

#### UNITED STATES NUCLEAR REGULATORY COMMISSION REGION III 2443 WARRENVILLE RD. SUITE 210 LISLE, IL 60532-4352

January 31, 2017

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

#### SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2—NRC INTEGRATED INSPECTION REPORT 05000266/2016004; 05000301/2016004; 05000266/2016501; AND 05000301/2016501

Dear Mr. Coffey:

On December 31, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Point Beach Nuclear Plant, Units 1 and 2. On January 18, 2017, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The enclosed report represents the results of this inspection. The NRC also completed its annual inspection of the Emergency Preparedness Program. This inspection began on January 1, 2016, and issuance of this letter closes Inspection Report Number 2016501.

Based on the results of this inspection, the NRC has identified one issue that was evaluated under the risk significance determination process as having very low safety significance (green). The NRC has also determined that one violation is associated with this issue. Because the licensee initiated condition reports to address this issue, this violation is being treated as a Non-Cited Violation (NCV), consistent with Section 2.3.2 of the Enforcement Policy. The NCV is described in the subject inspection report. Further, inspectors documented a licensee-identified violation that was determined to be of very low safety significance in this report. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violations or significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555–0001, with copies to: (1) the Regional Administrator, Region III; (2) the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; and (3) the NRC Resident Inspector at the Point Beach Nuclear Plant.

In addition, if you disagree with the cross-cutting aspect assignment to any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III, and the NRC Resident Inspector at the Point Beach Nuclear Plant.

R. Coffey

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response, (if any), will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the Public without redaction.

Sincerely,

#### /RA John Rutkowski Acting for/

Jamnes Cameron, Chief Branch 4 Division of Reactor Projects

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

Enclosure: IR 05000266/2016004; 05000301/2016004; 05000266/2016501; 05000301/2016501

cc: Distribution via LISTSERV®

# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket Nos: License Nos:	50–266; 50–301 DPR–24; DPR–27
Report No:	05000266/2016004; 05000301/2016004; 05000266/2016501; 05000301/2016501
Licensee:	NextEra Energy Point Beach, LLC
Facility:	Point Beach Nuclear Plant, Units 1 and 2
Location:	Two Rivers, WI
Dates:	October 1 through December 31, 2016
Inspectors:	<ul> <li>K. Barclay, Acting Senior Resident Inspector</li> <li>J. Boettcher, Acting Senior Resident Inspector</li> <li>J. Havertape, Acting Resident Inspector</li> <li>J. Steward, Acting Resident Inspector</li> <li>R. Baker, Operations Engineer</li> <li>M. Garza, Emergency Preparedness Inspector</li> <li>L. Haeg, Senior Resident Inspector, Prairie Island</li> <li>D. Krause, Resident Inspector, Monticello</li> <li>J. Mancuso, Reactor Engineer</li> <li>J. Park, Reactor Inspector</li> <li>J. Rutkowski, Project Engineer</li> </ul>
Approved by:	J. Cameron, Chief Branch 4 Division of Reactor Projects

SUMMARY		2
REPORT DET	AILS	4
	Plant Status	
	CTOR SAFETY	
1R01	Adverse Weather Protection (71111.01)	
1R04	Equipment Alignment (71111.04)	
1R05	Fire Protection (71111.05)	
1R11	Licensed Operator Requalification Program (71111.11)	
1R12	Maintenance Effectiveness (71111.12)	
1R13	Maintenance Risk Assessments and Émergent Work Control (71111.13)	10
1R15	Operability Determinations and Functional Assessments (71111.15)	
1R19	Post-Maintenance Testing (71111.19)	
1R22 1EP2	Surveillance Testing (71111.22) Alert and Notification System Evaluation (71114.02)	14
1EP2 1EP3	Emergency Response Organization Staffing and Augmentation System	15
TEFJ	(71114.03)	15
1EP4	Emergency Action Level and Emergency Plan Changes (71114.04)	
1EP5	Maintenance of Emergency Preparedness (71114.05)	
1210		
4. OTHE	ER ACTIVITIES	17
40A1	Performance Indicator Verification (71151)	17
40A2	Identification and Resolution of Problems (71152)	21
40A6	Management Meetings	
40A7	Licensee-Identified Violations	22
SUPPLEMEN	TAL INFORMATION	1
Key Points o	of Contact	1
List of Items	Opened, Closed, and Discussed	2
List of Docu	ments Reviewed	3
List of Acron	iyms Used	13

# TABLE OF CONTENTS

#### SUMMARY

Inspection Report 05000266/2016004, 05000301/2016004, 05000266/2016501, 05000301/2016501; 10/01/2016 – 12/31/2016; Point Beach Nuclear Plant, Units 1 & 2; Maintenance Risk Assessments and Emergent Work Control.

This report covers a 3-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors and the annual review of emergency preparedness. One Green finding was identified by the inspectors. The finding involved a Non-Cited Violation (NCV) of the U.S. Nuclear Regulatory Commission (NRC) requirements. The significance of inspection findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," dated April 29, 2015. Cross-cutting aspects are determined using IMC 0310, "Aspects Within the Cross-Cutting Areas," dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated November 1, 2016. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG–1649, "Reactor Oversight Process," Revision 6, dated July 2016.

#### **Cornerstone: Mitigating Systems**

<u>Green</u>: A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by inspectors for the licensee's failure to follow step 4.1.3 (2) of procedure MA–AA–100–1002, "Scaffold Installation, Modification, and Removal Requests." Specifically, the licensee failed to obtain and document engineering approval for multiple scaffolds constructed in the cable spreading room that did not meet the separation criteria of Attachment 1 of MA–AA–100–1002. The licensee's short-term corrective actions included obtaining the appropriate engineering evaluations for the affected scaffolding and conducting a stand-down and information sharing with the scaffold builders to ensure they were aware of the importance of obtaining engineering approvals.

The finding was determined to be more than minor because the finding, if left uncorrected, had the potential to become a more significant safety concern. Specifically, if the licensee continued to construct scaffolding without obtaining required engineering approvals, scaffolding could be constructed that was not seismically gualified and adversely affect the operability of surrounding structures, systems, and components (SSCs). The inspectors concluded this finding was associated with the Mitigating Systems cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on October 7, 2016. Specifically, the inspectors used IMC 0609, Appendix A, "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. This finding has a cross-cutting aspect of Teamwork (H.4), in the area of Human Performance, for the failure of individuals and work groups to communicate and coordinate their activities across organizational boundaries to ensure nuclear safety is maintained. Specifically, the scaffold building team failed to communicate with the engineering organization to ensure the engineering evaluations were complete. (Section 1R13.1)

# Licensee-Identified Findings

A violation of very low safety or security significance or Severity Level IV that were identified by the licensee has been reviewed by the NRC. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program (CAP). The violation and CAP tracking number is listed in Section 40A7 of this report.

### **REPORT DETAILS**

### **Summary of Plant Status**

#### Unit 1

The unit operated at or near full power for the inspection period, except for brief power reductions to conduct planned maintenance and surveillance activities.

#### Unit 2

The unit operated at or near full power for the inspection period, except for brief power reductions to conduct planned maintenance and surveillance activities.

### 1. REACTOR SAFETY

# Cornerstone: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

1R01 Adverse Weather Protection (71111.01)

#### .1 <u>Winter Seasonal Readiness Preparations</u>

a. Inspection Scope

The inspectors conducted a review of the licensee's preparations for winter conditions to verify that the plant's design features and implementation of procedures were sufficient to protect mitigating systems from the effects of adverse weather. Documentation for selected risk-significant systems was reviewed to ensure that these systems would remain functional when challenged by inclement weather. During the inspection, the inspectors focused on plant specific design features and the licensee's procedures used to mitigate or respond to adverse weather conditions. Additionally, the inspectors reviewed the Final Safety Analysis Report (FSAR) and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures. Cold weather protection, such as heat tracing and area heaters, was verified to be in operation where applicable. The inspectors also reviewed corrective action program (CAP) items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their CAP in accordance with station corrective action procedures. Documents reviewed are listed in the Attachment to this report. The inspectors' reviews focused specifically on the following plant systems due to their risk significance or susceptibility to cold weather issues:

- G–05 gas turbine engine; and
- service water system.

This inspection constituted one winter seasonal readiness preparations sample as defined in inspection procedure (IP) 71111.01–05.

#### b. Findings

No findings were identified.

- 1R04 <u>Equipment Alignment</u> (71111.04)
  - .1 Quarterly Partial System Walkdowns
  - a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- Unit 2 turbine driven auxiliary feedwater (AFW) pump with associated motor driven AFW pump out of service;
- G–04 emergency diesel generator; and
- Unit 2, train B safety injection system.

The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, FSAR, Technical Specification (TS) requirements, outstanding work orders (WOs), condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

These activities constituted three partial system walkdown sample as defined in IP 71111.04–05.

b. Findings

No findings were identified.

#### .2 <u>Semi-Annual Complete System Walkdown</u>

a. Inspection Scope

On October 3, 2016 to October 5, 2016, the inspectors performed a complete system alignment inspection of the emergency diesel generator (EDG) system to verify the functional capability of the system. This system was selected because it was considered both safety significant and risk significant in the licensee's probabilistic risk assessment. The inspectors walked down the system to review mechanical and electrical equipment lineups; electrical power availability; system pressure and temperature indications, as

appropriate; component labeling; component lubrication; component and equipment cooling; hangers and supports; operability of support systems; and to ensure that ancillary equipment or debris did not interfere with equipment operation. A review of a sample of past and outstanding WOs was performed to determine whether any deficiencies significantly affected the system function. In addition, the inspectors reviewed the CAP database to ensure that system equipment alignment problems were being identified and appropriately resolved. Documents reviewed are listed in the Attachment to this report.

These activities constituted one complete system walkdown sample as defined in IP 71111.04–05.

b. Findings

No findings were identified.

- 1R05 Fire Protection (71111.05)
  - .1 <u>Routine Resident Inspector Tours</u> (71111.05Q)
  - a. Inspection Scope

The inspectors conducted fire protection walkdowns which were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- Fire Zone 320; condensate storage tank area with welding in progress;
- Fire Zone 770; G–03 EDG room;
- Fire Zone 304N; turbine driven auxiliary feedwater pump room (North); and
- Fire Zone 304S; turbine driven auxiliary feedwater pump room (South).

The inspectors reviewed areas to assess if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capability, maintained passive fire protection features in good material condition, and implemented adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems, or features in accordance with the licensee's fire plan. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to impact equipment which could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the Attachment to this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's CAP. Documents reviewed are listed in the Attachment to this report.

These activities constituted four quarterly fire protection inspection samples as defined in IP 71111.05–05.

#### a. <u>Findings</u>

No findings were identified.

#### .2 Annual Fire Protection Drill Observation (71111.05A)

#### a. Inspection Scope

On October 11, 2016, the inspectors observed a fire brigade activation in response to a simulated fire in the technical support center ventilation room. Based on this observation, the inspectors evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that the licensee staff identified deficiencies openly discussed them in a self-critical manner at the drill debrief, and took appropriate corrective actions. Specific attributes evaluated were:

- employment of appropriate firefighting techniques;
- sufficient firefighting equipment brought to the scene;
- effectiveness of fire brigade leader communications, command, and control;
- search for victims;
- smoke removal operations;
- utilization of pre-planned strategies;
- adherence to the pre-planned drill scenario;
- effectiveness of the control room response; and
- drill objectives.

Documents reviewed are listed in the Attachment to this report.

These activities constituted one annual fire protection inspection sample as defined in IP 71111.05–05.

b. Findings

No findings were identified.

#### 1R11 Licensed Operator Regualification Program (71111.11)

- .1 <u>Resident Inspector Quarterly Review of Licensed Operator Regualification</u> (71111.11Q)
  - a. Inspection Scope

On November 1, 2016, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator requalification training. The inspectors verified that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and that training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of abnormal and emergency procedures;
- control board manipulations;

- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and Emergency Plan actions and notifications.

The crew's performance in these areas was compared to pre-established operator action expectations and successful critical task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator requalification program simulator sample as defined in IP 71111.11–05 and satisfied the inspection program requirement for the resident inspectors to observe a portion of an in-progress annual requalification operating test during a training cycle in which it was not observed by the NRC during the biennial portion of this IP.

b. Findings

No findings were identified.

- .2 <u>Resident Inspector Quarterly Observation During Periods of Heightened Activity or Risk</u> (71111.11Q)
- a. Inspection Scope

On December 14, 2016 and December 16, 2016, the inspectors observed performance of reactor protection system surveillance activities and control rod exercises. This was an activity that required heightened awareness or was related to increased risk. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms (if applicable);
- correct use and implementation of procedures;
- control board (or equipment) manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and Emergency Plan actions and notifications (if applicable).

The performance in these areas was compared to pre-established operator action expectations, procedural compliance and task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator heightened activity/risk sample as defined in IP 71111.11–05.

b. Findings

No findings were identified.

## .3 <u>Annual Testing Results</u> (71111.11A)

### a. Inspection Scope

The inspectors reviewed the overall pass/fail results of the Annual Operating Test, as administered by the licensee from October 3, 2016, through November 11, 2016, and required by Title 10 of the *Code of Federal Regulations* (10 CFR), Part 55.59(a). The results were compared to the thresholds established in Inspection Manual Chapter 0609, Appendix I, "Licensed Operator Requalification Significance Determination Process," to assess the overall adequacy of the licensee's Licensed Operator Requalification Training Program to meet the requirements of 10 CFR 55.59. (Section 02.02).

This inspection constituted one annual licensed operator requalification inspection sample as defined in Inspection Procedure 71111.11A.

#### b. Findings

No findings were identified.

- 1R12 Maintenance Effectiveness (71111.12)
  - .1 Routine Quarterly Evaluations
  - a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk-significant systems:

- component cooling water (CCW);
- station air compressors; and
- reactor protection system.

The inspectors reviewed events such as where ineffective equipment maintenance had resulted in valid or invalid automatic actuations of engineered safeguards systems and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- implementing appropriate work practices;
- identifying and addressing common cause failures;
- scoping of systems in accordance with 10 CFR 50.65(b) of the maintenance rule;
- characterizing system reliability issues for performance;
- charging unavailability for performance;
- trending key parameters for condition monitoring;
- ensuring 10 CFR 50.65(a)(1) or (a)(2) classification or re-classification; and
- verifying appropriate performance criteria for structures, systems, and components (SSCs)/functions classified as (a)(2), or appropriate and adequate goals and corrective actions for systems classified as (a)(1).

The inspectors performed a quality review with the CCW sample, as discussed in IP 71111.12, Section 02.02.

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two quarterly maintenance effectiveness samples and one quality control sample as defined in IP 71111.12–05.

b. Findings

No findings were identified.

#### 1R13 <u>Maintenance Risk Assessments and Emergent Work Control</u> (71111.13)

- .1 Maintenance Risk Assessments and Emergent Work Control
  - a. Inspection Scope

The inspectors reviewed the licensee's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- maintenance activities with G–02 EDG and K–2A instrument air (IA) compressor out of service; and
- maintenance activities on 1SI–889B, 1P–15B safety injection pump discharge check valve, with P–32C service water pump and 1DY–04 inverter out of service.

These activities were selected based on their potential risk significance relative to the Reactor Safety Cornerstones. As applicable for each activity, the inspectors verified that risk assessments were performed as required by 10 CFR 50.65(a)(4) and were accurate and complete. When emergent work was performed, the inspectors verified that the plant risk was promptly reassessed and managed. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed TS requirements and walked down portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

Documents reviewed during this inspection are listed in the Attachment to this report. These maintenance risk assessments and emergent work control activities constituted two samples as defined in IP 71111.13–05.

- b. Findings
- (1) <u>Scaffolds Constructed Without Required Engineering Approval</u>

<u>Introduction</u>: A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by inspectors for the licensee's failure to follow step 4.1.3 (2) of procedure MA–AA–100–1002, "Scaffold Installation, Modification, and Removal Requests."

Specifically, the licensee failed to obtain and document engineering approval for multiple scaffolds constructed in the cable spreading room that did not meet the separation criteria of Attachment 1 of MA–AA–100–1002.

Description: The inspectors, while performing a tour of the cable spreading room for the maintenance risk inspection on November 30, identified scaffolding in contact with the 2C-167 safeguards train B channels 2 and 4 relay rack and other examples where scaffolding was less than two inches from safety-related equipment. The inspectors reviewed the attached scaffold paperwork and found that engineering approvals had not been completed as required by the licensee's scaffold procedure MA-AA-100-1002. Specifically, MA-AA-100-1002, requires that the licensee obtain engineering approval for scaffolding constructed that does not meet the separation criteria listed in Attachment 1 of MA-AA-100-1002. The scaffolding in the cable spreading room had been constructed on November 2, 3, and 8. The separation criteria for the safety-related components of concern was two inches. The inspectors discussed their concerns with the licensee. As a result, the licensee modified the scaffolding that was in contact with a safeguards cabinet and the licensee's engineers inspected and approved the scaffolds of concern. Additionally, the licensee performed an extent of condition walk-down and identified additional examples, which were subsequently evaluated and documented. The licensee performed a condition evaluation to understand how the scaffolds were constructed without an engineering approval and determined that the group who constructed and inspected the scaffolding attempted to contact engineering, but did not follow through to ensure engineering was aware of the need to evaluate and approve the scaffolding. The licensee conducted a stand-down and information sharing session with the scaffold builders to ensure they were aware of the importance obtaining engineering approvals.

<u>Analysis</u>: The inspectors determined that not obtaining engineering approval for scaffold constructed within 2 inches of safety-related equipment was contrary to MA–AA–100–1002, step 4.1.3 (2) and was a performance deficiency. The finding was determined to be more than minor because the finding, if left uncorrected, had the potential to become a more significant safety concern. Specifically, if the licensee continued to construct scaffolding without obtaining required engineering approvals, scaffolding could be constructed that adversely affected the operability of surrounding SSCs. The inspectors concluded this finding was associated with the Mitigating Systems Cornerstone.

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on October 7, 2016. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. Specifically, the licensee completed the required evaluations and concluded that the scaffolding issues identified did not cause a loss of operability for the associated SCCs. This finding has a cross-cutting aspect of Teamwork (H.4), in the area of Human Performance, for the failure to individuals and work groups to communicate and coordinate their activities across organizational boundaries to ensure nuclear safety is maintained. Specifically, the scaffold building team failed to communicate with the engineering organization to ensure the engineering evaluations were complete. (Section 1R13.1)

<u>Enforcement</u>: Title 10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality be prescribed and accomplished by procedures appropriate to the circumstance and in accordance with those instructions and procedures. Procedure MA–AA–100–1002, Revision 4, step 4.1.3 (2) requires, in part, that for scaffolding that cannot meet the separation criteria in Attachment 1, engineering approval must be documented.

Contrary to the above, on November 2–3, 2016 and November 8, 2016, the licensee failed to obtain and document engineering approval for multiple scaffolds constructed in the cable spreading room that did not meet the separation criteria of Attachment 1 of MA–AA–100–1002. Specifically, the components of concern, which included the 2C–167 safeguards train B channels 2 and 4 relay racks, had scaffold constructed within the two inch Attachment 1 separation criteria without engineering approval. The licensee's short-term corrective actions included obtaining the appropriate engineering evaluations for the affected scaffolding and conducting a stand-down and information sharing with the scaffold builders to ensure they were aware of the importance obtaining engineering approvals. Because this violation is of very low safety significance and the licensee entered it into the CAP as AR 02171922, it is being treated as a non-cited violation, consistent with Section 2.3.2 of the NRC Enforcement Policy. (NCV 05000266/2016004–001; 05000301/2016004–001; "Scaffolds Constructed Without Required Engineering Approvals")

- 1R15 <u>Operability Determinations and Functional Assessments</u> (71111.15)
  - .1 Operability Evaluations
  - a. Inspection Scope

The inspectors reviewed the following issues:

- AR 2160698; AFW pump suction pressure channel check;
- AR 2152508; PBN TFPI 2016 FSA 2080426 Fire Penetration Seals Not Inspected;
- AR 2169657; unevaluated potential PAB flood source; and
- AR 2160569; DY–0D inverter blown A3 fuse during start up after A3 board inspection.

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TS and FSAR to the licensee's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors reviewed a sampling of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the Attachment to this report.

This operability inspection constituted four samples as defined in IP 71111.15–05.

b. Findings

No findings were identified.

#### 1R19 Post-Maintenance Testing (71111.19)

- .1 Post-Maintenance Testing
- a. Inspection Scope

The inspectors reviewed the following post-maintenance (PM) activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- G-02 EDG after fuel injector replacement;
- K–2A IA compressor after maintenance;
- DY–0D inverter after maintenance; and
- 1P–10B RHR pump after preventative maintenance.

These activities were selected based upon the structure, system, or component's ability to impact risk. The inspectors evaluated these activities for the following (as applicable): the effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed: acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate; tests were performed as written in accordance with properly reviewed and approved procedures; equipment was returned to its operational status following testing (temporary modifications or jumpers required for test performance were properly removed after test completion); and test documentation was properly evaluated. The inspectors evaluated the activities against TSs, the FSAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with post-maintenance tests to determine whether the licensee was identifying problems and entering them in the CAP and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

This inspection constituted four post-maintenance testing samples as defined in IP 71111.19–05.

#### b. Findings

No findings were identified.

## 1R22 <u>Surveillance Testing</u> (71111.22)

## .1 <u>Surveillance Testing</u>

## a. Inspection Scope

The inspectors reviewed the test results for the following activities to determine whether risk-significant systems and equipment were capable of performing their intended safety function and to verify testing was conducted in accordance with applicable procedural and TS requirements:

- PC 29, Gas Turbine and Auxiliary Diesel Load Test (routine);
- IT 07D, P–32D Service Water Pump (routine);
- 1ICP 02.003B, Reactor Protection System Logic Train B Surveillance Test (routine);
- 1ICP 02.005B, Engineered Safety Features System Logic Train B Staggered Actuation Logic Test (routine); and
- OI 55, Primary Leak Rate Calculation for Unit 1 and Unit 2 (RCS).

The inspectors observed in-plant activities and reviewed procedures and associated records to determine the following:

- did preconditioning occur;
- the effects of the testing were adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- acceptance criteria were clearly stated, demonstrated operational readiness, and were consistent with the system design basis;
- plant equipment calibration was correct, accurate, and properly documented;
- as-left setpoints were within required ranges; and the calibration frequency was in accordance with TSs, the USAR, procedures, and applicable commitments;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy; applicable prerequisites described in the test procedures were satisfied;
- test frequencies met TS requirements to demonstrate operability and reliability; tests were performed in accordance with the test procedures and other applicable procedures; jumpers and lifted leads were controlled and restored where used;
- test data and results were accurate, complete, within limits, and valid;
- test equipment was removed after testing;
- where applicable for inservice testing activities, testing was performed in accordance with the applicable version of Section XI, American Society of Mechanical Engineers code, and reference values were consistent with the system design basis;
- where applicable, test results not meeting acceptance criteria were addressed with an adequate operability evaluation or the system or component was declared inoperable;
- where applicable for safety-related instrument control surveillance tests, reference setting data were accurately incorporated in the test procedure;
- where applicable, actual conditions encountering high resistance electrical contacts were such that the intended safety function could still be accomplished;

- prior procedure changes had not provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- equipment was returned to a position or status required to support the performance of its safety functions; and
- all problems identified during the testing were appropriately documented and dispositioned in the CAP.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted four routine surveillance testing samples and one reactor coolant system leak detection inspection sample as defined in IP 71111.22, Sections–02 and–05.

b. <u>Findings</u>

No findings were identified.

- 1EP2 Alert and Notification System Evaluation (71114.02)
  - .1 <u>Alert and Notification System Evaluation</u>
  - a. Inspection Scope

The inspectors reviewed documents and held discussions with Emergency Preparedness (EP) staff regarding the operation, maintenance, and periodic testing of the primary and backup Alert and Notification System (ANS) in the plume pathway Emergency Planning Zone. The inspectors reviewed monthly trend reports and siren test failure records from October of 2014 to October 2016. Information gathered during document reviews and interviews were used to determine whether the ANS equipment was maintained and tested in accordance with Emergency Plan commitments and procedures. Documents reviewed are listed in the Attachment to this report.

This ANS evaluation inspection constitutes one sample as defined in Inspection Procedure (IP) 71114.02–06.

b. Findings

No findings were identified.

### 1EP3 <u>Emergency Response Organization Staffing and Augmentation System</u> (71114.03)

- .1 Emergency Response Organization Staffing and Augmentation System
  - a. Inspection Scope

The inspectors reviewed and discussed with plant EP management and staff the Emergency Plan commitments and procedures that addressed the primary and alternate methods of initiating an Emergency Response Organization (ERO) activation to augment the on-shift staff as well as the provisions for maintaining the plant's ERO team and qualification lists. The inspectors reviewed reports and a sample of CAP records of unannounced off-hour augmentation drills and pager tests, which were conducted from October 2014 to October 2016, to determine the adequacy of the drill critiques and

associated corrective actions. The inspectors also reviewed a sample of the training records of approximately six ERO personnel, who were assigned to key and support positions, to determine the status of their training as it related to their assigned ERO positions. Documents reviewed are listed in the Attachment to this report.

This ERO augmentation testing inspection constitutes one sample as defined in IP 71114.03–06.

b. Findings

No findings were identified.

#### 1EP4 <u>Emergency Action Level and Emergency Plan Changes</u> (71114.04)

a. Inspection Scope

The regional inspector performed an in-office review of the latest revisions to the Emergency Plan, Emergency Action Levels (EALs), and EAL Bases document to determine if these changes decreased the effectiveness of the Emergency Plan. The inspector also performed a review of the licensee's Title 10 of the *Code of Federal Regulations*, (10 CFR) Part 50.54(q) change process, and Emergency Plan change documentation to ensure proper implementation for maintaining Emergency Plan integrity.

The U.S. Nuclear Regulatory Commission review was not documented in a safety evaluation report, and did not constitute approval of licensee-generated changes; therefore, this revision is subject to future inspection. The specific documents reviewed during this inspection are listed in the Attachment to this report.

This EAL and Emergency Plan Change inspection constituted one sample as defined in Inspection Procedure 71114.04–06.

b. Findings

No findings were identified.

### 1EP5 <u>Maintenance of Emergency Preparedness</u> (71114.05)

- .1 <u>Maintenance of Emergency Preparedness</u>
  - a. Inspection Scope

The inspectors reviewed the nuclear oversight staff's 2014 and 2015 audit of the Point Beach Nuclear Plant's EP Program to determine that the independent assessments met the requirements of 10 CFR, Part 50.54(t). The inspectors reviewed samples of CAP records associated with the 2015 biennial exercise, as well as various EP drills conducted in 2015 and 2016, in order to determine whether the licensee fulfilled drill commitments and to evaluate the licensee's efforts to identify and resolve identified issues. The inspectors reviewed a sample of EP items and corrective actions related to the station's EP program, and activities to determine whether corrective actions were completed in accordance with the site's CAP. Documents reviewed are listed in the Attachment to this report.

This maintenance of EP inspection constitutes the completion of one sample as defined in IP 71114.05–06.

b. Findings

No findings were identified.

# 4. OTHER ACTIVITIES

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security

- 4OA1 Performance Indicator Verification (71151)
- .1 <u>Mitigating Systems Performance Index—Emergency AC Power System</u>
  - a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index (MSPI) Emergency AC Power System performance indicator, Units 1 and 2, for the period from the third quarter 2015 through the second quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, MSPI derivation reports, issue reports, event reports and NRC Integrated Inspection Reports to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two MSPI emergency AC power system sample as defined in IP 71151–05.

b. <u>Findings</u>

No findings were identified.

### .2 <u>Mitigating Systems Performance Index—High Pressure Injection Systems</u>

a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index High Pressure Injection Systems performance indicator, Units 1 and 2, for the period from the third quarter 2015 through the second quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated Inspection Reports to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two MSPI high pressure injection system sample as defined in IP 71151–05.

b. Findings

No findings were identified.

- .3 <u>Mitigating Systems Performance Index—Heat Removal System</u>
- a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index Heat Removal System performance indicator, Units 1 and 2, for the period from the third quarter 2015 through the second quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, event reports, MSPI derivation reports, and NRC Integrated Inspection to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two MSPI heat removal system sample as defined in IP 71151–05.

b. Findings

No findings were identified.

- .4 Mitigating Systems Performance Index—Residual Heat Removal System
- a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index Residual Heat Removal System performance indicator Units 1 and 2, for the period from the third quarter 2015 through the second quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated Inspection Reports to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two MSPI residual heat removal system sample as defined in IP 71151–05.

b. Findings

No findings were identified.

- .5 <u>Mitigating Systems Performance Index—Cooling Water Systems</u>
- a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index Cooling Water Systems performance indicator, Units 1 and 2, for the period from the third quarter 2015 through the second quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated Inspection Reports to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two MSPI cooling water system sample as defined in IP 71151–05.

b. Findings

No findings were identified.

#### .6 Drill and Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill and Exercise Performance (DEP) Indicator for the period from the third quarter 2015 through the third quarter 2016. To determine the accuracy of the Performance Indicator (PI) data reported during those periods, PI definitions and guidance contained in the NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the DEP indicator, in accordance with relevant procedures and NEI

guidance. Specifically, the inspectors reviewed licensee records and processes, including procedural guidance on assessing opportunities for the PI; assessments of PI opportunities during pre-designated control room simulator training sessions; performance during the 2015 biennial exercise; and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constitutes one DEP sample as defined in IP 71151–05.

b. Findings

No findings were identified.

#### .7 <u>Emergency Response Organization Drill Participation</u>

a. Inspection Scope

The inspectors sampled licensee submittals for the ERO Drill Participation PI for the period from the third quarter 2015 through third quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator, in accordance with relevant procedures and NEI guidance. Specifically, the inspectors reviewed licensee records and processes, including procedural guidance on assessing opportunities for the PI; participation during the 2015 biennial exercise and other drills; and revisions of the roster of personnel assigned to key ERO positions. Documents reviewed are listed in the Attachment to this report.

This inspection constitutes one ERO drill participation sample as defined in IP 71151–05.

b. Findings

No findings were identified.

#### .8 <u>Alert and Notification System Reliability</u>

a. Inspection Scope

The inspectors sampled licensee submittals for the ANS PI for the period from the third quarter 2015 through third quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI Document 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator, in accordance with relevant procedures and NEI guidance. Specifically, the inspectors reviewed licensee records and processes, including procedural guidance on assessing opportunities for the PI and results of periodic ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constitutes one ANS sample as defined in IP 71151–05.

#### b. Findings

No findings were identified.

#### 4OA2 Identification and Resolution of Problems (71152)

#### .1 Routine Review of Items Entered into the Corrective Action Program

#### a. Inspection Scope

As discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify they were being entered into the licensee's corrective action program at an appropriate threshold, adequate attention was being given to timely corrective actions, and adverse trends were identified and addressed. Some minor issues were entered into the licensee's corrective action program as a result of the inspectors' observations; however, they are not discussed in this report.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure they were considered an integral part of the inspections performed during the quarter.

#### b. Findings

One licensee-identified NCV of very low safety significance was identified and is documented in Section 4OA7 of this report.

#### .2 Semi-Annual Trend Review

#### a. Inspection Scope

The inspectors performed a review of the licensee's corrective action program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector corrective action program item screening discussed in Section 4OA2.1 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the 6-month period of April 2016 through September 2016, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside the corrective action program in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self-assessment reports, and Maintenance Rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's corrective action program trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

This review constituted one semi-annual trend review inspection sample as defined in IP 71152.

#### b. Observations

As part of the semi-annual trend sample, the inspectors assessed the licensee's progress in addressing an adverse trend in Operations department human performance events. The licensee identified that the adverse trend began in the fourth quarter of 2015 after an increase in the number of human performance events, most notably the main transformer lockout and loss of non-vital 4KV buses, documented in LER 05000301/2015–005–01. The licensee, to correct the trend, created an Operations excellence plan with an emphasis on improving procedure use and adherence, effective use of human performance tools, and enhancing senior reactor operator leadership traits. The inspectors continued to note human performance errors in the first half of 2016, but efforts by station leadership appeared to result in improvements in Operations human performance beginning in the August timeframe, and which continued through the remainder of the year.

c. Findings

No findings were identified.

#### 4OA6 Management Meetings

.1 Exit Meeting Summary

On January 18, 2017, the inspectors presented the inspection results to Mr. R. Coffey, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Interim Exit Meetings

Interim exits were conducted for:

- the results of an EP Program inspection with Mr. R. Coffey, Site Vice President, conducted at the site on October 27, 2016;
- the results of the Licensed Operator Requalification Program and Licensed Operator Performance inspection with Mr. R. Amundson, Operations Training Regulatory Exam Coordinator, conducted over the phone on November 11, 2016; and
- the results of an EP Program inspection with Mr. R. Seizer, Emergency Preparedness Manager, conducted over the phone on December 22, 2016.

The inspectors confirmed that none of the potential report input discussed was considered proprietary. Proprietary material received during the inspection was returned to the licensee or destroyed.

### 4OA7 Licensee-Identified Violations

The following violation of very low significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy for being dispositioned as an NCV. The licensee identified a finding of very low safety significance (Green) and an NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," due to the failure to properly implement instructions in Work Order (WO) 40461957 for the replacement of the power range nuclear instrument (NI) 1N-43 gain potentiometer vernier dial. Specifically, step 5 of the WO stated, "Replace the gain pot vernier with the preset spare. Prevent movement of the potentiometer shaft as much as possible." Contrary to the WO instructions, the technician performing the work believed it was necessary to dial the gain potentiometer to zero before replacing the dial and in doing so caused the 1N-43 NI high flux trip function to become inoperable. This was identified when the control room operators observed the indicated NI power reading for 1N-43 decrease to 82 percent and questioned the technician performing the work about the observed power change.

Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" required, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Contrary to the above, on December 2, 2016, the licensee did not accomplish activities affecting quality in accordance with the documented instructions. Specifically, the licensee did not follow step 5 of the work instructions in WO 40461957, causing the NI high flux trip function for 1N–43 to become inoperable. The licensee entered this issue into the CAP as AR 02172378. The inspectors determined that this issue was of very low safety significance (Green) after reviewing IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated October 7, 2016 and IMC 0609, Appendix A, "The Significance Determination Process (SDP) For Findings At-Power," dated July 1, 2012. The inspectors answered no to all questions in Exhibit 2, Section C, "Reactivity Control Systems." This resulted in the finding screening as Green.

ATTACHMENT: SUPPLEMENTAL INFORMATION

# SUPPLEMENTAL INFORMATION

# **KEY POINTS OF CONTACT**

#### Licensee

- R. Coffey, Site Vice President
- D. DeBoer, Plant General Manager
- S. Aerts, Performance Improvement Manager
- R. Amundson, Operations Training Regulatory Exam Coordinator
- R. Bretton, Emergency Preparedness
- A. Bussiere, Information Technology Project Manager
- R. Clark, Licensing Engineer
- A. Fitzgerald, Emergency Preparedness Specialist
- J. Gerondale, Security Supervisor
- B. Gierach, Information Technology Manager
- J. Golding, System Engineering Supervisor
- B. Griffin, Communications Specialist
- A. Gustafson, Operations Training General Supervisor
- D. Halverson, Information Technology Specialist
- R. Harrsch, Engineering Director
- R. Hastings Operations Assistant Manager
- J. Henrickson, Emergency Preparedness Coordinator
- R. Higgins, Operations Assistant Manager
- K. Hilliker, Emergency Preparedness Coordinator
- T. Lesniak, Maintenance Director
- B. Leonhardt, Emergency Preparedness Coordinator
- K. Locke, Licensing Engineer
- S. Manthei, Licensing Engineer
- M. Millen, Senior Project Manager
- C. Neuser, Site Engineering Manager
- P. Polfleit, Emergency Preparedness Corporate Functional Area Manager
- J. Ramski, Outage Manager
- B. Scherwinski, Licensing
- E. Schmidt, Site Engineering Manager
- T. Schneider, Senior Engineer
- R. Seizert, Emergency Preparedness Manager
- B. Smith, Independent Spent Fuel Storage Installation Project Manager
- G. Strharsky, Site Quality Manager
- S. Wall, Emergency Preparedness Training
- R. Webber, Site Operations Director
- R. Welty, Radiation Protection Manager
- P. Wild, Site Engineering Manager
- J. Wilson, Site Operations Director
- B. Wolf, Safety Manager
- B. Woyak, Licensing Manager
- U.S. Nuclear Regulatory Commission
- J. Cameron, Chief, Reactor Projects Branch 4

# LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

# <u>Opened</u>

05000266/2016004-01	NCV	Scaffolds Constructed Without Required Engineering
05000301/201600401		Approval (Section 1R13.1)

# <u>Closed</u>

05000266/2016004–01	NCV	Scaffolds Constructed Without Required Engineering
05000301/2016004–01		Approval (Section 1R13.1)

# LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector 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.

#### 1R01 Adverse Weather Protection

- AOP 13C; Severe Weather Conditions; Revision 43
- AR 2072647; Cold Weather Readiness Period Actions 2016
- AR 2151043; PB Seasonal Readiness Program Assessment
- AR 2162943; HX-800B Does Not Operate
- AR 2169702; Multiple Façade Freeze Low Amperage Issues
- AR 2169704; Façade Freeze Low Load Issues
- Level 2 Independent Assessment Plan and Report; Station Winter Readiness, from October 24, 2016 October 27, 2016
- Memo, GDS 2016-0819; Point Beach Seasonal Readiness Program Assessment
- Memo, TS 2016-1019; NRC SRI Request on Status of Cold Weather Preparations for 2016-2017
- OP-AA-102-1002; Seasonal Readiness; Revision 15
- PC 49 Part 1; Turbine Hall Ventilation Unit 1; Revision 11
- PC 49 Part 2; Turbine Hall Ventilation Unit 2; Revision 17
- PC 49 Part 3; Auxiliary Building Ventilation; Revision 19
- PC 49 Part 4; Auxiliary Building Miscellaneous and Facades; Revision 31
- PC 49 Part 5; Cold Weather Checklist: Outside Areas and Miscellaneous; Revision 33
- PC 49 Part 5; Cold Weather Checklist: Outside Areas and Miscellaneous; Revision 34
- WO 40448670-01; PC-49.2, Cold Weather Ventilation Sys Checks U2 TH
- WO 40448671-01; PC-49.3, Cold Weather Preparation for PAB
- WO 40448672-01; PC-49.4, Cold Weather Preparation for PAB & Facades
- WO 40448676-01; PC-49.5, Cold Weather Preparation of Outside Areas
- WO 404489669-01; PC-49.1, Cold Weather Ventilation Sys Checks U1 TH
- WO 40492115; Door-004, Removable Weather Barrier for Door-4
- WO 40492116; Door-013, Removable Weather Barrier for Door-13

### 1R04 Equipment Alignment

- AR 2052030; POR Request for W-185A & B A-06 Switchgear Room Fans
- AR 2146371; HU Error During Performance of 2 ICP 2.1YL
- AR 2157992; Procedure Use and Adherence Issue During PC 21.5
- ASME B31.1; American Society of Mechanical Engineers Power Piping, 1989 Edition; Section 124.4 Cast Gray Iron
- CL 10B; Service Water Safeguards Lineup; Revision 73
- CL 10D; Fuel Oil Systems; Revision 24
- CL 11A; G-01 Diesel Generator Checklist; Revision 27
- CL 11A; G-02 Diesel Generator Checklist; Revision 30
- CL 11A; G-03 Diesel Generator Checklist; Revision 9
- CL 11A; G-04 Diesel Generator Checklist; Revision 11
- CL 13E; Auxiliary Feedwater Valve Lineup Turbine-Driven Checklist Unit 2; Revision 29
- CL 7A; Safety Injection System Checklist Unit 1; Revision 37

- Condition Report Search from September 1, 2015, to September 29, 2016; Keyword "MISPO, MISPOS1, MISPOS2, MISPOS3, MISPOS4, MISPOS5"
- DBD-16; Design Basis Document Emergency Diesel Generator System, Sub-system Performance Parameter Worksheet for Diesel Generator Starting Air System; Revision 18
- Drawing 110E017; Sheet 1; Unit 1 Safety Injection System P&ID; Revision 59
- Drawing 110E017; Sheet 2; Unit 1 Safety Injection System P&ID; Revision 66
- Drawing M-207 Sheet 1; Service Water System; Revision 81
- Drawing M-207 Sheet 1A; Service Water System; Revision 40
- Drawing M-207 Sheet 2; Service Water System; Revision 47
- Drawing M-209 Sheet 12; Emergency Diesel Air Starting System; Revision 22
- Drawing M-209 Sheet 14; Starting & Service Air System; Revision 13
- Drawing M-209 Sheet 15; Starting Air System; Revision 13
- Drawing M-211 Sheet 3; Air Flow Diagram HVAC Systems; Revision 6
- Drawing M-217 Sheet 1; Auxiliary Feed System; Revision 103
- Drawing M-217 Sheet 2; Auxiliary Feed System; Revision 34
- Drawing M-219 Sheet 1; Fuel Oil System; Revision 50
- Drawing M-219 Sheet 2; Fuel Oil System; Revision 16
- Drawing M-219 Sheet 3; Fuel Oil System; Revision 17
- Drawing M-227 Sheet 1; Glycol Cooling System; Revision 11
- Drawing M-227 Sheet 2; Glycol Cooling System; Revision 10
- EC 281914; Engineering Change Package to Move Fuel Oil Base Tank Level from the Base Tank to a Standpipe; Revision 0
- NP 2.1.3; Administrative Control of Red Locks, Lead Seal Wires, and Padlocks on Plant Equipment; Revision 12
- Operator Work Arounds, Burdens, and Control Room Deficiency Log; Dated September 29, 2016
- P&ID MDGK00000713; Starting Air System Diesel Generator Building
- P&ID MEGK00000110; Glycol Cooling System Diesel Generator Building
- P&ID MFOK0000217; Fuel Oil System Diesel Generator Building
- PBNP Inservice Testing Background Valve Data Sheets; December 11, 2009; Revision 0
- PCR 02053174; ICP 13.0007B-2 Emergency
- Safety Injection System (SI), FSAR Section 6.2, UFSAR 2017

#### 1R05 Fire Protection

- AR 2131479; NP 1.9.9 Transient Combustibles Control (RCE 02101318)
- AR 2148979; Degraded Fire Penetration
- AR 2170007; Cured Grout Timeframe is Undefined
- AR 2170135; PBC-218 fire Protection and Fire Barrier Drawings Errors
- AR 2170165; NP 1.9.9 Transient Combustibles Control
- DWG PB01MFPL00001306; Fire Emergency Procedure 4.14 Turbine Building & Aux Building Elev. 26"-0
- DWG PB31MFPL00016302; Fire Emergency Procedure 4.27 Diesel Generator Building
- FEP 4.12; Auxiliary Feedwater Pump and Vital Switchgear Area; Revision 10
- FEP 4.14; Turbine Hall Unit 1; Revision 17
- FEP 4.27; Emergency Diesel Generator Building (G-03/G-04), Revision 05
- FHAR FZ 320; Fire Area A01-E, September 2015, Condensate Storage Tank Area Fire Zone Data
- FHAR FZ 770; Fire Area A71, September 2015, G-03 Diesel Room Fire Zone Data
- FP-AA-104-1004; Nuclear Fleet Administrative Procedure; Control of Combustibles and Ignition Sources; Revision 01

- NP 1.9.12; Ignition Control Procedure; Revision 23
- NP 1.9.9; Transient Combustible Control, Revision 29
- PC 74; Conducting and Evaluating Fire Drills; Revision 17; Completed on November 11, 2016
- RMP 9057; Fire Barrier Penetration Fire Seal Surveillance; Revision 6
- TSC Fire Drill Scenario; October 11, 2016

#### 1R11 Licensed Operator Requalification Program

- 1ICP 02.001YL Reactor Protection and Engineered Safety Features Yellow Channel Analog 92 Day Surveillance Test
- AD-AA-100-1006; Procedure and Work Instructions Use and Adherence; Revision 11
- Crew Simulator Evaluation Forms; October 31, 2016 November 1, 2016
- OP 5B; Blender Operation / Dilution / Boration; Revision 41
- OP-AA-03; FPL Nuclear Policy; Reactivity Management; Revision 0
- OP-AA-100; Operations Expectations; Revision 2
- OP-AA-100-1000; Conduct of Operations; Revision 16
- OP-AA-103-1000; Reactivity Management; Revision 5
- PBN LOC 000 049E; Simulator Exercise Guide; October 27, 2016
- Point Beach Permanent Simulator vs. Plant Discrepancies; September 22, 2016
- TS 6; Rod Exercise Test Unit 2; Revision 34
- TWR Simulator Report

#### 1R12 Maintenance Effectiveness

- AR 1673719; Refurbish, Inspect, and Test DANA AMPS 2R34
- AR 2076885; K-3B Out-Of-Service (Not Loading Properly)
- AR 2079502; K-3B Compressor Failure to Load
- AR 2085956; K-0003B SA Compressor not Loading
- AR 2091060; K-3B Service Air Compressor Failure to Load
- AR 2091284; Mechanical Binding of SA Unloader Solenoid
- AR 2098324; Catastrophic Failure of 2P-11B CCW Pump Motor
- AR 2118547; Received An Out-of-Tolerance Report For M&TE (MCDM-019)
- AR 2123029; Received An Out-of-Tolerance Report For M&TE (MCHP-001)
- AR 2145197; SA Low Pressure Alarm Followed by Standby SA Compressor
- AR 2164119; Reactor Trip Bypass Breaker Failed to Stay Closed
- AR 2165556; Update Multiple SA CRS Due to Mrule Perf Crit Revision
- AR 2166512; Reactor Protection Unavailability Increased During Q3 2016
- AR Equipment Search; Reactor Protection; December 27, 2015 December 27, 2016
- CCW Motor System Plant Health Committee Presentation
- CCWP Motor Maintenance Procedure, RMP 9006-3; Revision 11
- Certificate of Calibration; MCHP-001; Hi-Pot Tester; March 16, 2016
- Certificate of Calibration; MCHP-019; Depth Micrometer; March 8, 2016
- Condition Report Search; Service Air System; May 1, 2015 Aug 22, 2016
- EACE 02076885; K-3B Out-Of-Service (Not Loading Properly); Dated November 18, 2015
- EACE 02098324; Catastrophic Failure of 2P-11B CCW Pump Motor
- EACE 02145794; K-3A Service Air Compressor Trip; Dated August 17, 2016
- EPRI 1003095; Electric Motor Tiered Maintenance Program; Dated August 2002
- ER-AA-100-2002; Maintenance Rule Program Administration; Revision 3
- Eval-PB-SA-00288; Service Air (a)(1) Review and Action Plan; Accessed November 8, 2016
- Fire Event Reporting Data Collection Form for 2P-11B Component Cooling Water Motor Short to Ground; Revision 0

- FPL-1; Point Beach Quality Assurance Topical Report; Revision 19
- Life Cycle Management Plan for Large Electric Motors [4.16 kV & 480 V more than 100Hp, dated March 1, 2013
- LTA PB-15-0019, Long Term Action for SA Moisture Issue; Dated March 27, 2016
- MA-AA-204-1000; Preventative Maintenance and Surveillance Procedure; Revision 9
- Maintenance Rule Function Scoping and Criteria; 4.16KV System; Accessed November 8, 2016
- Maintenance Rule Function Scoping and Criteria; Instrument Air; Accessed November 9, 2016
- Maintenance Rule Function Scoping and Criteria; Safety Injection; Accessed November 8, 2016
- Maintenance Rule Function Scoping and Criteria; Service Air; Accessed November 9, 2016
- Maintenance Rule Function Scoping and Criteria; VNDG System; Accessed November 8, 2016
- Maintenance Rule Functional Failure Evaluation; Catastrophic Failure of 2P-011B-M; Dated January 6, 2016
- Maintenance Rule Functional Failure Evaluation; Catastrophic Failure of 2P-011B-M; Dated January 14, 2016
- Maintenance Rule Functional Failure Evaluation; Service Air Compressor AR 02076885 and AR 02079502; Dated October 19, 2015
- Maintenance Rule Functional Failure Evaluation; Service Air Compressor AR 0208956; Dated November 10, 2015
- Maintenance Rule Functional Failure Evaluation; Service Air Compressor AR 02091060 and 02091284; Dated December 3, 2015
- Maintenance Rule Functional Failure Evaluation; Service Air Compressor AR 02145794; Dated August 11, 2016
- NP 11.1.14; Inspection Planning; Revision 8
- NP 11.1.15; Quality Control Inspections; Revision 2
- NP 7.7.4; Scope and Risk Significant Determination for the Maintenance Rule; Revision 24
- NP 7.7.5; Maintenance Rule Monitoring; Revision 27
- Schultz Electric Report N-7875-FA; Failure Analysis Report for Point Beach CCWPM; Revision 0
- Test Equipment Job History; MCDM-019; March 18, 2016
- Test Equipment Job History; MCHP-001; April 5, 2016
- WO 40329646-01; Install 1-HR Firewrap on Conduit D04-7 in FZ-166
- WO 40357169-02; R-1/Mech Work Associated Removal/Installation of RV Head
- WO 40361756; 2P-011B-M EMAX Test Results dated December 8, 2015
- WO 40370664; IT 13 Train A
- WO 40437220-01; Catastrophic Failure of 2P-11B CCW Pump Motor
- WO 40454445-25; 1CV-00200B/Prefab Welds (Pipe to Valve Welds)
- WO 40489615-01; 1SI-889B/Adverse Trend U1 T-34A SI Accumulator Leakage Rate
- WO 40493115-04; G-02 EDG Injector Inspection and Qualification

### 1R13 Maintenance Risk Assessments and Emergent Work Control

- AR 2145936; Phoenix Risk Monitor
- AR 2148112; Changes to Work Management Process
- AR 2148512: Scheduled Items not Reflected in Risk Look Ahead for August 8, 2016
- AR 2171922; NRC Found Scaffolds Discrepancies
- AR 2173470; Documentation of Identified Scaffold Deficiencies
- AR Search; Phoenix; June 1, 2016 December 1, 2016
- Daily Production Meeting Look-Ahead; Elevated Risk/A & B Adherence; November 30, 2016

- MA-AA-100-1002; Scaffold Installation, Modification, and Removal Requests; Revision 4
- MA-AA-100-1002; Scaffold Installation, Modification, and Removal Requests; Revision 5
- Phoenix Risk Monitor Change Notice; Level 1 Assessment Performed Under L1A02171005; Change Number 5
- Point Beach Unit 1 Phoenix Configuration Report; November 30; 9:32 a.m.
- Point Beach Unit 1 Phoenix Risk Summary Report; November 30, 2016
- Point Beach Unit 1 Phoenix Risk Summary Report; October 17, 2016
- Point Beach Unit 1 Phoenix Risk Summary Report; October 18, 2016
- Point Beach Unit 1 Station Daily Status Report; November 30, 2016
- Point Beach Unit 2 Phoenix Risk Summary Report; November 30, 2016
- Point Beach Unit 2 Phoenix Risk Summary Report; October 17, 2016
- Point Beach Unit 2 Phoenix Risk Summary Report; October 18, 2016
- Point Beach Unit 2 Station Daily Status Report; November 30, 2016
- Qualitative Risk Assessment; November 30, 2016
- Station Logs; October 17, 2016
- Station Logs; November 30, 2016

#### 1R15 Operability Determinations and Functional Assessments

- AR 2004558; Question Screening of AR 2002825 For Functionality; Functionality Assessment; Revision 5
- AR 2121178; 2AF-101, 2HX-1B SG AFW First Off Potential Leakage
- AR 2136109; PC 8 Part 2 Unsatisfactory Result
- AR 2152508; PBN TFPI 2016 FSA 2080426 Fire Penetration Seals Not Inspected
- AR 2160569; DY-0D; Blown A3 Fuse During Start Up After A3 Board Inspect
- AR 2160577; 2PI-4044; 2P-29 Suction Header Pressure, Indication Increase
- AR 2160698; AFW Pump Suction Pressure Channel Check
- AR 2160698; Auxiliary Feedwater Pump Suction Pressure Channel Check
- AR 2160893; Calibration Check Due to Overpressure of 2PT-4044A
- AR 2161006; Auxiliary Feedwater Pump Low Pressure Switch Switchover Calibration Error
- AR 2161043; Potential Missed Technical Specification Surveillance SR 3.3.2.1
- AR 2169657; Unevaluated Potential PAB Flood Source
- AR Search; Inverter; October 5, 2016 October 11, 2016
- AR Search; Operability Determination; June 1, 2016 December 5, 2016
- OI 62B; Turbine-Driven Auxiliary Feedwater System (P-29); Revision 34
- PC 8 Part 2; Monthly AFW Pump Discharge Piping Temperature Checks; Revision 7
- Station Log Search; Inverter; October 7, 2016 October 9, 2016

#### 1R19 Post-Maintenance Testing

- AR 2071304; Charging Pump VFD Ground Fault Wiring Concerns
- AR 2147663; Issues Associated with RTS Testing K-3A SA Compressor
- AR 2164236; K-2A IA-226 Total Closure Valve Issues During PMT
- AR Search; PMT; June 5, 2016 December 5, 2016
- DBD-06; Design Basis Document; Instrument & Service Air System, Revision 7
- Drawing 110E018; Sheet 1; Auxiliary Coolant System; Revision 71
- Drawing M-209; Sheet 3; Instrument Air; Revision 20
- Instrument Air (IA), FSAR Section 9.7, UFSAR 2013
- Project Schedule; K-2A IA Compressor Maintenance, October 19, 2016
- Station Log Search; K-2A, October 17, 2016 October 21, 2016
- WO 40274813-03; K-2A Compressor/Operations Remove from Service

- WO 40274913-01; K-2A-CS Replace Switch (REF.CR 01911733 Make Before Break)
- WO 40274913-04; K-2A-CS Operations PMT/RTS
- WO 40379746-01; SW-00566A/Open/Inspect SW-00566A
- WO 40379746-02; SW-00566A/OPS PMT/RTS
- WO 40390381-01; 1B52-3213L Clean/Repair Line Sid Start "A" Phase Connection
- WO 40390381-03; K-2A/Operations PMT/Return to Service
- WO 40412371-01; SW-02826-S/Perform Replacement of Solenoid Valve
- WO 40412371-02; SW-02826-S/Operations PMT/RTS
- WO 40417220-01; IA-00228-O Replace Total Closure Valve Operator as Required
- WO 40417220-02; IA-00228-O Operations PMT/RTS
- WO 40434527-01; IA-06332A-S, Replace Solenoid Valve
- WO 40434527-02; IA-06332-A-S Operations PMT/RTS
- WO 40438059-01; K-002A Compressor Maintenance
- WO 40438059-02; K-002A Operations PMT/RTS
- WO 40444585-01; IA-06329A-S, Replace Solenoid Valve
- WO 40444585-02; IA-06329A-S, Operations PMT/RTS
- WO 40454254-01; K-2A, Calibrate Relays
- WO 40454254-02; K-2A, OPS Post Maintenance PMT & RTS
- WO 40464148-01; 1P-010B Change Oil as Required
- WO 40464148-02; 1P-010B OPS PMT/RTS
- WO 40469502-01; IA-300, Downstream Pipe Plug Leaking
- WO 40469502-04; IA-300, OPS PMT/RTS
- WO 40485217-01; K-2A, Perform Replacement of Aux Relay in C-47 Panel
- WO 40485217-04; K-2A, Operations PMT/RTS
- WO 40488102-03; DY-0D, Operations PMT/RTS
- WO 40488102-06; DY-0D/Perform Troubleshooting and Repair
- WO 40488102-07; EY-0D; Record Inverter Drive Board Traces
- WO 40488102-10; DY-0D/Startup Inverter
- WO 40488102-13; 83/DY-0D/EOC Inspection of Static Transfer Switch
- WO 40488102-14; DY-0D/SCR/Diode Replacement (FAR 7)
- WO 40488102-15; DY-0D/IC to Perform Repairs to Circuit Boards
- WO 40488102-16; DY-0D; Obtain Inverter Drive Board Traces
- WO 40488102-18; DY-0D; Electrical Testing Per RMP 9045
- WO 40488102-19; DY-0D; Operations PMT/RTS
- WO 40493115-01; G-02 Emergency Diesel Generator Fuel Dilution of Lube Oil
- WO 40493115-01; G-02 Emergency Diesel Generator Fuel Dilution of Lube Oil
- WO 40493115-02; G-02 EDG Injectors and Valve Bridge/Rocker Arms
- WO 40493115-03; G-02 EDG Maintenance/OPS PMT/RTS
- WO 40493115-04; G-02 EDG Injector Inspections and Qualification
- WO 40493115-05; G-02 EDG Change Crankcase Oil
- WO 40495832-01; K2A- IA-226 Total Closure Valve Potential Issue During PMT

#### 1R22 Surveillance Testing

- 1ICP 02.003B; Reactor Protection System Logic Train B 31 Day Surveillance Test; Revision 13
- 1ICP 02.005B; Engineered Safety Features System Logic Train B 31 Day Staggered Actuation Logic Test; Revision 13
- AR 2102273; Potential Adverse Fire Effect on G-05 Operation
- AR 2118547; Received An Out-of-Tolerance Report For M&TE (MCDM-019)
- AR 2123029; Received An Out-of-Tolerance Report For M&TE (MCHP-001)

- AR 2131812; G-05 Failed to Start
- AR 2134955; K-502, Air Leaking on Evacuator Downstream of the Compressor
- AR 2135415; G-05 Checklist CL-16A Appears to be Incomplete
- AR 2143475; Gen BRG Drain Temp Alarm on G-05
- AR 2143792; G-05 Atomizing Air Comp Check Valve
- AR 2152873; Gen BRG Drain Temp Alarm on G-05
- AR 2155884; 2P-11A Increased Vibration at Point P2H
- AR 2158826; Significant Open Stroke Time Increase on 2SI-871A
- AR 2164980; G-05 Needs Maintenance Rule Evaluation
- Certificate of Calibration; MCHP-001; Hi-Pot Tester; March 16, 2016
- Certificate of Calibration; MCHP-019; Depth Micrometer; March 8, 2016
- IST Testing Trend Report; November 3, 2016
- IT 07D; P-32D Service Water Pump (Quarterly), Revision 38
- OI 55; Primary Leak Rate Calculation; Revision 31; Completed December 27, 2016 for Unit 1
- OI 55; Primary Leak Rate Calculation; Revision 31; Completed December 27, 2016 for Unit 2
- OP 2B; 345 KV Transmission System Impacts upon PBNP Station Operations; Revision 12
- PC 29; Gas Turbine and Auxiliary Diesel Load Test; Revision 60
- PCR 02068210; (S) AOP-9A, Service Water System Malfunction
- PCR 02068210; (S) AOP-9A, Service Water System Malfunction
- Station Log Search; OI-55, OI 55, Unidentified; January 1, 2016 December 28, 2016
- Test Equipment Job History; MCDM-019; March 18, 2016
- Test Equipment Job History; MCHP-001; April 5, 2016
- 1EP2 Alert and Notification System Evaluation
- AR 2009161; Missed Siren Maintenance Window For KPS Sirens in EPZ; November 24, 2014
- AR 2036546; Siren Failure Trend on Siren P-11; March 31, 2015
- AR 2126586; Siren Server Issues; April 19, 2016
- AR 2131145; Loss of Client Connection to EP Siren Server; May 11, 2016
- EPMP 6.0; Alert and Notification Systems; Revision 17
- REP-10 Design Report; Revision 1

#### 1EP3 Emergency Response Organization Staffing and Augmentation System

- AR 1994102; ERO NXT Communicator Failure For 3rd Qtr Augmentation Drill; September 26, 2014
- AR 1995607; Escalation Phone in Only Augmentation Drill Unsat Results; October 2, 2014
- AR 2008806; Escalation Phone in ERO Augmentation Drill Unsat Results; November 22, 2014
- AR 2072527; ERO Pager Number Disabled By Vendor; September 9, 2015
- AR 2135221; 2Q16 ERO Augmentation Drill Response Acceptable with Comment; May 31, 2016
- AR 2154982; 3Q16 Augmentation Drill Sat with Comments; September 9, 2016
- Current ERO Team Roster; as of October 12, 2016
- EP-AA-107; Fleet Emergency Response Organization (ERO) Training Program; Revision 3
- EPIP 1.1; Course of Actions; Revision 73
- ERO Augmentation Drill Results from September 2014 through October 2016
- Point Beach Nuclear Plant On-Shift Staffing Analysis; Revision 3

#### 1EP4 Emergency Action Level and Emergency Plan Changes

- Current Revision of the Point Beach Emergency Plan and its attachments
- AR 2139729; Question on Rad Monitor Used for Emergency Action Level RU1; Dated June 22,2016

- 2016-PB-005; 10 CFR 50.54(q) Evaluation Form; Dated March 15, 2016
- EPIP 1.2.1; Emergency Action Level; Revisions 14 and 15
- 2015-PB-006; 10 CFR 50.54(q) Evaluation Form; Dated June 26, 2015
- 2015-PB-007; 10 CFR 50.54(q) Evaluation Form; Dated June 26, 2015
- 2015-PB-008; 10 CFR 50.54(q) Evaluation Form; Dated June 26, 2015
- 2016-PB-002; 10 CFR 50.54(q) Evaluation Form; Dated February 15, 2016
- 2016-PB-001; 10 CFR 50.54(q) Evaluation Form; Dated February 27, 2016

#### <u>1EP5 Maintenance of Emergency Preparedness</u>

- 2015 PBNP Hostile Action Based Evaluation Exercise Final Report; October 2, 2015
- AR 2035038; DEP Opportunity Canceled on March 24, 2015, Due to Missing ED; March 25, 2015
- AR 2074399; 2015 HAB Ex JPIC Command and Control
- AR 2074403; 2015 HAB EX Control Room Roll Up Items
- AR 2074409; 2015 HAB EX Drill and Scenario Issues
- AR 2074476; 2015 HAB EX Requirements for and Distribution of Dosimetry
- AR 2074715; Relationship Concerns Between Utility and State of Wisconsin
- AR 2074883; 2015 HAB EX Inspection Debrief Comments
- AR 2112502; OSC Failed Drill Objective
- AR 2112888; Understanding of Inputs to Dose Assessment
- AR 2112891; Fission Product Barrier Status Confusion
- AR 2113841; Potential Gaps in EP Training, Performance and Critique
- AR 2113855; Weaknesses Identified During 1Q16 EP Drill (OSC and TSC
- AR 2147934; Overdue EP Callups
- AR 2158767; Potential Trend ERO Response Performance PAIG Identified
- AR 2160927; EP HU Standdown
- AR 2164164; Adverse Trend ERO Response to Radioactive Release
- Current Point Beach Nuclear Plant Emergency Plan
- NPM 2015-0074; 2015 1st quarter ERO Tabletop Drill Report; April 11, 2015
- NPM 2016-0038; 2016 1Q16 Team A ERO Drill Report; March 7, 2016
- PBN 15-007; Point Beach Nuclear Oversight Report, Emergency Preparedness; August 12, 2015
- PBN 16-004; Point Beach Nuclear Oversight Report, Emergency Preparedness; August 12, 2016
- QHSA 2075578; Evaluation of NRC EP Program Inspection; October 11, 2016
- Sample of Drill and Exercise Reports from September 2014 through October 2016

#### 4OA1 Performance Indicator Verification

- ANS Siren Data; Third quarter of 2015 through Third quarter of 2016
- AR 2075391; MSPI Basis Document Update for DG
- AR 2096856; NRC Questions MSPI Accounting Practices
- Control Room Log Entries from July 2015, November 2015, February 2016, and April 2016
- DEP Opportunity Data; Third quarter of 2015 through Third quarter of 2016
- ERO Personnel Participation Data; Second quarter of 2015 through Third quarter of 2016
- MSPI Derivation Report; MSPI Systems; Unavailability Index; Units 1 and 2; July 2015, November 2015, February 2016, and April 2016
- MSPI Derivation Report; MSPI Systems; Unreliability Index; Units 1 and 2; July 2015, November 2015, February 2016, and April 2016
- MSPI Indicator Margin Remaining in Green for MSPI Systems; Units 1 and 2; Period Ending June 2016

- MSPI Monthly Unavailability and Verification for MSPI Systems for July 2015, November 2015, February 2016, and April 2016
- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7
- NRC Reactor Oversight Program; MSPI Basis Document for Point Beach Nuclear Plant; Revision 23
- NRC Reactor Oversight Program; MSPI Basis Document for Point Beach Nuclear Plant; Revision 24
- NRC Reactor Oversight Program; MSPI Basis Document for Point Beach Nuclear Plant; Revision 25

### 4OA2 Identification and Resolution of Problems

- AD-AA-100-1004-10001; Document Management Desk-Top Instruction; Revision 6
- AR 2017787; Security Opportunity for Improvement
- AR 2017789; Security Log Keeping Discrepancies
- AR 2017791; Security Document Accuracy Discrepancies
- AR 2017793; Security Light Meter Calibration Indeterminate
- AR 2018020; Missing or Incorrect Safety Security Interface Forms
- AR 2082271; RHR Closed System Boundary May Not Be Fully Missile Protected
- AR 2124428; Weaknesses in Electrical Transient Corrective Actions
- AR 2127316; Recovery Plan Needed CAP Compliance
- AR 2131739; Part 21 Notification From Electroswitch
- AR 2152842; EOP-0.4 Has Fatal Flaws
- AR 2153571; Charging Pump VFD Tamper Tape Found Removed
- AR 2154927; EOP-0.4; Unit 2 TRR 10/7 Cancel After LOC Exams
- AR 2160866; U2 Failure of TE-406BD OP/OTDT Turbine Runback (White)
- AR 2163828; Switch Found Out of Position for 2TC-406L Delta Flux Control
- AR 2172378; Nuclear Instrument Testing, High Flux Trip Became OOS
- AR 2175806; Battery D-105 Was Found Below Tech Spec Limits
- AR 2176084; D-105 Quarterly SG Data Needs Retaken
- AR 2176108; Excessive Adjustment Required On D-107 Float Potentiometer R3
- AR Assignment Search; Adverse Trend; June 1, 2016 November 29, 2016
- AR Equipment Search; Inverters; January 1, 2016 December 20, 2016
- AR Search; Adverse Trend; June 1, 2016 November 29, 2016
- AR Search; Rework; Jun 1 November 29, 2016
- EOP-0.4 Unit 1; Natural Circulation Cooldown with Steam Void in Vessel (Without RVLIS); Revision 13
- IST Testing Trend Report; November 3, 2016
- Maintenance Rework List; November 30, 2016
- OP-AA-100-1000-10005; Operations Excellence Model; Revision 0
- Operations Field Observations and Leadership Slides
- Self-Evaluation and Trending Analysis Report; Engineering; Second Quarter 2016
- Self-Evaluation and Trending Analysis Report; Engineering; Third Quarter 2016
- Self-Evaluation and Trending Analysis Report; Maintenance; Second Quarter 2016
- Self-Evaluation and Trending Analysis Report; Maintenance; Third Quarter 2016
- Self-Evaluation and Trending Analysis Report; Operations; Second Quarter 2016
- Self-Evaluation and Trending Analysis Report; Operations; Third Quarter 2016
- Self-Evaluation and Trending Analysis Report; Radiation Protection; Third Quarter 2016
- Self-Evaluation and Trending Analysis Report; Radiation Protection; Second Quarter 2016
- Self-Evaluation and Trending Analysis Report; Site Human Performance; Third Quarter 2016
- Self-Evaluation and Trending Analysis Report; Station; Second Quarter 2016

- System Health Report; Unit 1; Auxiliary Feedwater; Fourth Quarter 2016
  System Health Report; Unit 2; Auxiliary Feedwater; Fourth Quarter 2016
  Unit 1 Top Ten Equipment Reliability Issues List; November 29, 2016
  Unit 2 Top Ten Equipment Reliability Issues List; November 29, 2016

- WO 40461957 01; 1N-43 Gain Potentiometer Lock

# LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access Management System
AFW	Auxiliary Feed Pump
ANS	Alert and Notification System
AOP	Abnormal Operating Procedure
AR	Action Request
CAP	Corrective Action Program
CFR	Code of Federal Regulations
DEP	Drill and Exercise Performance
DRP	Division of Reactor Projects
EAL	Emergency Action Levels
EC	Engineering Change
EDG	Emergency Diesel Generator
EP	Emergency Preparedness
ERO	Emergency Response Organization
FSAR	Final Safety Analysis Report
IMC	Inspection Manual Chapter
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
IR	Inspection Report
LLC	Limited Liability Corporation
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NI	Nuclear Instrument
NRC	Nuclear Regulatory Commission
MSPI	Mitigating Systems Performance Index
OA	Other Activities
PAB	Primary Auxiliary Building
PI	Performance Indicator
SDP	Significance Determination Process
SSC	Structures, Systems, and Components
TS	Technical Specification
WO	Work Order

R. Coffey

Letter to Robert Coffey from Jamnes Cameron dated January 31, 2017

#### SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2—NRC INTEGRATED INSPECTION REPORT 05000266/2016004; 05000301/2016004; 05000266/2016501; AND 05000301/2016501

DISTRIBUTION: Jeremy Bowen RidsNrrDorlLpl3-1 Resource RidsNrrPMPointBeach RidsNrrDirsIrib Resource Cynthia Pederson Darrell Roberts Richard Skokowski Allan Barker Carole Ariano Linda Linn DRPIII DRSIII ROPreports.Resource@nrc.gov

#### ADAMS Accession Number: ML17032A074

OFFICE	RIII			
NAME	JRutkowski for JCameron:bw			
DATE	01/31/2017			

OFFICIAL RECORD COPY