August 28, 2013

NRC 2013-0078
10 CFR 50.54(f)

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

Point Beach Nuclear Plant, Units 1 and 2
Docket 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

NextEra Energy Point Beach, 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)

References:

1. NRC Order Number EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, dated March 12, 2012 [ML12054A735]
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, dated August 29, 2012 [ML12229A174]
3. NEI 12-06, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide, Revision 0, dated August 2012 [ML12221A205]
4. NextEra Energy Point Beach, 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), dated October 28, 2012 [ML12305A201]
5. NextEra Energy Point Beach, LLC's 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), dated February 22, 2013 [ML13053A401]

On March 12, 2012, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an Order (Reference 1) to NextEra Energy Point Beach, LLC (NextEra). Reference 1 was immediately effective and directs NextEra 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 initial status report regarding mitigation strategies. Reference 5 provided the NextEra 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. The purpose of this letter is to provide the first six-month status report pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the requirements of Reference 1. The enclosed report provides 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, if any.

This letter contains no new regulatory commitments.

If you have any questions please contact Mr. Michael Millen, Licensing Manager, at 920/755-7845.

I declare under penalty of perjury that the foregoing is true and correct. Executed on August 28, 2013.

Very truly yours,

NextEra Energy Point Beach, LLC

Larry Meyer
Site Vice President

Enclosure: NextEra Energy Point Beach, LLC's First Six Month Status Report for the Implementation of Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events

cc: Director, Office of Nuclear Reactor Regulation
Administrator, Region III, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC

ENCLOSURE

NEXTERA ENERGY POINT BEACH, LLC'S FIRST SIX MONTH STATUS REPORT FOR THE IMPLEMENTATION OF ORDER EA-12-049, ORDER MODIFYING LICENSES WITH REGARD TO REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS

1 Introduction

NextEra Energy Point Beach, LLC (NextEra) developed an Overall Integrated Plan (Reference 1 in Section 8), documenting the diverse and flexible strategies (FLEX), in response to Reference 2. This enclosure provides an update of milestone accomplishments since submittal of the Overall Integrated Plan, including any changes to the compliance method, schedule, or need for relief/relaxation and the basis, if any.

2 Milestone Accomplishments

The following milestone(s) have been completed since the development of the Overall Integrated Plan (Reference 1), and are current as of July 31, 2013.

- Initiate Engineering Changes for Modification Development

  Engineering changes (EC) have been initiated for all the FLEX modifications listed in NextEra Energy Point Beach, LLC's Overall Integrated Plan (Reference 1). A responsible owner has been assigned to each EC with a due date that supports NextEra's FLEX implementation schedule.

3 Milestone Schedule Status

The following provides an update to the Milestone Schedule submitted as Attachment 2 to the Overall Integrated Plan (Reference 1). It provides the activity status of each item, and whether the expected completion date has changed. The dates are planning dates subject to change as design and implementation details are developed.

The schedule provided in Reference 1 included a milestone to Complete Final Time Constraint Validations, due to be complete in May 2014. An activity to perform a Final Walkthrough Validation has been added to the milestone schedule. The Final Walkthrough activity will ensure that all FLEX response actions can be successfully performed. This will be complete by September 2014 for Unit 1 and September 2015 for Unit 2.

The following milestone target completion dates have been adjusted or added:

- Complete Analyses Supporting FLEX Strategies with a target completion date of August 2013 has been adjusted to November 2013.

  BASIS: This milestone is for analysis supporting the FLEX strategies and does not include the analysis required to implement the FLEX identified modifications. Analysis required for the FLEX modifications is within the scope of the modification implementation milestones. Completion of the FLEX analysis has taken longer than anticipated because of the difficulties encountered in defining initial conditions, assumptions and acceptance criteria for the Beyond-Design-Basis External Events

(BDBEEs). Several of the calculations also require specialty contractor assistance. The FLEX supporting analysis includes the following:

1. A DC load management and battery life analysis

2. A containment environmental analysis assuming installation of the shutdown (low leakage) Reactor Coolant Pump seals for Modes 1 through 4

3. A containment environmental analysis for Modes 5 and 6 assuming decay heat removal by steaming to a closed containment

4. An analysis demonstrating the adequacy of the Primary Auxiliary Building (PAB) environment for equipment and personnel access during Spent Fuel Pool (SFP) boiling

5. A formalized evaluation that demonstrates adequate shutdown margin

6. A PAB room heat up analysis to determine what additional time may be gained by opening area doors

7. Validated adequacy of the existing B.5.b pumps for use during Phase 2 Core Cooling and Heat Removal

8. Performance of the Turbine Driven Auxiliary Feedwater (TDAFW) pump and turbine at low Steam Generator (SG) pressures demonstrated by testing and/or analysis.

- Complete Final Time Constraint Validations with a target completion date of April 2014 has been adjusted to May 2014.

  BASIS: The time constraint validation will be performed in conjunction with the Phase II Staffing Assessment. The target completion date has been adjusted to coincide with the completion date for the Phase II Staffing Assessment milestone.

- Complete FLEX Support Guidelines (FSGs) has been changed to "Complete draft FLEX Support Guidelines for training." The target completion date of December 2013 is not changed.

  BASIS: The FSGs will be drafted and used during the training cycle preceding FLEX implementation for Unit 1. This will allow feedback from the operating crews to be incorporated into the final version prior to being issued during the Unit 1 FLEX implementing outage.

- A milestone has been added for Full Site FLEX Implementation with a target completion date of October 2015.

- A milestone has been added to Submit Completion Report with a target completion date of December 2015.

The revised milestone target completion dates do not impact the Order implementation date.

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Submit 60 Day Status Report	Oct 2012	Complete	N/A
Submit Overall Integrated Plan	Feb 2013	Complete	N/A
Submit 6 Month Updates:			
Update 1	Aug 2013	Complete	N/A
Update 2	Feb 2014	Not Started	N/A
Update 3	Aug 2014	Not Started	N/A
Update 4	Feb 2015	Not Started	N/A
Update 5	Aug 2015	Not Started	N/A
Validation:			
Complete Analyses Supporting FLEX Strategies	Aug 2013	Started	Nov 2013
Complete Final Time Constraint Validations	Apr 2014	Not Started	May 2014
Complete the Phase II Staffing Assessment	May 2014	Not Started	N/A
Complete Unit 1 Final Walkthrough Validation	Sept 2014	Not Started	N/A
Complete Unit 2 Final Walkthrough Validation	Sept 2015	Not Started	N/A
Modifications:			
Initiate Engineering Changes for Modification Development	Mar 2013	Complete	N/A
Complete Unit 1 & Common Non-Outage Modifications	Sep 2014	Started	N/A
Unit 1 Implementation Outage	Oct 2014	Not Started	N/A
Complete Unit 2 Non-outage Modifications	Sep 2015	Started	N/A
Unit 2 Implementation Outage	Oct 2015	Not Started	N/A
Storage:			N/A
Complete Construction of the FLEX Storage Facility	Aug 2014	Not Started	N/A
FLEX Equipment:			N/A
Initiate Procurement of Remaining FLEX Equipment	Aug 2013	Started	N/A
Receive Remaining FLEX Equipment	Mar 2014	Not Started	N/A
Complete Regional Resource Center (RRC) Offsite Delivery Arrangements	Aug 2014	Started	N/A
Procedures:			
Complete Revisions to Site Emergency Response Procedures	Mar 2014	Started	N/A
Complete draft FLEX Support Guidelines for training	Dec 2013	Started	N/A
Complete Maintenance and Operations Procedures related to FLEX Equipment Storage, Maintenance and Testing	Aug 2014	Not Started	N/A

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Complete FLEX Administrative Program Implementation (Unit 1)	Sep 2014	Started	N/A
Revise FLEX Administrative Program for Unit 2	Sep 2015	Not Started	N/A
Training:			
Complete Training Development	Jun 2014	Not Started	N/A
Complete Applicable Training for Unit 1 and Common FLEX Strategy Implementation	Sep 2014	Not Started	N/A
Complete Applicable Training for Unit 2 FLEX Strategy Implementation	Sep 2015	Not Started	N/A
Implementation:			
Unit 1 Implementation Completion	Oct 2014	Not Started	N/A
Unit 2 Implementation Completion	Oct 2015	Not Started	N/A
Full Site FLEX Implementation	Oct 2015	Not Started	N/A
Submit Completion Report	Dec 2015	Not Started	N/A

4 Changes to Compliance Method

NextEra Energy Point Beach, LLC Overall Integrated Plan submittal (Reference 1) described the Phase 2 480 VAC portable diesel generator connection points to be at busses 1B-03 and 2B-04. The current plans are to install the connection points on busses 1B-03 and 2B-03 because of easier installation access on bus 2B-03. Power to all four of the 480 VAC safeguards busses will be provided via use of the tie breaker between the B-03 and B-04 busses as originally described in the Overall Integrated Plan. This change will not affect the ability to power credited equipment during Phase 2.

The Overall Integrated Plan submittal (Reference 1) described an alternate flow path from the P-9 connection point to the SFP via the transfer canal drain piping. The description stated that the transfer canal doors would be over-topped if closed. The doors will not be overtopped as originally described. Flow from the transfer canal to the SFP will be provided via the fuel elevator hoist cable opening between the transfer canal and the SFP. This opening is approximately 3" x 12" in cross section and is at a lower elevation than the top of the transfer canal doors.

An integral part of the Point Beach strategy for Reactor Coolant System (RCS) inventory control was the installation of the Reactor Coolant Pump low leakage shutdown seals. With the recent failure of the Beaver Valley seal to actuate when tested, NextEra has put installation of the seals on hold until the technical issues are resolved and the seals are retested. Alternatives are being evaluated which may require a change in the coping strategies contained in our Overall Integrated Plan.

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

NextEra is considering an extension request for Point Beach Unit 1 implementation. The current required implementation date for Unit 1 is the 2014 fall refueling outage. An extension of one additional refueling cycle may be requested which would move the implementation date

to spring 2016. This change would result in Unit 1 implementation still remaining within the maximum allowed time frame of December 2016. The extension would provide additional time to resolve industry issues and fully design and safely implement modifications that affect both Point Beach units. The October 2015 implementation date for Unit 2 will be maintained.

The Unit 1 implementation extension request, if pursued, will be transmitted by separate correspondence. The milestones listed in this update will require adjustment if an extension request is approved.

6 Open Items from Overall Integrated Plan and Draft Safety Evaluation

The following tables provide a summary of the open items documented in the Overall Integrated Plan or the Draft Safety Evaluation (SE) and the status of each item.

	Overall Integrated Plan Open Item (Pending Actions)	Status
1	A DC load management strategy will be developed. It will include a formal evaluation to verify available DC power time and validate the Time Constraints to initiate and complete load stripping activities. The battery load management strategy will include power to credited installed equipment (e.g., DC MOVs, SOVs, etc.) and at least one channel of credited instrumentation during Phase 1. Time Constraint to have battery chargers energized and aligned prior to battery depletion will be validated.	In progress
2	An evaluation will be performed to determine whether system isolation will be required for Service Water (SW) system return and non-seismic/missile protected portions of the SW system to ensure adequate flow to the suction of the TDAFW pump.	In progress
3	Based on the results of the evaluation (Pending Action 2) required Operator actions to isolate SW will be time validated.	Not Started
4	Formal MAAP or other comparable analysis and evaluations will be performed to demonstrate the adequacy of the mitigation strategies for core cooling in all plant operating MODES.	GOTHIC analysis In Progress
5	A containment environmental analysis will be performed based on the use of low leakage RCP seals and the FLEX mitigation strategy.	GOTHIC analysis In Progress
6	An analysis will be performed to demonstrate the adequacy of the Primary Auxiliary Building (PAB) environment for equipment and personnel access during SFP boiling. The requirements for opening doors to establish a vent path will be determined. Administrative guidance will be created based on this analysis.	In Progress

	Overall Integrated Plan Open Item (Pending Actions)	Status
7	A SFP makeup water connection point will be added to the suction of the Hold Up Tank Recirculation Pump (P-9). The P-9 pump and associated piping which is currently not seismic class I will be evaluated and upgraded as necessary to make it seismically robust.	In Progress
8	T-30, Diesel Fire Pump Fuel Tank, and related piping will be evaluated for seismic loading and upgraded as necessary.	In Progress
9	The need for additional lighting will be evaluated as FSGs are developed.	Not Started
10	The deployment of credited FLEX equipment to the designated primary and secondary connection points within the required time frame will be resource and time validated.	Not Started
11	The portable 480 VAC generator secondary connection points will be designated.	In Progress
12	The Cable Spreading Room will reach 120°F at approximately 1 hour 16 minutes; the ability to meet the Time Constraint will be validated.	In Progress
13	An overall diesel refueling plan will be developed based on final FLEX diesel driven component fuel consumption requirements that specifies refueling frequency and time requirements. Time Constraint based on Fuel Oil Consumption of Diesel Driven Fire Pump (DDFP) will be validated.	Not started
14	Further evaluation will be required to address the TDAFW pump extended operation at low Steam Generator (SG) pressures and low decay heat loads.	In Progress
15	Time validation studies will be conducted to justify the Time Constraints and resources necessary for implementing the FLEX strategies. These will be performed in accordance with Point Beach Operations Manual OM 4.3.8, "Control of Time Critical Operator Actions."	Not Started
16	Point Beach will develop strategy implementing procedures and FLEX Support Guidelines including the following: • Provide guidance for manual actions to implement Auxiliary Feed Water (AFW) steam and discharge line alignment • Provide guidance for operators to provide steam or AFW flow from opposite unit when required • Procedurally control maintaining one accumulator available in Modes 5 and 6 with SGs unavailable	In Progress

	Overall Integrated Plan Open Item (Pending Actions)	Status
17	Systematic Approach to Training (SAT) will be used to evaluate training requirements for station personnel based upon changes to plant equipment, implementation of FLEX portable equipment, and new or revised procedures that result from implementation of the FLEX strategies.	In Progress
18	Seismically harden the Condensate Storage Tanks (CST) and missile protect the bottom 6 feet to provide additional coping time for aligning the DDFP to the SW System and the suction of the TDAFW pump.	In Progress
19	Harden existing diesel driven fire pump to meet seismic requirements. Install a cross connect between fire water and the SW system to supply the TDAFW pump suction. The cross connect to SW will also have a connection point for a Portable Diesel Driven Pump (PDDP).	In Progress
20	A compressed gas backup will be installed for the accumulator fill valves to allow the boric acid to be injected into the RCS in a controlled manner.	In Progress
21	Cross connect piping will be installed between the Unit 1 and Unit 2 TDAFW pumps' steam exhaust lines, steam supply lines and pump discharge lines.	In Progress
22	Connection points for a portable diesel pump will be added to the Residual Heat Removal (RHR) system for injecting into the RCS.	In Progress
23	Install low leakage RCP seals to decrease RCP seal leakage and increase the time to core uncovery.	With the recent failure of the Beaver Valley seals to actuate when tested, NextEra has placed installation of the seals on hold until the technical issues are resolved and retested. Alternatives are being evaluated which may require a change in the coping strategies contained in our Overall Integrated Plan.
24	Flanged hose adapters will be fabricated to facilitate connection of the Portable Diesel Driven Charging Pump (PDDCP) to the primary and secondary connection points without modification to permanent plant equipment. The hose adapters for each connection point will be pre-staged and stored with the skid pumps.	In Progress
25	Install Portable Diesel Generator (PDG) connection points at 1B-03 and 2B-03.	In Progress Connection location changed from 2B-04 to 2B-03 for ease of access.
26	Modifications to facilitate the connection of a PDG to the 1-A06 and 2-A06 4.16 kV switchgear will be performed.	In Progress

	Overall Integrated Plan Open Item (Pending Actions)	Status
27	The Steam Generator Storage Building (SGSB) will be analyzed for seismic and tornado loading to qualify it for FLEX purposes. The west wall of the SGSB will require additional evaluation and modification to ensure that it satisfies the FLEX requirements.	In Progress
28	Evaluate the Technical Support Center (TSC) 18.5 foot level for adequacy of storing miscellaneous FLEX strategy equipment.	The feasibility of the TSC surviving a seismic event or tornado missile is considered unlikely and this option will no longer be pursued. Multiple storage locations will be considered.
29	Formalize an evaluation that demonstrates adequate shutdown margin can be maintained during cooldown without establishing letdown and injecting water from the Refueling Water Storage Tank (RWST).	In Progress
30	Required operator actions to cross connect the TDAFW pump discharge and steam supply lines will be time validated.	Not Started
31	Specific actions per AOP-30, "Temporary Ventilation for Vital Areas," will be developed to account for the loss of all AC. Additional analysis will be performed to determine what additional time may be gained by opening cabinets and area doors.	In Progress
32	Validate the adequacy of the existing B.5.b pumps for use during Phase 2 Core Cooling and Heat Removal.	In Progress
33	Develop performance requirements for Phase 2 and 3 portable equipment following completion of required analyses and modification design efforts.	In Progress
34	The Phase II staffing study for FLEX will include an assessment of communications for FLEX activities.	A preliminary staffing assessment is scheduled for the third quarter 2013.
35	If the non-safety related batteries are required to be credited as part of the battery load management strategy, they will be evaluated and upgraded as necessary to make them seismically robust and tornado missile protected.	The feasibility of the non-safety batteries being available as a backup to the safety related batteries is considered unlikely and this option will no longer be pursued.

	Overall Integrated Plan Open Item (Pending Actions)	Status
36	Point Beach will implement a FLEX program stipulating the required administrative controls to be implemented. The program will include: • FLEX equipment procurement requirements • Plant configuration control procedures to assure plant physical changes will not adversely impact the approved FLEX strategies • Complete Maintenance and Operations Procedures related to FLEX Equipment Storage, Maintenance, and Testing • Deployment strategy administrative requirements that address all Modes of operation and requirements to keep routes and staging areas clear or invoke contingency actions	In Progress

Draft Safety Evaluation Open Item	Status
Draft Safety Evaluation has not been received yet.	N/A

7 Potential Draft Safety Evaluation Impacts

There are no potential impacts to the Draft Safety Evaluation identified at this time.

8 References

The following references support the updates to the Overall Integrated Plan described in this enclosure:

1. NextEra Energy Point Beach, LLC's 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)," dated February 22, 2013 [ML13053A401]

2. NRC Order Number EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012 [ML12054A735]