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

November 24, 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 RE: EXTENDED POWER UPRATE (TAC NOS. ME1044 AND ME1045)

Dear Mr. Meyer:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated April 7, 2009, as supplemented by letters dated September 11 and October 9, 2009 (Agencywide Documents Access and Management System Accession Nos. ML091250564, ML092570205, and ML092860098), FPL Energy Point Beach, LLC, submitted a request to increase each unit's licensed core power level from 1540 megawatts thermal (MWt) to 1800 MWt reactor core power, and revise the technical specifications to support operation at this increased core thermal power level.

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 November 16, 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

1) Page 2.8.5.6.3-6 of the Point Beach Extended Power Uprate (EPU) Licensing Report (Enclosure 5 to Reference 1) indicates that the small-break loss-of-coolant accident analysis was performed using the NOTRUMP evaluation model. Please provide a copy of the NOTRUMP analysis report that supports the EPU application.

2) For the Point Beach nuclear steam supply system, please provide the following information:

   a) Core Rated Thermal Power

   b) Power uncertainty, %

   c) Total Core Peaking Factor, F_Q

   d) Hot channel enthalpy rise factor, $F_{\Delta H}$

   e) Hot assembly average power factor, P HA

   f) Most limiting top and bottom skewed axial power shapes

   g) Full power loop mass flow rate, lb/sec

   h) Core mass flow rate, lbs/sec

   i) T_{hot}, °F

   j) T_{cold}, °F

   k) Safety injection Flow delay time, sec

   l) High pressure safety injection (HPSI) flow rate (lb/sec) vs reactor coolant system (RCS) pressure (psia)

   m) HPSI runout flow rate

   n) Low pressure safety injection flow rate (lb/sec) vs RCS pressure (psia)

   o) If charging flow is part of the emergency core cooling system (ECCS), provide the flow vs pressure for this pump curve also

   p) Head flow curves for the ECCS pumped injection assuming a severed injection line.

   q) Active Core height, ft

   r) Peak linear heat generation rate, kw/ft

s) Average linear heat generation rate, kw/ft

t) Number of fuel rods

u) Number of fuel assemblies

v) Fuel rod pellet diameter and inside and outside radius of cladding

w) Radiological waste storage tank (RWST) max temperature, °F

x) RWST capacity, gallons, and boron concentration

y) Accumulator minimum pressure, psia

z) Accumulator minimum liquid volume, ft^3, and maximum boric acid concentration

aa) Volumes and heights of the following regions, each identified separately:

i) Lower plenum
ii) Core
iii) Upper plenum below the bottom elevation of the hot-leg

bb) Elevation data:

i) Bottom elevation of suction leg horizontal leg piping
ii) Top elevation of cold-leg at reactor coolant pump discharge
iii) Top elevation of the core (also core height)
iv) Bottom elevation of the downcomer

cc) Loop friction and geometry pressure losses from the core exit through the steam generators to the inlet nozzle of the reactor vessel

dd) Locked rotor reactor coolant pump (RCP) k-factor

ee) Mass flow rates, flow areas, k-factors, and coolant temperatures for the pressure losses provided (upper plenum, hot-legs, steam generators, suction legs, RCPs, and discharge legs). Please include the reduced SG flow areas due to plugged tubes. Please also provide the loss from each of the intact cold-legs through the annulus to a single broken cold-leg. Please also provide the equivalent loop resistance for the broken loop and separately for the intact loop.

ff) Capacity of the condensate storage tank

gg) Flushing flow rate at the time of switch to simultaneous injection

hh) Capacities and boron concentrations for high concentrate boric acid storage tanks

3) Please provide the sump temperature vs. time following recirculation. How does this impact precipitation? Is the boric acid concentration in the vessel below the precipitation limit based on the minimum sump temperature at the time the switch to simultaneous injection is performed? Please explain.

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/RA/
Justin C. Poole, Project Manager
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ADAMS Accession Number: ML093240028 *per memo dated October 7, 2009

OFFICE	LPL3-1/PM	LPL3-1/LA	NRR/SRXB/BC	LPL3-1/BC
NAME	JPoole	THarris	GCranston*	RPascarelli
DATE	11/24/09	11/24/09	10/7/09	11/24/09

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