



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 9, 2014

Mr. Eric McCartney
Site Vice President
NextEra Energy Point Beach, LLC
Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241-9516

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 – REGULATORY AUDIT IN SUPPORT OF LICENSE AMENDMENT REQUEST TO IMPLEMENT THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805, “PERFORMANCE-BASED STANDARD FOR LIGHT WATER REACTOR ELECTRIC GENERATING PLANTS,” AS INCORPORATED INTO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS*, PARAGRAPH 50.48(c) (TAC NOS. MF2372 AND MF2373)

Dear Mr. McCartney:

On June 26, 2013, NextEra Energy Point Beach, LLC (NextEra, the licensee) submitted a license amendment request (LAR) to change its fire protection program to one based on the National Fire Protection Association (NFPA) standard 805, “Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants,” 2001 Edition, as incorporated into Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.48(c), for the Point Beach Nuclear Plant (Point Beach), Units 1 and 2.

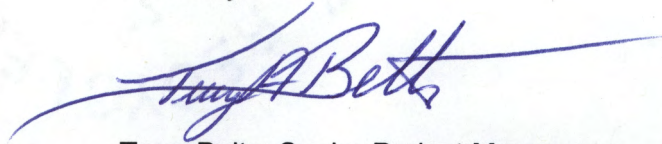
The U.S. Nuclear Regulatory Commission staff will be conducting an on-site audit from NextEra’s Training Building in Two Rivers, Wisconsin, during the week of June 9 - 12, 2014. The purpose of the audit is to 1) gain a better understanding of the detailed calculations, analyses and bases underlying the NFPA 805 LAR and confirm the staff’s understanding of the LAR; 2) identify further information that is necessary for the licensee to submit for the NRC staff to reach a licensing or regulatory decision; 3) discuss requests for additional information; 4) verify that NextEra’s planned process for self-approval of fire protection program changes will meet the proposed NFPA 805 license condition and quality requirements; 5) establish an understanding of proposed plant modifications necessary to implement NFPA 805; and, 6) verify the implementation of processes or procedures that the licensee committed to as part of NFPA 805 implementation.

E. McCartney

- 2 -

If you have any questions, please contact me at 301-415-3049 or by e-mail at Terry.Beltz@nrc.gov.

Sincerely,



Terry Beltz, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure:
Audit Plan

cc w/encl: Distribution via Listserv

AUDIT PLAN

JUNE 9 - 12, 2014

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-266 AND 50-301

(TAC NOS. MF2372 AND MF2373)

1.0 BACKGROUND

NextEra Energy Point Beach, LLC (NextEra, the licensee) submitted a license amendment request (LAR) (Reference 1) to change its fire protection program to one based on the National Fire Protection Association (NFPA) standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition, as incorporated into Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.48(c), for the Point Beach Nuclear Plant (Point Beach), Units 1 and 2.

The U.S. Nuclear Regulatory Commission (NRC) staff's review of the LAR has commenced in accordance with the Office of Nuclear Reactor Regulation's (NRR) Office Instruction LIC-101, "License Amendment Review Procedures" (ADAMS Accession No. ML113200053). The NRC staff has determined that a regulatory audit associated with the LAR should be conducted in accordance with the NRR Office Instruction LIC-111, "Regulatory Audits" (ADAMS Accession No. ML082900195), to allow the staff to gain a better understanding of the licensee's calculations, proposed plant modifications, and other aspects of the LAR.

A regulatory audit is a planned, license or regulation-related activity that includes the examination and evaluation of primarily non-docketed information. A regulatory audit is conducted with the intent to gain understanding, to verify information, and/or to identify information that will require docketing to support the basis of the licensing or regulatory decision. Performing a regulatory audit of the licensee's information is expected to assist the NRC staff in efficiently conducting its review or gain insights on the licensee's processes or procedures. Information that the NRC staff relies upon to make the safety determination must be submitted on the docket. However, there may be supporting information retained as records under 10 CFR 50.71 and/or 10 CFR 54.37 that, although not required to be submitted as part of the licensing action, would help the staff better understand the licensee's submitted information.

The objectives of this regulatory audit are to:

- Gain a better understanding of the detailed calculations, analyses and bases underlying the NFPA 805 LAR and confirm the staff's understanding of the LAR;
- Identify further information that is necessary for the licensee to submit for the NRC staff to reach a licensing or regulatory decision; discuss requests for additional information (RAIs);

Enclosure

- Verify that the licensee's planned process for self-approval of fire protection program (FPP) changes will meet the proposed NFPA 805 license condition and quality requirements;
- Establish an understanding of proposed plant modifications necessary to implement NFPA 805; and,
- Verify the implementation of processes or procedures that the licensee committed to as part of NFPA 805 implementation.

2.0 REGULATORY AUDIT BASIS

The basis of this audit is the licensee's LAR (Reference 1) and the Standard Review Plan (SRP) Section 9.5.1.2, "Risk-Informed, Performance-Based (RI/PB) Fire Protection" (Reference 2). References 3 through 7 provide additional information that will be used to support the audit.

3.0 REGULATORY AUDIT SCOPE OR METHOD

The audit team will review the licensee's NFPA 805 transition as proposed in the LAR. Key to this effort is the licensee's RI/PB FPP. The team will review the fundamental FPP elements and minimum design requirements. A sample of fire protection engineering evaluations may be selected for review. In addition, the team will review, as necessary, the regulatory basis, references, licensing actions, existing engineering equivalency evaluations, and issues that the licensee has deemed "previously approved."

The scope of the review of nuclear safety performance criteria may include both at-power and non-power operational modes, and may require a sample of procedures and other documentation. The compliance by fire area review will, as necessary, include multiple spurious operations, the transition of operator manual actions to recovery actions (RAs), fire protection engineering evaluations, and NFPA 805 deterministic requirements. The audit team may also include alternatives to compliance with NFPA 805, if any are identified.

The audit team may review a sample of fire risk assessments and plant change evaluations for one or more fire areas, the evaluation of the additional risk of RAs, the licensee's process for self-approving post-transition FPP changes, cumulative risk and combined changes, as well as uncertainty and sensitivity analyses. The review may also include licensee risk-informed evaluations to ensure that defense-in-depth and safety margins have been evaluated. The audit team will also review the licensee's assessment of the technical adequacy of the probabilistic risk assessment (PRA) model used for any risk evaluations required to transition to a RI/PB FPP, including resolution of peer review findings and licensee self-assessments. This effort may include auditing a sample of logic models and calculations in the fire PRA (FPRA) model as well as the Internal Events PRA model. The review will include, as necessary, the licensee's process that has or will be implemented to maintain the quality of the Internal Events PRA and FPRA models to support self-approval of risk-informed change evaluation after transition is completed.

The scope may also include the licensee's NFPA 805 monitoring program which is to establish and monitor acceptable levels of availability, reliability, and performance of fire protection systems and features relied upon for NFPA 805 compliance.

The scope may also include, as appropriate, selected plant modifications to confirm they have been appropriately characterized in the LAR. The team may review the process for controlling compensatory measures to confirm their adequacy while they remain in effect until the modifications are completed.

In addition, the audit team may review program documentation, configuration control, and the FPP quality assurance program. The FPP design basis document may be reviewed, as well as other documentation of fire hazards identification and nuclear safety capability assessments. The review may include configuration control of the FPP design basis document, the fire PRA methods and model, and other relevant documentation as necessary. The team may also review the FPP quality assurance program, and sample fire models and fire model calculations. Plant walkdowns may be performed as necessary to observe features of the licensee's FPP and design elements of buildings within the power block.

4.0 INFORMATION AND OTHER MATERIAL NECESSARY FOR THE AUDIT

The NRC audit team will require access to licensee personnel knowledgeable regarding the technical aspects of the Point Beach NFPA 805 LAR. At a minimum, a hardcopy and electronic copy of the following documentation should be available to the audit team:

- Calculation models and supporting documentation for PRA models used in support of the LAR, including peer review history and resolution of peer review significant findings;
- Calculation models and supporting documentation for fire models used in support of the LAR;
- Procedures that have been modified or developed to transition to the NFPA 805 licensing basis;
- Procedures that have been modified or developed to maintain the NFPA 805 licensing basis after transition is completed;
- Documentation of changes made to PRA models in support of change analysis;
- Documentation about PRA configuration control and procedures to support self-approval of risk-informed plant changes after transition;
- Documentation of plant modifications or operational changes identified, screened, and considered (or planned for) during the licensee's transition to NFPA 805;
- Calculations and evaluations used to transition to NFPA 805 such as plant change evaluations, engineering equivalency evaluations, and RA evaluations; and,

- Other documents, which the licensee deems as necessary to support the NRC staff's audit team, outlined under audit activities.

5.0 TEAM ASSIGNMENTS

The audit will be conducted by NRC staff from NRR's Division of Risk Assessment (DRA); Fire Protection Branch (AFPB) and the PRA Licensing Branch (APLA) staff knowledgeable in PRA, safe shutdown and circuit analysis, and fire protection engineering, will comprise the audit team. Contractors from the Pacific Northwest National Laboratories and the Center for Nuclear Waste Regulatory Analysis may be utilized to augment the technical audit team members. NRC staff from other organizations may be assigned to the team as appropriate and others may participate as observers. Observers at the audit may include NRR program managers and various regional inspectors.

The NRC Audit Team Leader will be Leslie Fields and the NRC Technical Lead will be Harold Barrett. The team leader will conduct daily briefings on the status of the review and coordinate audit activities while on site. The tables below provide a list of (1) audit milestones and schedule, and (2) planned audit team composition and their assigned areas for review during the audit.

Audit Milestones and Schedule		
Activity	Time Frame	Comments
RAI Clarification Call	05/16/14 or later	Teleconference to provide clarification of draft RAIs.
Onsite Audit Kick-Off Meeting	06/09/14	NRC will present a brief team introduction and discuss the scope of the audit. The licensee should introduce team members and give logistics for the week. Additionally, the licensee should be prepared to give a virtual tour of the protected area in the plant.
Onsite Escorted Tour	06/10/14	Tours of risk significant power block areas. Second day, if needed
End of Day Summary Briefing	06/10 - 11/14	Meet with licensee to provide a summary of any significant findings and requests for additional assistance.
Provide Break-out Areas	06/09 - 12/14	Facilitate discussion between site and staff technical areas
Onsite Audit Exit Meeting	06/12/14	NRC staff will hold a short exit meeting, with licensee staff to conclude audit activities
Audit Summary (see VIII)	07/31/14	To document the audit

Regulatory Audit Team and Assignments			
SRP 9.5.1.2 Section	Audit Plan Review Areas	Lead	Support
III.1.2	Modifications	Team	Team
III.1.3	Licensee Self-Approval	J. Robinson	R. Fosdick
III.2	Fundamental FPP and Design Elements	T. Dinh	R. Layton
III.3.1.2	Multiple Spurious Operation	G. Cooper	R. Layton
III.3.2	Engineering Evaluations, Previous Approval	Team	Team
III.3.2.2	Operations Guidance for Fire Modeling Point Beach Method	B. Metzger	M. Janssens, K. Das
III.3.2.2	Recovery Actions	Team	Team
III.3.3	Non-power Operation	H. Barrett	R. Layton
III.5.3-5.6	Risk Assessments	R. Gallucci	S. Short, W. Ivans
III.5.1	PRA Technical Adequacy	R. Gallucci	S. Short, W. Ivans
III.5.2	DID and Safety Margins	Team	Team
III.6	Monitoring Program	J. Robinson	R. Fosdick
III.7.1-7.3	Documentation, Configuration Control, Quality	J. Robinson	R. Fosdick
	Plant Walk-downs	As needed	As needed

6.0 LOGISTICS

This regulatory audit is planned for the week of June 9, 2014, and will last approximately four days. We will schedule a conference call two weeks prior to discuss the details of the Generic Audit Plan. The dates in the milestone chart are subject to change based on mutual agreement between the licensee and the NRC. An entrance meeting for this audit will be held on the first day at 9:00 a.m. and an exit meeting will be held the final audit day at a mutually agreed time to conclude the audit activities. The NRC audit leader will provide daily progress to licensee personnel on the second and third day of the audit.

The audit will take place at a location agreed upon by the licensee and NRC audit leader where (1) the necessary reference material and (2) appropriate analysts will be available to support the review. Because the audit scope includes NRC staff walkdowns of selected fire areas in the power block, the regulatory audit must be conducted in a location that allows for travel to the plant's protected area for escorted access. Visitor access will be requested for the entire audit team. We recommend that security paperwork be handled upon arrival on the first day of the audit week.

7.0 SPECIAL REQUESTS

The regulatory audit team will require the following to support the regulatory audit:

- Visitor access will be needed for all team members participating in the plant tour.
- Two printers and six computers with internet access, access to the site portal, and printing capability. Wired or wireless internet access.
- Private conference room(s) (preferably outside the protected area) to support document review, breakout sessions, and audit team meetings.
- Access to the FPP documentation, including but not limited to: plant drawings depicting fire area boundaries, the Fire Hazards Analysis, Safe Shutdown Analysis, and the internal events PRA and FPRA.
- Access to licensee personnel knowledgeable in the FPP, fire modeling; safe shutdown and circuit analysis; FPRA and internal events PRA, non-power operations, radiological release analysis, and the NFPA 805 fire protection design-basis document.

8.0 DELIVERABLES

A regulatory audit summary will be issued within approximately 30 days of the completion of the audit. The summary will use the guidance of NRR Office Instruction LIC-111 for content. Since formal RAIs will likely be sent prior to the audit, the summary itself is expected to be an internal memorandum from the audit team leader to the responsible supervisors. The audit summary will be placed in ADAMS.

9.0 REFERENCES

1. Letter from Larry Meyer, NextEra Energy Point Beach, LLC, to U.S. NRC Document Control Desk, "Transition to 10 CFR 50.48(c) – NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)," dated June 26, 2013 (Agencywide Documents (ADAMS) Accession No. ML131820453).
2. U.S. NRC, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, NUREG-0800, Section 9.5.1.2, "Risk-Informed, Performance-Based Fire Protection Program" (ADAMS Accession No. ML092590527).
3. Title 10 of the *Code of Federal Regulations*, Part 50, Section 48 (10 CFR 50.48), "Fire protection."
4. NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Stations," 2001 Edition.
5. Regulatory Guide 1.205, Rev. 1, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," dated December 2009 (ADAMS Accession No. ML092730314).
6. Nuclear Energy Institute, NEI 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)," Revision 2, dated April 2008 (ADAMS Accession No. ML081130188).
7. Nuclear Energy Institute, NEI 00-01, "Guidance for Post-Fire Safe Shutdown Analysis," Revision 2, dated May 2009 (ADAMS Accession No. ML091770265).

If you have any questions, please contact me at 301-415-3049 or by e-mail at Terry.Beltz@nrc.gov.

Sincerely,

/RA/

Terry Beltz, Senior Project Manager
 Plant Licensing Branch III-1
 Division of Operating Reactor Licensing
 Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure:
 Audit Plan

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ADAMS Accession No: ML14127A294 * via memorandum dated May 1, 2014

OFFICE	DORL/LPL3-1/PM	DORL/LPL3-1/LA	DRA/AFP/BC *
NAME	TBeltz	MHenderson	AKlein
DATE	05/07/2014	05/08/2014	05/01/2014
OFFICE	DRA/APLA/BC *	DORL/LPL3-1/BC	DORL/LPL3-1/PM
NAME	HHamzehee	RCarlson	TBeltz
DATE	05/01/2014	05/09/2014	05/09/2014

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