-month status update  04/12/2013	 Continue further discussions following the April 12, 2013 meeting on activities related to implementation of Recommendation 5.1 of the Near-Term Task Force
and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to the implementation	Discuss generic issues associated with the review of integrated plan submittals associated with JLD Order EA- 12-049, as well an NEI developed template associated with the next 6-month status update
	and Boiling Water Reactor Owners Group (BWROG) representatives on activities related to the implementation

O4/12/2013 [/docs/ML1308/ML13087A549.pdf]  Continue discussions between the U.S. Nuclear Regulatory Commission (NRC) and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons learned from the accident at the Fukushima Dai-inuclear power plant in Japan  O4/11/2013 [/docs/ML1309/ML13091A407.pdf]  Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1  O4/04/2013 [/docs/ML1309/ML13091A196.pdf]  Discuss and explore differences between MELCOR and MAAP analysis for selected stylized sequences with Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives  O3/29/2013 [/docs/ML1308/ML13085A088.pdf]  Continue discussions following February 5, 2013 meeting with NEI and BWROG representatives on industry initiatives related to implementation of Recommendation 5.1  Discuss with stakeholders the strategy the nuclear industry is taking to address NTTF Recommendation 8  Discuss implementation of NTTF Recommendation 2.1 Flooding Hazard Requirementations  Discuss implementation of NTTF Recommendation 2.1 Flooding Hazard Requirementations
[/docs/ML1309/ML13091A407.pdf]  O4/04/2013 [/docs/ML1309/ML13091A196.pdf]  Discuss implementation of the flooding nazard reevaluations of Recommendation 2.1  Discuss and explore differences between MELCOR and MAAP analysis for selected stylized sequences with Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWROG) representatives  O3/29/2013 [/docs/ML1308/ML13085A088.pdf]  Continue discussions following February 5, 2013 meeting with NEI and BWROG representatives on industry initiatives related to implementation of Recommendation 5.1  O3/28/2013 [/docs/ML1307/ML13072A672.pdf]  Discuss with stakeholders the strategy the nuclear industry is taking to address NTTF Recommendation 8
[/docs/ML1309/ML13091A196.pdf] Nuclear Energy Institute (NEI), EPRI, and Boiling Water Reactor Owners Group (BWRÓG) representatives  03/29/2013 [/docs/ML1308/ML13085A088.pdf] Continue discussions following February 5, 2013 meeting with NEI and BWROG representatives on industry initiatives related to implementation of Recommendation 5.1  03/28/2013 [/docs/ML1307/ML13072A672.pdf] Discuss with stakeholders the strategy the nuclear industry is taking to address NTTF Recommendation 8
[/docs/ML1308/ML13085A088.pdf] initiatives related to implementation of Recommendation 5.1  03/28/2013 [/docs/ML1307/ML13072A672.pdf] Discuss with stakeholders the strategy the nuclear industry is taking to address NTTF Recommendation 8
[/docs/ML1307/ML13072A672.pdf] Discuss with stakeholders the strategy the nuclear industry is taking to address NTTF Recommendation 8
02/26/2012
[/docs/ML1307/ML13078A107.pdf] Discuss implementation of NTTF Recommendation 2.1, Flooding Hazard Reevaluations
03/26/2013 [/docs/ML1307/ML13078A107.pdf] Discuss the industry's proposed Augmented Seismic Approach and the central eastern United States (CEU)
03/04/2013 [/docs/ML1305/ML13056A234.pdf] Discuss the content of the NRC document entitled "The Information for the Plant Specific Submittal for the Analysis of the Extended Loss of AC Power Event"
02/28/2013 [/docs/ML1305/ML13050A644.pdf] Discuss the central eastern United States (CEUS) ground motion model update project
02/21/2013 Commence discussions with the Nuclear Energy Institute (NEI) and stakeholders on implementation of the submittal of Overall Integrated Plans for reliable spent fuel pool instrumentation
02/21/2013 [/docs/ML1302/ML13029A778.pdf] Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Tas
02/19/2013 [/docs/ML1304/ML13043A592.pdf]  The purpose of this meeting is to discuss with stakeholders the content requested in the forthcoming Phase Staffing submittals to the NRC in response to Request for Information Pursuant to Title 10 of the Code of Fe Regulations 50.54(f)
02/14/2013 [/docs/ML1302/ML13023A430.pdf]  The purpose of this public webinar is to allow the Nuclear Energy Institute representatives to continue discussions with U.S. Nuclear Regulatory Commission staff on an alternative seismic approach supporting Recommendation 2.1 seismic reevaluations
02/11/2013 The purpose of this teleconference is to discuss implementation of the flooding hazard reevaluations of [/docs/ML1303/ML13031A246.pdf] Recommendation 2.1, of the Near-Term Task Force (NTTF) report
02/04/2013 [/docs/ML1302/ML13024A286.pdf] Discuss with NEI and BWROG recent industry initiatives related to implementation of NTTF Recommendation for Enhancing Reactor Safety in the 21st Century, Recommendation 5.1.

01/31/2013 [/docs/ML1301/ML13016A518.pdf]	The purpose of this teleconference is to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force (NTTF) report	
01/31/2013 [/docs/ML1301/ML13011A021.pdf]	rovide external stakeholders with the staff's preliminary thoughts on onsite emergency response capabilities uch as the EOPs, SAMGs, and EDMG	
01/23/2013 [/docs/ML1235/ML12356A394.pdf]	uss the central eastern United States (CEUS) ground motion model update project	
01/18/2013 [/docs/ML1301/ML13011A127.pdf]	Discuss the implementation plan submittals related to the Order EA-12-049 (Mitigating Strategies) due on February 28, 2013	
01/16/2013 [/docs/ML1300/ML13002A442.pdf]	Discuss implementation of NTTF Recommendation 2.1, Flooding Hazard Reevaluations	
01/16/2013 [/docs/ML1300/ML13004A203.pdf]	Continue discussions between the U.S. Nuclear Regulatory Commission (NRC) and Nuclear Energy Institution (NEI) Fukushima Steering Committees	
01/03/2013 [/docs/ML1235/ML12354A487.pdf]	Discuss technical issues needing resolution regarding Recommendation 9.3 communication responses	

#### **2012 Public Meetings and Presentations**

Date	Subject
12/17/2012 [/docs/ML1234/ML12340A438.pdf]	Gain high-level insight into the industry's approach for addressing Order EA-12-049 (Mitigating Strategies)
12/13/2012 [/docs/ML1233/ML12332A189.pdf]	Continue discussions on an alternative seismic approach supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation
12/13-14/2012 [/docs/ML1233/ML12334A086.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report
11/27/2012 [/docs/ML1231/ML12319A234.pdf]	Discuss the implementation of Order EA-12-050, regarding reliable hardened containment vents at boiling-water reactor (BWR) facilities with Mark I and Mark II containments
11/26/2012 [/docs/ML1231/ML12319A570.pdf]	Continue development of the guidance document supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation
11/20/2012 [/docs/ML1231/ML12319A616.pdf]	Webinar to continue development of the guidance document supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation

11/16/2012 [/docs/ML1230/ML12305A221.pdf]	Discuss the implementation related to Order EA-12-049 (Mitigating Strategies)
11/14/2012 [/docs/ML1230/ML12300A352.pdf]	Webinar to continue development of the guidance document supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation
11/14-15/2012 [/docs/ML1230/ML12305A539.pdf]	Discuss implementation of NTTF Recommendation 2.1, Flooding Hazard Reevaluations
11/14/2012 [/docs/ML1229/ML12299A368.pdf]	Webinar to allow the Nuclear Energy Institute representatives to discuss an alternative seismic approach supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation
11/09/2012 [/docs/ML1231/ML12310A409.pdf]	Webinar to continue development of the guidance document supporting Recommendation 2.1, Screening and Prioritization Guidance for Seismic Reevaluation
11/07/2012 [/docs/ML1230/ML12300A317.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force [NTTF] Recommendations for Enhancing Reactor Safety in the 21st Century report
11/07/2012 [/docs/ML1229/ML12297A037.pdf]	Discuss with stakeholders the strategy the nuclear industry is taking to address Recommendation 8, strengthening and integration of onsite emergency response capabilities such as emergency operating procedures (EOPs), severe accident management guidelines (SAMGs), and the extensive damage mitigation guidelines (EDMGs)
11/05/2012 [/docs/ML1229/ML12297A301.pdf]	Continue development of the guidance document supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation
11/01/2012 [/docs/ML1225/ML12257A046.pdf]	Commence discussions with NEI and stakeholders on implementation of the NTTF Tier 2 recommendations for emergency planning
10/24-25/2012 [/docs/ML1227/ML12272A256.pdf]	Meeting to discuss implementation of the flooding hazard reevaluations of Recommendation 2.1, of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report
10/18/2012 [/docs/ML1226/ML12269A030.pdf]	Continue development of guidance documents to support Recommendation 2.1, screening and prioritization guidance for seismic reevaluation
10/16/2012 [/docs/ML1227/ML12272A239.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1 of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report
10/16/2012 [/docs/ML1225/ML12257A043.pdf]	Commence discussions with NEI and stakeholders on implementation of the NTTF Tier 2 recommendations for emergency planning
10/11/2012 [/docs/ML1226/ML12268A306.pdf]	Discuss testing programs and technology developments on filtered containment venting systems (FVCS) with representatives from the Westinghouse Electric Company (WEC)
10/09/2012 [/docs/ML1227/ML12271A009.pdf]	Continue development of guidance documents to support Recommendation 2.1, screening and prioritization guidance for seismic reevaluation

10/04/2012 [/docs/ML1227/ML12270A086.pdf]	Discuss implementation of Recommendation 2.1, Flooding Hazard Reevaluations, from the NTTF "Recommendations for Enhancing Reactor Safety in the 21st Century" report	
10/04/2012 [/docs/ML1226/ML12265A345.pdf]	Discuss results from the NRC's staff analysis to manage radiological releases following a severe accident in BWR Mark I and Mark II containments	
10/03/2012 [/docs/ML1225/ML12257A031.pdf]	Commence discussions with NEI and stakeholders on implementation of the NTTF Tier 2 recommendations for emergency planning	
09/27/2012 [/docs/ML1225/ML12256A303.pdf]	Continue discussions between the U.S. Nuclear Regulatory Commission (NRC) and Nuclear Energy Institute (NEI) Steering Committees on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant in Japan	
09/27/2012 [/docs/ML1225/ML12256A480.pdf]	Discuss the content of the status reports and the integrated plan related to the Order EA-12-049 (Mitigating Strategies), EA-12-50 (Hardened Vents) and EA-12-51 (Spent Fuel Pool Instrumentation)	
09/25/2012 [/docs/ML1225/ML12251A312.pdf]	Discuss implementation of Recommendation 2.1, Flooding Hazard Reevaluations, from the Near-Term Task Force	
09/21/2012 [/pmns/mtg? do=details&Code=20120810]	Webinar to continue development of the guidance document supporting Recommendation 2.1, screening and prioritization guidance for seismic reevaluation	
09/13/2012 [/docs/ML1224/ML12241A337.pdf]	Discuss initial results from the NRC's staff analysis to manage radiological releases frollowing a severe accident in BWR Mark I and Mark II containments	
09/12-13/2012 [/docs/ML1223/ML12234A546.pdf]	Continue discussions with stakeholders on implementation strategies the NRC is considering to address Recommendation 2.1, flooding hazard reevaluations	
09/11/2012 [/docs/ML1224/ML12242A429.pdf]	NRC staff will describe the draft Interim Staff Guidance (ISG) for performing a Seismic Margins Assessment	
09/04/2012 [/docs/ML1222/ML12229A518.pdf]	Discuss testing programs and technology developments on filtered containment venting systems (FCVS)	
08/30/2012 [/docs/ML1223/ML12230A196.pdf]	Continue development of guidance documents to support Recommendation 2.1, screening and prioritization guidance for seismic reevaluation	
08/28/2012 [/docs/ML1223/ML12236A309.pdf]	Discuss implementation of Recommendation 2.1, Flooding Hazard Reevaluations, from the Near-Term Task Force	
08/23/2012 [/docs/ML1223/ML12233A609.pdf]	Continue discussions with NEI staff concerning a clarification in the guidance to be used for compliance with the SFP Instrumentation Fukushima Order, EA-12-051	
08/21/2012 [/docs/ML1222/ML12220A016.pdf]	Discuss implementation of the flooding hazard reevaluations of Recommendation 2.1	
08/20/2012 [/docs/ML1222/ML12228A396.pdf]	Continue discussions with NEI staff concerning a clarification in the guidance to be used for compliance with the SFP Instrumentation Fukushima Order, EA-12-051	

08/16/2012 [/docs/ML1220/ML12209A358.pdf]	Continue development of guidance documents to support Recommendation 2.1, screening and prioritization guidance for seismic reevaluation	
08/14/2012 [/docs/ML1222/ML12223A060.pdf]	Discuss with the industry, the need to clarify within the guidance, the instrumentation seismic standards to be used for compliance with the Spent Fuel Pool Instrumentation Fukushima Order EA-12-051	
08/08-09/2012 [/docs/ML1220/ML12207A207.pdf]	Continue discussions with stakeholders on implementation strategies the NRC is considering to address Recommendation 2.1, flooding hazard reevaluations	
08/08/2012 [/docs/ML1220/ML12207A137.pdf]	For NRC staff to gain an understanding of the industry's analysis and assessment of various means to reduce or limit radiological releases following a severe accident in BWR Mark I and Mark II containments	
08/07/2012	Briefing on the Status of Lessons Learned from the Fukushima Dai-Ichi Accident (webcast [https://video.nrc.gov/#searcharchivedwebcasts] )	
07/27/2012 [/docs/ML1218/ML12187A002.pdf]	Continue discussions between the NRC and NEI Steering Committees on activities related to lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant	
07/26/2012 [/docs/ML1218/ML12188A154.pdf]	Discuss development of Interim Staff Guidance with stakeholders related to Recommendation 4.2 from the Near-Term Task Force	
07/24-25/2012 [/docs/ML1217/ML12177A066.pdf]	Continue development of guidance documents to support Recommendation 2.1, screening and prioritization guidance for seismic reevaluation	
07/24/2012 [/docs/ML1218/ML12187A151.pdf]	Discuss implementation of Recommendation 2.1, Flooding Hazard Reevaluations, from the Near-Term Task Force	
07/12/2012 [/docs/ML1218/ML12180A009.pdf]	Discuss testing programs and technology developments on wet and dry filtered containment venting systems (FVCS)	
07/11-12/2012 [/docs/ML1218/ML12180A379.pdf]	Discuss implementation of Recommendation 2.1, Flooding Hazard Reevaluations, from the Near-Term Task Force	
06/26/2012 [/docs/ML1216/ML12166A030.pdf]	Discuss remaining issues on walkdown guidance for implementing Recommendation 2.3 flooding walkdowns	
06/21/2012 [/docs/ML1214/ML12146A025.pdf]	Meeting to answer questions from the public and discuss the content of the draft interim staff guidance to address compliance with Order EA-12-051	
05/30/2012 [/docs/ML1211/ML12110A218.pdf]	Meeting to Discuss Development of the Interim Staff Guidance Related to Order EA-12-049, Mitigation Strategies for Beyond-Design-Basis External Events	
05/29/2012 [/docs/ML1213/ML12136A502.pdf]	Discuss remaining issues on the walkdown guidance for implementing Recommendation 2.3 flooding walkdowns	
05/15-16/2012	Public Meeting to Discuss Seismic Screening and Prioritization Guidance	

05/15/2012 [/docs/ML1211/ML12110A203.pdf]	Meeting to Discuss Development of the Interim Staff Guidance Related to Order EA-12-049, Mitigation Strategies for Beyond-Design-Basis External Events	
05/09/2012 [/docs/ML1211/ML12110A195.pdf]	Meeting to Discuss Development of the Interim Staff Guidance Related to Order EA-12-049, Mitigation Strategies for Beyond-Design-Basis External Events	
05/08/2012 [/docs/ML1211/ML12117A328.pdf]	Public Conference Call to Discuss Implementation of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns	
05/07/2012 [/docs/ML1211/ML12115A067.pdf]	Public Conference Call to Discuss Implementation of Flooding Re-evaluations	
05/03-04/2012 [/docs/ML1210/ML12109A312.pdf]	Public Webinar to Discuss Seismic Walkdown Guidance	
05/03/2012 [/docs/ML1211/ML12110A064.pdf]	Meeting to Discuss Near-Term Task Force Tier 3 Recommendations Related to the Fukushima Dai-Ichi Nuclear Power Plant Accident	
	Meeting to Discuss Implementation of EA-12-050 Reliable Hardened Containment Vents	
05/02/2012 [/docs/ML1211/ML12116A149.pdf]	Note: Includes REVISED Agenda	
05/01/2012 [/docs/ML1210/ML12108A032.pdf]	Meeting to Discuss Implementation of Guidance for Order EA-12-051 for Spent Fuel Pool Instrumentation	
CO/O 1/2012 [racco/ME1210/ME12100/tco2.pai]	WORKING DRAFT Interim Staff Guidance [/docs/ML1211/ML12117A412.pdf]	
	Public Meeting to Discuss Seismic Walkdown Guidance (Rec 2.3)	
04/27/2012 [/docs/ML1210/ML12107A293.pdf]	<ul> <li>NRC Comments on draft Outline [/docs/ML1211/ML12114A078.pdf]</li> <li>NEI Draft Guidance Document [/docs/ML1211/ML12117A003.pdf]</li> </ul>	
04/25-26/2012 [/docs/ML1210/ML12103A349.pdf]	Meeting to Discuss Implementation of Guidance Associated with the March 12, 2012 Request for Information Associated with Recommendations 2.1 and 2.3 Flooding Protections	
04/25/2012 [/docs/ML1208/ML120820254.pdf]	Public Meeting to Discuss the Advanced Notice of Proposed Rulemaking for the Station Blackout Rule	
04/24/2012 [/docs/ML1210/ML12102A177.pdf]	Meeting to Discuss Development of the Interim Staff Guidance Related to Order EA-12-049, Mitigation Strategies for Beyond-Design Basis External Events	
04/18/2012 [/docs/ML1209/ML12093A414.pdf]	Meeting to Discuss Implementation of Guidance for Order EA-12-051, Spent Fuel Pool Instrumentation, Related to the Fukushima Daiichi Nuclear Power Plant Accident	
04/17/2012 [/docs/ML1209/ML12095A291.pdf]	Public Conference Call to Discuss Implementation of the March 12, 2012, Recommendation 2.3 Associated with Flooding Protections	

04/17/2012 [/docs/ML1210/ML12103A296.pdf]	Public Conference Call on Implementation of the Request for Information on Recommendation 2.3 Seismic  NEI Comments [/docs/ML1210/ML12107A275.pdf]  NRC Comments [/docs/ML1211/ML12114A078.pdf]	
04/13/2012 [/docs/ML1209/ML12090A595.pdf]	Public Conference Call on Implementation of the Request for Information on 2.1 and 2.3 Seismic Protection	
04/11-12/2012 [/docs/ML1207/ML12079A026.pdf]	Meeting to Continue Discussions on Implementation Strategies the NRC is Considering to Address Recommendation 2.3, Flooding Protection, Related to the Fukushima Daiichi Nuclear Power Plant Accident	
04/10/2012 [/docs/ML1208/ML12082A030.pdf]	Meeting to Discuss Implementation of the Near-Term Task Force Orders and 10 CFR 50.54(f) Letter Issued March 12, 2012, Related to the Fukushima Daiichi Nuclear Power Plant Accident	
04/02-03/2012 [/docs/ML1207/ML12079A172.pdf]	Meeting to Continue Discussions on Implementation Strategies the NRC is Considering to Address Recommendation 2.3, Flooding Protection, Related to the Fukushima Daiichi Nuclear Power Plant Accident  • Seismic Walkdown Outline [/docs/ML1208/ML12087A012.pdf]  • Screening, Prioritization and Implementation Details [/docs/ML1208/ML12087A010.pdf]	
03/29/2012 [/docs/ML1207/ML12073A078.pdf]	Meeting to Discuss Implementation of Guidance for Order EA-12-051, Spent Fuel Pool Instrumentation, Related to the Fukushima Daiichi Nuclear Power Plant Accident  • Order EA-12-051 [/docs/ML1205/ML12056A044.pdf]	
03/28/2012 [/docs/ML1206/ML12066A021.pdf]	Meeting to Discuss Implementation of Guidance for Order EA-12-049, Regarding Mitigation Strategies for Beyond-Design-Basis External Events, Related to the Fukushima Daiichi Nuclear Power Plant Accident  Order EA-12-049 [/docs/ML1205/ML12054A735.pdf]  Meeting Summary [/docs/ML1210/ML12104A019.pdf]	
03/27/2012 [/docs/ML1207/ML12075A004.pdf]	Meeting to Discuss Implementation of Guidance for Near-Term Task Force Recommendation 2.3, Request for Information Concerning Flooding Protections, Related to the Fukushima Daiichi Nuclear Power Plant Accident  Request for Information [/docs/ML1205/ML12053A340.pdf]  Meeting Summary [/docs/ML1210/ML12101A029.pdf]	

03/15/2012 [/docs/ML1206/ML12066A186.pdf]	Meeting to Discuss Implementation of Guidance for Near-Term Task Force Recommendation 2.3, Request for Information Concerning Flooding Protections, Related to the Fukushima Daiichi Nuclear Power Plant Accident  • Request for Information [/docs/ML1205/ML12053A340.pdf]
03/05/2012 [/docs/ML1205/ML12052A052.pdf]	Meeting to Discuss Implementation of Guidance for Near-Term Task Force Recommendation 9.3, Staffing and Communication, Related to the Fukushima Daiichi Nuclear Power Plant Accident  • Meeting Summary [/docs/ML1208/ML12082A007.pdf]
03/01-02/2012 [/docs/ML1205/ML12052A054.pdf]	Meeting to Discuss Implementation of Guidance for Near-Term Task Force Recommendations 2.1 and 2.3, Seismic Protections, Related to the Fukushima Daiichi Nuclear Power Plant Accident  Slides:  Changes to Scope [/docs/ML1206/ML12061A314.pdf] Hazard Evaluation and Preliminary Approach [/docs/ML1206/ML12061A293.pdf] NRC Seismic Margin [/docs/ML1206/ML12061A309.pdf] Guidance Development [/docs/ML1206/ML12061A305.pdf] Meeting Summary [/docs/ML1208/ML12087A159.pdf]
02/22/2012 [/docs/ML1204/ML12040A234.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations 2.1, Other External Events Protections, Related to the Fukushima Daiichi Nuclear Power Plant  • Slideshow [/docs/ML1205/ML12052A129.pdf]  • Slideshow [/docs/ML1205/ML12054A113.pdf]  • NEI Slideshow [/docs/ML1205/ML12053A003.pdf]
02/07/2012 [/docs/ML1202/ML12025A048.pdf]	Meeting to Discuss Guidance for Implementation of Near-Term Task Force Recommendations 9.3, Emergency Preparedness Staffing Analysis, Related to the Fukushima Daiichi Nuclear Power Plant Accident  Revision to Enclosure 2 [/docs/ML1203/ML12030A174.pdf]  NEI Slideshow [/docs/ML1204/ML12044A008.pdf]
01/19/2012 [/docs/ML1136/ML11361A044.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendation 7.1, Spent Fuel Pool Instrumentation, Related to the Fukushima Daiichi Nuclear Power Plant Accident  • Slideshow [/docs/ML1201/ML12013A237.pdf]  • NEI White Paper [/docs/ML1201/ML12010A004.pdf]

01/19/2012 [/docs/ML1135/ML11353A323.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations 9.3, Emergency Preparedness Staffing Analysis, Related to the Fukushima Daiichi Nuclear Power Plant Accident  • Slideshow [/docs/ML1201/ML12013A228.pdf]  • Emergency Preparedness (Enclosure 6) [/docs/ML1201/ML12013A270.pdf]
01/18/2012 [/docs/ML1200/ML12004A161.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendation 4.2, Protection of Equipment Associated with 10 CFR 50.54.(hh)(2), Related to the Fukushima Dai-ichi Nuclear Power Plant Accident  • Slideshow [/docs/ML1201/ML12013A241.pdf]
01/18/2012 [/docs/ML1135/ML11355A008.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations 2.1 and 2.3, Flooding and Seismic Protections, Related to the Fukushima Daiichi Nuclear Power Plant  Revised Slideshow [/docs/ML1201/ML120170112.pdf] Draft 50.54(f) Letters (Memo) [/docs/ML1201/ML120120549.pdf] Draft 50.54(f) Letters (Enclosure 1) [/docs/ML1201/ML120110114.pdf] Draft 50.54(f) Letters (Enclosure 2) [/docs/ML1201/ML120110116.pdf] Draft 50.54(f) Letters (Enclosure 3) [/docs/ML1201/ML120110118.pdf] Draft 50.54(f) Letters (Enclosure 4) [/docs/ML1201/ML120110119.pdf] Draft 50.54(f) Letters (Enclosure 5) [/docs/ML1201/ML120110121.pdf] Draft 50.54(f) Letters (Enclosure 6) [/docs/ML1201/ML12013A270.pdf]
01/17/2012 [/docs/ML1200/ML12004A097.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendation 5.1, Reliable Hardened Vents, Related to the Fukushima Dai-ichi Nuclear Power Plant Accident  • Slideshow [/docs/ML1201/ML12013A230.pdf]
01/13/2012 [/docs/ML1136/ML11362A197.pdf]	Steering Committee Public Meeting to Continue Discussions on Implementation of Near-Term Task Force Recommendations Related to the Fukushima Daiichi Nuclear Power Plant Accident
01/09/2012 [/docs/ML1135/ML11353A009.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations 9.3, Emergency Preparedness Communications, Related to the Fukushima Daiichi Nuclear Power Plant Accident

#### **2011 Public Meetings and Presentations**

Date	Subject
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12/15/2011 [/docs/ML1133/ML11336A309.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendation 7.1, Spent Fuel Pool Instrumentation, Related to the Fukushima Daiichi Nuclear Power Plant Accident	
12/15/2011 [/docs/ML1133/ML11339A006.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendation 5.1, Reliable Hardened Vents, Related to the Fukushima Daiichi Nuclear Power Plant Accident	
12/14/2011 [/docs/ML1133/ML11336A344.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations 2.1 and 2.3, Flooding and Seismic Protections, Related to the Fukushima Daiichi Nuclear Power Plant	
12/12/2011 [/docs/ML1133/ML11336A251.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations 9.3, Staffing Analysis and Communications, Related to the Fukushima Daiichi Nuclear Power Plant Accident	
12/08/2011 [/docs/ML1133/ML11333A055.pdf]	Meeting to Discuss Recommendation 4.2 of Near-Term Task Force Recommendations Related to the Fukushima Daiichi Nuclear Power Plant Accident	
12/01/2011 [/docs/ML1132/ML11321A239.pdf]	Meeting to Discuss Implementation of Near-Term Task Force Recommendations Related to the Fukushima Daiichi Nuclear Power Plant Accident	
08/31/2011	<ul> <li>Public Meeting to Obtain Feedback on Near-Term Task Force Recommendations</li> <li>Slides [/japan/slides-20110831.pdf]</li> <li>Meeting Summary and Transcript [/docs/ML1124/ML112490382.html]</li> <li>Stakeholder Comments [/docs/ML1124/ML11249A161.pdf]</li> </ul>	
07/28/2011	Public Meeting on the Results of the NRC's Near-Term Task Force Review of NRC Processes and Regulations Following Events in Japan  Slides [/docs/ML1120/ML11209B473.pdf] Transcript [/japan/20110728.pdf] Webcast Archive [https://video.nrc.gov/#searcharchivedwebcasts] Responses to Open Questions [/docs/ML1125/ML11255A219.pdf]	
06/09/2011 [/about- nrc/organization/commission/comm-william- ostendorff/wco-symposium-20110609.pdf]	A Commissioner's Perspective on Nuclear Safety Research and NRC's Response to Nuclear Events in Japan: Presentation to the National Nuclear Security Administration, NNSA, LDRD Symposium	
06/06/2011 [/about-nrc/organization/commission/comm-william-ostendorff/wco-workshop-20110606.pdf]	A Commissioner's Perspective on Nuclear Safety and NRC's Response to Nuclear Events in Japan: Presentation to the U.S. Department of Energy	
05/26/2011 [/japan/japan-society-may2011.pdf]	U.S. NRC Response to the Fukushima Nuclear Event: Presentation to Japan Society	
05/19/2011 [/about- nrc/organization/commission/comm-william- ostendorff/wco-slides-20110519.pdf]	NRC Response to Nuclear Events in Japan: Presentation to the University of Pittsburgh Medical Center, Center for Biosecurity	

04/29/2011 [/about- nrc/organization/commission/comm-william- ostendorff/ostendorff-eei-04292011.pdf]	Regulatory Decision-Making in the Wake of Fukushima: Presentation to Edison Electric Institute
04/13/2011 [/about- nrc/organization/commission/comm-william- ostendorff/nnog-conference-wco.pdf]	Perspectives of a Commissioner in Times of a Historical Event: Presentation for the Nuclear Non-operating Owners' Group Conference
04/2011 [/japan/nrr-fukushima-apr2011.pdf]	Presentation on Fukushima

Page Last Reviewed/Updated Monday, July 27, 2020



#### Actions in Response to the Japan Nuclear Accident: Timeline

This page presents an animated graphical timeline, highlighting the Japan nuclear accident at Fukushima Dai-ichi and specific dates and activities associated with how the U.S. Nuclear Regulatory Commission (NRC) responded to that event. You can browse the animated timeline on this page, view Congressional Briefings [/reactors/operating/ops-experience/japan/timeline/congress-briefings.html] and Public Meetings and Briefings [/reactors/operating/ops-experience/japan/timeline/public-meetings.html] or select a specific date for additional detail and related documents. For accessibility purposes, please see Key Dates and Activities [#accessible], below.

3/11/2011 [#]

NRC OC [#]

3/18/2011 [#]



NRC Actions in Response to the Japan Nuclear Accident: March 11, 2011

A magnitude 9.0 earthquake struck near Honshu, Japan, generating an estimated 45-foot tsunami at the Fukushima Daiichi nuclear power plant.

### **Key Dates and Activities**

2013	2012	2011

January 4, 2013 [/reactors/operating/opsexperience/japan/timeline/01042013.html] Implementation Details [/reactors/operating/opsexperience/japan-dashboard.html] February 17, 2012 [/reactors/operating/opsexperience/japan/timeline/02172012.html] March 12, 2012 [/reactors/operating/opsexperience/japan/timeline/03122012.html] March 20, 2012 [/reactors/operating/opsexperience/japan/timeline/03202012.html] April 18, 2012 [/reactors/operating/opsexperience/japan/timeline/04182012.html] May 31, 2012 [/reactors/operating/opsexperience/japan/timeline/05312012.html] July 13, 2012 [/reactors/operating/opsexperience/japan/timeline/07132012.html] August 30, 2012 [/reactors/operating/opsexperience/japan/timeline/08302012.html] November 16, 2012 [/reactors/operating/opsexperience/japan/timeline/11162012.html] November 26, 2012 [/reactors/operating/opsexperience/japan/timeline/11262012.html] November 30, 2012 [/reactors/operating/opsexperience/japan/timeline/11302012.html]

March 11, 2011 [/reactors/operating/opsexperience/japan/timeline/03112011.html] NRC Operations Center [/reactors/operating/opsexperience/japan/timeline/nrc-operationscenter.html1 March 18, 2011 [/reactors/operating/opsexperience/japan/timeline/03182011.html] March 23, 2011 [/reactors/operating/opsexperience/japan/timeline/03232011.html] March 31, 2011 [/reactors/operating/opsexperience/japan/timeline/03312011.html] April 1, 2011 [/reactors/operating/opsexperience/japan/timeline/04012011.html] April 29, 2011 [/reactors/operating/opsexperience/japan/timeline/04292011.html] May 11, 2011 [/reactors/operating/opsexperience/japan/timeline/05112011.html] May 20, 2011 [/reactors/operating/opsexperience/japan/timeline/05202011.html] June 6, 2011 [/reactors/operating/opsexperience/japan/timeline/06062011.html] July 12, 2011 [/reactors/operating/opsexperience/japan/timeline/07122011.html September 9, 2011 [/reactors/operating/opsexperience/japan/timeline/09092011.html September 30, 2011 [/reactors/operating/opsexperience/japan/timeline/09302011.html] October 3, 2011 [/reactors/operating/opsexperience/japan/timeline/10032011.html] October 18, 2011 [/reactors/operating/opsexperience/japan/timeline/10182011.html] December 15, 2011 [/reactors/operating/opsexperience/japan/timeline/12152011.html]



## Actions in Response to the Japan Nuclear Accident: March 11, 2011

A magnitude 9.0 earthquake struck near Honshu, Japan, generating an estimated 45-foot tsunami at the Fukushima Daiichi nuclear power plant.





# Actions in Response to the Japan Nuclear Accident: NRC Operations Center

The NRC staffs its Headquarters Operations Center, March 11, 2011, on a 24/7 basis, first monitoring tsunami effects on the U.S. West Coast, and then supporting both domestic and international responses to the Fukushima Dai-ichi reactor accidents until May 16, 2011. The first of many NRC reactor experts are sent immediately to Japan as part of a USAID mission. Others follow in the weeks and months ahead.



- Operations Center Transcripts [/docs/ML1205/ML120520264.html]
- Blog Posts [http://public-blog.nrc-gateway.gov/category/emergency-preparedness-and-response/]



### Actions in Response to the Japan Nuclear Accident: March 18, 2011

This page includes links to files in non-HTML format. See Plugins, Viewers, and Other Tools [/site-help/plugins.html] for more information.

NRC shares details of the Fukushima accident with U.S. nuclear power plants, and reminds plants of post-9/11 requirements for additional emergency equipment.

For details, see the following resources:

- Information Notice 2011-05 [/docs/ML1112/ML111250360.pdf]
- 2011 Public Meetings and Presentations [/reactors/operating/opsexperience/japan/japan-meeting-briefing.html#2011]





### **Actions in Response to the Japan Nuclear** Accident: March 23, 2011

NRC resident inspectors begin re-examining post-9/11 emergency equipment and related items at U.S. nuclear power plants, in light of details from the Fukushima accident.

#### Documents:

- Temporary Instruction 2515/183 [/docs/ML1107/ML11077A007.pdf] Summary of Observations [/reactors/operating/oversight/Summary-of-Observations-TI-2515-183.pdf
- Results Overview [/reactors/operating/oversight/TI-183-Results-Overview.pdf]





### Actions in Response to the Japan Nuclear Accident: March 31, 2011

NRC shares details of the Fukushima accident with U.S. nuclear fuel facilities, and reminds those facilities of the need to properly analyze the effects of severe natural events.

#### Documents:

Information Notice 2011-08 [/docs/ML1108/ML110830824.pdf]





# Actions in Response to the Japan Nuclear Accident: April 1, 2011

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NRC creates Near-Term Task Force to examine lessons learned from the Fukushima accident.

For details, see the following resources:

 NRC Appoints Task Force Members and Approves Charter for Review of Agency's Response to Japan Nuclear Event [/docs/ML1109/ML110910479.pdf]





### **Actions in Response to the Japan Nuclear** Accident: April 29, 2011

NRC resident inspectors begin examining severe accident management procedures and training at U.S. nuclear power plants.

#### Documents:

- Temporary Instruction 2515/184 [/docs/ML1111/ML11115A053.pdf] Summary of Observations [/reactors/operating/oversight/Summary-of-Observations-TI-2515-184.pdf
- Results Overview [/reactors/operating/oversight/TI-184-Results-Overview.pdf]

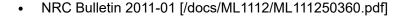




# Actions in Response to the Japan Nuclear Accident: May 11, 2011

NRC requires nuclear power plants to provide information on post-9/11 emergency equipment, as well as how the plants ensure strategies to use the equipment remain effective over time.

#### Documents:







# Actions in Response to the Japan Nuclear Accident: May 20, 2011

NRC reports all US nuclear power plants have appropriate post-9/11 emergency equipment and procedures in place.

- Summary of Observations [/reactors/operating/oversight/Summary-of-Observations-TI-2515-183.pdf]
- Results Overview [/reactors/operating/oversight/TI-183-Results-Overview.pdf]





### Actions in Response to the Japan Nuclear Accident: June 6, 2011

NRC reports on areas for improvement regarding U.S. nuclear power plants' Severe Accident Management Guidelines (SAMG).

- Summary of Observations [/reactors/operating/oversight/Summary-of-Observations-TI-2515-184.pdf]
- Results Overview [/reactors/operating/oversight/TI-184-Results-Overview.pdf]





### Actions in Response to the Japan Nuclear Accident: July 12, 2011

The NRC's Near-Term Task Force issues its report on lessons learned from Fukushima. The NTTF concluded U.S. plants are operating safely and provided 12 broad recommendations to the Commission for enhancing reactor safety.

#### Documents:

 Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, SECY-11-093 [/docs/ML1118/ML111861807.pdf]





# Actions in Response to the Japan Nuclear Accident: September 9, 2011

NRC staff presents to the Commission six Near-Term Task Force recommendations for U.S. nuclear power plants that should be initiated without delay.

#### Documents:

 Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, SECY-11-0124 [/reading-rm/doc-collections/commission/secys/2011/2011-0124scy.pdf]





# Actions in Response to the Japan Nuclear Accident: September 30, 2011

NRC resident inspectors begin examining U.S. nuclear fuel cycle facilities' plans and procedures for safely dealing with severe events.

#### Documents:

Temporary Instruction 2600/0015 [/reading-rm/doc-collections/insp-manual/temp-instructions/ti2600-015.pdf]





# Actions in Response to the Japan Nuclear Accident: October 3, 2011

The NRC staff proposes to the Commission three tiers of prioritization for the Near-Term Task Force recommendations.

#### Documents:

 SECY-11-0137 [/reading-rm/doc-collections/commission/secys/2011/2011-0137scy.pdf] ,





### Actions in Response to the Japan Nuclear Accident: October 18, 2011

The Commission approves the NRC staff's proposal to implement recommendations described in SECY-11-0124 within five years, by 2016.

#### Documents:

 SECY-11-0124 [/reading-rm/doc-collections/commission/srm/2011/2011-0124srm.pdf]





# Actions in Response to the Japan Nuclear Accident: December 15, 2011

The Commission approves the staff's proposed prioritization of the Near-Term Task Force recommendations described in SECY-11-0137.

### Documents:

 SECY-11-0137 [/reading-rm/doc-collections/commission/srm/2011/2011-0137srm.pdf]





### Actions in Response to the Japan Nuclear Accident: February 17, 2012

NRC staff proposes to the Commission issuing three orders to enhance post-9/11 emergency equipment, install additional spent fuel pool instruments and, for certain plants, enhance or install containment vents, along with a request for information.

### Documents:

 SECY-12-0025 [/reading-rm/doc-collections/commission/srm/2012/2012-0025srm.pdf]
 Proposed Orders and Requests for Information in Response to Lessons Learned from Japan's March 11, 2011, Great Tohoku Earthquake and Tsunami





### Actions in Response to the Japan Nuclear Accident: March 12, 2012

The Commission approves, and the staff issues, the first regulatory requirements for the nation's 104 operating reactors based on the lessons-learned at Fukushima Dai-ichi. The three orders require safety enhancements of operating reactors, construction permit holders, and combined license holders. These orders require nuclear power plants to implement safety enhancements related to (1) mitigation strategies to respond to extreme natural events resulting in the loss of power at plants [/docs/ML1205/ML12054A735.pdf] , (2) ensuring reliable hardened containment vents

[/docs/ML1205/ML12054A694.pdf] , and (3) enhancing spent fuel pool instrumentation [/docs/ML12054A679.pdf] . The plants are required to promptly begin implementation of the safety enhancements and complete implementation within two refueling outages or by December 31, 2016, whichever comes first. The NRC staff provided the Commission with its technical and regulatory basis for issuing the orders and requests for information in a paper dated February 17, 2012 (see SECY-12-0025 [/reading-rm/doc-collections/commission/secys/2012/2012-0025scy.pdf] ). The Commission approved issuance of the orders on March 9, 2012. (see SRM SECY-12-0025 [/reading-rm/doc-collections/commission/srm/2012/2012-0025srm.pdf] ).

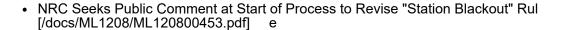
In addition, the NRC issues a request for information [/docs/ML1205/ML12053A340.pdf] , requesting each reactor reevaluate the seismic and flooding hazards at their site using present-day methods and information, conduct walkdowns of their facilities to ensure protection against the hazards in their current design basis, and reevaluate their emergency communications systems and staffing levels.



### Actions in Response to the Japan Nuclear Accident: March 20, 2012

NRC staff asks for public input on possible revisions of NRC requirements for addressing station blackout conditions , where a nuclear power plant loses all onsite and offsite alternating- current power.

### Documents:



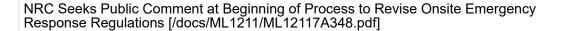




# Actions in Response to the Japan Nuclear Accident: April 18, 2012

NRC staff asks for public input on possible revisions of NRC requirements aimed to strengthen and integrate onsite emergency response capabilities at nuclear power plants.

Documents:







### Actions in Response to the Japan Nuclear Accident: May 31, 2012

NRC staff issues guidance for U.S. nuclear power plants to:

- · Assess emergency preparedness communications and staffing
- Perform seismic and flooding walkdowns

### Documents:

- Endorsed EP assessment guidance [/docs/ML1212/ML12125A412.pdf]
- Endorsed flooding walkdown guidance [/docs/ML1214/ML121440522.html] and seismic walkdown guidance [/docs/ML1216/ML12164A181.pdf]

Additionally, the NRC staff issued draft guidance for comment for the March 12, 2012 Orders:



- Draft guidance for the Order on mitigation strategies to respond to extreme natural events resulting in the loss of power at plants [/docs/ML1214/ML12146A014.pdf]
- Draft guidance for the Order on ensuring reliable hardened containment vents [/docs/ML1214/ML12146A371.pdf]
- Draft guidance for the Order on enhancing spent fuel pool instrumentation [/docs/ML1214/ML12144A323.pdf]



### Actions in Response to the Japan Nuclear Accident: July 13, 2012

On July 13, 2012, the NRC staff provided the Commission a paper outlining its plans for implementing the longer-term "Tier 2" and "Tier 3" recommendations.

### Documents:

 SECY-12-0095 [/reading-rm/doc-collections/commission/secys/2012/2012-0095scy.pdf]





### Actions in Response to the Japan Nuclear Accident: August 30, 2012

On August 30, 2012, the NRC staff issued implementation guidance to enable U.S. nuclear power plants to achieve compliance with each of the Orders. The staff developed this guidance through engagement of stakeholders in a series of public meetings on each of the orders and requests for information.

### Orders:

- Order EA-12-049 [/docs/ML1222/ML12229A174.pdf] , Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events
- Order EA-12-050 [/docs/ML1222/ML12229A475.pdf] , Reliable Hardened Containment Vents
- Order EA-12-051 [/docs/ML1222/ML12221A339.pdf] , Reliable Spent Fuel Pool Instrumentation





# Actions in Response to the Japan Nuclear Accident: November 16, 2012

The NRC informed U.S. nuclear power plants of one way to acceptably perform part of the seismic hazard re-analysis the NRC asked all plants to do in March 2012.

### Documents:

 Interim Staff Guidance on Performing a Seismic Margin Assessment [/docs/ML1228/ML12286A029.pdf]





# Actions in Response to the Japan Nuclear Accident: November 26, 2012

The NRC's technical staff gave the agency's five Commissioners a paper examining potential additional requirements, including filters for radioactive material, for the venting systems at some U.S. nuclear power plants.

### Documents:







### Actions in Response to the Japan Nuclear Accident: November 30, 2012

The NRC informed U.S. nuclear power plants of one way to acceptably perform part of the flood hazard re-analysis the NRC asked all plants to do in March 2012.

### Documents:

 Interim Staff Guidance on Performance of an Integrated Assessment for Flooding [/docs/ML1231/ML12311A214.pdf]

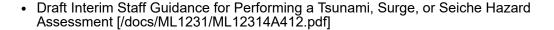




### Actions in Response to the Japan Nuclear Accident: January 4, 2013

The NRC informed U.S. nuclear power plants of one way to acceptably account for events such as tsunami and storm surge as part of the flood hazard re-analysis the NRC asked all plants to do in March 2012.

### Documents:







# Actions in Response to the Japan Nuclear Accident: Congressional Briefings

The Commission briefs Congressional committees several times between March and August 2011 on the status of recent events in Japan, NRC's response and action plans.

Documentation of testimony to Congress by the Commission and other senior agency officials.

• Congressional Testimony 2011 [/reading-rm/doc-collections/congress-docs/congress-testimony/2011/]





### Actions in Response to the Japan Nuclear Accident: Next Steps

Over the next few months, the NRC expects to take the following actions:

- Following the close of the public comment period on the advance notice of proposed rulemaking for station blackout regulatory actions [http://www.gpo.gov/fdsys/pkg/FR-2012-03-20/pdf/2012-6665.pdf] (May 4, 2012), the NRC is currently evaluating all public comments received.
- In November 2012, the NRC staff plans to issue guidance to enable U.S. nuclear power plants to perform the seismic and flooding reevaluations.





# Actions in Response to the Japan Nuclear Accident: Public Meetings and Briefings

The NRC considers public involvement in, and informing the public about, agency activities to be a cornerstone of strong, fair regulation of the nuclear industry. The NRC recognizes the public's interest in the proper regulation of nuclear activities and provides opportunities for citizens to be heard.

For details, see the following resources:

- Public Meetings/Presentations [/reactors/operating/ops-experience/japan/japan-meeting-briefing.html]
- Commission Briefings [/reactors/operating/ops-experience/japan/japan-commission-briefing.html]

