

# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352 September 9, 2013

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

SUBJECT: POINT BEACH NUCLER PLANT – NRC PROBLEM IDENTIFICATION AND

RESOLUTION INSPECTION REPORT 05000266/2013007; 05000301/2013007

Dear Mr. Meyer:

On August 28, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution inspection at the Point Beach Nuclear Plant. The enclosed inspection report documents the inspection results, which were discussed at an interim exit meeting on August 2, 2013, with you and other members of your staff, and a final exit meeting on August 28, 2013, (via teleconference) with Ms. F. Hennessy.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

On the basis of the samples selected for review, there were no findings identified during this inspection. The team concluded that the corrective action program was generally effective in identifying, evaluating and correcting issues. The licensee had a low threshold for identifying issues and entering them into the corrective action program. A risk based approach was used to determine the significance of the issues and that drove the priority of issue evaluation and resolution. Corrective actions were generally implemented in a timely manner, commensurate with their safety significance. Operating experience was entered into the corrective action program and appropriately evaluated. The use of operating experience was integrated into daily activities and found to be effective in preventing similar issues at the plant. In addition, selfassessments, audits, and effectiveness reviews were found to be conducted at appropriate frequencies with sufficient depth for all departments. The assessments reviewed were thorough and effective in identifying plant performance deficiencies, programmatic concerns, and improvement opportunities. On the basis of the interviews conducted, the inspectors did not identify any impediment to the establishment of a safety conscious work environment. Your staff was aware of and generally familiar with the corrective action program and other processes, including the Employee Concerns Program, through which concerns could be raised. .

L. Meyer -2-

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Patricia Pelke, Acting Chief Branch 6 Division of Reactor Projects

Docket Nos. 50-266; 50-301 License Nos. DPR-24; DPR-27

Enclosure: Inspection Report No. 05000266/2013007; 05000301/2013007

w/Attachment: Supplemental Information

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#### U.S. NUCLEAR REGULATORY COMMISSION

#### **REGION III**

Docket Nos: 50-266; 50-301 License Nos: DPR-24; DPR-27

Report Nos: 05000266/2013007; 05000301/2013007

Licensee: NextEra Energy Point Beach, LLC

Facility: Point Beach Nuclear Plant, Unit 1 and Unit 2

Location: Two Rivers, WI

Dates: July 15, 2013, through August 28, 2013

Team Leader: R. Ng, Project Engineer

Inspectors: M. Thorpe-Kavanaugh, Resident Inspector

R. Lerch, Project Engineer D. Jones, Reactor Engineer G. O'Dwyer, Reactor Inspector

Approved by: P. Pelke, Acting Chief

Branch 6

**Division of Reactor Projects** 

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#### **SUMMARY OF FINDINGS**

Inspection Report 05000266/2013007; 05000301/2013007; 07/15/2013 – 08/28/2013; Point Beach Nuclear Plant; Problem Identification and Resolution.

This inspection was performed by four region-based inspectors and the Point Beach Resident Inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

#### Problem Identification and Resolution

On the basis of the samples selected for review, the team concluded that the corrective action program (CAP) at Point Beach Nuclear Plant was generally effective in identifying, evaluating and correcting issues. The licensee had a low threshold for identifying issues and entering them into the CAP. A risk based approach was used to determine the significance of the issues and that drove the priority of issue evaluation and resolution. Corrective actions were generally implemented in a timely manner, commensurate with their safety significance. Operating experience was entered into the CAP and appropriately evaluated. The use of operating experience was integrated into daily activities and found to be effective in preventing similar issues at the plant. In addition, self-assessments, audits, and effectiveness reviews were found to be conducted at appropriate frequencies with sufficient depth for all departments. The assessments reviewed were thorough and effective in identifying plant performance deficiencies, programmatic concerns, and improvement opportunities. On the basis of the interviews conducted, the inspectors did not identify any impediment to the establishment of a safety conscious work environment at Point Beach Nuclear Plant. Licensee staff was aware of and generally familiar with the CAP and other processes, including the Employee Concerns Program, through which concerns could be raised.

Although implementation of the CAP was determined to be generally effective, the inspectors identified several issues that were either minor in nature and/or represented potential weakness of the program.

of the	program.
Α.	NRC-Identified and Self-Revealed Findings

**Licensee-Identified Violations** 

None.

В.

None.

#### **REPORT DETAILS**

#### 4. OTHER ACTIVITIES

#### 4OA2 Problem Identification and Resolution (71152B)

This inspection constituted one biennial sample of Problem Identification and Resolution as defined by Inspection Procedure 71152, "Problem Identification and Resolution." Documents reviewed are listed in the Attachment to this report.

#### .1 <u>Assessment of the Corrective Action Program (CAP) Effectiveness</u>

#### a. <u>Inspection Scope</u>

The inspectors reviewed the procedures and processes that described the CAP at Point Beach Nuclear Plant to ensure, in part, that the requirements of 10 Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," were met. The inspectors observed and evaluated the effectiveness of meetings related to the CAP, such as the Initial Screening Team meeting, the Management Review Committee meeting and the Corrective Action Review Board meeting. Selected licensee personnel were interviewed to assess their understanding of and their involvement in the CAP.

The inspectors reviewed selected condition reports across all seven Reactor Oversight Process cornerstones to determine if problems were being properly identified and entered into the CAP. The majority of the risk-informed samples of condition reports reviewed were issued after the last NRC Problem Identification and Resolution inspection completed in July of 2011. The inspectors also reviewed selected issues that were more than five years old.

The inspectors assessed the licensee's characterization and evaluation of the issues and examined the assigned corrective actions. This review encompassed the full range of safety significance and evaluation classes, including root cause evaluations, apparent cause evaluations, common cause evaluations and condition evaluations. The inspectors assessed the scope and depth of the evaluations. For significant conditions adverse to quality, the inspectors evaluated the corrective actions to prevent recurrence and for less significant issues, the inspectors reviewed the corrective actions to determine if they were implemented in a timely manner commensurate with their safety significance.

The inspectors selected the gas turbine generator system to review in detail as a vertical slice sample based on input from the resident staff semi-annual trend review. The gas turbine generator system was a nonsafety-related, but risk significant, Maintenance Rule (a)(1) system. The gas turbine generator is allowed by Technical Specification to satisfy the Electrical Power Technical Specification Limiting Conditions of Operation (i.e. LCO 3.8.1.a). The gas turbine also has augmented quality functions for Station Blackout and Appendix R events. The primary purpose of this review was to determine whether the licensee was properly monitoring and evaluating the performance of this risk significant system. A 5-year review of the Maintenance Rule (a)(1) process was also performed to assess the licensee's efforts in monitoring and correcting system performance issues. The team also assessed whether the licensee effectively

implemented monitoring programs. The inspectors performed walkdowns, as needed, to verify the resolution of issues.

The inspectors selected the emergency preparedness alert and notification system (sirens) and the independent spent fuel storage installation security as vertical slice samples for review including performing system walkdowns.

The inspectors examined the results of self-assessments of the CAP completed during the review period. The results of the self-assessments were compared to self-revealed and NRC-identified findings. The inspectors also reviewed the corrective actions associated with previously identified non-cited violations and findings to determine whether the licensee properly evaluated and resolved those issues. The inspectors performed walkdowns, as necessary, to verify the resolution of the issues.

#### b. Assessment

#### (1) Identification of Issues

Based on the results of the inspection, the inspectors concluded that, in general, the licensee was effective in identifying issues at a low threshold and entering them into the CAP. The inspectors determined that problems were generally identified and captured in a complete and accurate manner in the CAP. The licensee appropriately screened issues from both the NRC and industry operating experience at an appropriate level and entered them into the CAP when applicable. The inspectors also noted that deficiencies were identified by external organizations (including the NRC) that had not been previously identified by licensee personnel. These deficiencies were subsequently entered into the CAP for resolution.

With respect to the threshold for initiation of condition reports, the inspectors noted instances where conditions were not captured historically in the CAP. The inspectors reviewed Procedure PI-AA-204, "Condition Identification and Screening Process," which stated that the site utilized an expectation of "when in doubt, fill it out" to identify any unexpected or unwanted conditions, encouraging a low threshold for reporting. Based on this guidance, during system walkdowns, the inspectors questioned licensee staff about whether various conditions identified by the inspectors met the threshold for initiation of a condition report. The responses received from licensee personnel involved with the walkdowns confirmed the low threshold defined in their procedures.

The inspectors determined that the licensee was generally effective at trending low level issues to prevent larger issues from developing. The licensee also used the CAP to document instances where previous corrective actions were ineffective or were inappropriately closed.

The inspectors performed a five year extensive review of the gas turbine generator system. As part of this review, the inspectors interviewed the current and prior system engineers, reviewed a sample of gas turbine generator system health reports, condition reports, operating experience, apparent cause evaluations and a root cause evaluation. The inspectors reviewed the CAP and work management system procedures that provided trending guidance. In addition, the inspectors walked down the gas turbine generator area to visually inspect recent gas turbine generator related modifications and to verify that identified concerns were tagged and entered into the CAP. The inspectors

concluded that gas turbine generator related concerns were identified and entered into the CAP at a low threshold, and concerns were resolved in a timely manner commensurate with their safety significance. An observation related to the adequacy of a functionality assessment for the gas turbine generator was documented in Section 4OA2.1.b.(2).ii below.

#### Findings

No findings were identified.

#### (2) Effectiveness of Prioritization and Evaluation of Issues

Based on the results of the inspection, the inspectors concluded that the licensee was effective at prioritizing and evaluating issues commensurate with the safety significance of the identified issue, including an appropriate consideration of risk.

The inspectors determined that the Initial Screening Team meeting, the Management Review Committee meeting and the Corrective Action Review Board meeting were generally thorough and maintained a high standard for evaluation quality. Members of the Corrective Action Review Board discussed selected issues in sufficient detail and challenged presenters regarding their conclusions and recommendations.

The inspectors performed a detailed review of issues entered into the Maintenance Rule (a)(1) category covering approximately the past five years. The review included the longest standing (a)(1) system, the gas turbine generator and a recent (a)(1) entry, emergency lighting. The inspectors reviewed action plans approved by the expert panel, associated cause evaluations, Maintenance Rule evaluations, and condition reports. The inspectors noted that the licensee generally showed no reluctance in placing structure, system, and components into Maintenance Rule (a)(1) status. Appropriate corrective actions to address the maintenance deficiencies were prescribed and completed. A detailed review of the structure, system, and components performance generally occurred before returning such structure, system and components to (a)(2) status.

The inspectors determined that the licensee usually evaluated equipment functionality requirements adequately after a degraded or non-conforming condition was identified. In general, appropriate actions were assigned to correct the degraded or non-conforming condition.

However, the inspectors noted vulnerabilities and deficiencies in the licensee's evaluations of some conditions. These vulnerabilities and deficiencies had the potential to lead to degraded or inoperable conditions not being recognized.

#### Observations

#### Vulnerabilities in Licensee's Condition Evaluations

The inspectors found several instances where the licensee's documentation lacked sufficient detail to address the extent of condition such that a technically competent reviewer could understand how the identified actions would correct the condition. The inspectors concluded that this represented a failure to evaluate the condition as

described in Procedure PI-AA-205, "Condition Evaluation and Corrective Action," and that this impacted the licensee's ability to identify adequate corrective actions. The inspectors identified the following condition reports as examples where the evaluation lacked sufficient detail:

- AR 1762546 "Security Observation" This condition evaluation lacked detail regarding the extent of condition, the fire areas/zones impacted, the fire round qualifications of individuals involved, and impact of the failures on the fire protection system.
- AR 1709409, "Security Procedure Violation" This apparent cause evaluation did not document the timeliness deficiency identified regarding the reporting of the condition.
- AR 1801201, "Improper Post Turnover Conducted" This condition evaluation did not evaluate the impact on the security plan.
- AR 1714146, "Point Beach UE 11/27, Single Point Failure Issues" This
  condition report was closed to a root cause evaluation associated with
  another condition report and there was no documentation in support of this
  change.
- AR 1792071, "10 CFR 50.54(q) Description Did Not Match Actual Changes Made" – This condition report lacked sufficient detail regarding the evaluation of the condition and impact on emergency preparedness reporting requirements.
- AR 1812176, "Emergency Preparedness Needs Support to Be Successful" –
  This condition report lacked sufficient detail regarding the actions taken to
  close the issue.

In response to these observations, the licensee took immediate actions and provided additional information to address the underlying concerns. Additionally, the licensee initiated AR 1894494, "2013 PI&R – Condition Report Evaluation – Weak Documentation" and assigned condition evaluations in the areas of Security and Emergency Preparedness.

#### Deficiencies in Gas Turbine Generator Functionality Assessments

On February 8, 2013, the G-05 Gas Turbine Generator failed due to a flameout resulting from ice and snow ingestion during a snowstorm. The licensee initiated AR 1846509 to troubleshoot the failure. The gas turbine was successfully restarted soon after the snow storm had ended and the licensee concluded that the gas turbine was functional.

To address the functionality of the gas turbine during future severe weather, the licensee initiated AR 1847140, "G-05 Functionality during Severe Weather." The shift manager initially requested a functionality assessment for the gas turbine generator. The inspectors questioned if the shift manager should have initially requested an operability determination (OD) for the gas turbine because Section 2.1 of the licensee's OD procedure, EN-AA-203-1001, "Operability Determinations/Functionality

Assessments," Revision 9, stated that "The OD process is used to assess the Operability of SSCs described in Technical Specifications." The gas turbine generator is described in Technical Specifications.

Section 8.9.1 of the licensee's Final Safety Analysis Report stated that the gas turbine performed no safety-related functions but did perform some Appendix R functions and Station Blackout functions. Since the gas turbine is described in and used to satisfy Technical Specification Limiting Condition for Operation (i.e. TS LCO 3.8.1), the inspectors determined that the failure to follow procedure EN-AA-203-1001, Section 2.1 and initiate an OD was an NRC-identified performance deficiency. The inspector determined that the licensee should have initiated an OD and documented why the issue would be evaluated under a functionality assessment. This performance deficiency was considered minor because there was no safety consequences associated with the missing step in transitioning to a functionality assessment.

In addition, the assessment for the gas turbine generator functionality during severe weather was completed on February 21, 2013. The functionality assessment concluded that G-05 was functional for Station Blackout and loss of Transformer X03 scenarios during a heavy snow/high wind event, provided that the gas turbine generator was loaded to greater than 10 megawatts (MW). This loading would make the combustor section hotter and the generator would be immune to flameout during severe weather.

The functionality assessment also concluded that the gas turbine generator was functional but nonconforming for a specific Appendix R event during severe weather. For this specific Appendix R event, the gas turbine generator could only be loaded to a maximum of 2.5 MW, which did not make the combustor section hot enough to prevent flameouts during severe weather. However, the assessment failed to specifically evaluate the impact of the generator tripping off due to a severe-weather-induced flameout during an Appendix R event.

Step 5.G (4) of EN-AA-203-1001, Attachment 8, required documentation of the basis for functionality for each potential problem that existed. Therefore, the failure to evaluate the impact of the generator tripping offline during an Appendix R event was an NRC-identified performance deficiency. As a result of questions from the inspectors, the licensee evaluated the issue and concluded that the gas turbine generator could be restarted before any equipment damage would occur during an Appendix R event. Therefore, the inspectors determined that the performance deficiency was minor because under the current conditions there had been no safety consequences associated with the missing documentation.

The licensee initiated AR 1893275 to document these discrepancies. The recommended actions of the condition report proposed communication of these lessons learned to operations and engineering personnel who request or perform operability determinations and functionality assessments. The licensee was in the process of installing a hood over the intake to prevent snow and rain from entering the gas turbine generator.

#### <u>Findings</u>

No findings were identified.

#### (3) Effectiveness of Corrective Action

Based on the results of the inspection, the inspectors concluded that the licensee was generally effective in addressing identified issues and the assigned corrective actions were generally appropriate. The licensee implemented corrective actions in a timely manner, commensurate with their safety significance, including an appropriate consideration of risk. Problems identified using root or apparent cause methodologies were resolved in accordance with the CAP procedural and regulatory requirements. Corrective actions designed to prevent recurrence were generally comprehensive, thorough, and timely. The inspectors sampled corrective action assignments for selected NRC documented violations and determined that actions assigned were generally effective and timely.

However, vulnerabilities were noted in the thoroughness of corrective actions. Specifically, the licensee's pre-inspection review identified several instances where corrective actions were closed inappropriately and that additional actions were needed to complete the closeout of the corrective actions. The inspectors determined these discrepancies were minor compliance issues with the CAP procedures and the licensee had taken actions to address these issues.

The inspectors also identified that there were 630 open corrective action items at the time of the inspection. More than 60 of these items were greater than three years old. The inspectors reviewed a sample of these items and verified that the condition reports were evaluated and actions assigned appropriately. The inspectors determined that most of the remaining actions were minor non-conformances or enhancements and the due dates for the actions had been extended a number of times due to resource limitations or other emergent issues. For those corrective actions that were safety significant, the inspectors verified that the due dates were reasonable and the licensee had appropriate compensatory actions in place.

The inspectors regarded the aging corrective action issue as an opportunity for improvement. While the total number of outstanding actions was considered manageable, they could potentially affect the licensee's focus on the more important safety issues and complicate resource utilization.

#### **Observations**

#### Vulnerability in Implementation of Corrective Actions

With respect to the licensee's timeliness of corrective actions, the inspectors noted that the time frame between when a condition was identified until the time of implementation of corrective action could be as long as 165 days (30 or 45 days for evaluation and 120 days for implementation of corrective actions following evaluation) and could be longer if extensions were granted. While the procedure allowed this amount of time and extensions with management approval, the inspectors were concerned that this amount of time could cause the licensee to be vulnerable to repeat issues in the period before the final corrective action was implemented. The inspectors identified the following as an example:

AR 1785395, "NRC Cross-Cut to H.2(c), Documentation, Adverse Trend" –
 This condition report was initiated on July 18, 2012, and the inspectors

identified the date of completion for the final corrective actions was February 12, 2013 (206 days). The final corrective action was to "identify and revise those programs controlling important procedures and processes to ensure a link between the procedures and site risk management procedures." The inspectors noted that the licensee did not put an interim corrective action in place from July 2012 through February 2013. During this time period, the inspectors had identified a number of risk management related issues including one Non-Cited Violation (NCV 2012004-02) and three minor violations (AR 1847252, AR 1847635, and AR 1834675) for the licensee's failure to monitor risk, as documented in the Integrated Inspection Report 2012004.

The inspectors reviewed Procedure PI-AA-204 and found that it defined an "interim corrective action" as an action taken to temporarily prevent the effects of a condition or make an event less likely to recur during the period when the condition is being evaluated and the final corrective actions are completed." The initial screening team is required by procedure to consider the need for interim corrective action. However, the procedure guidance is only provided for conditions that directly challenge the performance of a system. The inspectors determined that interim corrective actions may be beneficial to temporarily prevent the effects of a condition or to make an event less likely to recur during the period when the condition is being evaluated and the final corrective actions are completed. The inspectors concluded that the lack of guidance regarding interim barriers represented vulnerabilities and could impact the licensee's evaluation of conditions.

# <u>Missed Opportunity to Address Design Deficiency of the Unit 2 Turbine Driven Auxiliary</u> Feedwater Pump

On June 21, 2007, the licensee observed moisture in the turbine outboard bearing oil for the 2P-29, Unit 2 turbine driven auxiliary feedwater pump. An operability determination was performed and determined that the pump was operable. The operability determination also established a water content level below 5000 parts per million (ppm) as a threshold for operability and required an oil sample and oil change after every pump run.

An overhaul of the turbine was completed on September 23, 2007, in an attempt to correct the water intrusion problem. An oil sample taken during the initial post maintenance test run showed a high water content of 20,040 ppm and a sample taken during a second post maintenance test run showed 56 ppm of water. The licensee attributed the high water content during the first run to initial break in of the gland seals and returned the pump to service.

The water content of an oil sample taken during the next surveillance test on November 1, 2007, exceeded the operability criterion of 5000 ppm. The licensee elected to run the pump to show that the 8-hr design basis mission time could be met. This was done as a compensatory measure every 72 hours. The licensee later took the pump out of service for overhaul on November 13, 2007, and returned it to service with the normal moisture level in the turbine bearing oil. The licensee determined that this was a significant condition adverse to quality and performed a root cause evaluation, RCE 1331388, "2P-29 AFW Pump Moisture in Oil," for the issue. The licensee determined that the root causes of the issue were inadequate instructions in procedures and training for applying

B Enclosure

sealant and assembling the terry turbine. This resulted in a steam leak at the gland and turbine casing. The steam subsequently migrated into the lube oil system for the pump and raised the water content of the oil above its operability criterion. Corrective actions to prevent recurrence were prescribed to revise the applicable maintenance procedures and to conduct training for the maintenance technicians. However, the steam leaks from the terry turbine continued with moisture intrusion into the oil system although the magnitude was low enough that operability of the pump was maintained.

On May 18, 2010, during a quarterly surveillance, turbine casing joint steam leakage was discovered and a subsequent oil sample revealed a visually unacceptable sample result with high water content. The licensee analyzed the oil sample and found that the water content was below the 5000 ppm criterion. However, the licensee estimated that the water intrusion would exceed the 5000 ppm criterion if the pump were to run for 8 hours based on a conservatively assumed constant intrusion rate. Therefore, the licensee took the pump out of service for repair. The issue on past operability was reviewed by the resident inspectors as documented in the Integrated Inspection Report 2010003 and no finding was identified at the time. The licensee completed the repair and returned the pump to service on May 20, 2010. At that time, the licensee determined that this was only a condition adverse to quality but assigned a root cause evaluation to examine the issue. RCE 1389194, "2P-29-T Casing Leak Identified during IT-09A Initial Start," was completed on July 6, 2010, and concluded that the turbine casing steam leakage was due to the temporary axial and radial distortion in the turbine casing from the turbine and piping mounting configuration that did not adequately accommodate thermal growth.

This root cause evaluation further concluded that the licensee recognized that accommodation for proper thermal expansion of the turbine was required since 1987. but only a limited scope modification was made in the late 1980s to alleviate a series of bearing wipes. Subsequent to this time period, the licensee has documented a number of steam leaks, bearing issues, and moisture intrusion events. There were a total of six condition reports that documented elevated water content in oil between November 2007 and May 2010. The root cause evaluation stated that some of these events were evaluated through root cause and closed to specific actions to address deficiencies noted in those instances. The root cause evaluation also stated that an aggregate review of the history confirmed that the repeated events were related to information the licensee already had which confirmed that the original design turbines require modifications to account for thermal growth such that the turbine casing was not distorted. As a long term corrective action to prevent recurrence, the licensee determined that the turbine driven auxiliary feedwater pump turbine would be replaced. In the interim, the licensee would monitor the oil content and perform repairs to maintain operability.

Since the completion of the 2010 root cause evaluation, the licensee has not resolved this issue. There were documented steam leaks and moisture in the lube oil system, however, these events had not resulted in inoperability of the auxiliary feedwater pump. Due to vendor qualification issues and other process delays, the installation of the replacement Unit 2 turbine and all associated actions will not be completed until the U2R33 refueling outage in the spring of 2014.

Even though the licensee did not identify that thermal expansion was a contributing factor for the water intrusion in 2007, the inspectors concluded that the licensee would

not have identified this cause until the sealant installation and training deficiencies were corrected. The relative contribution of the steam leak from each of these causes could not be quantified accurately. Given the magnitude of the water intrusion in 2010 was only a fraction of the intrusion identified in 2007, it was reasonable to conclude that the significant steam leak condition from 2007 did not reoccur. Therefore, no performance deficiency existed for the 2007 root cause evaluation. However, the inspectors determined that the licensee missed an opportunity in 2007 to address a known design deficiency. The root cause evaluation should be comprehensive and address all possible known deficiencies that could have resulted in the significant condition adverse to quality. Under different circumstances, thermal expansion might lead to a steam leak large enough to cause the pump to become inoperable. The licensee plans to correct this design deficiency with a replacement turbine.

#### <u>Findings</u>

No findings were identified.

# (4) <u>Implementation of Corrective Actions Generated Since NRC 95001 Supplemental Inspection</u>

#### a. <u>Inspection Scope</u>

The inspectors reviewed the 95001 supplemental inspection action items that were implemented and the effectiveness review that had been conducted since the completion of the supplemental inspection on March 8, 2013. This supplemental inspection was related to a White Emergency Preparedness finding that was documented in NRC Inspection Report 05000266/2012504; 05000301/2012504. The supplemental inspection was documented in NRC Inspection Report 05000266/2013503; 05000301/2013503.

#### b. Assessment

The inspectors reviewed AR 1757131, "EX-12 – Potential Violation RSPS Degraded Function," and found that the associated corrective actions had been planned and implemented. Specifically, 21 of the 23 assigned corrective actions (approximately 91 percent) had been completed at the time of this inspection. There was one additional corrective action that had been completed since the time of the supplemental inspection. The inspectors reviewed the completed corrective actions, the licensee's quick hit assessment of the root cause evaluation corrective actions, and found them to be adequate. The remaining open corrective actions include effectiveness reviews of the protective action recommendation and 50.54(q) process, both due on December 20, 2013.

#### c. Findings

No findings were identified.

#### .2 Assessment of the Use of Operating Experience

#### a. Inspection Scope

The inspectors reviewed the licensee's implementation of their operating experience program. Specifically, the inspectors reviewed the operating experience program implementing procedures, and completed evaluations of operating experience issues and events. The inspectors also observed meetings and daily activities for the use of operating experience information. The intent was to determine if the licensee was effectively integrating experience into the performance of daily activities, whether evaluations of issues were proper and conducted by qualified personnel, whether the program was sufficient to prevent future occurrences of previous industry events, and whether the licensee effectively used the information in developing departmental assessments and facility audits. The inspectors also assessed whether corrective actions, as a result of operating experience, were identified and implemented effectively and in a timely manner.

#### b. Assessment

Based on the results of the inspection, the inspectors concluded that in general, operating experience was effectively utilized by the licensee. The inspectors observed that operating experience was discussed as part of the daily and pre-job briefings. Industry operating experience was effectively disseminated across plant departments and no issues were identified during the inspectors' review of licensee operating experience evaluations.

#### c. Findings

No findings were identified.

#### .3 <u>Assessment of Self-Assessments and Audits</u>

#### a. <u>Inspection Scope</u>

The inspectors reviewed selected Focused Self-Assessments, benchmarkings, "Quick Hit" self-assessments, and Nuclear Oversight audits, as well as the schedule of past and future assessments. The inspectors evaluated whether these audits and self-assessments were effectively managed, adequately covered the subject areas, and properly captured identified issues in the CAP. In addition, the inspectors interviewed licensee personnel regarding the implementation of the audit and self-assessment programs.

#### b. <u>Assessment</u>

Based on the results of the inspection, the inspectors concluded that self-assessments and audits were generally accurate, thorough, and effective at identifying issues and enhancement opportunities at an appropriate threshold. The inspectors concluded that these audits and self-assessments were completed by personnel knowledgeable in the subject area. In many cases, these self-assessments and audits had identified numerous issues that were not previously recognized by the licensee. These issues were entered into condition reports as required by the CAP procedures. For example,

nuclear oversight had identified issues that included aging of the reactor simulator software and inadequate thermal performance testing and analysis of heat exchangers. The heat exchanger testing issue had been elevated to the fleet executive vice president and chief nuclear officer for resolution following the fleet quality assurance processes.

#### c. Findings

No findings were identified.

#### .4 <u>Assessment of Safety Conscious Work Environment</u>

#### a. Inspection Scope

The inspectors interviewed selected Point Beach Nuclear Plant personnel to determine if there were any indications that licensee personnel were reluctant to raise safety concerns, to either their management or the NRC, due to fear of retaliation. The inspectors reviewed selected Employee Concern Program activities to identify any emergent issues or potential trends. The inspectors also assessed the safety conscious work environment through a review of employee concern program implementing procedures, discussions with employee concern program manager, interviews with personnel from various departments, and reviews of condition reports. The licensee's programs to publicize the CAP and employee concern program were also reviewed. The inspectors reviewed licensee's self-assessments and assessments by external organizations of safety culture to determine if there were any organizational issues or trends that could impact the licensee's safety performance.

#### b. Assessment

The inspectors did not identify any issues that suggested conditions were not conducive to the establishment and existence of a safety conscious work environment. Licensee staff was aware of and generally familiar with the CAP and other processes, including the employee concern program, through which concerns could be raised. In addition, a review of the types of issues in the employee concern program indicated that personnel were appropriately using the CAP and employee concern program to identify issues. The staff also indicated that management had been supportive of the CAP by providing time and resources for employees to generate their own condition reports.

The staff also expressed a willingness to challenge actions or decisions that they believed were unsafe. All employees interviewed noted that any safety issue could be freely communicated to supervision and safety significant issues were being corrected. Some employees indicated a number of low level items were not being corrected in a timely manner. The inspectors determined that the timeliness of the planned corrective actions for the examples given were commensurate with their safety significance.

Various safety culture assessments had been performed by contractors, the licensee's staff, and a nuclear plant owner/operators organization. The results indicated that there were no impediments to the identification of nuclear safety issues. In addition, the NextEra fleet procedure on safety culture created a Nuclear Safety Culture Team, made up of plant managers, to monitor safety culture at the site on a periodic basis (at least quarterly). The licensee had also initiated a Nuclear Safety Culture Improvement Team with plant staff membership to conduct surveys and evaluations and develop

improvement actions on a routine basis. The Nuclear Safety Culture Improvement Team met monthly, issued minutes, and provided input to management on safety culture health and initiatives. The inspectors concluded that this group was actively engaged in the plant safety culture and could be effective in proactively addressing issues and initiating improvements.

#### c. Findings

No findings were identified.

#### 4OA6 Management Meetings

#### a. <u>Interim Exit Meeting</u>

On August 2, 2013, the inspectors presented the preliminary inspection results to Mr. L. Meyer, and other members of the licensee staff.

#### b. Exit Meeting

On August 28, 2013, Mr. R. Ng provided the final inspection results to Ms. F. Hennessy via a teleconference. The licensee acknowledged the issues presented. Mr. Ng also confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

#### **SUPPLEMENTAL INFORMATION**

#### **KEY POINTS OF CONTACT**

#### <u>Licensee</u>

- L. Meyer, Site Vice President
- E. McCartney, Site Director
- R. Baird, Acting Training Manager
- F. Hennessy, Performance Improvement Manager
- C. McMillan, Scheduling Manager
- M. Millen, Licensing Manager
- C. Mott, Chemistry Supervisor
- J. Pruitt, Nuclear Oversight Manager
- G. Strharsky, Emergency Preparedness Manager
- C. Trezise, Engineering Director
- G. Vickery, Acting Plant General Manager/Operations Manager
- R. Welty, Radiation Protection Manager

#### Nuclear Regulatory Commission

P. Pelke, Acting Branch Chief, Branch 6, Division of Reactor Projects

D. Betancourt-Roldan, Acting Senior Resident Inspector

#### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

	EIOT OF THE MIC OF EIVED, GEOGED, AND BIOGGOOD
<u>Opened</u>	
None	
<u>Closed</u>	
None	
<u>Discussed</u>	
None	

#### LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

#### **Action Request**

AR 0100950	CC Pump Min Flow Concerns Not Adequately Addressed by CAs	March 25, 2002
AR 1252952	Previously Identified Equipment Issue Not Given Adequate Priority	August 18, 2011
AR 1264259	Potentially Non-Conservative Appendix R Response Times	November 18, 2004
AR 1284477	Replacement for 1SW-322 and 1SW-360 Mechanically Failed After Installation	November 4, 2005
AR 1287800	HX Conditions & Testing Issues Currently Not Tracked in Corrective Action Process	January 26, 2006
AR 1295231	480V Control Circuits Not Evaluated for Maximum Voltage	May 8, 2006
AR 1318333	Create Review of Area TLDs For Evaluation of Dosimetry Need	May 11, 2007
AR 1321297	Moisture Observed in Oil Sample from 2P-29 Turbine Reservoir	June 21, 2007
AR 1321829	Unable to Analyze Water Content of Oil Sample	June 26, 2007
AR 1321910	Oil Sample for 2P-029-T May Not Have Been Taken Correctly	June 26,2007
AR 1323850	High Than Expected Water in 2P29T OB Brg Post Run Sample	July 21, 2007
AR 1324822	AF System Exceeds 100% of Unavailability Criteria	July 31, 2007
AR 1324822	AF System Exceeds 100% of Unavailability Criteria	July 31, 2007
AR 1327100	Oil Analysis Results Questioned	August 28, 2007
AR 1328728	9/21 2P29 Oil Analysis Results	September 22, 2007
AR 1328767	2P-029-T OB Brg Water Following IT-09A	September 24, 2007
AR 1329016	IT-09A Oil Analysis Results Not as Expected for 2P-029-T	September 27, 2007
AR 1331388	2P-29 Moisture in Oil Concern	November 1, 2007
AR 1331408	Visual Indications Post IT-09A on 11/2/07 for Oil	November 2, 2007
AR 1331448	Oil Analysis Results for 2P-029-T 11/3/07	November 3, 2007
AR 1331592	Oil Analysis Results for 2P-029-T from 11/5/07	November 6, 2007

AR 1331878	Oil Analysis Results for 2P-029-T from 11/8/07	November 9, 2007
AR 1332082	2P-029-T Oil Dregs No Longer Being Discarded	November 13, 2007
AR 1332331	Oil Analysis Results for 2P-029-T from 11/15/07 Operation	November 16, 2007
AR 1333472	2P-029-T Oil Analysis Results	December 7, 2007
AR 1342727	1P-029T OB Bearing Oil Analysis – Current Trend Update	April 30, 2008
AR 1345253	Control Room/Simulator Recorder Obsolescence	June 12, 2008
AR 1346004	Visual Indication of Water in 2P-029-T OB Bearing Oil	June 25, 2008
AR 1346155	Water Analysis from 2P-029T Outboard Bearing	June 27, 2008
AR 1349051	Oil Condition in 2P-29-0T OB Bearing at Oil Change	August 12, 2008
AR 1352155	Oil Analysis Results for 2P-29T Run on 9/26/08	October 1, 2008
AR 1361767	G-02 EDG Tripped on Reverse Power	March 15, 2009
AR 1362165	Elevated Water Content in 2P-029T Outboard Bearing Reservoir	March 20, 2009
AR 1367490	Documentation of Water Content in 2P-029T Bearing Oil	June 23, 2009
AR 1377823	3 Approved Minor Revision "C" for Calc 2004-0009	November 28, 2009
AR 1378305	2P-029T Oil Sample Contained Water	December 5, 2009
AR 1382223	Potential Trend - Design Changes/Modifications	February 15, 2010
AR 1382645	Documentation of 2P-029T Bearing Oil Water Content	February 22, 2010
AR 1389194	2P-29-T Casing Leak Identified During IT-09A Initial Start	May 18, 2010
AR 1390724	2P-29T PMT Steam Leak on 5/20/2010	June 10, 2010
AR 1394906	Engineering Observation During IT-09 on 8/16/10	August 17, 2010
AR 1624317	U2 Entered LCO 3.03 due to 2 ECCS Train OOS	February 27, 2011
AR 1633384	IER1 11-1: Unanalyzed Challenge from Non-Seismic Internal Flooding	March 25, 2011
AR 1634515	IER1 11-1: Non-Seismic Flood Barrier	March 28, 2011
AR 1639692	Insufficient Secondary Chemistry Controls	April 9, 2011
AR 1657810	2B-04 Safeguards 480V Bus Were De-energized	June 6, 2011
AR 1660378	2N-31 SRNI HVPS Failed High	June 13, 2011
AR 1661857	2P-29T Turbine / Pump Seal and Casing were Doc. As Leaking	June 18, 2011
AR 1669352	Security Procedure Not Updated To Reflect Change	July 14, 2011

AR 1672296	Potential Trend - Post-Mod Plant Procedures Requiring Changes	July 26, 2011
AR 1682142	EPIP 1.3 Contains Incorrect Information	August 30, 2011
AR 1683730	Plant Personnel Using Out Of Service Door	September 5, 2011
AR 1684683	Engineering U2 ISI Inspection	September 8, 2011
AR 1685100	EAL Technical Basis Clarification	September 9, 2011
AR 1686912	G-05 Controls Upgrade Project Late and Over Budget	September 16, 2011
AR 1692675	OE Screening Team Members Inadequate Attendance	October 4, 2011
AR 1692681	Untimely Evaluation Of Industry and Internal OE	October 4, 2011
AR 1692686	Sharing Of Significant OE Items with Fleet	October 4, 2011
AR 1692690	Untimely Sharing Of Significant OE Items with Industry	October 4, 2011
AR 1692692	Deficiencies Identified In OE Procedures	October 4, 2011
AR 1698342	P-32C; SW Pump Breaker Will Not Close on Alt Power	October, 20, 2011
AR 1702148	Nuclear Oversight Audit PBN 11-017 Found Weaknesses with Self Assessment Program.	November 1, 2011
AR 1702148	Self Assessment Program Issues	November 01, 2011
AR 1702316	Firewatch Packet Incorrectly Documented	November 1, 2011
AR 1704900	Shift Turnover	November 9, 2011
AR 1705396	Lack of Management Emphasis on the Operational Experience Program Has Led to Weaknesses	November 10, 2011
AR 1709409	Security Procedure Violation	November 23, 2011
AR 1712999	Operability Concern: U2 CFC Accident Cooler Drain Valves	December 6, 2011
AR 1714146	Point Beach UE 11/27, Single Point Failure Issues	December 8, 2011
AR 1715842	Valve Manipulation Issue During IT-13 Train A	December 14, 2011
AR 1725962	Unit 1 RCS Lithium Exceeds Allowed Concentration Band	January 19, 2012
AR 1727978	Calc 2003-0046 Rev. 004-C DC Loading Issues	January 25, 2012
AR 1736052	FSA Found 50.59 Screening Deficiencies	February 20, 2012
AR 1736165	FSA Found Mod Deficiencies	February 20, 2012
AR 1737633	G-05 Declared Unavailable Due to Turning Gear Failure	February 23, 2012
AR 1742751	Evaluate EP Classification For Security Hostile Action	March 8, 2012
AR 1748545	Place Signs At ISFSI/SITE PA To Meet 10CFR73.75 Requirement	March 26, 2012

AR 1749819	Mods Open for More Than a Year	March 28, 2012
AR 1749819	More Than 20 Mod-Related ECs Need to be Assigned for Condition Evaluation to Advance to Completed Status	April 23, 2012
AR 1749819	Course of action for 5 Mod-Related Project Engineering ECs Assigned for Condition Evaluation to Advance to Completed status	April 23, 2012
AR 1749819	3 ECs should be Reassigned to Advance to the Correct status	April 23, 2012
AR 1749819	3 Electrical Design ECs Should be Advanced to the Correct Status	April 24, 2012
AR 1749819	EC 254576 Needs Calc Revision and Drawing Updates but Delayed, e.g., Fukushima Seismic Walkdowns Take Precedence	June 11, 2013
AR 1750276	G-01 and G-02 Diesel Room Air Flow NRC Concern	March 29, 2012
AR 1754326	MRC Request for Functionality Assessment Did Not Go through Shift Manager per Procedure	April 11, 2012
AR 1757131	EX12 – Potential Violation RSPS Degraded Function	July 13, 2013
AR 1758645	Missed DEP PI Opportunity During Operations Requalification	May 22, 2012
AR 1759720	Alert Declared for IDLH Environment In Air Compressor	May 30, 2012
AR 1762546	Security Observation	May 2, 2012
AR 1763006	North East Switchyard is Not Draining	May 3, 2012
AR 1763180	U1 Façade Elevator Pit Flooded – Again	May 3, 2012
AR 1763749	IDY-04 Inverter Transferred to Backup Power	May 3, 2012
AR 1765497	EPIP-1.3 Direction On Monitored Releases Needs Clarification	May 9, 2012
AR 1767771	Plugging Elevator Sump Drains Not the Right Thing to Do	May 16, 2012
AR 1771773	Security Force Member Failed To Follow Post Pass-Ons	May 30, 2012
AR 1774022	Stop the Offsite All Hands Meetings	June 7, 2012
AR 1777990	Scaffolding Program	June 20, 2012
AR 1778538	CO Staffing Levels	June 22, 2012
AR 1781880	Housekeeping Issue – 44' Turbine Deck	July 5, 2012
AR 1783310	ISFSI Inspection Severity Level IV NRC of 10 CFR 72.146	July 10, 2012
AR 1785137	EP Audit Not Completed After Training	July 17, 2012
AR 1790429	Turbine Driven AFW Pump Turbine Replacement Project on Hold	August 2, 2012

AR 1792071	10 CFR 50.54(Q) Description Did Not Match Actual Changes Made	August 8, 2012
AR 1793914	Unit 1 Manual Trip due to main speed B card failure	August 14, 2012
AR 1795505	Potential Vulnerability for Consistency In Event Retraction	August 20, 2012
AR 1797522	Control Operator Forced to Work on 2 Days Off	August 27, 2012
AR 1800130	Emergency Lighting PM – Potential Trend	September 5, 2012
AR 1800279	Health Screenings Difficult to Attend for Shift Workers	September 5, 2012
AR 1801201	Improper Post Turnover Conducted	September 8, 2012
AR 1801869	Control Operators Are Not Allowed Breaks	September 11, 2012
AR 1802005	Inappropriate Cube Activity	September 11, 2012
AR 1802022	EC 260234 G-05 I & C Upgrade Project untimely closure	September 11, 2012
AR 1805614	Safety CAPS	September 21, 2012
AR 1806234	Step Increase in Anonymous CR Submittals	September 24, 2012
AR 1806650	PBSA-PBNP-12-02 NSC Assessment Enhancement Tracking	September 25, 2012
AR 1807148	PMS Were Suspended to Help Manage KPI	September 26, 2012
AR 1809560	Unexpected Dose Rates Outside of Source Storage Room	November 16, 2012
AR 1812176	Emergency Preparedness Needs Support To Be Successful	October 11, 2012
AR 1812335	2HC-478 Atmospheric Controller Failure	October 12, 2012
AR 1814450	CO Missed For Insulation Removal & Installation	October 18, 2012
AR 1819300	2R32 RDC Anomalous CRDM Coil Resistance Measurements	November 2, 2012
AR 1820800	Security Process Completed In Violation of Procedure	November 7, 2012
AR 1823686	Seal Table Operations Inadequate	November 15, 2012
AR 1824604	New Safety Observation Program Issues	November 17, 2012
AR 1824646	Metal Filings Atop RPI Stacks	November 17, 2012
AR 1825455	Mode Holds Are Out of Control	November 20, 2012
AR 1825640	SRO Did Not Adhere to 2 Minute Job Site Review	November 20, 2012
AR 1826008	Outage Work Scope Deletion	November 21, 2012
AR 1826161	Possible Lack of Knowledge By OCC of Head Lift Hold	November 22, 2012
AR 1826650	Lack of Focus on Key Nuclear Safety Equipment	November 25, 2012
		1

AR 1827381	Screening of CRS at Initial Screen	November 27, 2012
AR 1831422	Incomplete/Unfinished NAME Database	December 10, 2012
AR 1835376	F-235 and F-236 Waste Water Filters	December 27, 2012
AR 1838893	Immediate Inspection of Installed ABB Part 21 Relays	January 11, 2013
AR 1839798	NERC PM for G-05 May not be Completed	January 16, 2013
AR 1841374	Work Management Staffing Shortages	January 22, 2013
AR 1842280	Potential Trend – G-05 Alarms	January 24, 2013
AR 1843299	New Water Treatment Project Does Not Have a Project Manager	January 29, 2013
AR 1846509	G-05 Gas Turbine Tripped Off Line During Snow Storm on February 8, 2013	February 8, 2013
AR 1847140	G-05 Functionality During Severe Weather	February 11, 2013
AR 1847252	Safety Monitor Risk Higher For Unit 2 Than Unit 1	February 11, 2013
AR 1847635	NRC Resident Question ON G-04 Operability Relative To W-184B	February 12, 2013
AR 1852693	Adverse Trend for Crane and Manlift Operations	February 28, 2013
AR 1862430	New Containment Requirements are Solving What?	April 2, 2013
AR 1863013	Lack of Support for Core Business	April 4, 2013
AR 1864747	RP Preparation & Execution Issues Resulting in Problems	April 10, 2013
AR 1869604	Nuclear Safety Culture Issue – The CAP-a-Rang	April 26, 2013
AR 1869714	G-05 Out of Spec for Exhaust Gas Average Temperature	April 27, 2013
AR 1873410	A HA Moment	May 10, 2013
AR 1877008	G-05 Turning Gear Appears to have Numerous Oil Leaks	May 24, 2013
AR 1883410	PBNP 50.59 Disagreement	June 19, 2013
AR 1889400	CE Did Not Evaluate Scope Identified in Parent CR	July 15, 2013
AR 1889401	Update Seismic CLB / IER L1-11-1	July 15, 2013
AR 1889415	Elevator Pit Mod EC 275601 Shows No Progress	July 15, 2013
AR 1891660	Oil Results for 1P-29-T from 7/23/13 IT-08	July 24, 2013
AR 1892192	U2 Controllers 2HC-428A, B & C Need Refurbishment Every 15 Years	July 25, 2013
AR 1899411	AR Closed to Facilities Request Became Repeat Issue	July 15, 2013
AR 1934675	NRC Minor Violation – Failure To Monitor Risk	December 21, 2012
		1

AR 1947086	PIMS Contain Wrong Revisions Of EPIPs in ERO	February 11, 2013
	Facilities	
AR1762802	Unit 1 Yellow Inverter Transferred to Non Safeguards	May 3, 2012

# **Apparent Cause Evaluation**

ACE 1114313	Security Officer Suffered OSHA / ISAR Injury to Left Knee While Performing a Timeline Drill	November 4, 2010
ACE 1626344	Step 5.14.3 of NDE-173 Missed By Qualified Examiner	April 7, 2011
ACE 1639531	2A-05 Safeguards Bus Standby Emergency Power Inoperability	April 9, 2011
ACE 1672760	Nuclear Oversight Finding: Oversight of Maintenance TRA	August 8, 2011
ACE 1683509	EC 258482 May Not Have Been Fully Implemented	September 14, 2011
ACE 1690304	Shallow Dose Not Calculated or Recorded Correctly	October 3, 2011
ACE 1694033	Security Access Not Terminated	October 20, 2011
ACE 1698342	Alt Power Supply Bkr to P-32C SW Pump Will Not Close	December 09, 2011
ACE 1698487	ISI Indication Dispositions For Several Piping Supports Were Not Adequately Evaluated	December 21, 2011
ACE 1698487	Engineering Assessment of IDR 2010-0018	October 20,2011
ACE 1705640	Loss of 1X-03 When Starting 1P-1A, RCP	December 7, 2011
ACE 1709409	Security Procedure Violation	December 20, 2011
ACE 1722122	Functionality Assessment of Emergency Response Facility	March 22, 2012
ACE 1725962	Unit 1RCS Lithium Concentration Reaches Action Level 1	March 30, 2012
ACE 1735115	Keys Left In Vehicle	May 7, 2012
ACE 1737633	G-05 Declared Unavailable Due to Turning Gear Failure	April 9, 2012
ACE 1742751	Evaluate EP Classification For security Hostile Action	March 28, 2012
ACE 1748699	PREX12 PAR DEP Failure	April 25, 2012
ACE 1756818	EX-12 Knowledge Issues Related to Dose Oversight	April 26, 2012
ACE 1758645	Missed DEP PI Opportunity During Operations Requalification	July 6, 2012
ACE 1759720	Alert Declared for IDLH Environment In Air Compressor	July 6, 2012
ACE 1789202	Steam Generator Secondary Side Leakage Identified Inside U2 Containment	January 9, 2013

ACE 1846509	G-05 Gas Turbine Tripped Offline During Snow Storm on February 8, 2013	April 27, 2013
ACE 1851639	LER 226/2012-003, for 2B04, Was Not Submitted Within 60 Days as Required	April 8, 2013
ACE 1851688	Inadequate Prompt Operability Evaluation for Containment	March 28, 2013

# Common Cause Evaluation

CCA 1215659	Adverse Trend in Later Request for Unescorted Access	June 10, 2011
CCA 1698847	Safe Load Path (SLP) Program Trend	October 24, 2011
CCA 1751614	Declining DEP Performance Indicator	August 14, 2012
CCA 1785395	Potential H.2(c) Crosscut	August 21, 2012
CCA 1800130	Emergency Lighting PM – Potential Trend	September 11, 2012

### Audit, Assessment and Self-Assessments

AR 1629771-03	Quick Hit Assessments: PCR Quality	November 10, 2011
AR 808265	Check-In Self-Assessment - SOER Effectiveness Reviews	August 18, 2008
PBN 11-006	Nuclear Fuel Management	July 13, 2011
PBN 11-013	Emergency Planning	August 18, 2011
PBN 11-017	NOS audit of Performance Improvement Program	November 17, 2011
PBN 11-017	Performance Improvement – Audit	November 17, 2011
PBN 12-003	Surveillance-Early Intervention Process	February 9, 2012
PBN 12-004	Radiation Protection and Radwaste	April 12, 2012
PBN 12-009	Operations	June 21, 2012
PBN 12-010	Maintenance: Corrective and Preventive	July 12, 2012
PBN 12-011	Emergency Planning	August 12, 2012
PBN 13-001	Security	February 24 2013
PBN 12-015	Chemistry and Effluents	November 1, 2012
PBN 13-003	Engineering Design	March 8, 2013
PBSA-CHEM-13-03	Lab Quality Control Program	March 21, 2013

PBSA-ENG-12-14	10 CFR 50.59/Modification Focused Self- Assessment	February 29, 2012
PBSA-ENG-12-17	ISI Program Quick Hit	October 3, 2012
PBSA-ENG-12-18	Environmental Qualification Program FSA	September 25, 2012
PBSA-EP-13-02	Potential Violation Due To A Degraded Emergency Planning Risk Significant Planning Standard Function	June 25, 2013
PBSA-OPS-12-01	Configuration Control/ Status Control	June 27, 2012
PBSA-PBNP-12-02	Nuclear Safety Culture	September 25, 2012
PBSA-PI-11-17	Quick Hit Assessments: PCR Quality	November 10, 2011
PBSA-PI-13-04	Operating Experience Closeout Quality	April 10, 2013
PBSA-PI-13-06	Corrective Action Program Self-Assessment	June 12, 2013

# Miscellaneous

CA 1104580-01	Maintenance Rule (a)(1) Action Plan for Auxiliary Feedwater System	December 17, 2007
CA 1104580-01	Maintenance Rule (a)(1) Action Plan for Auxiliary Feedwater System	September 1, 2010
CA 1104580-01	Maintenance Rule (a)(1) Action Plan for Auxiliary Feedwater System	January 15, 2013
CA 1098358-01	Operability Recommendation for 2P-29 Turbine Driven Auxiliary Feedwater Pump (TDAFW)	Revision 4
L-HU-05-23	Letter of Intent to Transition to 10 CFR 50.48(c) – National Fire Protection Association Standard NFPA 805, "Performance-Based Standards for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition"	November 30, 2005
OPR 000116	RWST Inventory Available for RCS Makeup Following an Appendix R Fire	November 20, 2004
ACE 1698487-05 Information Sharing Package		February 9, 2012
ACE 1698487-06 Ir	nformation Sharing Package	March 15, 2012
Agenda and Discussion Materials for the Nuclear Safety Culture Team		July 16, 2013
Aon Hewitt Engagement Survey results		2012
Dashboard on Employee Engagement		2012
Email: From Charles Trezise, Subject: Lessons Learned from Steam Leak Inside Unit 2 Containment		December 12, 2012
Email: From Mark Ralph, Subject: POD Information Sharing		January 17, 2013
G-05 Gas Turbine Functionality Assessment (CA 1847140-01) for February 8, 2013 G-05 trip During Snow Storm		February 21, 2013

Licensee Event Report 266/2011-001-00 Loss of Offsite Power to Unit q Safeguard Buses	January 25, 2012
MRC CARB Causal Evaluation and Corrective Action Review Meeting Package	July 16, 2013
Nuclear News – Point Beach Edition	August 1, 2012
Nuclear Safety Culture Improvement Team Charter	Revision 1
Nuclear Safety Culture Improvement Team Meeting Minutes	May 10, 2013
Nuclear Safety Culture Questions for the Nuclear Safety Culture Survey	
OR Survey – Mean Sigma Trend – NextEra Energy Point Beach	2010-2013
OR Survey – Mean Sigma Trend – NextEra Energy Point Beach	2013
PBNP 2011 Site Self-Assessment/Benchmark Schedule	
PBNP 2012 Site Self-Assessment/Benchmark Schedule	
PBNP 2013 Site Self-Assessment/Benchmark Schedule	
PBNP Performance Improvement Measures of Success	December 26, 2012
PBNP Performance Improvement Measures of Success	May 29, 2013
Point Beach Daily Quality Summary	June 4, 2013
Selected Initial Screening Team Meeting Packages	July 16 – 31, 2013
Selected Management Review Meeting Packages	July 16 – 31, 2013
System Health Report: GT – Gas Turbine G-05	Q1 - 2012
System Health Report: GT – Gas Turbine G-05	Q2 - 2012
System Health Report: GT – Gas Turbine G-05	Q4 - 2012
System Health Report: GT – Gas Turbine G-05	Q1 - 2013
System Health Report: GT – Gas Turbine G-05	Q2 - 2013
System Health Report: VA-Auxiliary Building HVAC	Q1-2011

# Operating Experience

AR 1314200	NMC Internal OE Report	March 15, 2007
AR 1764677	Seabrook CR on Seabrook Tagging and Mis- Positioning errors	May 22, 2012
AR 1766498	Sterns-Roger Customer Bulletin for Wire Rope – Operating Experience	May 22, 2012
AR 1766938	PB CR on Seabrook Rapid OE Clearance 1-Ab-F-9018-CAL-01 Not Hung Correctly	May 22, 2012

AR 1801541	IN 2012-16, Preconditioning of Pressure Switches Before Surveillance	September 10, 2012
AR 1880415	NRC IN-2013-09	June 7, 2013
AR 1882053	IN 2012-15	June 13, 2013
AR 1882062	IN 2012-13	June 13, 2013
AR 1882068	IN 2011-15	June 13, 2013
AR 1882675	GE Hitachi Part 21	June 17, 2013
AR 939664	OE 29202 - Large Motor Maintenance Lessons Learned (Columbia)	July 8, 2009
OE 35880	NOUE was Declared Due to Freon R-502 Leak - Screened 3e (Information)	May 22, 2012
OE 35890	Fuel Oil Analysis Method Not the Method in TS - Screened 3e (Information)	May 22, 2012
OE 35892	New Auxiliary Flood Source from Non-Seismic Pipe- Break	May 22, 2012
OE 35921	Reactor Head Indication of Primary Water Stress Corrosion	May 22, 2012
OE 35927	RHR Pump Inoperable Due to Low Flow Rates	May 22, 2012
OE 36124	Update to OE 35921 - Reactor Head Indication of Primary Water Stress Corrosion	June 19, 2012
OE 36463	Update to OE 35892 - New Flood Source from Pipe- Break	August 14, 2012
OE 302560	Low Temperature Over Pressure (LTOP) Actuation Due to Human Error	April 9, 2013
OE 302719	Main Turbine Control Panel "Control Valve Lower" Pushbutton Sticks Causing Larger than Intended Main Turbine Load Reduction	June 4, 2013
OE 305033	Unit 1 Reactor Scram Due to Loss of Condenser vacuum - Screened 3e (Information)	June 4, 2013

# **Procedures**

AD-AA-103	Nuclear Safety Culture Program	Revision 3
FP-PA-ARP-01	Action Request Process	Revision 35
MI 32.9	Scaffolding Program	Revision 38
NA-AA-200	Employee Concerns program process Description	Revision 5
NA-AA-202-1000	Audit Topic Selection and Scheduling	Revision 4
NA-AA-203-1000	Performance of Nuclear Oversight Audits	January 15, 2013

OI 110	Gas Turbine Operation	Revision 23
PI-AA-100-1005	Root Cause Analysis	Revision 8
PI-AA-100-1006	Common Cause Evaluation	Revision 6
PI-AA-100-1007	Apparent Cause Evaluation	Revision 7
PI-AA-100-1008	Condition Evaluation	Revision 5
PI-AA-101	Self-Assessment and Benchmarking Program	May 1, 2012
PI-AA-101-1001	Quick Hit Assessments	Revision 5
PI-AA-102	Operating Experience Program	Revision 5
PI-AA-203-10003	Action Tracking-Searches And Navigation	Revision 2
PI-AA-204	Condition Evaluation And Screening Process	Revision 20
PI-AA-205	Condition Evaluation And Corrective Action	Revision 20
PI-AA-205	Condition Evaluation And Corrective Action	Revision 21

# **Root Cause Evaluations**

RCE 1284477	1SW-00322, HX-12A, SWW-00360, HX-12B, Component Cooling Water Heat Exchanger Service Water Outlet Valve Failures	December 11, 2006
RCE 1331388	2P-29 Moisture in Oil Concern	February 22, 2008
RCE 1389194	2P-29-T Casing Leak Identified During IT-09A Initial Start	July 6, 2010
RCE 1657810	2B-04 Safeguards 480V Bus was De-energized	June 6, 2011
RCE 1686912	G-05 Controls Upgrade Project Late and Overbudget	September 16, 2011
RCE 1709993	1F89-112 Circuit Switcher Failure	January 4, 2012
RCE 1757131	EX12 – Potential Violation RSPS Degraded Function	June 20, 2012
RCE 1780054	Unit 2 Manual Reactor Trip	June 27, 2012
RCE 1793914	Unit 1 Manual Reactor Trip Due to Card failure	August 14, 2012
RCE 1809560	Unexpected Dose Rates Outside of Source Storage Room	November 16, 2012
RCE 1845965	Unusual Event Declared Due to Loss of Offsite Power	March 12, 2013
RCE 1854671	2013 OPT Comp Finding Obj 2.5 Finding: Simulator Deficiencies	April 16, 2013
RCE 1865777	1SI-831A Found Shut	May 24, 2013

RCE 985151	Draining RH System Without a Clearance Order	October 28, 2009

# Condition Reports from the PI&R Inspection

AR 1890600	2013 PI&R: G05 Functionality Assessment	July 19, 2013
AR 1891150	2013 PI&R: QF-0436 Documentation Missing from EDMS in CAP	July 22, 2013
AR 1892195	NRC Questioned NCAQ Status of FID Discrepancies Between Unit 1 and 2 Similar Controllers	July 25, 2013
AR 1892422	NRC Questioned NCAQ Status of Update of Calc 2002- 004, Shutdown Cooling Capability	July 26, 2013
AR 1893275	2013 PI&R: G-05 Functionality Assessment Issue	July 30, 2013
AR 1893614	NRC Questioned NCAQ Status of CCP Controllers Need to be Refurbished on 15 YR Frequency But Subcomponents Last Refurbished in 1989	July 31, 2013
AR 1893694	2013 PI&R: MRC Screening Question	August 1, 2013
AR 1893695	2013 PI&R: Communication of Anonymous Issues	August 1, 2013
AR 1893702	2013 PI&R: Missed Licensing Approval for Due Date Extension	August 1, 2013
AR 1893763	2013 PI&R: NFPA 805 Corrective Action Closeout Concern	August 1, 2013
AR 1894494	2013 PI&R – Condition Report Evaluation – Weak Documentation	August 5, 2013

# LIST OF ACRONYMS USED

CAP Corrective Action Program Code of Federal Regulations
Nuclear Regulatory Commission
Operability Determination CFR NRC

OD

Megawatt MW

Parts per Million ppm

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Sincerely,

/RA/

Patricia Pelke, Acting Chief Branch 6 Division of Reactor Projects

Docket Nos. 50-266; 50-301 License Nos. DPR-24; DPR-27

Enclosure: Inspection Report No. 05000266/2013007; 05000301/2013007

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Letter to L. Meyer from P. Pelke dated September 9, 2013

SUBJECT: POINT BEACH NUCLER PLANT – NRC PROBLEM IDENTIFICATION AND

RESOLUTION INSPECTION REPORT 05000266/2013007; 05000301/2013007

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