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# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 9, 2009

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

SUBJECT:

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - REQUEST FOR

ADDITIONAL INFORMATION FROM REACTOR SYSTEMS BRANCH RELATED

TO LICENSE AMENDMENT REQUEST NO. 247 SPENT FUEL POOL STORAGE CRITICALITY CONTROL - ROUND 2 (TAC NOS. MD9321 AND

MD9322)

Dear Mr. Meyer:

By letter to the Nuclear Regulatory Commission (NRC) dated July 24, 2008, as supplemented by letters dated September 19, 2008, April 14, 2009, and May 22, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML082240685, ML082630114, ML091050499, and ML091420436, respectively), FPL Energy Point Beach, LLC, submitted a license amendment application to revise the Point Beach Nuclear Plant (PBNP), Units 1 and 2, licensing basis to reflect a revision to the spent fuel pool (SFP) criticality analysis methodology.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on June 23, 2009, it was agreed that you would provide the additional information within 30 days of the date of this letter.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-2048.

Sincerely.

Justin C. Poole, 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:

Request for Additional Information

cc w/encl: Distribution via ListServ

#### REQUEST FOR ADDITIONAL INFORMATION

#### POINT BEACH NUCLEAR POWER PLANT, UNITS 1 AND 2

# DOCKET NOS. 50-266 AND 50-301

#### Regarding licensee letter dated, May 22, 2009:

#### Regarding Question 1 Code Validation:

- a) Table 1 of Request for Additional Information (RAI) 1 response does not include any spectral parameters (e.g., energy of the average lethargy causing fission, hydrogen to uranium atomic ratio (H/U)) to show how the validation is applicable to the Point Beach analysis. Figure 1 of RAI 1 response provides the H/U range for the validation but does not show how it compares to the Point Beach analysis. What are the H/U values for the system analyzed for Point Beach?
- b) Figure 1 shows a large range of H/U that is not supported by benchmarks. How is this justified?
- c) How did you conclude that the Figure 1 "data is well distributed and no trend is apparent as a function of H/<sup>235</sup>U?" Did you use any quantitative methods such as the regression analysis?

# Regarding Question 2 Tolerance and Uncertainty Calculations:

a) What enrichment value was the enrichment reactivity uncertainty based on?

# Regarding licensee letter dated, September 19, 2008:

#### Regarding Question 1:

a) For each storage configuration, what burnup value was the burnup reactivity uncertainty based on?

#### Regarding Question 4:

a) Please provide a quantitative justification to demonstrate that power suppression assemblies do not result in a more reactive assembly.

#### New:

### Question 1 (Interface analysis):

a) Please justify how the k-eff comparison is valid when the interface model assumes radial leakage and the individual storage models consider no radial leakage (i.e. repeating 2x2 array).

b) Please show that placing a more reactive storage configuration (e.g., 1-out-of-4 Fresh 5 percent no integral fuel burnable absorber) next to a less reactive storage configuration (e.g. All-cell) will not lead to unacceptable increase in reactivity of the less reactive storage configuration (e.g. All-cell).

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Sincerely,

#### /RA/

Justin C. Poole, Project Manager Plant Licensing Branch III-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

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**DISTRIBUTION:** 

PUBLIC
RidsNrrPMPointBeach Resource
RidsRgn3MailCenter Resource
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RidsNrrDirsltsb Resource RidsNrrDorlDpr Resource

ADAMS Accession Number: ML091770550

OFFICE	LPL3-1/PM	LPL3-1/LA	NRR/SRXB/BC	LPL3-1/BC
NAME	JPoole	BTully	SMiranda for GCranston	LJames /TWengert for
DATE	07/09/09	07/09/09	07/09/09	07/09/09