February 18, 2011

NRC 2011-0022
10 CFR 50.73

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Point Beach Nuclear Plant, Unit 1
Dockets 50-266 and 50-301
License Nos. DPR-24 and DPR-27

Licensee Event Report 266/2010-005-00
Improper Administrative Controls for Breach of HELB Barriers

Enclosed is Licensee Event Report (LER) 266/2010-005-00 for Point Beach Nuclear Plant (PBNP), Units 1 and 2. This LER documents improper controls used while breaching high energy line break (HELB) barriers. Pursuant to 10 CFR 50.73(a)(2)(ii)(B), and 10 CFR 50.73(a)(2)(v)(A) and (D), the event is reportable as an unanalyzed condition and a condition that could have prevented fulfillment of the safety function of systems that are needed to shutdown the reactor and maintain it in a safe shutdown condition or mitigate the consequences of an accident.

This submittal contains no new or revised regulatory commitments.

If you have questions or require additional information, please contact Mr. James Costedio at 920/755-7427.

Very truly yours,

NextEra Energy Point Beach, LLC

Larry Meyer
Site Vice President

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
PSCW

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resourse@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

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4. TITLE
Improper Administrative Controls for HELB Barriers

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
08	27	2010	2010	- 005 -	00	02	18	2011	PBNP Unit 2	05000301
									FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE
Unit 1 - MODE 1
Unit 2 - MODE 1

10. POWER LEVEL
Unit 1 - 100%
Unit 2 - 100%

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: *(Check all that apply)*

☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☒ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☒ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☒ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Fritzie Flentje	920/755-7656

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED		15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☒ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)*	☐ NO		04	29	2011

ABSTRACT *(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)*

During the spring of 2010, NextEra identified several past instances where high energy line break (HELB) barriers were not being properly controlled during maintenance and modification activities. Consequently, a HELB in certain areas coincident with the barriers being open could have adversely affected the equipment within the adjacent room.

A three-year review was conducted to determine the extent of condition of the potential barrier breaches. The results revealed additional instances where HELB barriers had been improperly controlled and the barrier had been rendered inoperable. A causal evaluation determined that the administrative procedure governing HELB barriers was not consistent with industry standards and did not contain applicable regulatory guidance. An analysis for safety significance is in progress.

This 60-day licensee event report is being submitted in accordance with the requirements of 10 CFR 50.73(a)(2)(ii)(B), as an unanalyzed condition and 10 CFR 50.73(a)(2)(v)(A) and (D) as a condition that could have prevented fulfillment of the safety function of systems that are needed to shutdown the reactor and maintain it in a safe shutdown condition or mitigate the consequences of an accident. The event constitutes a safety system functional failure.

NARRATIVE

Event Description:

During the spring of 2010 NextEra identified that there were several instances where barriers were not being properly controlled and had been breached during maintenance and modification activities. Specifically, NextEra identified that high energy line break (HELB) barriers had been improperly controlled while the barriers were open for other than normal ingress and egress. If a HELB had occurred while the barriers had been breached, the condition could have adversely affected safety-related equipment contained in the adjacent room.

The station's administrative program in place at the time of these past events was determined to be inconsistent with industry standards and applicable regulatory guidance. Furthermore, the program did not include an analysis of postulated HELB effects on safety-related equipment, during barrier breaches.

This 60-day licensee event report is being submitted in accordance with the requirements of 10 CFR 50.73(a)(2)(ii)(B), as an unanalyzed condition, and 10 CFR 50.73(a)(2)(v)(A) and (D) as a condition that could have prevented fulfillment of the safety function of systems that are needed to shutdown the reactor and maintain it in a safe shutdown condition or mitigate the consequences of an accident. The event constitutes a safety system functional failure.

Event Analysis:

A three-year historical review of the station log was conducted to identify HELB breach occurrences. NextEra determined that the north control room door was prevented from closing for lock replacement approximately every six (6) weeks over the duration of the review. The data contained in the station log was further verified by security logs that monitored the status of this door during the potential breach. The north control room door is a HELB barrier. The door would mitigate the consequences of a potential HELB event in the turbine building by maintaining the normal control room environment.

There were other additional identified instances of HELB barriers being breached during the review period. Where possible, the station log information was further verified by security logs that monitored the status of the barrier during the potential breach.

Based upon work practices that implemented administrative procedure guidance at the time of the events, NextEra conservatively assumed that the above described barriers were prevented from closing by mechanical means. Therefore, a harsh environment could have existed in the areas protected by the barrier had a HELB event occurred during the period of time the barrier was prevented from closing. The equipment potentially affected was dependent upon the specific barrier that was breached for the given area.

Preventing HELB barriers from closing created a condition where the barriers were degraded relative to protecting both the safety-related and environmentally-qualified equipment contained in the area. A HELB barrier may be opened for routine ingress and egress with no effect on the HELB barrier's ability to perform its function. Since the barriers were prevented from closing, the barriers were not open for routine ingress and egress. An analysis had not been performed to determine whether the equipment on the other side of the breached barrier would become subject to a harsh environment had a HELB occurred.

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NARRATIVE

A follow-up adverse trend evaluation was performed of documented instances of barrier breaches. The purpose of the evaluation was to determine if other programs (such as fire barriers) had sufficient administrative controls in place to prevent an improper breach of the required barrier. The results of the evaluation determined that corrective actions were appropriate to resolve the identified extent of condition.

Safety Significance:

A historical review concluded when the barriers were prevented from closing there was no actual loss of a safety-related system, structure or component (SSC). Overall, HELB events are low-frequency occurrences. These events would have to cause systems required to mitigate a postulated HELB to be rendered non-functional in order to result in substantive safety consequences. The probability of a main steam line break occurring during the individual short time periods the HELB barriers were open is very low. Therefore, the safety significance of the individual events is low.

Analyses are in progress to determine the overall safety significance of the HELB barrier breaches and the impact on safety-related equipment protected by the barrier. This licensee event report will be supplemented when that analysis has been completed.

Cause:

The cause of the condition was that HELB programmatic requirements did not incorporate applicable industry guidance. The program permitted barriers to be prevented from closing and did not require an analysis of postulated HELB effects on safety-related equipment during barrier breaches. These program deficiencies led to the effects of a potential HELB event not being appropriately considered.

Corrective Actions:

The following corrective actions were taken:

- The HELB administrative procedure was revised to reflect applicable industry guidance.
- Pending work packages for HELB related work were updated with revised HELB requirements.

Previous Occurrences:

None

Failed Components Identified:

None