



February 2, 2010

NRC 2010-0002
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

Supplement to License Amendment Request 247
Spent Fuel Pool Storage Criticality Control

- References
- (1) FPL Energy Point Beach Letter to NRC, License Amendment Request 247, Spent Fuel Pool Storage Criticality Control, dated July 24, 2008 (ML082240685)
 - (2) FPL Energy Point Beach Letter to NRC, Supplement to License Amendment Request 247, Spent Fuel Pool Storage Criticality Control, dated September 19, 2008 (ML082630114)
 - (3) NextEra Energy Point Beach Letter to NRC, Response to Request for Additional Information, License Amendment Request 247, Spent Fuel Pool Storage Criticality Control, dated November 20, 2009 (ML093270080)

NextEra Energy Point Beach, LLC (NextEra), (formerly known as FPL Energy Point Beach, LLC), submitted a proposed license amendment request for Commission review and approval pursuant to 10 CFR 50.90 for Point Beach Nuclear Plant (PBNP), Units 1 and 2 (Reference 1). The proposed amendment revises the licensing basis to reflect a revision to the spent fuel pool (SFP) criticality analysis methodology. The revised criticality analysis for the SFP storage racks credits burnup, integral fuel burnable absorber (IFBA), Plutonium-241 decay, and soluble boron, where applicable. NextEra provided a supplemental response (Reference 2) containing additional quantitative information to support the fidelity of key methodology aspects described in Reference (1).

Reference (1) submitted the proposed Technical Specifications. The Technical Specification Bases were submitted for NRC staff information. Approval of the proposed Bases was not requested. Reference (3) submitted an Addendum to WCAP-16541-P/NP, Revision 2, which contained an analysis that restores the full 0.5% Δk analytical margin for the proposed storage configurations, addressing any identified non-conservatisms.

The enclosures to this letter add "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis - Addendum," WCAP-16541-NP, Revision 2, Addendum 1, Westinghouse Electric Company, November 2009," as Reference 2 in proposed Technical Specification 4.0. This addition is also made in the reference section for Technical Specification Bases 3.7.11 and 3.7.12. Enclosure 1 contains revised Technical Specification 4.0. Enclosure 2 contains Technical Specification Bases 3.7.11 and 3.7.12, for information only. NRC approval is not being requested for the revised Bases.

This letter contains no new commitments and no revisions to existing commitments. The Plant Operations Review Committee has reviewed the proposed change.

The addition of Reference 2 to Technical Specification 4.0 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 for an environmental assessment.

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

I declare under penalty of perjury that the foregoing is true and correct.
Executed on February 2, 2010.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read "Larry Meyer" with a stylized flourish at the end. The signature is written over a light blue horizontal line.

Larry Meyer
Site Vice President

Enclosures

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 247
SPENT FUEL POOL STORAGE CRITICALITY CONTROL**

**TECHNICAL SPECIFICATION
(MARKUP)**

1 page follows

4.0 DESIGN FEATURES

- b. $k_{\text{eff}} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 9.4 of the FSAR;
- c. $k_{\text{eff}} \leq 0.98$ under optimum moderator density conditions, which includes an allowance for uncertainties as described in Section 9.4 of the FSAR; and
- d. A nominal 20 inch center to center distance between fuel assemblies placed in the storage racks.

4.3.2 Drainage

The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 40 ft 8 in.

4.3.3 Capacity

The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 1502 fuel assemblies.

REFERENCES

1. "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis," WCAP-16541-P, Revision 2 Westinghouse Electric Company, June 2008.
2. "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis - Addendum," WCAP-16541-NP, Revision 2, Addendum 1, Westinghouse Electric Company, November 2009.

ENCLOSURE 2

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

**LICENSE AMENDMENT REQUEST 247
SPENT FUEL POOL STORAGE CRITICALITY CONTROL**

**TECHNICAL SPECIFICATION BASES
(MARKUP)**

2 pages follow

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.7.11.1

This SR verifies that the concentration of boron in the fuel storage pool is within the required limit. As long as this SR is met, the analyzed accidents are fully addressed. The 7 day Frequency is appropriate because no major replenishment of pool water is expected to take place over such a short period of time.

REFERENCES

1. FSAR. Section 9.4.
 2. ~~NRC Safety Evaluation Report, USNRC to WEPCO, dated September 4, 1997.~~ "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis," WCAP-16541-P, Revision 2, Westinghouse Electric Company, June, 2008.
 3. Double contingency principle of ANSI N16.1-1975, as specified in the April 14, 1978 NRC letter (Section 1.2) and implied in the proposed revision to Regulatory Guide 1.13 (Section 1.4, Appendix A).
 4. FSAR. Section 14.2.1.
 5. "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis - Addendum," WCAP-16541-NP, Revision 2, Addendum 1, Westinghouse Electric Company, November 2009.
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BASES

REFERENCES

1. FSAR. Section, 9.4.
2. Double contingency principle of ANSI N16.1-1975, as specified in the April 14, 1978 NRC letter (Section 1.2) and implied in the proposed revision to Regulatory Guide 1.13 (Section 1.4, Appendix A).
3. ~~NRC Safety Evaluation Report, USNRC to WEPCO, dated September 4, 1997. "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis." WCAP-16541-P, Revision 2, Westinghouse Electric Company, June 2008.~~
4. NRC Safety Evaluation Report, USNRC to WEPCO, dated February 23, 1990.
5. "Point Beach Units 1 and 2 Spent Fuel Pool Criticality Safety Analysis - Addendum," WCAP-16541-NP, Revision 2, Addendum 1, Westinghouse Electric Company, November 2009.