



April 29, 2010

NRC 2010-0037
10 CFR 50.90

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

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

License Amendment Request 261
Extended Power Uprate
Response to Request for Additional Information

- References:
- (1) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)
 - (2) NRC letter to NextEra Energy Point Beach, LLC, dated April 7, 2010, Point Beach Nuclear Plant, Units 1 and 2 – Request for Additional Information from Human Performance Branch RE: Extended Power Uprate (TAC Nos. ME1044 AND ME1045) (ML100820370)

NextEra Energy Point Beach, LLC (NextEra) submitted License Amendment Request (LAR) 261 (Reference 1) to the NRC pursuant to 10 CFR 50.90. The proposed license amendment would increase each unit's licensed thermal power level from 1540 megawatts thermal (MWt) to 1800 MWt, and revise the Technical Specifications to support operation at the increased thermal power level.

Via Reference (2), the NRC staff determined that additional information was required to enable the staff's continued review of the request. Enclosure 1 provides the NextEra response to the NRC staff's request for additional information.

This letter contains no new Regulatory Commitments and no revisions to existing Regulatory Commitments.

The information contained in this letter does not alter the no significant hazards consideration contained in Reference (1) and continues to satisfy the criteria of 10 CFR 51.22 for categorical exclusion from the requirements of an environmental assessment.

In accordance with 10 CFR 50.91, a copy of this letter is being provided to the designated Wisconsin Official.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on April 29, 2010.

Very truly yours,

NextEra Energy Point Beach, LLC

 A handwritten signature in black ink, appearing to read 'LM' or similar initials, followed by the word 'For' written in a cursive script.

Larry Meyer
Site Vice President

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
PSCW

ENCLOSURE 1

NEXTERA ENERGY POINT BEACH, LLC POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

LICENSE AMENDMENT REQUEST 261 EXTENDED POWER UPRATE RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

The NRC staff determined that additional information was required (Reference 1) to enable the Human Performance Branch to complete the review of License Amendment Request (LAR) 261, Extended Power Uprate (EPU) (Reference 2). The following information is provided by NextEra Energy Point Beach, LLC (NextEra) in response to the NRC staff's request.

RAI IHPB HF-1

Describe the integrated verification and validation process for control room modifications and emergency operating procedure revisions.

NextEra Response

A plant administrative procedure provides the requirements for verification and validation of Emergency Operating Procedures (EOPs) and Abnormal Operating Procedures (AOPs). The PBNP Operations Manager has overall responsibility for the EOP verification and validation process. Changes to EOPs and AOPs resulting from plant design changes, including control room modifications, must be processed using this procedure.

Verification of EOPs and AOPs is performed by a knowledgeable individual (or team), independent from the document preparer. Verification of EOPs includes the following checks:

- Review of design changes and Technical Specification (TS) changes by Design Engineering personnel to ensure continued compliance with the design bases.
- Changes to Final Safety Analysis Report (FSAR) have been initiated and approved if applicable, in accordance with the site's FSAR change process.
- EOP entry conditions, consistent with those listed in the Westinghouse Owner's Group (WOG) Emergency Response Guidelines (ERGs) or deviations, are justified in the EOP deviation and background documents.
- EOP sequencing of steps consistent with those listed in the WOG ERGs or deviations are justified in the EOP deviation and background documents.
- EOP steps are consistent with those listed in the WOG ERGs or deviations are justified in the EOP deviation and background documents.

- Differences with WOG guidelines are consistent with intent of the ERGs.
- Documentation is adequate to explain the intent of complex steps.
- References to all systems and components in the WOG ERGs are included in the EOP, as applicable.
- Computations specified in the procedure are consistent with the WOG ERGs or deviations are justified in the EOP deviation and background documents.
- Cautions or notes specified in the procedure are consistent with the WOG ERGs or deviations are justified in the EOP deviation and background documents.
- Contingency actions in the procedure are consistent with the WOG ERGs or deviations are justified in the EOP deviation and background documents.
- There are no conflicts between the foldout page requirements and the procedure actions.
- Procedure steps are consistent with the plant's design.
- Quantitative ranges specified in the procedure are consistent with the plant design.
- Limits specified in the procedure are consistent with the WOG ERGs or deviations are justified in the EOP deviation and background documents.
- Charts, tables and curves presented in the procedure are consistent with the WOG ERGs or deviations are justified in the EOP deviation and background documents.
- Parameter values, numerical values and setpoints in the procedure correspond with setpoint document values.

Technical changes to EOPs are verified by Operations, Design Engineering, Probabilistic Risk Assessment, and Training personnel to maximize the effectiveness of the verification process.

Validation of EOPs and AOPs is a user review conducted by a team knowledgeable in performing the procedure to ensure that the procedure can be followed and performed by qualified individuals. The validation process involves use of a validation team. The validation team leader is selected based on the scope of the validation and the validation method(s) used. The validation team member(s) are selected to satisfy the following criteria for technical changes to EOPs:

- The team should be multi-disciplinary.
- The team should collectively be knowledgeable in the areas of plant operations, training, simulator, technical bases, EOP development, and PRA.
- At least one team member shall be a licensed operator.
- For validations performed on the simulator, at least one team member shall be a simulator instructor.

EOP validation is performed using one of the following methods:

- Simulator validation – performed on the simulator using scenarios for the procedure to be validated.
- Walkthrough validation – performed at the in-plant location(s) where the procedure would be performed.
- Table-top validation – table-top discussion of scenario(s) that would use the EOP being validated.

The validation includes one or more scenarios that encompass the changes to the EOP(s) being validated. The validation team assesses time critical actions that might be affected by the changes.

During validation scenarios, plant failures are selected to exercise the procedure(s) being validated considering:

- Single and multiple failures, when appropriate.
- Concurrent and sequential failures, when appropriate.
- Dual unit failures, when appropriate.
- Simulator malfunctions that closely model the selected failures, if the simulator is to be used.

Personnel are assigned to resolve discrepancies identified during validation. Changes are provided as appropriate, to address discrepancies. If necessary, additional validation is performed once discrepancies have been resolved.

Plant Operations Review Committee (PORC) review and approval is required for all changes to EOPs. All technical changes to EOPs are approved by the Operations Manager or designee.

RAI IHPB HF-2

Describe the results of task analysis and simulations performed to establish operator action times with regard to operator actions after steam generator tube rupture.

NextEra Response

Simulator changes for the EPU have not yet been completed. Consequently, operator action times for EPU have not been evaluated using the simulator. The following operator action times were determined using the current plant configuration and were used as input for the steam generator tube rupture (SGTR) analysis:

Operator Action	Time for Operator Action
Isolate auxiliary feedwater (AFW) to affected steam generator (SG)	5 minutes
Initiation of reactor coolant system (RCS) depressurization following termination of RCS cooldown	3 minutes
Secure safety injection (SI) pumps following termination of RCS depressurization	2 minutes

The action times listed above are not expected to change for EPU.

The SGTR margin to overfill analysis performed for EPU demonstrated the following sequence of events:

Event	Time (sec)
Tube Rupture	0
Reactor Trip	64
Auxiliary Feedwater Initiation	64
Safety Injection (SI) Actuation	163
Isolate Ruptured SG	360
Initiate RCS Cooldown with Intact SG	1380
Terminate RCS Cooldown	1854
Initiate RCS Depressurization	2034
Terminate RCS Depressurization	2096
Stop SI Flow	2217
SGTR Break Flow Stopped	2632

After the PBNP simulator is modified to reflect EPU, plant EOPs used for response to a SGTR will be validated and verified in accordance with the process described in the above response to IHPB HF-1. This will include timing to ensure plant operators can perform required actions supporting the SGTR analysis.

RAI IHPB HF-3

Describe the timing for reflecting control room changes in the simulator.

NextEra Response

Plant procedures for simulator configuration management ensure that simulator hardware, software and modeling enable the simulator to match plant response and ensure physical fidelity requirements, as required by ANSI/ANS-3.5-1985, Nuclear Power Simulators for Use in Operator Training. Plant changes are required to be reflected in the simulator within one year following installation in the plant.

PBNP currently plans to implement changes in the simulator for EPU, alternative source term (AST), and auxiliary feedwater (AFW) prior to the change being implemented in the field. This is being done to allow just-in-time-training for Operations personnel prior to operation of the modified plant.

There are four instances where major plant changes will be implemented. These include:

- AST implementation - either on-line implementation or during Unit 2 refueling outage in Spring 2011
- AFW implementation - either on-line implementation or during Unit 2 refueling outage in Spring 2011
- Unit 2 EPU – implementation during Unit 2 refueling outage in Spring 2011
- Unit 1 EPU – implementation during Unit 1 refueling outage in Fall 2011.

References

- (1) NRC letter to NextEra Energy Point Beach, LLC, dated April 7, 2010, Point Beach Nuclear Plant, Units 1 and 2 – Request for Additional Information from Human Performance Branch RE: Extended Power Uprate (ML100820370)
- (2) FPL Energy Point Beach, LLC letter to NRC, dated April 7, 2009, License Amendment Request 261, Extended Power Uprate (ML091250564)