



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

July 6, 2010

Mr. Larry Meyer  
Site Vice President  
NextEra Energy Point Beach, LLC  
6610 Nuclear Road  
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 – SUPPLEMENTAL  
INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING  
ACTION RE: AMENDMENT ASSOCIATED WITH REACTOR VESSEL HEAD  
DROP METHODOLOGY (TAC NOS. ME4006 AND ME4007)

Dear Mr. Meyer:

By letter to the U.S. Nuclear Regulatory Commission dated June 1, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML101520200), NextEra Energy Point Beach (the licensee) submitted a license amendment request for the Point Beach Nuclear Plant, Units 1 and 2. The proposed amendment would revise the current license basis regarding a postulated reactor vessel head drop event to conform to the NRC-endorsed guidance of Nuclear Energy Institute (NEI) 08-05, "Industry Initiative on Control of Heavy Load," Revision 0, dated September 5, 2008 (ADAMS Accession No. ML082410532). The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment. This supplemental information was provided to your staff in draft form in an e-mail dated June 28, 2010 (ADAMS Accession No. ML101810585) and subsequently discussed during a teleconference on June 30, 2010.

In order to make the application complete, the NRC staff requests that you supplement the application to address the information requested in the enclosure by July 9, 2010. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the

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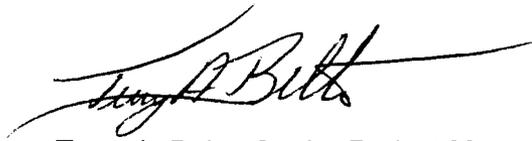
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NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested and date for response was discussed with Fritzie Flentje of your staff during the June 30, 2010, teleconference.

If you have any questions, please contact me (301) 415-3049.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry A. Beltz", with a long horizontal flourish extending to the right.

Terry A. 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:  
As stated

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SUPPLEMENTAL INFORMATION NEEDED  
LICENSE AMENDMENT REQUEST  
TO REVISE REACTOR VESSEL HEAD DROP METHODOLOGY  
NEXTERA ENERGY POINT BEACH  
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-266 AND 50-301

In accordance with the second criterion of Section 3.1.2 of Appendix B in NRR Office Instruction, LIC-109, "Guide for Performing Acceptance Reviews - Technical Staff Criteria," the staff of the Mechanical and Civil Engineering Branch (EMCB) has determined that insufficient information has been provided by NextEra Energy Point Beach (the licensee) with regards to their requested licensing action (RLA). These insufficiencies, which are detailed below, would result in an inappropriately large number of requests for additional information. However, based on the statements in the license amendment request (LAR), the supplemental information necessary for the U.S. Nuclear Regulatory Commission (NRC) staff to review the RLA appears readily available to the licensee. Therefore, the U.S. Nuclear Regulatory Commission (NRC) staff considers the RLA "unacceptable for review with opportunity to supplement," in accordance with LIC-109. The RLA would amend the current operating licenses at Point Beach Nuclear Plant, Units 1 and 2, to revise the current reactor vessel head drop analysis methodology.

EMCB Supplemental Information Request 1

The LAR submitted by Point Beach relies solely on the results of a finite element analysis (FEA) performed using the commercial FEA program, ANSYS<sup>®</sup>, which demonstrated that the two bottom-mounted instrument (BMI) conduits reviewed did not rupture. However, the licensee provided insufficient information regarding the ANSYS<sup>®</sup> analyses, in order for the NRC staff to assess the validity of the analyses, as incorrect results can be produced by FEA models which have not been properly developed. The following information regarding the ANSYS<sup>®</sup> analyses should be provided, in summary form, with appropriate assumptions and justifications:

- Contour plots graphically summarizing the FEA results.
- True stress-strain material data curves used in the FEA.
- Element types used in the FEA models.
- Boundary conditions utilized in the model (see Supplemental Information Request 2).
- Preprocessor graphics displaying these pertinent details (locations and details of degrees of freedom (DOF), boundary conditions, mesh density, etc.).
- Results of any mesh convergence studies performed to demonstrate satisfactory model responses.

Enclosure

- Plot comparison of the spring-mass system input displacement time-histories versus the output displacement time-histories.
- General information on the type of analyses performed (i.e., confirmation that inelastic analysis was performed).

The licensee will also provide the associated Westinghouse Electric Company, LLC, calculation note (CN-MRCDA-08-51, Rev. 1).

#### EMCB Supplemental Information Request 2

No information was provided regarding the structural integrity of the BMI conduit supports. Information should be provided regarding the behavior of these supports during the vessel head drop transient as it relates to the structural behavior of the supports during this transient. Depending on this behavior (i.e., whether the supports fail, deform, or retain elastic behavior), information should be provided indicating whether the finite element analyses are correctly configured to capture the boundary conditions resulting from the stability of the supports. Additionally, a summary of the results of the stresses found in the analysis of the conduit supports, compared with the acceptance criteria for the support stresses, should be provided.

The licensee will also emphasize that the support structures will absorb no energy caused by the accident as specified in the assumptions stated on Page 13 of CN-MRCDA-08-51, Rev. 1.

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NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested and date for response was discussed with Fritzie Flentje of your staff during the June 30, 2010, teleconference.

If you have any questions, please contact me (301) 415-3049.

Sincerely,

**/RA/**

Terry A. 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:  
As stated

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**ADAMS Accession No.: ML101870535**

\* via e-mail dated June 28, 2010

<b>OFFICE</b>	LPL3-1/PM	LPL3-1/LA	DSS/EMCB/BC	LPL3-1/BC
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<b>DATE</b>	07/06/10	07/06/10	06/28/2010	07/06/10

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