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

July 21, 2021

Mr. Bob Coffey
Executive Vice President, Nuclear
Division and Chief Nuclear Officer
Florida Power & Light Company
Mail Stop: EX/EB
700 Universe Blvd.
Juno Beach, FL 33408

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 269 AND 271 RE: TECHNICAL SPECIFICATION CHANGES TO IMPLEMENT NEW SURVEILLANCE METHODS FOR TRANSIENT HEAT FLUX HOT CHANNEL FACTOR (EPID L-2020-LLA-0170)

Dear Mr. Coffey:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment Nos. 269 and 271 to Renewed Facility Operating License Nos. DPR-24 and DPR-27, respectively, for the Point Beach Nuclear Plant, Units 1 and 2 (Point Beach). The amendments consist of changes to the technical specifications (TSs) in response to your application dated July 30, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20216A243).

The amendments would modify the TSs for Point Beach to implement new surveillance methods for nuclear transient heat flux hot channel factor, F_Q. The new surveillance methods are applicable to plants using either relaxed axial offset control (RAOC) or constant axial offset control (CAOC) surveillance formulations, as described in the NRC-approved topical report WCAP-17661-P-A, “Improved RAOC and CAOC F_Q Surveillance Technical Specifications” (ADAMS Accession No. ML19225C138).

A copy of our related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

Sincerely,

/RA/

Booma Venkataraman, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosures:
1. Amendment No. 269 to DPR-24
2. Amendment No. 271 to DPR-27
3. Safety Evaluation

cc: Listserv

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

NEXTERA ENERGY POINT BEACH, LLC

DOCKET NO. 50-266

POINT BEACH NUCLEAR PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 269
License No. DPR-24

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by NextEra Energy Point Beach, LLC (the licensee), dated July 30, 2020, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 4.B of the Renewed Facility Operating License No. DPR-24 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 269, are hereby incorporated in the renewed operating license. NextEra Energy Point Beach shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado

Digitally signed by Nancy L. Salgado
Date: 2021.07.21 12:46:15 -04'00'

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical Specifications and Renewed Facility Operating License

Date of issuance: July 21, 2021

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

NEXTERA ENERGY POINT BEACH, LLC

DOCKET NO. 50-301

POINT BEACH NUCLEAR PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 271
License No. DPR-27

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by NextEra Energy Point Beach, LLC (the licensee), dated July 30, 2020, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 4.B of the Renewed Facility Operating License No. DPR-27 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 271, are hereby incorporated in the renewed operating license. NextEra Energy Point Beach shall operate the facility in accordance with Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Nancy L. Salgado

Digitally signed by Nancy L. Salgado
Date: 2021.07.21 12:46:48 -04'00'

Nancy L. Salgado, Chief
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical Specifications and Renewed Facility Operating License

Date of issuance: July 21, 2021

ATTACHMENT TO LICENSE AMENDMENT NO. 269

TO RENEWED FACILITY OPERATING LICENSE NO. DPR-24

AND LICENSE AMENDMENT NO. YYY

TO RENEWED FACILITY OPERATING LICENSE NO. DPR-27

DOCKET NOS. 50-266 AND 50-301

Replace the following pages of Renewed Facility Operating License Nos. DPR-24 and DPR-27, and Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Renewed Facility Operating License No. DPR-24

REMOVE	INSERT
-3-	-3-

Renewed Facility Operating License No. DPR-27

REMOVE	INSERT
-3-	-3-

Appendix A, Technical Specifications

REMOVE	INSERT
3.2.1-1	3.2.1-1
3.2.1-2	3.2.1-2
3.2.1-3	3.2.1-3
3.2.1-4	3.2.1-4
3.2.1-5	3.2.1-5
3.2.1-6	-------

D. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NextEra Energy Point Beach to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

E. Pursuant to the Act and 10 CFR Parts 30 and 70, NextEra Energy Point Beach to possess such byproduct and special nuclear materials as may be produced by the operation of the facility, but not to separate such materials retained within the fuel cladding.

4. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

A. Maximum Power Levels

NextEra Energy Point Beach is authorized to operate the facility at reactor core power levels not in excess of 1800 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 269, are hereby incorporated in the renewed operating license. NextEra Energy Point Beach shall operate the facility in accordance with Technical Specifications.

C. Spent Fuel Pool Modification

The licensee is authorized to modify the spent fuel storage pool to increase its storage capacity from 351 to 1502 assemblies as described in licensee's application dated March 21, 1978, as supplemented and amended. In the event that the on-site verification check for poison material in the poison assemblies discloses any missing boron plates, the NRC shall be notified and an on-site test on every poison assembly shall be performed.

C. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NextEra Energy Point Beach to receive, possess and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed source for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

D. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NextEra Energy Point Beach to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

E. Pursuant to the Act and 10 CFR Parts 30 and 70, NextEra Energy Point Beach to possess such byproduct and special nuclear materials as may be produced by the operation of the facility, but not to separate such materials retained within the fuel cladding.

4. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

A. Maximum Power Levels

NextEra Energy Point Beach is authorized to operate the facility at reactor core power levels not in excess of 1800 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 271, are hereby incorporated in the renewed operating license. NextEra Energy Point Beach shall operate the facility in accordance with Technical Specifications.

C. Spent Fuel Pool Modification

The licensee is authorized to modify the spent fuel storage pool to increase its storage capacity from 351 to 1502 assemblies as described in licensee's application dated March 21, 1978, as supplemented and amended. In the event that the on-site verification check for poison material in the poison assemblies discloses any missing boron plates, the NRC shall be notified and an on-site test on every poison assembly shall be performed.

3.2 POWER DISTRIBUTION LIMITS

3.2.1 Heat Flux Hot Channel Factor ($F_Q(Z)$)

LCO 3.2.1 $F_Q(Z)$, as approximated by $F_Q^C(Z)$ and $F_Q^W(Z)$, shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
----------NOTE---------- Required Action A.4 shall be completed whenever this Condition is entered prior to increasing THERMAL POWER above the limit of Required Action A.1. SR 3.2.1.2 is not required to be performed if this condition is entered prior to THERMAL POWER exceeding 70% RTP after a refueling. ---------- A. $F_Q^C(Z)$ not within limit.	A.1	Reduce THERMAL POWER ≥ 1% RTP for each 1% $F_Q^C(Z)$ exceeds limit.	15 minutes after each $F_Q^C(Z)$ determination
	AND		
	A.2	Reduce Power Range Neutron Flux — High trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action A.1.	72 hours after each $F_Q^C(Z)$ determination
	AND		
	A.3	Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action A.1.	72 hours after each $F_Q^C(Z)$ determination
	AND		(continued)

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. (continued)	A.4	Perform SR 3.2.1.1 and SR 3.2.1.2.	Prior to increasing THERMAL POWER above the limit of Required Action A.1
B. $F_Q^W(Z)$ not within limits.	B.1.1	Implement a CAOC operating space if specified in the COLR that restores $F_Q^W(Z)$ to within limits. AND	4 hours
	B.1.2	Perform SR 3.2.1.1 and SR 3.2.1.2 if control rod motion is required to comply with the new operating space.	72 hours
	OR		
	B.2.1	----------NOTE---------- Required Action B.2.4 shall be completed whenever Required Action B.2.1 is performed prior to increasing THERMAL POWER above the limit of Required Action B.2.1. ---------- Limit THERMAL POWER to less than RATED THERMAL POWER as specified in the COLR. AND	4 hours
	B.2.2	Reduce Power Range Neutron Flux-High trip setpoints $\geq$ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.2.1	72 hours (continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	AND	
	B.2.3 Reduce the Overpower ΔT trip setpoints $\geq$ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.2.1	72 hours
	AND	
	B.2.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	Prior to increasing THERMAL POWER above the limit of Required Action B.2.1.
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 2.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.2.1.1	Verify $F_Q^C(Z)$ is within limit.	Once after each refueling prior to THERMAL POWER exceeding 75% RTP AND Once within 24 hours after achieving equilibrium conditions after exceeding, by ≥ 10% RTP, the THERMAL POWER at which $F_Q^C(Z)$ was last verified AND In accordance with the Surveillance Frequency Control Program

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.2.1.2	Verify $F_Q^W(Z)$ is within limit.	Once after each refueling within 24 hours after THERMAL POWER exceeds 70% RTP AND Once within 24 hours after achieving equilibrium conditions after exceeding, by $\geq$ 10% RTP, the THERMAL POWER at which $F_Q^W(Z)$ was last verified. AND In accordance with the Surveillance Frequency Control Program

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 269 AND 271, RESPECTIVELY, TO

RENEWED FACILITY OPERATING LICENSE NOS. DPR-24 AND DPR-27

NEXTERA ENERGY POINT BEACH, LLC

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-266 AND 50-301

1.0 INTRODUCTION

By application to the U.S. Nuclear Regulatory Commission (NRC or Commission) dated July 30, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20216A243, NextEra Energy Point Beach, LLC (the licensee), requested changes to the technical specifications (TSs) for the Point Beach Nuclear Plant, Units 1 and 2 (Point Beach).

Specifically, the proposed amendments would modify the TSs for Point Beach to implement new surveillance methods for nuclear transient heat flux hot channel factor (F_Q). The new surveillance methods are applicable to plants using either relaxed axial offset control (RAOC) or constant axial offset control (CAOC) surveillance formulations, as described in the NRC-approved topical report WCAP-17661-P-A, "Improved RAOC and CAOC F_Q Surveillance Technical Specifications" (ADAMS Accession No. ML19225C138). The proposed changes address the issues previously communicated in Westinghouse Nuclear Safety Advisory Letters (NSALs) 09-05, Revision 1, "Relaxed Axial Offset Control F_Q Technical Specification Actions," and 15-01, "Heat Flux Hot Channel Factor Technical Specification Surveillance."[1]

2.0 REGULATORY EVALUATION

The specification of and adherence to limits on F_Q ensures that the value of the initial total peaking factor assumed in the accident and transient analyses remains valid. As noted in NUREG-1431, "Standard Technical Specifications: Westinghouse Plants- Specifications," (ADAMS Accession No. ML12100A222) the F_Q limits assumed in the emergency core cooling system (ECCS) performance evaluation are typically limiting relative to the F_Q limits assumed in safety analyses for other postulated accidents and anticipated operational occurrences. Even if the ECCS limits are less limiting than those determined by another safety analysis, specification of and adherence to the F_Q limits still ensures that facility operation remains bounded by the safety analyses.

[1] Westinghouse Electric Company issues NSALs to its customers to communicate a potential safety issue so that the customers can conduct a review of the issue and determine whether any action is required. The NRC does not have official record copies of NSALs 09-05 and 15-01.

The regulatory evaluation identified performance requirements and design criteria contained within Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." The applicable requirements related to the specific content of TSs, relative to the facility safety analyses, are also included.

Section 2.3 of this safety evaluation (SE) summarizes the way in which the regulatory requirements apply specifically to the new TS for F_Q, as described in WCAP-17661-P-A.

2.1 Performance Requirements and Design Criteria

The performance requirements and design criteria applicable to the power distribution assumed in the safety analysis are those that pertain to accident and transient analysis. Primarily, these include the requirements contained in 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," and General Design Criterion (GDC) 10, contained in 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants." Because the TSs also prescribe appropriate remedial action to follow if TS limitations are not met, some additional GDCs relative to the reactor protection and reactivity control systems apply, as listed below.

The requirements in 10 CFR 50.46 state, in part, that the ECCS shall be designed such that an evaluation performed using an acceptable evaluation model demonstrates that acceptance criteria, set forth in 10 CFR 50.46(b), including peak cladding temperature, cladding oxidation, hydrogen generation, maintenance of coolable core geometry, and long-term core cooling, are met for a variety of hypothetical loss-of-coolant accidents (LOCAs), including the most severe hypothetical LOCA.

The Point Beach GDCs are similar in content to the Atomic Industrial Forum (AIF) version of the proposed 1967 GDCs.

The applicable Point Beach GDC are as follows:

- GDC 6 states that the reactor core with its related controls and protection systems shall be designed to function throughout its design lifetime without exceeding acceptable fuel damage limits which have been stipulated and justified. The core and related auxiliary system designs shall provide this integrity under all expected conditions of normal operation with appropriate margins for uncertainties and for specified transient situations which can be anticipated.

- GDC 7 states that the design of the reactor core with its related controls and protection systems shall ensure that power oscillations, the magnitude of which could cause damage in excess of acceptable fuel damage limits, are not possible or can be readily suppressed.

- GDC 13 states that means shall be provided for monitoring or otherwise measuring and maintaining control over the fission process throughout core life under all conditions that can reasonably be anticipated to cause variations in reactivity of the core.

- GDC 14 states that core protection systems, together with associated equipment, shall be designed to prevent or to suppress conditions that could result in exceeding acceptable fuel damage limits.

Based on the above statement, the NRC staff evaluated the request relative to conformance to the existing GDCs published in 10 CFR Part 50 Appendix A (i.e., the 1971 GDCs), which are listed below.

- GDC 10, "Reactor Design," states as follows:

  The reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

- GDC 20, "Protection System Functions," states, as follows:

  The protection system shall be designed (1) to initiate automatically the operation of appropriate systems including the reactivity control systems, to assure that specified acceptable fuel design limits are not exceeded as a result of anticipated operational occurrences and (2) to sense accident conditions and to initiate the operation of systems and components important to safety.

2.2 Technical Specifications

The requirements for TSs are set forth in 10 CFR 50.36, "Technical specifications." Specific categories of TSs are provided in 10 CFR 50.36(c). These include limiting conditions for operations (LCOs) and surveillance requirements (SRs). If an LCO is not met, the facility must be shut down or other acceptable remedial action must be taken. SRs are intended to ensure that facility operation remains within the LCOs.

Paragraph (c)(2) of 10 CFR 50.36 contains requirements for LCOs, stating that such TSs are the lowest functional capability or performance levels of equipment required for safe operation of the facility. The requirements indicate that LCOs must be established for each item that meets one or more of four criteria. One of the criteria is a process variable, design feature, or operating restriction, that is an initial condition of a design-basis accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Paragraph (c)(3) of 10 CFR 50.36 states:

> Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met.

NRC Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," (ADAMS Accession No. ML031200485) established the NRC position that licensees could remove the cycle-specific values of certain operating limits from the TS and maintain them in a core operating limits report (COLR), provided that certain requirements were met. The guidance contained in GL 88-16 provides a means by which the values of certain parameters could be determined and modified on a cycle-specific basis without prior NRC review and approval. In order to implement this guidance, licensees are required, in part, to do the following: (1) use NRC-approved methodology to determine the operating limits; (2) include

a list in the TS Administrative Controls section, of the references used to determine the operating limits; and (3) maintain the limits in a COLR, which must be submitted to the NRC for information.

2.3 Discussion

The safety analyses required to establish that a facility will comply with the requirements of 10 CFR 50.46, and with GDC 10, require as input the peak fuel power and the power distribution. Since the peak power and the power distribution are initial conditions of DBAs and transient analyses, facility operation must be controlled by LCOs that are established based on these parameters. Hence, Westinghouse designed pressurized-water reactors have LCOs relative to F_Q. In accordance with 10 CFR 50.36(c)(2), the LCO is accompanied by SRs to ensure that the LCO is satisfied. At plants that have implemented GL 88-16, specific parameter values may be administratively controlled, and in such cases, these parameters must be determined in accordance with NRC-approved methodology and contained in the facility COLR.

If, during performance of an SR, F_Q is determined not to be within the limit, then the LCO is not met, and the TS remedial actions must be followed to ensure that facility operation remains safe. These remedial actions are based on: (1) restoring compliance with the LCO, and (2) adjusting the reactor protection system settings so that the functionality required by GDCs 10 and 20 is maintained.

2.4 Summary of Proposed Changes

2.4.1 Background

Along with several improvements to the RAOC and CAOC surveillance methodologies, WCAP-17661-P-A addresses issues previously communicated in Westinghouse NSALs 09-05 and 15-01. These NSALs noted that there are non-conservatisms in the methodology in Westinghouse Standard Technical Specification (STS) 3.2.1B, “Heat Flux Hot Channel Factor ($F_Q(Z)$ (RAOC-W(Z) Methodology),” for plants that have implemented the RAOC methodology. Point Beach is listed in NSAL-09-05 and NSAL-15-01 as Westinghouse plants affected by specific issues with the F_Q surveillance approach.

In accordance with the guidance in NRC Administrative Letter (AL) 98-10, “Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety” (ADAMS Accession No. ML031110108), NSALs 09-05 and 15-01 contained recommended administrative actions that ensured a set of compensatory measures to address the non-conservatisms. Implementation of the proposed changes in Point Beach TSs consistent with WCAP-17661-P-A will resolve the non-conservatisms.

2.4.2. Summary of TS Changes:

The following provides a summary of the TS changes that NextEra proposed for Point Beach.

- LCO 3.2.1 currently states:

  $F_Q(Z)$, as approximated by $F^C_Q(Z)$ and $F^W_Q(Z)$, shall be within the limits specified in the COLR.

NextEra requests an editorial change in the notations in LCO 3.2.1 to state:

$F_Q(Z)$, as approximated by $F_Q^C(Z)$ and $F_Q^W(Z)$, shall be within the limits specified in the COLR.

- The NOTE in LCO 3.2.1, Condition A, currently states:

  Required Action A.4 shall be completed whenever this Condition is entered.

The NOTE is requested to be changed to:

Required Action A.4 shall be completed whenever this Condition is entered prior to increasing THERMAL POWER above the limit of Required Action A.1. SR 3.2.1.2 is not required to be performed if this condition is entered prior to THERMAL POWER exceeding 70% rated thermal power after a refueling.

- LCO 3.2.1 Required Action A.2 currently states:

  Reduce Power Range Neutron Flux – High trip setpoints ≥ 1% for each 1% $F^C_Q(Z)$ exceeds limit.

The required action is requested to be changed to:

Reduce Power Range Neutron Flux – High trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action A.1.

- LCO 3.2.1 Required Action A.3 currently states:

  Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% $F^C_Q(Z)$ exceeds limit.

The required action is requested to be changed to:

Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action A.1

- LCO 3.2.1 Required Action B.1 currently states:

  Reduce THERMAL POWER ≥ 1% RATED THERMAL POWER for each 1% $F^W_Q(Z)$ exceeds limit.

The required action is requested to be changed to:

B.1.1 Implement a constant axial offset control operating space if specified in the core operating limits report that restores $F_Q^W(Z)$ to within limits. (Completion Time is 4 hours)

AND

B.1.2 Perform Surveillance Requirement 3.2.1.1 and Surveillance Requirement 3.2.1.2 if control rod motion is required to comply with the new operating space. (Completion Time is 72 hours)

OR

B.2.1 NOTE: Required Action B.2.4 shall be completed whenever Required Action B.2.1 is performed prior to increasing THERMAL POWER above the limit of Required Action B.2.1

Limit THERMAL POWER to less than RATED THERMAL POWER as specified in the COLR. (Completion Time is 4 hours)

- LCO 3.2.1 Required Action B.2 currently states:

  Reduce Power Range Neutron Flux-High trip setpoints ≥ 1% for each 1% $F^{W}_{Q}(Z)$ exceeds limits.

The required action is requested to be changed to:

B.2.2 Reduce Power Range Neutron Flux-High trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.2.1

- LCO 3.2.1 Required Action B.3 currently states:

  Reduce the Overpower ΔT trip setpoints ≥ 1% for each 1% $F^{W}_{Q}(Z)$ exceeds limits.

The required action is requested to be changed to:

B.2.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.2.1

- LCO 3.2.1 Required Action B.4 is requested to be renamed Required Action B.2.4 and in the completion time, it is requested to change B.1 to B.2.1

- A NOTE currently exists for the SR associated with RATED THERMAL POWER in LCO 3.2.1, that states:

  During power escalation at the beginning of each cycle, THERMAL POWER may be increased until an equilibrium power level has been achieved, at which a power distribution map is obtained.

The licensee requests to remove this NOTE.

- In SR 3.2.1.1, the licensee requested to change a frequency from, “Once within 12 hours” to, “Once within 24 hours”.

- The licensee has requested to remove the NOTE from SR 3.2.1.2 and to change the frequency from:

  Once after each refueling prior to THERMAL POWER exceeding 75 % RTP [RATED THERMAL POWER].

to:

  Once after each refueling within 24 hours after THERMAL POWER exceeds 70% RTP.

- Additionally, the licensee requested to change another frequency from, “Once within 12 hours” to “Once within 24 hours”.

3.0 TECHNICAL EVALUATION

The NRC staff evaluated the modified TSs proposed by NextEra for Point Beach and considered whether the modified TSs are consistent with the regulatory requirements identified in Section 2, above. In a generic sense, the F_Q limits, surveillance methods, and remedial actions, have been found to satisfy these requirements as documented in the NRC staff SE approving WCAP-17661-P-A for use. Therefore, this SE establishes that NextEra has proposed to implement revised CAOC F_Q TS that are consistent with WCAP-17661-P-A.

3.1 Consistency with WCAP-17661-P-A, Revision 1, and Changes to TS 3.2.1

The NRC staff reviewed the TS changes proposed for Point Beach in comparison to those contained in WCAP-17661-P-A. Based on its review, the NRC staff determined that the proposed changes are consistent with those provided in Appendix D of WCAP-17661-P-A. The overall F_Q surveillance formulation is provided in Chapter 7 of the topical report. The associated TS requirements and an example application using the CAOC methodology in use at Point Beach are described in WCAP-17661 P-A, Chapters 8 and 9, respectively.

The proposed TS changes are identical to the TS provided in WCAP-17661-P-A, therefore, the NRC staff finds the proposed changes acceptable.

3.2 Proposed Changes to TS COLR References

The NRC staff reviewed the proposed changes to the TS COLR references for both units. The changes are consistent with the recommendations established in the SE for WCAP-17661-P-A, Revision 1. The NRC staff finds the changes acceptable because the methodology described in WCAP-17661-P-A, Revision 1, will now be used to determine operating limits. The NRC staff SE approving WCAP-17661-P-A provides a detailed technical basis explaining why the new surveillance methodology and associated TS requirements, which are proposed for use by Point Beach, are acceptable. Because NextEra proposed to implement the new CAOC surveillance methodology in a manner that is consistent with an NRC-approved topical report, the NRC staff finds that the proposed changes to TS 3.2.1 are acceptable.

3.3 Evaluation of Limitations for WCAP-17661-P-A

Chapter 5 of the SE approving WCAP-17661-P-A for use provides two limitations, adherence to which is necessary to ensure acceptable implementation of WCAP-17661-P-A. Relevant to the CAOC methodology, Limitation 1 of WCAP-17661-P-A stipulates requirements on the use of the

A_Q factor within the power distribution surveillance methodology. Limitation 2 requires that the final power level reduction following a failed F_Q surveillance must be a reduction to 50-percent rated thermal power.

The licensee proposes to resolve non-conservative TS identified in NSAL 15-01, applicable to Point Beach. The optional improvement changes that provide additional input to the surveillance are not being requested due to the low likelihood of $F_Q^W(Z)$ being exceeded. The A_Q factor is intended to be used when off-reference conditions would result in an $F_Q^W(Z)$ surveillance that is unlikely to be sufficiently conservative. Point Beach procedures direct application of a penalty factor for all $F_Q^W(Z)$ surveillances to cover any potential increases in $F_Q^W(Z)$ between surveillance intervals. Based on the station's operating margin to the F_Q limit, conservatively applying the penalty factor for all surveillances would still provide sufficient margin to assure the F_Q limit assumed in Point Beach safety analyses is satisfied. Therefore, the licensee is not pursuing the optional use of the WCAP feature function, $A_Q(Z)$. Due to the conservatism in the Point Beach method, the intent of Limitation 1 is met.

Limitation 2 requires that the final reduction in thermal power following a failed F_Q surveillance is to 50-percent rated thermal power. NextEra provided sample COLR input indicating its adherence to this limitation in the event of a failed F_Q surveillance. The NRC staff reviewed the information provided by the licensee and finds that it addresses this limitation.

Based on its review of the information provided by the licensee, the NRC staff finds that NextEra has acceptably addressed the two limitations included in the NRC staff SE approving WCAP-17661-P-A for use.

3.4 Technical Conclusion

The NRC staff considered the following:

- NextEra proposes to implement methods described in a topical report that has been approved for use by the NRC staff for formulating and performing F_Q surveillance, and

- The NRC staff confirmed that NextEra’s proposed implementation is consistent with the TS described in the WCAP.

- The NRC staff determined the editorial changes to the notations in LCO 3.2.1 are administrative and acceptable.

Based on the above considerations, the NRC staff has determined that is it acceptable for NextEra to implement WCAP-17661-P-A, Revision 1, at Point Beach.

Because WCAP-17661-P-A, Revision 1, provides an acceptable way to determine operating limits and to perform core surveillance in a way that demonstrates compliance with the requirements identified in Section 2 of this SE, and because the NRC staff determined that NextEra may acceptably implement WCAP-17661-P-A, Revision 1, at Point Beach, the NRC staff concludes that the proposed license amendment is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission’s regulations, on June 15, 2021, the Wisconsin State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or change a surveillance requirement. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluent that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that these amendments involve no significant hazards consideration, published in the *Federal Register* (FR) on September 22, 2020 (85 FR 59562) and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Diana Woodyatt, NRR
Joshua Wilson, NRR

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SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT NOS. 269 AND 271 RE: TECHNICAL SPECIFICATION CHANGES TO IMPLEMENT NEW SURVEILLANCE METHODS FOR TRANSIENT HEAT FLUX HOT CHANNEL FACTOR (EPID L-2020-LLA-0170) DATED JULY 21, 2021

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DWoodyatt, NRR
JWilson, NRR

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