



February 11, 2016

SBK-L-16011

Docket No. 50-443

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Seabrook Station

NextEra Energy Seabrook, LLC's Sixth Six-Month Status Report in Response to March 12, 2012  
Commission Order Modifying Licenses with Regard to Requirements for Mitigation  
Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)

References:

1. NRC Order Number EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, March 12, 2012 (ML12054A736)
2. NRC Interim Staff Guidance JLD-ISG-2012-01, Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, Revision 0, August 29, 2012 (ML12229A174)
3. NEI 12-06, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide, Revision 0, August 2012 (ML12242A378)
4. NextEra Energy Seabrook, LLC's Initial Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), October 26, 2012 (ML12311A013)
5. Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), February 26, 2013 (ML13063A438)
6. NextEra Energy Seabrook, LLC's First Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), August 28, 2013 (ML13247A178)
7. NextEra Energy Seabrook, LLC's Second Six-Month Status Report in Response to the March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), February 27, 2014 (ML14064A188)

A131  
NRR

8. NextEra Energy Seabrook, LLC's Third Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), August 26, 2014 (ML14246A193)
9. NextEra Energy Seabrook, LLC's Fourth Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), February 27, 2015 (ML15068A021)
10. NextEra Energy Seabrook LLC's Request for Schedule Relaxation from NRC Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, July 23, 2015 (ML15209A581)
11. NextEra Energy Seabrook, LLC's Fifth Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, (Order Number EA-12-049), August 26, 2015 (ML15245A531)
12. Seabrook Station, Unit 1 – Relaxation of the Schedule Requirements of Order EA-12-049, “Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events” (TAC No. MF0836), October 4, 2015 (ML15244A045)
13. Seabrook Station, Unit 1 – Report for the Onsite Audit Regarding Implementation of Mitigating Strategies and Reliable Spent Fuel Instrumentation Related to Orders EA-12-049 and EA-12-051 (TAC Nos. MF0836 AND MF0837), October 28, 2015 (ML15278A200)

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued an order (Reference 1) to NextEra Energy Seabrook, LLC (NextEra Energy Seabrook). Reference 1 was immediately effective and directed NextEra Energy Seabrook to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. Specific requirements are outlined in Attachment 2 of Reference 1.

Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (Reference 2) and an overall integrated plan pursuant to Section IV, Condition C. Reference 2 endorses industry guidance document NEI 12-06, Revision 0 (Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the NextEra Energy Seabrook initial status report regarding mitigation strategies. Reference 5 provided the NextEra Energy Seabrook Overall Integrated Plan.

Reference 1 requires submission of a status report at six-month intervals following submittal of the overall integrated plan. Reference 3 provides direction regarding the content of the status reports. References 6, 7, 8, 9, and 11 provided the six-month status reports pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the

requirements of Reference 1. Reference 9 also included the revised FLEX Integrated Plan. The Attachment to this letter provides the sixth six-month update report required by Reference 1 that delineates progress made in implementing the requirements of Reference 1 and an update of milestone accomplishments since the last status report, including any changes to the compliance method, schedule, or need for relief and the basis.

This letter contains no new regulatory commitments.

If you have any questions regarding this report, please contact Mr. Michael Ossing, Licensing Manager, at (603) 773-7512.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 11, 2016.

Sincerely,

NextEra Energy Seabrook, LLC



Dean Curtland  
Site Vice President

cc: D. Dorman, NRC Region I Administrator  
J.G. Lamb, NRC Project Manager, Project Directorate 1-2  
P. Cataldo, NRC Senior Resident Inspector  
Director, Office of Nuclear Reactor Regulation  
Ms. Jessica A. Kratchmann, NRR/JLD/PMB, NRC  
Mr. Eric E. Bowman, NRR/DPR/PGCB

Mr. Perry Plummer  
Director Homeland Security and Emergency Management  
New Hampshire Department of Safety  
Division of Homeland Security and Emergency Management  
Bureau of Emergency Management  
33 Hazen Drive  
Concord, NH 03305

Mr. John Giarrusso, Jr., Nuclear Preparedness Manager  
The Commonwealth of Massachusetts  
Emergency Management Agency  
400 Worcester Road  
Framingham, MA 01702-5399

Attachment to SBK-L-16011

NextEra Energy Seabrook, LLC's Sixth Six-Month Status Report in Response to March 12, 2012  
Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies  
for Beyond-Design-Basis External Events (Order Number EA-12-049)

## **1 Introduction**

NextEra Energy Seabrook, LLC (NextEra Energy Seabrook) developed and submitted an Overall Integrated Plan (Reference 5) in response to NRC Order EA-12-049 (Reference 1). The Integrated Plan was subsequently revised to describe Seabrook's current proposed diverse and flexible coping strategies (FLEX) and submitted with the Fourth Six-Month Status Report (Reference 9).

This Sixth Six-Month Status Report provides an update of milestones and milestone accomplishments since the initial submittal of the Overall Integrated Plan, describes changes to the compliance method, provides an update of the pending and open/confirmatory actions, and provides an update of the Seabrook FLEX Audit open items.

## **2 Milestone Accomplishments**

The following milestones have been completed since the Fifth Six-Month Status Report submittal of August 26, 2015 and are current as of January 19, 2016:

- Submit sixth 6 month status report.
- Install RCP low leakage seals.
- Procure SEPS / portable equipment refueling trailer.
- Achieve operational status for offsite resources (SAFER NSRC).

Other significant accomplishments include:

- All outage-required FLEX modifications have been completed.
- The Unit 2 Circulating Water Piping cistern has been completed and filled with water.
- The ESF Bus 5 and 6 cabling for connecting to the NSRC generators has been fabricated.
- The SG and RCS makeup connection modifications for FLEX strategies have been implemented.
- The refueling strategy pumps have been installed in the DG fuel tank rooms.
- The SEPS seismic hardening modification has been completed.
- The FLEX portable equipment has been received on site, tested, and stored at least 1200 feet from the SEPS equipment.
- The FLEX Support Guidelines have been developed and reviewed (issuance awaiting final project implementation).
- FLEX training has been provided to site personnel.

### **3 Milestone Schedule Status**

The following provides an update to Attachment 2 of the original submittal of the Seabrook Overall Integrated Plan (OIP) (Reference 5). The table includes the current status of each item and whether the expected completion date has changed. As noted in the original station submittal these dates are planning dates which are subject to change as design and implementation details are developed.

The following milestone target completion dates have been adjusted or added since the last six-month update:

In the original submittal of the OIP in February 2013 (Reference 5), the milestone to “Revise/develop procedures based upon approved strategies and engineering change packages” had a target completion date of December 2014. The procedures have been developed and reviewed, and are ready to issue pending storage of FLEX equipment in the final storage locations as well as procedure validation completion. Validation is in progress, and when complete the procedures will be reviewed and updated as appropriate. The revised target completion date is March 2016, based on when the FLEX equipment will be moved to the final storage locations and the procedures can be issued.

In the original submittal of the OIP in February 2013 (Reference 5), the milestone to “Develop PMs for refueling trailer” had a target completion date of March 2015. This milestone has been extended to March 2016, to be complete prior to final implementation of Order EA-12-049.

In the first six-month update provided March 2012 (Reference 6), the milestone “Conduct walkthroughs / demonstrations of portable equipment connection points” was added with a target completion date of August 2015. These walkdowns are in progress, and the revised target completion date is March 2016.

A new milestone has been added to confirm the move of equipment items from their temporary storage locations to their final storage locations, and to inventory the equipment items in their final storage locations. Target completion date is March 2016.

Revised milestone target completion dates support NextEra Energy Seabrook’s full compliance date of May 30, 2016.

<b>Milestone</b>	<b>Target Completion Date</b>	<b>Activity Status</b>	<b>Revised Target Completion Date</b>
Submit Overall Integrated Implementation Plan	February 2013	Complete	N/A
<b>Submit 6 Month Updates:</b>			
Update 1	August 2013	Complete	N/A
Update 2	February 2014	Complete	N/A
Update 3	August 2014	Complete	N/A
Update 4	February 2015	Complete	N/A
Update 5	August 2015	Complete	N/A
Update 6	February 2016	Complete	N/A
Prepare engineering change packages for SEPS missile barrier	December 2014	Cancelled	N/A
Prepare engineering change package for RCP low leakage seals	December 2014	Complete	N/A
Prepare bid for construction of SEPS missile barrier	March 2015	Cancelled	N/A
Install RCP shutdown seals in four pumps in refueling outage #17	April 2014	Complete	N/A
Construct SEPS missile barrier	December 2014	Cancelled	N/A
Revise / develop procedures based upon approved strategies and engineering implementation packages	December 2014	Working	March 2016

<b>Milestone</b>	<b>Target Completion Date</b>	<b>Activity Status</b>	<b>Revised Target Completion Date</b>
Develop required training for station staff based upon draft procedure changes and engineering change packages.	December 2014	Complete	N/A
Procure SEPS / portable equipment refueling trailer	December 2014	Complete	N/A
Develop PMs for refueling trailer	March 2015	Working	March 2016
Store refueling trailer in Service Water Pump house	June 2015	Pending	March 2016
Off-site resources implementation site – RRC operational fall 2015	June 2015	Complete	N/A
Conduct walkthroughs / demonstrations of portable equipment connection points	August 2015	Working	March 2016
Implement training for station staff	September 2015	Working	N/A
Complete movement of all FLEX equipment to final storage locations and complete inventory.	March 2016	Pending	
Final implementation – Order full compliance letter to NRC	November 2015	Working	May 2016

#### **4 Changes to Compliance Method**

NextEra Energy Seabrook has received feedback in the form of NRC audit questions and subsequent teleconferences with NRC Staff reviewers. The NRC's Interim Staff Evaluation (ISE) was also received. A revised Integrated Plan and list of pending actions was included in the fourth six-month update to the NRC, dated February 27, 2015 (Reference 9). The onsite NRC FLEX audit was conducted the week of July 27, 2015. Items were reviewed by NRC Staff reviewers, audit questions responded to, and Staff Evaluation items closed or stuated as open/pending. The audit report was received October 28, 2015 (Reference 13).

Since the revised Integrated Plan was transmitted to the NRC on February 27, 2015, the following changes have been made to the NextEra Energy Seabrook strategies:

- a) The large FLEX portable generator was described as a 250 kW, 480V generator in the February 27, 2015 revised Integrated Plan. During the July, 2015 audit it was noted that the generator actually procured was a 405 kW, 480V generator, and that its maximum loading was slightly less than 405 kW. Subsequent to the audit, it was decided to provide additional operating margin by reducing generator loading. This was done by removing the control room chillers from the list of equipment being energized.
- b) Originally the Modes 5 and 6 strategies required use of the personnel hatch to vent containment. This would have required maintaining both personnel hatch doors open during all shutdown conditions, or opening a hatch door under pressure. An alternate option has been chosen, to use existing Combustible Gas Control (CGC) system piping as the vent path. At the beginning of each outage in Mode 5, prior to draining either the primary or secondary sides of the SGs, a vent path will be installed on a section of CGC piping inside containment to allow venting to outside containment if an ELAP occurs. The final FIP will include analysis supporting this strategy.

Additionally, interim actions have been implemented to provide the new SFP Level Indication equipment an alternate power source until FLEX is fully implemented at Seabrook. A portable generator has been stationed in the "B" Diesel Generator Building, to be deployed to provide power to the SFP Level Indication equipment during an extended loss of power event.

#### **5 Need for Relief/Relaxation and Basis for the Relief/Relaxation**

On July 23, 2015, NextEra Energy Seabrook submitted Reference 10 requesting schedule relaxation from the Order requirements for completion of full implementation from November 2015 to May 30, 2016. The request for relaxation was based on the development of a second set of strategies. On October 4, 2015, the NRC authorized this relaxation (Reference 12), noting:

- a) Seabrook has already developed procedures and has trained personnel on how to operate the SEPS and realign plant cooling to the service water cooling tower.
- b) During the delay, portable equipment onsite will be stored more than 1200 feet from the SEPS equipment to provide protection by separation.
- c) The service water pumphouse modification and final implementation will occur prior to the next hurricane season.

## 6 Open Items from Overall Integrated Plan and NRC Interim Staff Evaluation /TER

The following Table provides a summary of the Pending Items documented in the Overall Integrated Plan:

	<b>Overall Integrated Plan Pending Actions</b>	<b>Status</b>
1	Revise ECA-0.0 to include steps to transition to FLEX Support Guidelines (FSGs) when an extended loss of offsite power event is in progress. This determination will delineate future procedural strategies and transitions.	In Progress. ECA-0.0 (revised and awaiting issuance) provides the transitions to FSG-0.0 and FSG-0.1.
2	Develop FSG-0.0 attachments to include a SEPS load reduction method for an extended loss of offsite power event to control SEPS loading within the capacity of one engine.	Complete. FSG-0.0 Attachments A and B provide for maintaining loads within the capacity of one SEPS engine.
3	A seismic evaluation will be conducted on the connections that penetrate the upper half of the Condensate Storage Tank (CST) to determine if NextEra Energy Seabrook can take credit for the entire tank volume for Phase 1 & 2 event coping.	Complete, no credit will be taken for the non-seismic volume in the CST.
4	Develop FSG-0.0 to add a step to manually shutdown the motor-driven Emergency Feedwater (EFW) pump if the Turbine Driven (TD) EFW pump is running satisfactorily.	Complete
5	Add an Attachment to ES-0.2, ES-0.3 and ES-0.4 that provides a table of electrical loads for responding to an extended loss of offsite power event.	In Progress. This is addressed in FSG-0.0 (developed and awaiting issuance) and not in ES-0.2, ES-0.3, and ES-0.4.
6	Develop a SEPS generator set (genset) refueling strategy from 1) an offsite supplier outside a 25 mile radius from the station (primary strategy), and 2) the Emergency Diesel Generator (EDG) fuel oil storage tanks using a refueling trailer stored in the Service Water (SW) Pumphouse (backup strategy). This strategy will include provisions for refueling within 24 hours in the event that only a single SEPS is functional.	In Progress. FSG-5 provides refueling strategies, offsite supplier contract update is in progress.

	<b>Overall Integrated Plan Pending Actions</b>	<b>Status</b>
7	Develop FSG-5 and FSG-5.1 to include a step for implementation of a SEPS genset refueling strategy.	Complete. FSG-5.1.1
8	Develop a FSG for refueling SEPS from the EDG fuel oil storage tanks using a portable refueling trailer. Utilize the information contained in existing procedure OS1061.02, 'Receipt of SEPS Fuel Oil', for development of the FSG.	Complete. FSG-5.1.1
9	Develop FSG-5 to include direction for connecting the backup diesel-driven air compressor to the Service Air system to restore Instrument Air system pressure.	Complete.
10	Develop required preventive maintenance actions and surveillance test procedures for the refueling trailer to be procured and stored in the SW Pumphouse.	In Progress.
11	Revise AOPs to include transitions to FSG-11 and FSG-14 when Extended Loss of all AC Power (ELAP) is in progress for shutdown mode strategies.	In Progress. OS1213.01, OS1213.02, and OS1246.01 (developed and awaiting issuance) will provide transitions to FSG-14. OS1215.07 (developed and awaiting issuance) will provide the transition to FSG-11.
12	Conduct an engineering evaluation to determine if the existing hurricane enclosures for the SEPS gensets provide adequate missile protection. If protection is not adequate, develop a design change (EC) to add missile protection for the SEPS gensets.	Complete. SEPS missile protection will not be added. Other missile protected strategies are being added.
13	Evaluate the 'seismic robustness' of SEPS and determine if enhancements are needed with respect to the new Ground Motion Response Spectrum (GMRS) data for the site.	Complete. EC 282774 Fukushima SEPS Foundations and Exhaust Seismic Upgrade and EC 282825 Fukushima SEPS components Seismic Upgrades.
14	Once the site flooding re-evaluation is completed in accordance with Recommendation 2.1 of the RFI letter, determine if additional flood protection is necessary for SEPS.	In Progress. The Seabrook Flooding Hazard Reevaluation Report was submitted 9-25-15 and is currently in NRC review.

	<b>Overall Integrated Plan Pending Actions</b>	<b>Status</b>
15	Formalize the Engineering assessment of ELAP load capacity for a single SEPS genset and modify procedural guidance in the applicable Emergency Operating Procedures (EOPs) and FSGs, as necessary.	Complete. FSG-0.0
16	Evaluate SEPS snow removal plan and revise the plan as necessary.	In Progress. While SEPS missile protection will not be added, the snow removal plan is being reviewed to ensure the refueling trailer path to SEPS is cleared.
17	Determine if a quantity of diesel fuel will be provided from the National SAFER Response Centers (NSRCs) along with requested Phase 3 portable equipment. If not, establish a contract with a fuel supplier outside a 25 mile radius from the plant to provide fuel within 48 hours of a Beyond Design Basis External Event (BDBEE).	In Progress. The existing contract with an offsite supplier outside the 25 mile radius is being updated.
18	Develop a FSG for staging and deployment of Phase 3 equipment from the RRCs into the Protected Area (PA).	Complete. FSG-4, FSG-4.1, FSG-13, FSG-13.1
19	Develop a FSG for connecting the two 1MW generators from the NSRC to 4.16 KV Emergency Buses E5 and E6 and a 1MW generator from the NSRC to 480V Buses E53 and E63.	Complete. FSG-4.1
20	Develop a FSG for refueling the NSRC generators or incorporate this action into the SEPS refueling FSG.	Complete. FSG-5.1.1
21	Install low leakage RCP seals on all four RCPs to minimize RCS leakage into Containment.	Complete. All four seals installed during OR17.
22	Based on PWROG guidance, determine if new FSGs are required that incorporate the existing guidance provided in SAG-1, 'Inject to the SGs', and SAG-3, 'Inject to the RCS' or whether transition points to these two Severe Accident Management Guidelines (SAMGs) should be added to the applicable EOPs.	Complete, new FSGs are being developed for Steam Generator (SG) and RCS injection in the event SEPS is unavailable using alternate FLEX RCS makeup connections. This is independent of SAMG guidance.

	<b>Overall Integrated Plan Pending Actions</b>	<b>Status</b>
23	Develop a method for obtaining local readings for the 12 critical parameters identified in the Integrated Plan and include in site procedures as appropriate.	Complete. FSG-7 and FSG-7.1.1
24	Develop Westinghouse FSGs to support ELAP strategies with SEPS unavailable.	Complete. FSG-0.1 directs the response to ELAP with SEPS unavailable.
25	Develop EC to use existing below grade Unit 2 Circulating Water (CW) abandoned piping section as a holding tank for credited makeup in SG injection strategies.	Complete. EC 282982 modifies the below grade Unit 2 Circ water piping to be used as a cistern for injection water.
26	Perform analysis to qualify Unit 2 CW piping as a credited makeup source in seismic and missile related events.	Complete. Documented in EC 282982 Fukushima FLEX Unit 2 CW Pipe Water Storage.
27	Perform analysis for containment pressure & temperature response after installation of RCP shutdown seals to ensure containment integrity is not challenged without containment cooling.	Complete. C-X-1-28141 Containment Response During ELAP - Gothic
28	Perform analysis for SG feedwater quality requirements to ensure continued SG heat sink capability for 72 hours following loss of AC power.	Complete. C-X-1-20720-CALC, S/G Water Quality Analysis Through 72 Hours
29	Perform analysis for RCS boration and cooldown strategies to support FSG development.	Complete. CN-SEE-II-15-3-Revision 1
30	Complete SG, Spent Fuel Pool (SFP), and RCS makeup hydraulic analysis for FLEX strategies in modes 1-6.	Complete. C-X-1-20718-CALC Diverse and Flexible Coping Strategy Hydraulic Analysis
31	Complete FSG setpoint calculations and basis.	In Progress.
32	Complete FLEX equipment storage building analysis and develop EC for SW pumphouse building mods.	Complete. EC 282582 FLEX Portable Equipment Storage.
33	Complete site flooding analysis and add any interim actions to OS1200.03, Severe Weather Conditions.	In Progress.

	<b>Overall Integrated Plan Pending Actions</b>	<b>Status</b>
34	Procure site FLEX portable equipment to augment Seabrook BDBEE response strategies.	Complete.
35	Complete ECs for plant system FLEX connections for Fire Tanks, EFW pumphouse, Demineralized Water Storage Tanks (DWSTs), and Positive Displacement Charging pump.	Complete. EC 282580
36	Complete Analysis for > 8 hrs heat removal using CST.	Complete. C-X-1-20719-CALC Determination of Water Inventory Required for RCS Heat Removal During ELAP
37	Revise the NextEra Energy Nuclear Training Program to assure personnel proficiency in the mitigation of BDBEE is adequate and maintained.	Complete
38	Complete the travel route soil liquefaction study.	Complete. This study has been provided to the NRC for their review.
39	Modify the SWPH entrance with a new Barrier I missile door to allow for rapid deployment with missile protection.	In Progress

## 7 Interim Staff Evaluation Open/Confirmatory Item Status

<b>Open/Confirmatory Item</b>	<b>Status</b>
3.2.4.8.A Verify that the enclosure for the SEPS DGs and switchgear SEPS-SWG-1 provides sufficient protection of the equipment from seismic events and wind driven missiles.	Closed
3.1.1.1.A Protection of FLEX equipment from seismic and high wind hazards – Confirm that the PDDPs and hose trailers will be adequately protected from seismic and high wind hazards.	Closed
3.1.1.2.A Confirm that at least one connection point for each use of a PDDP is protected from a seismic event (includes access to the connection point and areas the operators have to access to deploy or control the PDDP).	Closed (see follow-on action, Audit Open Item 1)

3.1.1.2.B Confirm that a tow vehicle for FLEX equipment movement is reasonably protected from a seismic event, flooding event, and high wind event.	Closed
3.1.1.3.A Procedural interface for seismic hazards -Confirm that operators have procedural guidance and references for the methods of obtaining local readings for critical parameters to support the implementation of the coping strategy, consistent with the guidelines in Section 3.2.1.10 of NEI 12-06.	Closed
3.1.1.4.A Off-Site Resources – Confirm the location of the local staging area for the RRC equipment, and that access routes to the site, the method of transportation, and the drop off area have been properly evaluated for all applicable hazards.	Closed
3.1.5 High temperature – Confirm that the effects of high temperature have been considered in the procurement, protection, and deployment of FLEX equipment.	Closed
3.2.1.7.A Confirm that portable FLEX equipment is included in the licensee’s program to maintain equipment available for deployment in shutdown and refueling modes.	Closed
3.2.1.9.A Use of portable pumps – Confirm that appropriate procedural guidance is provided for operation of the PDDPs for SG and RCS injection as part of the FLEX strategies.	Closed
3.2.1.9.B Confirm availability of the fire main to provide a suction source for the PDDP for all of the hazards applicable to Seabrook.	Closed
3.2.2.A Confirm that the PDDPs and hose trailers are incorporated into the FLEX guidelines for makeup and spray to the SFP.	Closed
3.2.4.4.A Confirm that adequate portable lighting is available for operator use during an ELAP event.	Closed
3.2.4.4.B The NRC staff has reviewed the licensee communications assessment (ADAMS Accession Nos. ML 12311A34 and ML 13060A048) and has determined that the assessment and planned upgrades are reasonable (ADAMS Accession No. ML 13102A254). Confirm that the upgrades have been completed.	Closed
3.2.4.7.A Confirm the source of water to be used for makeup to the service water cooling basin tower by the portable diesel-driven cooling tower makeup pump.	Closed

3.2.4.8.B Confirm that any SEPS missile barrier modifications do not interfere with the ability to remove snow from the SEPS DGs air intake system.	Closed
3.2.4.9.A Confirm that the refueling strategy for SEPS has been changed to require refueling to begin within 24 hours of the event.	Closed
3.3.1.A Confirm that the PDDPs will be included in the maintenance and testing (M&T) program in conformance with the Electric Power Research Institute report on M&T.	Closed
3.3.2.A Confirm that the configuration control of FLEX strategies conforms to the guidance of Section 11.8 of NEI 12-06.	Closed
3.4.A Offsite resources - Confirm that NEI 12-06, Section 12.2 guidelines 2 through 10, regarding minimum capabilities for offsite resources, have been adequately addressed.	Closed

## 8 July 2015 Audit Open Item Status

The following Table provides a summary of the Open Items from the July 2015 audit.

	<b>July 2015 Audit Open Item</b>	<b>Status</b>
1	ISE CI 3.1.1.2.A, Deployment Paths - During the audit walkdown, the staff noted non-seismic piping above the FLEX low pressure pump hose deployment path. The staff requested that the licensee make available an evaluation of the non-seismic piping over the FLEX deployment paths.	The evaluation has been provided and the staff is currently reviewing the evaluation.
2	AQ 3, Soil Liquefaction - The staff requested that the licensee make available the soil liquefaction assessments performed on the deployment routes.	The evaluation has been provided and the staff is currently reviewing the evaluation.
3	AQ 19, Heat Tracing - The staff requested that the licensee make available a heat tracing analysis for equipment required to cope with an ELAP.	In process.
4	AQ 33, Non-Safety Related Equipment - The licensee indicated that the U2 piping cistern is seismically protected and made available a seismic evaluation.	The staff is currently reviewing the evaluation.

	<b>July 2015 Audit Open Item</b>	<b>Status</b>
5	SE Review Item 12, Missile Protection - The licensee made available its missile protection evaluation of the TDEFWP exhaust.	The staff is currently reviewing the evaluation.
6	SE Review Items 14, 15, and 20, Heat-up Calculations - The staff requested the following actions regarding temperature heatup calculations and associated ventilation actions: <ol style="list-style-type: none"> <li>1. The staff requested that the control room temperature extrapolation be formally documented.</li> <li>2. The staff requested that the battery rooms' temperature extrapolation for both hot and cold outside ambient conditions be formally documented.</li> <li>3. The staff requested that the essential switch gear rooms' temperature extrapolation be formally documented considering the additional heat loads being added by the restoration of electric power during Phases 2 and 3 of the ELAP event.</li> <li>4. The staff requested that the emergency feedwater pumphouse temperature extrapolation be formally documented.</li> <li>5. The staff requested that the main steam and feedwater pipe chase's temperature extrapolation be formally documented. In addition, the staff requested that the licensee make available an evaluation of the impact of any uninsulated atmospheric steam dump valve (ASDV) piping, if the ASDVs are in service during the ELAP. The staff noted that the evaluation should include justification that the actions that need to be performed in the chases (i.e., connection of the FLEX low pressure pump to the SG feed lines) are capable of being accomplished with the conditions that will exist in those areas. Lastly, the staff requested that the licensee make available an evaluation of the environmental qualification of the ASDV nitrogen supply system.</li> <li>6. The staff requested that the licensee make available the containment pressure and temperature calculation.</li> <li>7. The staff requested that the licensee make available the ventilation actions (e.g., open doors, stage temporary ventilation, etc.) as a result of the heat-up calculations for the rooms listed above.</li> </ol>	In process.