



July 30, 2015

NRC 2015-0039
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, Response to Request for Information Related to Full Compliance Report for the March 12, 2012 Commission Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order EA-12-051)

- References: (1) U.S. Nuclear Regulatory Commission, Order Number EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Effective Immediately)," dated March 12, 2012 [ML12056A044]
- (2) NextEra Energy Point Beach, LLC's Full Compliance Report for the March 12, 2012 Commission Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051), dated December 19, 2014 [ML14353A047]
- (3) NRC Electronic Mail to NextEra Energy Point Beach, LLC, Point Beach – Request for Additional Information RE Integrated Plan for Reliable SFP Instrumentation (Order EA-12-051), dated July 2, 2015

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued an Order to NextEra Energy Point Beach, LLC (NextEra) (Reference 1). Reference 1 was immediately effective and directed NextEra to install reliable spent fuel pool (SFP) level instrumentation. By letter dated December 19, 2014, NextEra notified the NRC that full compliance with Order EA-12-051 had been achieved for Point Beach (Reference 2).

An onsite audit of the diverse and flexible coping strategies (FLEX) was conducted at Point Beach by NRC staff during the week of June 8 - 12, 2015. During the audit, the SFP level instrumentation and associated documents were reviewed. Request for Additional Information 14 (RAI-14) was generated (Reference 3). The NRC audit team also requested additional information related to the responses previously provided for RAI-8, RAI-11 and RAI-12 to aid their review. The enclosure to this letter provides the response to RAI-14 and additional information related to RAI-8, RAI-11 and RAI-12.

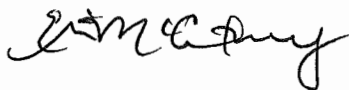
This letter contains no new regulatory commitments or revisions to existing commitments.

If you have any questions regarding the enclosed information, please contact Mr. Bryan Woyak, Licensing Manager, at (920) 755-7599.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 30, 2015.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read "Eric McCartney". The signature is fluid and cursive, with the first name "Eric" and last name "McCartney" clearly distinguishable.

Eric McCartney
Site Vice President

Enclosure

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
Ms. Lisa M. Regner, NRR/JLD/PMB, USNRC
Mr. Blake A. Purnell, NRR/JLD/PMB, USNRC
Mr. Steven R. Jones, NRR/DSS/SBPB, USNRC

ENCLOSURE

NEXTERA ENERGY POINT BEACH UNITS 1 & 2 RESPONSE TO REQUEST FOR INFORMATION RELATED TO THE FULL COMPLIANCE REPORT FOR THE MARCH 12, 2012 COMMISSION ORDER TO MODIFY LICENSES WITH REGARD TO RELIABLE SPENT FUEL POOL INSTRUMENTATION (ORDER EA-12-051)

An onsite audit of the diverse and flexible coping strategies (FLEX) was conducted at Point Beach by NRC staff during the week of June 8 - 12, 2015. During the audit, the spent fuel pool (SFP) level instrumentation and associated documents were reviewed. Request for Additional Information 14 (RAI-14) was generated. The NRC audit team also requested additional information related to the responses previously provided for RAI-8, RAI-11 and RAI-12 to aid their review. This enclosure provides the response to RAI-14 and additional information related to RAI-8, RAI-11 and RAI-12.

REQUEST FOR INFORMATION (RAI)

RAI-14: *Please provide an assessment of potential susceptibilities of electromagnetic interference (EMI) in the areas where the spent fuel pool (SFP) level instrumentation is located and how those susceptibilities will be mitigated.*

NextEra Response to RAI-14

Point Beach installed the Westinghouse Guided Wave Radar Spent Fuel Pool Instrumentation System. Westinghouse performed electromagnetic compatibility (EMC) qualification of the system.

Westinghouse Report EQ-QR-269, documents the test results for the susceptibilities of the equipment and the modifications required to meet criterion B or A for the various testing performed. Point Beach reviewed the susceptibilities of the equipment and purchased the appropriate modifications to mitigate them based on the locations of the plan where it would be installed as noted below.

As noted in the response to RAI-10 from Letter NRC 2014-0077, the location of the equipment was chosen for its access routes and proximity to a designated watch station. Administrative controls via signs are in place to preclude the use of radios with the control panel doors open during an ELAP.

Point Beach Engineering Change (EC) 276803 installed the SFP instrumentation. The equipment and installation requirements were designed to ensure the equipment will operate reliably with consideration to electromagnetic compatibility of the system. The EC states:

"Westinghouse position is the standard base product meets criterion B and any additional modifications required to meet [criterion] A could be purchased or installed by the sites based on the testing reports. Criterion A equipment shall continue to operate during and after the event with no degradation or loss of function. Criterion B only requires the equipment to operate following the event. NextEra chose to purchase most of the criterion A modifications. This includes routing the cable in dedicated conduit, installing an enclosure at the launch plate to house the coupler, 90 degree connector and coax cable, an enclosure to house the level sensor head and a separate enclosure at the level display to house a second surge suppressor and breaker. This second enclosure is where the main power feed connects thus the signal can be filtered prior to entering the main level display enclosure."

Radio frequency interference (RFI) testing was conducted by Point Beach as a post-installation test. The test included keying a radio at specified distances from the launch plate area, transmitter housing, and the electronics cabinet. All tests performed had satisfactory results with no signal disturbance.

Although the vendor and onsite test results were found to be satisfactory, to ensure personnel awareness of the instrumentation's radio frequency sensitivity, work orders were initiated to mark the areas around the indicator cabinets as "RFI sensitive."

ADDITIONAL INFORMATION RELATED TO PRIOR RAI RESPONSES

RAI-8: RAI-8 requested information regarding the SFP level instrument channel accuracy. The response to the RAI was submitted to the electronic portal and was stated in the Enclosure to the SFP Full Compliance Report, dated December 19, 2014, Table 1.

During the Point Beach onsite FLEX Audit the week of June 8 - 12, 2015, the auditor questioned why the Point Beach Auxiliary Building Log channel check specified an allowed maximum deviation of ± 6 inches when the vendor documentation indicates accuracy to ± 3 inches. Accuracy greater than ± 3 inches could be indicative of a nonfunctioning instrument.

NextEra Additional Information Related to RAI-8

Vendor documents WNA-CN-00301 and WNA-DS-02957-GEN describe the SFP level instrument channel accuracy under both (a) normal SFP level conditions, and (b) Beyond Design Basis (BDB) conditions that would be present if SFP level were at Level 2 and Level 3 datum points. In accordance with the vendor documentation, each instrument channel will be accurate to within ± 3 inches during normal spent fuel pool level conditions and will retain this accuracy after BDB conditions. Point Beach did not install remote displays, consequently, the instrument design is within the ± 3 inches accuracy reported by the vendor.

Point Beach originally specified ± 6 inches for accuracy of the SFP level instrumentation. The ± 6 inch value was chosen to provide margin to the Order requirement of ± 1 foot. The out of service requirement stated in the Operations SFP level check in the Auxiliary Building Log was based on the original Point Beach specification (± 0.5 feet) and not the vendor's stated accuracy. Consequently, a Condition Report was initiated and a revision will be made to the Auxiliary Building Log to perform a comparison to the opposite channel with ± 3 inch deviation allowed. Additionally, the Log activity will perform a comparison to the local indicator, LC-00634, with a more stringent deviation allowance.

A history review was performed for the wide range SFP level instrumentation and determined that all channel verification readings were within ± 3 inches.

No discrepancy was identified in the instrument calibration procedure.

RAI-11: RAI-11 requested a list of procedures addressing normal and abnormal response, calibration, test, maintenance and inspection. A brief description of the technical objectives of each procedure was requested. This RAI was addressed in the Second Six-Month Status Report dated February 28, 2014. At the time of the response, procedure development was still in progress.

NextEra Additional Information Related to RAI-11

The following tables provide a list of the operating, programmatic, maintenance and preventive maintenance procedures, a summary of their technical objectives, and the specified frequency of the preventive maintenance procedures.

<i>OPERATING PROCEDURES:</i>		
PROCEDURE NO./ CURRENT REVISION	TITLE	TECHNICAL OBJECTIVE
1-SOP-208Y-L04 Revision 8	Unit 1 Vital Train B Lighting Panels	Provides guidance for removing normal power to the wide range level indicator
2-SOP-208Y-L03 Revision 9	Unit 2 Vital Train A Lighting Panels	Provides guidance for removing normal power to the wide range level indicator
AOP-8F Revision 20	Loss of Spent Fuel Pool Cooling	Entered in an abnormal condition for a loss of SFP cooling. Provides guidance for establishing cooling and makeup to the SFP.
FSG-11 Draft	Alternate SFP Makeup and Cooling	Entered from AOP-8F when in a beyond design basis event and SFP makeup is required.
Form PBF-2031 Revision 107	Auxiliary Building Log	Daily surveillance (channel check) of SFP wide range level.

<i>PROGRAMMATIC PROCEDURES:</i>		
DOCUMENT NO./ CURRENT REVISION	TITLE	TECHNICAL OBJECTIVE
OM 3.42 Revision 0	Control of Wide-Range SFP Level Determination	Provides programmatic requirements for the SFP wide range level indicators and actions to take if one or both instruments are out of service.

MAINTENANCE PROCEDURES:

PROCEDURE NO./ CURRENT REVISION	TITLE	TECHNICAL OBJECTIVE
ICP 03.017 Revision 0	Calibration of SFP Level Instrumentation Systems	Functional check and calibration of the SFP wide range level indicators.

PREVENTIVE MAINTENANCE PROCEDURES:

Preventive maintenance activities are being developed in accordance with vendor technical manual WNA-GO-00127-GEN, Revision 3, and vendor calibration procedure WNA-TP-04709-GEN, Revision 4.

DOCUMENT	TECHNICAL OBJECTIVE	WESTINGHOUSE ESTABLISHED FREQUENCY	POINT BEACH RECOMMENDED FREQUENCY
ICP 03.017 Revision 0 Model Work Order 40345581	Functional Check	Within 60 days of a planned refueling outage, considering normal testing scheduling allowances (e.g., 25%), but not more than once per 12 months.	One year, with a Spring and Fall call-up to meet the 60 day refueling outage requirement.
	Residual Boron Buildup Check <i>(procedure change request is pending to add this objective to ICP 03.017 or the associated Model Work Order)</i>		
Model Work Order 40345840 <i>(in planning status)</i>	Battery Replacement	3 years	3 years
Model Work Order 40345843 <i>(in planning status)</i>	Level Sensor Replacement	7 years	7 years

RAI-12a, b, c: RAI-12 requested the following information:

a) Further information describing the maintenance and testing program the licensee will establish and implement to ensure that regular testing and calibration is performed and verified by inspection and audit to demonstrate conformance with design and system readiness requirements. Please include a description of your plans for ensuring that necessary channel checks, functional tests, periodic calibration, and maintenance will be conducted for the level measurement system and its supporting equipment.

b) A description of how the guidance in NEI 12-02 section 4.3 regarding compensatory actions for one or both non-functioning channels will be addressed.

c) A description of what compensatory actions are planned in the event that one of the instrument channels cannot be restored to functional status within 90 days.

The response to RAI-12a, b, c was provided in the Second Sixth Month Update on February 28, 2014. At the time of the response, procedure development was still in progress.

NextEra Additional Information Related to RAI-12a

Performance of routine maintenance and testing will occur as prescribed in maintenance procedure ICP 03.017, and the preventive maintenance Model Work Orders described in RAI-11 response, above.

Operations Manual (OM) 3.42, Wide-Range Spent Fuel Pool Level Instrumentation, was established to ensure the wide range SFP level instrumentation is properly maintained and tested.

Refer to RAI-11 for the description of channel checks, functional tests, periodic calibration and maintenance.

NextEra Additional Information Related to RAI-12b

Operations Manual (OM) 3.42 was established to provide programmatic requirements for the SFP wide range level indicators, including actions to take if one or both instruments are out of service. NEI 12-02 is a basis document for this Operations Manual.

CONDITION	NEI 12-02 REV. 1 GUIDANCE	OM 3.42 GUIDANCE
One Channel Wide Range SFP Level Instrumentation Out of Service	<ul style="list-style-type: none"> • The primary or back-up instrument channel can be out of service for testing, maintenance and/or calibration for up to 90 days provided the other channel is functional. • Compensatory actions must be taken if the instrumentation channel is not expected to be restored or is not restored within 90 days. 	<ul style="list-style-type: none"> • Initiate actions to restore channel to functional status within 90 days. • Initiate an evaluation in accordance with the Corrective Action Program. The evaluation shall determine compensatory actions if a second channel becomes inoperable. The evaluation shall include a planned schedule for restoring the instrument channel(s) to functional status.
Two Channels Wide Range SFP Level Instrumentation Out of Service	<ul style="list-style-type: none"> • Initiate actions within 24 hours to restore one of the channels of instrumentation. • Implement compensatory actions (e.g., use of alternate suitable equipment or supplemental personnel) within 72 hours. 	<ul style="list-style-type: none"> • Initiate action to restore at least one channel to functional status within 24 hours. • Initiate compensatory actions for monitoring wide range SFP level within 24 hours. Initiate an evaluation in accordance with the Corrective Action Program. The evaluation shall document compensatory actions taken or planned to be taken to implement an alternate method of monitoring and schedule required actions for restoring the instrumentation channel(s) to functional status.

A Condition Report was issued on June 9, 2015, to review the Point Beach and NextEra fleet procedures for the wide range SFP level instrumentation to ensure consistent implementation of out of service requirements following the guidance of NEI 12-02, Revision 1. As a result of the review, OM 3.42 will be revised to bring it into alignment with NEI 12-02 out of service guidance.

NextEra Additional Information Related to RAI-12c

Compensatory measures are not prescribed in advance. Upon identifying a channel out of service, an evaluation will be performed in accordance with the Corrective Action Program. The evaluation will identify the necessary compensatory measures to be taken, including a planned schedule for restoring the instrument channel(s) to functional status.