



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

January 29, 2015

Mr. Eric McCartney  
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 05000266/2014005; 05000301/2014005

Dear Mr. McCartney:

On December 31, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed report documents the results of this inspection, which were discussed on January 15, 2015, with you and other members of your staff.

Based on the results of this inspection, one NRC-identified finding of very low safety significance was identified. The finding involved a violation of NRC requirements. Additionally, three licensee-identified violations are listed in Section 4OA7 of this report. However, because of the very low safety significance and because the issues were entered into your corrective action program (CAP), the NRC is treating the issues as non-cited violations (NCVs) in accordance with Section 2.3.2 of the NRC Enforcement Policy.

If you contest the subject or severity 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 a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission-Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Point Beach Nuclear Plant. In addition, if you disagree with the cross-cutting aspect assigned 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.

E. McCartney

-2-

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the 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/**

Jamnes Cameron, Chief  
Branch 4  
Division of Reactor Projects

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

Enclosure:  
IR 05000266/2014005; 05000301/2014005  
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 05000266; 05000301  
License Nos: DPR-24; DPR-27

Report No: 05000266/2014005; 05000301/2014005

Licensee: NextEra Energy Point Beach, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: Two Rivers, WI

Dates: October 1, 2014 through December 31, 2014

Inspectors: D. Oliver, Senior Resident Inspector  
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Approved by: J. Cameron, Chief  
Branch 4  
Division of Reactor Projects

Enclosure

## TABLE OF CONTENTS

SUMMARY OF FINDINGS .....	2
REPORT DETAILS .....	4
Summary of Plant Status.....	4
1. REACTOR SAFETY.....	4
1R01 Adverse Weather Protection (71111.01) .....	4
1R04 Equipment Alignment (71111.04).....	6
1R05 Fire Protection (71111.05).....	7
1R06 Flooding (71111.06) .....	8
1R08 Inservice Inspection Activities (71111.08) .....	9
1R11 Licensed Operator Requalification Program (71111.11) .....	13
1R12 Maintenance Effectiveness (71111.12).....	14
1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13).....	15
1R15 Operability Determinations and Functional Assessments (71111.15).....	15
1R18 Plant Modifications (71111.18).....	16
1R19 Post-Maintenance Testing (71111.19) .....	17
1R20 Outage Activities (71111.20).....	18
1R22 Surveillance Testing (71111.22).....	19
1EP4 Emergency Action Level and Emergency Plan Changes (IP 71114.04) .....	20
2. RADIATION SAFETY.....	20
2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03).....	20
2RS4 Occupational Dose Assessment (71124.04) .....	24
4. OTHER ACTIVITIES .....	28
4OA1 Performance Indicator Verification (71151).....	28
4OA2 Identification and Resolution of Problems (71152).....	31
4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153).....	34
4OA6 Management Meetings .....	35
4OA7 Licensee-Identified Violations.....	36
SUPPLEMENTAL INFORMATION .....	1
KEY POINTS OF CONTACT.....	1
LIST OF ITEMS OPENED, CLOSED AND DISCUSSED .....	2
LIST OF DOCUMENTS REVIEWED.....	3
LIST OF ACRONYMS USED .....	17

## SUMMARY OF FINDINGS

Inspection Report (IR) 05000266/2014005, 05000301/2014005; 10/01/2014–12/31/2014; Point Beach Nuclear Plant, Units 1 & 2; Adverse Weather Protection.

This report covers a 3-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors. One Green finding was identified by the inspectors. The finding was considered an NCV of NRC regulation. The significance of inspection findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using IMC 0609, "Significance Determination Process" dated June 2, 2011. cross-cutting aspects are determined using IMC 0310, "Aspects Within the Cross-Cutting Areas" effective date January 1, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy dated July 9, 2013. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process" Revision 5, dated February 2014.

### **NRC-Identified and Self-Revealed Findings**

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

Green. A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 Emergency Diesel Generator (EDG) day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit. The licensee repaired HX-272A on November 25, 2014 and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature. The licensee entered the issue into their CAP as action request (AR) 02018260 and AR 02008296.

The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee's specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the safety-related fuel oil transfer pumps within the room. The inspectors determined the finding could be evaluated using the SDP in accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012.

The inspectors concluded that the finding was of very low safety significance because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. (Section 1R01.1)

**Licensee-Identified Findings**

Violations of very low safety or security significance or Severity Level IV that were identified by the licensee have been reviewed by the NRC. Corrective actions taken or planned by the licensee have been entered into the licensee's CAP. These violations and CAP tracking numbers are listed in Section 4OA7 of this report.

## **REPORT DETAILS**

### **Summary of Plant Status**

#### **Unit 1**

The unit operated at or near full power until October 3. On October 3, the operators reduced power in preparation for the October 4 shutdown and refueling outage 35. The unit remained shutdown until October 30, when the unit was started-up. The unit reached full power on November 4 and operated at or near full power until it was manually tripped on December 2 for condensate pump malfunction. The unit was returned to full power on December 8 and remained at full power for the remainder of the inspection period.

#### **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**

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

#### **1R01 Adverse Weather Protection (71111.01)**

##### **.1 Winter Seasonal Readiness Preparations**

##### **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 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:

- service water (SW); and
- EDGs.

This inspection constituted one winter seasonal readiness preparations sample as defined in Inspection Procedure (IP) 71111.01-05.

b. Findings

(1) Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater

Introduction: A finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 EDG day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit.

Description: On November 20, 2014, while performing cold weather walkdowns of the G-03 and G-04 EDGs, the inspectors noted that the G-04 fuel oil day tank room was abnormally cold. The inspectors observed that neither room heater was operating and notified the control room. The inspectors used an infrared thermometer and found that temperature readings at some locations within the room were in the mid-forties. Additionally, some readings below ventilation grating, and near fuel oil and fire protection piping, were in the thirties. The licensee manually cycled a disconnect for heater HX-272B, which was successful in restoring the heater. The licensee continued to monitor HX-272B to ensure that it functioned properly and raised the room temperature to above 50 degrees Fahrenheit, the design basis temperature of the room. The inspectors' review of the second heater, HX-272A, found that the licensee had written AR 01774095, for the failed heater in June of 2012, and subsequently closed the AR to a work request (WR). The inspectors found that the work management process did not progress the WR to a work order (WO) in a timely manner that would have ensured prompt correction of the failed heater. Further inspection of the cold weather protection for the fuel oil day tank room found that the room didn't have any temperature alarms to notify the control room of below design basis temperatures, nor did the daily operator rounds have any requirements for monitoring room temperature. The licensee repaired HX-272A on November 25, 2014, and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature.

Analysis: The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee's specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the safety-related fuel oil transfer pumps within the room.



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," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions.

This finding has a cross-cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. Specifically, the licensee closed the AR for the failed safety-related heater to a WR in June of 2012 and the heater was not repaired until November of 2014.

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, states, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances, are promptly identified and corrected.

Contrary to this, from June 6, 2012 to November 25, 2014, a condition adverse to quality was not promptly corrected. Specifically, the licensee did not correct a failed safety-related EDG fuel oil day tank room heater for over two years and five months. This time frame included two complete cold weather seasons and below freezing temperatures of the third season.

Because this violation was of very low safety significance and the licensee entered it into the CAP as AR02018260 and AR02008296, it is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy. The licensee's corrective actions included repair of the HX-272A room heater and installation of a thermometer in the fuel oil day tank room for operators to monitor room temperature. **(NCV 05000301/2014005-01; "Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater")**.

1R04 Equipment Alignment (71111.04)

.1 Quarterly Partial System Walkdowns

a. Inspection Scope

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

- G-02, EDG following maintenance;
- motor driven auxiliary feedwater pump 1P-53 following maintenance on 1P-29 turbine-driven auxiliary feedwater pump (TDAFWP); and
- diesel driven fire pump while the motor driven fire pump was out of service.

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, Specification (TS) requirements, outstanding 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 samples as defined in IP 71111.04–05.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

.1 Routine Resident Inspector Tours (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 224: alternate shutdown panel zone;
- Fire Zone 225: battery room D–106;
- Fire Zone 226: 125 VDC electrical equipment room–D–04;
- Fire Zone 227: 125 VDC electrical equipment room–D–03;
- Fire Zone 228: battery room D–105;
- Fire Zone 304N: AFW pump room (2P–29); and
- Fire Zone 304S: AFW pump room (1P–29).

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 seven quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings were identified.

.2 Annual Fire Protection Drill Observation (71111.05A)

a. Inspection Scope

On November 13, 2014, the inspectors observed a fire brigade activation for a simulated fire of the 1X-01 phase 'A' transformer. 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. Documents reviewed are listed in the Attachment to this report. Specific attributes evaluated were:

- proper wearing of turnout gear;
- proper use and layout of fire hoses;
- employment of appropriate firefighting techniques;
- sufficient firefighting equipment brought to the scene;
- effectiveness of fire brigade leader communications, command, and control;
- utilization of pre-planned strategies;
- adherence to the pre-planned drill scenario; and
- drill objectives.

These activities constituted the completion of the one annual fire protection inspection sample as defined in IP 71111.05-05 that begun during the second quarter of 2014.

b. Findings

No findings were identified.

1R06 Flooding (71111.06)

.1 Internal Flooding

a. Inspection Scope

The inspectors reviewed selected risk important plant design features and licensee procedures intended to protect the plant and its safety-related equipment from internal flooding events. The inspectors reviewed flood analyses and design documents, including the FSAR, engineering calculations, and abnormal operating procedures. In addition, the inspectors reviewed licensee drawings to identify areas and equipment that may be affected by internal flooding caused by the failure or misalignment of nearby sources of water, such as the fire suppression or the circulating water systems. The inspectors also reviewed the licensee's corrective action documents with respect to past

flood-related items identified in the CAP to verify the adequacy of the corrective actions. Documents reviewed during this inspection are listed in the Attachment to this report. The inspectors performed a walkdown of the following plant area(s) to assess the adequacy of watertight barriers and flood water level alarms, and that equipment needed for safe shutdown was installed at an elevation above the maximum calculated design water level:

- auxiliary building-19 foot level containing the Unit 1 and Unit 2 residual heat removal (RHR) pumps.

This inspection constituted one internal flooding sample as defined in IP 71111.06–05.

b. Findings

No findings were identified.

.2 Underground Vaults

a. Inspection Scope

The inspectors selected underground bunkers/manholes subject to flooding that contained cables whose failure could disable risk-significant equipment. The inspectors determined that the cables were not submerged, that splices were intact, and that appropriate cable support structures were in place. In those areas where dewatering devices were used, such as a sump pump, the device was operable and level alarm circuits were set appropriately to ensure that the cables would not be submerged. The inspectors also reviewed the licensee's corrective action documents with respect to past submerged cable issues identified in the CAP to verify the adequacy of the corrective actions. The inspectors performed a walkdown of the following underground bunkers/manholes subject to flooding:

- manhole Z-066A;
- manhole Z-067A; and
- manhole Z-068.

Specific documents reviewed during this inspection are listed in the Attachment to this report. This inspection constituted one underground vaults sample as defined in IP 71111.06–05.

b. Findings

No findings were identified.

1R08 Inservice Inspection Activities (71111.08)

From October 6–17, 2014, the inspectors conducted a review of the implementation of the licensee's Inservice Inspection (ISI) Program for monitoring degradation of the reactor coolant system (RCS), risk significant piping and components, and containment systems.

The inservice inspections described in Sections 1R08.1 and 1R08.5 below constituted one inspection sample as defined in IP 71111.08.

.1 Piping Systems Inservice Inspections

a. Inspection Scope

The inspectors observed or reviewed records of the following nondestructive examinations mandated by the American Society of Mechanical Engineers (ASME) Section XI Code to evaluate compliance with the ASME Code Section XI and Section V requirements and if any indications and defects were detected, to determine if these were dispositioned in accordance with the ASME Code or an NRC-approved alternative requirement:

- ultrasonic examination of reactor vessel closure head penetration welds;
- eddy current examination of reactor vessel closure head vent line;
- ultrasonic examination of steam generator a shell to stub barrel weld;
- ultrasonic examination of steam generator a lower head to tube sheet weld;
- visual examination of reactor vessel closure head seismic support structure; and
- ultrasonic examination of reactor vessel threads in flange.

The inspectors reviewed the following examination records with relevant/recordable conditions/indications identified by the licensee to determine whether acceptance of these indications for continued service was in accordance with the ASME Code Section XI or an NRC-approved alternative:

- Report No. 2013–010; Chemical and Volume Control Elbow to Pipe Socket Weld; and
- Report No. 2013–011; Chemical and Volume Control Pipe to Elbow Weld.

The inspectors reviewed records of the following pressure boundary welds completed for a risk significant systems since the last Unit 1 refuelling outage to determine if the welding activities and any applicable non-destructive examination performed were completed in accordance with the ASME Code or NRC-approved alternative.

- WO 00391697–01; SW–00007 Cut Out and Replace Valve.

b. Findings

No findings were identified.

.2 Reactor Pressure Vessel Upper Head Penetration Inspection Activities

a. Inspection Scope

For the Unit 1 reactor pressure vessel upper head, a volumetric (ultrasonic examination) and examination on all upper head penetrations was required this outage pursuant to 10 CFR 50.55a(g)(6)(ii)(D).

The inspectors observed and reviewed records of the volumetric examination conducted on the Unit 1 reactor vessel upper head penetrations to determine whether the activities were conducted in accordance with the requirements of ASME Code Case N–729–1 and 10 CFR 50.55a(g)(6)(ii)(D). In particular, the inspectors confirmed that:

- the required examination scope (volumetric and surface coverage) was achieved and limitations (if applicable were recorded) in accordance with the licensee procedures;
- the ultrasonic examination equipment and procedures used were demonstrated by blind demonstration testing;
- if indications or defects were identified, the licensee documented the conditions in examination reports and/or entered this condition into the corrective action system and implemented appropriate corrective actions; and
- if indications were accepted for continued service the licensee evaluation and acceptance criteria were in accordance with the ASME Section XI Code, 10 CFR 50.55a(g)(6)(ii)(D) or an NRC-approved alternative.

b. Findings

No findings were identified.

.3 Boric Acid Corrosion Control

a. Inspection Scope

On October 4, 2014, the inspectors observed the licensee staff performing visual examinations of the RCS within containment to determine if these examinations focused on locations where boric acid leaks could cause degradation of safety significant components. Additionally, the inspectors conducted an independent Mode 3 containment “as-found” walkdown focusing on the identification of boric acid residue on plant systems, structures, and components.

The inspectors reviewed the following licensee evaluations of RCS components with boric acid deposits to determine if degraded components were documented in the CAP. The inspectors also evaluated corrective actions for any degraded RCS components to determine if they met the component Construction Code, ASME Section XI Code, and/or an NRC approved alternative:

- Boric Acid Corrosion Control (BACC) Evaluation No. 13–111–E; BACC Evaluation for Boric Acid Leak on Containment Spray Pump Flow Isolation Valve 1SI–860B;
- BACC Evaluation No. 14–157–E; BACC Evaluation for Boric Acid Leak on Containment Spray Pump Suction from 2HX–11B RHR HX;
- BACC Evaluation No. 14–078–E; BACC Evaluation for Boric Acid Leak on P–15A SI Pump Discharge Vent; and
- BACC Evaluation No. 13–073–E; BACC Evaluation for Boric Acid Leak on F–6 Filter Return to Spent Fuel Pool.

The inspectors reviewed the following corrective actions related to evidence of boric acid leakage to determine whether the corrective actions completed were consistent with the requirements of the ASME Code Section XI and 10 CFR Part 50, Appendix B, Criterion XVI:

- AR 01846341; Clean Bolt and Perform VT–3 for Boric Acid Packing Leak on SFP Filter Return;
- AR 01948376; Boric Acid Leakage Noted on Vent Cap for 2SI–V–29; and

- AR 01949894; Active Boric Acid Leak Identified on 2SI-871B.

b. Findings

No findings were identified.

.4 Steam Generator Tube Inspection Activities

a. Inspection Scope

No examinations were required during the current refueling outage pursuant to TS requirement for the Steam Generator Program. Therefore, the licensee did not conduct Steam Generator (SG) tube examinations and only a portion of the NRC IP could be completed for this review area. Specifically, from October 6-17, 2014, the inspectors performed an on-site review of documentation related to the SG ISI Program to determine if:

- the size of SG tube flaws/degradation predicted by the licensee's Operational Assessment would remain within structural integrity limits until the next scheduled tube inspection (e.g., until the end of the next operating cycle); and
- primary-to-secondary leakage (e.g., SG tube leakage) was below 3 gallons-per-day or the detection threshold during the previous operating cycle.

b. Findings

No findings were identified.

.5 Identification and Resolution of Problems

a. Inspection Scope

The inspectors performed a review of ISI-related problems entered into the licensee's CAP and conducted interviews with licensee staff to determine if:

- the licensee had established an appropriate threshold for identifying ISI related problems;
- the licensee had performed a root cause (if applicable) and taken appropriate corrective actions; and
- the licensee had evaluated operating experience and industry generic issues related to ISI and pressure boundary integrity.

The inspectors performed these reviews to evaluate compliance with 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requirements. The corrective action documents reviewed by the inspectors are listed in the Attachment to this report.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Resident Inspector Quarterly Review of Licensed Operator Requalification (71111.11Q)

a. Inspection Scope

On December 8, 2014, the inspectors observed Crew F licensed operators in the plant's simulator during licensed operator requalification training to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and 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.

b. Findings

No findings were identified.

.2 Resident Inspector Quarterly Observation During Periods of Heightened Activity or Risk (71111.11Q)

a. Inspection Scope

On October 20, 2014, the inspectors observed the actions of the Unit 1 licensed operators during the Unit 1 reactor cavity draindown following core reload during U1R35. 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 and equipment manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions.



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.

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:

- EDG expansion joint leaks;
- pressurizer power operated relief valve nitrogen regulator failures; and
- SW pump breaker failure.

The inspectors 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/functions classified as (a)(2), or appropriate and adequate goals and corrective actions for systems classified as (a)(1).

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 three quarterly maintenance effectiveness samples as defined in IP 71111.12-05.

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (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:

- October 1, 2014, Unit 1 IT-530C with A train RHR and safety injection out of service;
- October 6, 2014, Unit 2 IT-04, train B with Unit 1 in Mode 5-reduced inventory;
- October 6, 2014, SW pump P-32D tripped due to motor failure (emergent);
- October 15, 2014, 2 ICP 2.13 with switchyard factor in effect; and
- December 17, 2014; fire pump unavailability during the replacement of the fire pump cross-connect isolation valve FP-32.

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 five samples as defined in IP 71111.13-05.

b. Findings

No findings were identified.

1R15 Operability Determinations and Functional Assessments (71111.15)

.1 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following issues:

- FA 2001720; D-501 Battery High Inter-Tier Cable Connection Resistances;
- POD 01996698; Failure to Replace EQ O-Rings During Calibration;
- POD 01987680; Two Turbine Building Truck Bay Doors Found to be Stronger than Assumed in an Internal Flooding Calculation; and
- AR 01983501; Door 019 Needs Repair or Replacement.

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.

1R18 Plant Modifications (71111.18)

.1 Plant Modifications

a. Inspection Scope

The inspectors reviewed the following modification(s):

- EC 260347; 120V Vital Cable Short Circuit Protection for Units 1 and 2; and
- EC 278750; Turbine Driven Auxiliary Feedwater Pump Cross-Tie.

The inspectors reviewed the configuration changes and associated 10 CFR 50.59 safety evaluation screening against the design basis, the FSAR, and the TS, as applicable, to verify that the modification did not affect the operability or availability of the affected system(s). The inspectors, as applicable, observed ongoing and completed work activities to ensure that the modifications were installed as directed and consistent with the design control documents; the modifications operated as expected; post-modification testing adequately demonstrated continued system operability, availability, and reliability; and that operation of the modifications did not impact the operability of any interfacing systems. As applicable, the inspectors verified that relevant procedure, design, and licensing documents were properly updated. Lastly, the inspectors discussed the plant modification with operations, engineering, and training personnel to ensure that the individuals were aware of how the operation with the plant modification in place could impact overall plant performance. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two permanent plant modification samples as defined in IP 71111.18–05.

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 activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- RMP 9216–3 and IT–7D service water pump IST and electrical tests for P–32D following motor replacement;
- IT–7B service water pump IST for P–32B following complete pump and motor replacement (EC 272153);
- Procedure IT–230, NOP/NOT leak tests of class 1 components following U1R35 (WO 40254160);
- OI–62B operability run following quarterly 1P–29 TDAFWP oil sample/change;
- Incore flux map verifications for unit 1 core cycle 36;
- G–04 EDG operability run following torquing expansion joint XJ–3344B (WR 94107513); and
- Unit 1 TDAFW pump testing after turbine replacement.

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 seven post-maintenance testing (PMT) samples as defined in IP 71111.19–05.

b. Findings

No findings were identified.

1R20 Outage Activities (71111.20)

.1 Refueling Outage Activities

a. Inspection Scope

The inspectors reviewed the Outage Safety Plan (OSP) and contingency plans for the Unit 1 Refueling Outage (RFO), U1R35, conducted October 4 to November 1, 2014, to confirm that the licensee had appropriately considered risk, industry experience, and previous site-specific problems in developing and implementing a plan that assured maintenance of defense-in-depth. During the RFO, the inspectors observed portions of the shutdown and cooldown processes and monitored licensee controls over the outage activities listed below:

- licensee configuration management, including maintenance of defense-in-depth commensurate with the OSP for key safety functions and compliance with the applicable TS when taking equipment out of service;
- implementation of clearance activities and confirmation that tags were properly hung and equipment appropriately configured to safely support the work or testing;
- installation and configuration of reactor coolant pressure, level, and temperature instruments to provide accurate indication, accounting for instrument error;
- controls over the status and configuration of electrical systems to ensure that TS and OSP requirements were met, and controls over switchyard activities;
- monitoring of decay heat removal processes, systems, and components;
- controls to ensure that outage work was not impacting the ability of the operators to operate the spent fuel pool cooling system;
- reactor water inventory controls including flow paths, configurations, and alternative means for inventory addition, and controls to prevent inventory loss;
- controls over activities that could affect reactivity;
- licensee fatigue management, as required by 10 CFR 26, Subpart I;
- refueling activities, including fuel handling;
- startup and ascension to full power operation, tracking of startup prerequisites, walkdown of the containment to verify that debris had not been left which could block emergency core cooling system suction strainers, and reactor physics testing; and
- licensee identification and resolution of problems related to RFO activities.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted one RFO sample as defined in IP 71111.20–05.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

.1 Surveillance Testing

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:

- TS 82; G-02 Emergency Diesel Generator Monthly (Routine);
- ORT 3B; Safety Injection Actuation With Loss of Engineered Safeguards AC (Train B) Unit 1 (CIV); and
- IT 14 G-02; Fuel Oil Transfer System Pumps and Valves (IST).

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 FSAR, 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, ASME 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 one routine surveillance testing sample, one inservice testing sample, and one containment isolation valve sample as defined in IP 71111.22, Sections–02 and–05.

b. Findings

No findings were identified.

1EP4 Emergency Action Level and Emergency Plan Changes (IP 71114.04)

a. Inspection Scope

The regional inspectors performed an in-office review of the latest revisions to the Emergency Plan and Emergency Plan Implementing Procedures as listed in the Attachment to this report.

The licensee transmitted the Emergency Plan and Emergency Action Level revisions to the NRC pursuant to the requirements of 10 CFR Part 50, Appendix E, Section V, “Implementing Procedures”. The NRC 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 Emergency Action Level and Emergency Plan Change inspection constituted one sample as defined in IP 71114.04–06.

b. Findings

No findings were identified.

**2. RADIATION SAFETY**

**Cornerstones: Public Radiation Safety, and Occupational Radiation Safety**

2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03)

This inspection constituted one complete sample as defined in IP 71124.03–05.

.1 Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed the plant FSAR to identify areas of the plant designed as potential airborne radiation areas and any associated ventilation systems or airborne monitoring instrumentation. Instrumentation review included continuous air monitors and particulate-iodine-noble-gas-type instruments used to identify changing airborne radiological conditions such that actions to prevent an overexposure may be taken. The

review included an overview of the respiratory protection program and a description of the types of devices used. The inspectors reviewed FSAR, TSs, and emergency planning documents to identify location and quantity of respiratory protection devices stored for emergency use.

Inspectors reviewed the licensee's procedures for maintenance, inspection, and use of respiratory protection equipment including self-contained breathing apparatus as well as procedures for air quality maintenance.

The inspectors reviewed any reported performance indicators (PIs) related to unintended dose resulting from intakes of radioactive material.

b. Findings

No findings were identified.

.2 Engineering Controls (02.02)

a. Inspection Scope

The inspectors reviewed the licensee's use of permanent and temporary ventilation to determine whether the licensee uses ventilation systems as part of its engineering controls (in lieu of respiratory protection devices) to control airborne radioactivity. The inspectors reviewed procedural guidance for use of installed plant systems, such as containment purge, spent fuel pool ventilation, and auxiliary building ventilation, and assessed whether the systems are used, to the extent practicable, during high-risk activities (e.g., using containment purge during cavity flood-up).

The inspectors selected installed ventilation systems used to mitigate the potential for airborne radioactivity, and evaluated whether the ventilation airflow capacity, flow path (including the alignment of the suction and discharges), and filter/charcoal unit efficiencies, as appropriate, were consistent with maintaining concentrations of airborne radioactivity in work areas below the concentrations of an airborne area to the extent practicable.

The inspectors selected temporary ventilation system setups (high-efficiency particulate air/charcoal negative pressure units, down draft tables, tents, metal "Kelly Buildings," and other enclosures) used to support work in contaminated areas. The inspectors assessed whether the use of these systems is consistent with licensee procedural guidance and as-low-as-reasonably-achievable (ALARA) concept.

The inspectors reviewed airborne monitoring protocols by selecting installed systems used to monitor and warn of changing airborne concentrations in the plant and evaluated whether the alarms and setpoints were sufficient to prompt licensee/worker action to ensure that doses are maintained within the limits of 10 CFR Part 20 and the ALARA concept.

The inspectors assessed whether the licensee had established trigger points (e.g., the Electric Power Research Institute's "Alpha Monitoring Guidelines for Operating Nuclear Power Stations") for evaluating levels of airborne beta-emitting (e.g., plutonium-241) and alpha-emitting radionuclides.



b. Findings

No findings were identified.

.3 Use of Respiratory Protection Devices (02.03)

a. Inspection Scope

For those situations where it is impractical to employ engineering controls to minimize airborne radioactivity, the inspectors assessed whether the licensee provided respiratory protective devices such that occupational doses are ALARA. The inspectors selected work activities where respiratory protection devices were used to limit the intake of radioactive materials, and assessed whether the licensee performed an evaluation concluding that further engineering controls were not practical and that the use of respirators is ALARA. The inspectors also evaluated whether the licensee had established means (such as routine bioassay) to determine if the level of protection (protection factor) provided by the respiratory protection devices during use was at least as good as that assumed in the licensee's work controls and dose assessment.

The inspectors assessed whether respiratory protection devices used to limit the intake of radioactive materials were certified by the National Institute for Occupational Safety and Health/Mine Safety and Health Administration or have been approved by the NRC per 10 CFR 20.1703(b). The inspectors selected work activities where respiratory protection devices were used. The inspectors evaluated whether the devices were used consistent with their National Institute for Occupational Safety and Health/Mine Safety and Health Administration certification or any conditions of their NRC approval.

The inspectors reviewed records of air testing for supplied-air devices and self-contained breathing apparatus bottles to assess whether the air used in these devices meets or exceeds Grade D quality. The inspectors reviewed plant breathing air supply systems to determine whether they meet the minimum pressure and airflow requirements for the devices in use.

The inspectors selected several individuals qualified to use respiratory protection devices, and assessed whether they have been deemed fit to use the devices by a physician.

Due to limited in-field observations, the inspectors reviewed training curricula for users of respiratory protection device.

The inspectors chose multiple respiratory protection devices staged and ready for use in the plant or stocked for issuance for use. The inspectors assessed the physical condition of the device components (mask or hood, harnesses, air lines, regulators, air bottles, etc.) and reviewed records of routine inspection for each. The inspectors selected several of the devices and reviewed records of maintenance on the vital components (e.g., pressure regulators, inhalation/exhalation valves, hose couplings). The inspectors reviewed the respirator Vital Components Maintenance Program to ensure that the repairs of vital components were performed by the respirators' manufacturer.

b. Findings

No findings were identified.

.4 Self-Contained Breathing Apparatus for Emergency Use (02.04)

a. Inspection Scope

Based on the FSAR, TSs, and emergency operating procedure requirements, the inspectors reviewed the status and surveillance records of self-contained breathing apparatuses staged in-plant for use during emergencies. The inspectors reviewed the licensee's capability for refilling and transporting self-contained breathing apparatus air bottles to and from the control room and operations support center during emergency conditions.

The inspectors selected several individuals on control room shift crews and from designated departments currently assigned emergency duties (e.g., onsite search and rescue duties) to assess whether control room operators and other emergency response and radiation protection personnel (assigned in-plant search and rescue duties or as required by emergency operating procedures or the emergency plan) were trained and qualified in the use of self-contained breathing apparatuses (including personal bottle change-out). The inspectors evaluated whether personnel assigned to refill bottles were trained and qualified for that task.

The inspectors determined whether appropriate mask sizes and types are available for use (i.e., in-field mask size and type match what was used in fit-testing). The inspectors determined whether on-shift operators had no facial hair that would interfere with the sealing of the mask to the face and whether vision correction (e.g., glasses inserts or corrected lenses) was available as appropriate.

The inspectors reviewed the past two years of maintenance records for select self-contained breathing apparatus units used to support operator activities during accident conditions and designated as "ready for service" to assess whether any maintenance or repairs on any self-contained breathing apparatus unit's vital components were performed by an individual, or individuals, certified by the manufacturer of the device to perform the work. The vital components typically are the pressure-demand air regulator and the low-pressure alarm. The inspectors reviewed the onsite maintenance procedures governing vital component work to determine any inconsistencies with the self-contained breathing apparatus manufacturer's recommended practices. For those Self-contained breathing apparatuses designated as "ready for service," the inspectors determined whether the required, periodic air cylinder hydrostatic testing was documented and up to date, and the retest air cylinder markings required by the U.S. Department of Transportation were in place.

b. Findings

No findings were identified.

.5 Problem Identification and Resolution (02.05)

a. Inspection Scope

The inspectors evaluated whether problems associated with the control and mitigation of in-plant airborne radioactivity were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee CAP. The inspectors assessed whether the corrective actions were appropriate for a selected sample of problems involving airborne radioactivity and were appropriately documented by the licensee.

b. Findings

No findings were identified.

2RS4 Occupational Dose Assessment (71124.04)

This inspection constituted a partial sample as defined in IP 71124.04–05.

.1 Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed the results of radiation protection program audits related to internal and external dosimetry (e.g., licensee’s quality assurance audits, self-assessments, or other independent audits) to gain insights into overall licensee performance in the area of dose assessment and focus the inspection activities consistent with the principle of “smart sampling”.

The inspectors reviewed the most recent National Voluntary Laboratory Accreditation Program accreditation report on the vendor’s most recent results to determine the status of the contractor’s accreditation.

A review was conducted of the licensee procedures associated with dosimetry operations, including issuance/use of external dosimetry (routine, multi-badging, extremity, neutron, etc.), assessment of internal dose (operation of whole body counter, assignment of dose based on derived air concentration-hours, urinalysis, etc.), and evaluation of and dose assessment for radiological incidents (distributed contamination, hot particles, loss of dosimetry, etc.).

The inspectors evaluated whether the licensee had established procedural requirements for determining when external and internal dosimetry is required.

b. Findings

No findings were identified.

.2 External Dosimetry (02.02)

a. Inspection Scope

The inspectors evaluated whether the licensee's dosimetry vendor is National Voluntary Laboratory Accreditation Program accredited and if the approved irradiation test categories for each type of personnel dosimeter used are consistent with the types and energies of the radiation present and the way the dosimeter is being used (e.g., to measure deep dose equivalent, shallow dose equivalent, or lens dose equivalent).

The inspectors evaluated the onsite storage of dosimeters before their issuance, during use, and before processing/reading. The inspectors also reviewed the guidance provided to rad-workers with respect to care and storage of dosimeters.

The inspectors assessed whether Non-National Voluntary Laboratory Accreditation Program accredited passive dosimeters (e.g., direct ion storage sight read dosimeters) were used according to licensee procedures that provide for periodic calibration, application of calibration factors, usage, reading (dose assessment) and zeroing.

The inspectors assessed the use of active dosimeters (electronic personal dosimeters) to determine if the licensee uses a "correction factor" to address the response of the electronic personal dosimeter as compared to the passive dosimeter for situations when the electronic personal dosimeter must be used to assign dose. The inspectors also assessed whether the correction factor is based on sound technical principles.

The inspectors reviewed dosimetry occurrence reports or CAP documents for adverse trends related to electronic personal dosimeters, such as interference from electromagnetic frequency, dropping or bumping, failure to hear alarms, etc. The inspectors assessed whether the licensee had identified any trends and implemented appropriate corrective actions.

b. Findings

No findings were identified.

.3 Internal Dosimetry (02.03)

Special Bioassay (In Vitro)

a. Inspection Scope

The inspectors reviewed and assessed the adequacy of the licensee's program for in vitro monitoring (i.e., urinalysis and fecal analysis) of radionuclides (tritium, fission products, and activation products), including collection and storage of samples.

The inspectors reviewed the vendor laboratory quality assurance program and assessed whether the laboratory participated in an industry recognized cross-check program including whether out-of-tolerance results were resolved appropriately.

b. Findings

No findings were identified.

### Internal Dose Assessment–Airborne Monitoring

a. Inspection Scope

The inspectors reviewed the licensee's program for airborne radioactivity assessment and dose assessment, as applicable, based on airborne monitoring and calculations of derived air concentration. The inspectors determined whether flow rates and collection times for air sampling equipment were adequate to allow lower limits of detection to be obtained. The inspectors also reviewed the adequacy of procedural guidance to assess internal dose if respiratory protection was used.

b. Findings

No findings were identified.

### Internal Dose Assessment–Whole Body Count Analyses

a. Inspection Scope

The inspectors reviewed several dose assessments performed by the licensee using the results of whole body count analyses. The inspectors determined whether affected personnel were properly monitored with calibrated equipment and that internal exposures were assessed consistent with the licensee's procedures.

b. Findings

No findings were identified.

.4 Special Dosimetric Situations (02.04)

#### Declared Pregnant Workers

a. Inspection Scope

The inspectors assessed whether the licensee informs workers, as appropriate, of the risks of radiation exposure to the embryo/fetus, the regulatory aspects of declaring a pregnancy, and the specific process to be used for (voluntarily) declaring a pregnancy.

The inspectors selected individuals who had declared pregnancy during the current assessment period and evaluated whether the licensee's radiological monitoring program (internal and external) for declared pregnant workers is technically adequate to assess the dose to the embryo/fetus. The inspectors reviewed exposure results and monitoring controls employed by the licensee and with respect to the requirements of 10 CFR Part 20.

b. Findings

No findings were identified.

## Dosimeter Placement and Assessment of Effective Dose Equivalent for External Exposures

### a. Inspection Scope

The inspectors reviewed the licensee's methodology for monitoring external dose in non-uniform radiation fields or where large dose gradients exist. The inspectors evaluated the licensee's criteria for determining when alternate monitoring, such as use of multi-badging, was to be implemented.

The inspectors reviewed dose assessments performed using multi-badging to evaluate whether the assessment was performed consistently with licensee procedures and dosimetric standards.

### b. Findings

No findings were identified.

## Shallow Dose Equivalent

### a. Inspection Scope

The inspectors reviewed shallow dose equivalent dose assessments for adequacy. The inspectors evaluated the licensee's method (e.g., VARSKIN or similar code) for calculating shallow dose equivalent from distributed skin contamination or discrete radioactive particles.

### b. Findings

No findings were identified.

## Neutron Dose Assessment

### a. Inspection Scope

The inspectors evaluated the licensee's neutron dosimetry program, including dosimeter types and/or survey instrumentation.

The inspectors reviewed neutron exposure situations (e.g., independent spent fuel storage installation operations or at-power containment entries) and assessed whether (a) dosimetry and/or instrumentation was appropriate for the expected neutron spectra, (b) there was sufficient sensitivity for low dose and/or dose rate measurement, and (c) neutron dosimetry was properly calibrated. The inspectors also assessed whether interference by gamma radiation had been accounted for in the calibration and whether time and motion evaluations were representative of actual neutron exposure events, as applicable.

### b. Findings

No findings were identified.

## Assigning Dose of Record

### a. Inspection Scope

For the special dosimetric situations reviewed in this section, the inspectors assessed how the licensee assigns dose of record for total effective dose equivalent, shallow dose equivalent, and lens dose equivalent. This included an assessment of external and internal monitoring results, supplementary information on Individual exposures (e.g., radiation incident investigation reports and skin contamination reports), and radiation surveys and/or air monitoring results when dosimetry was based on these techniques.

### b. Findings

No findings were identified.

## .5 Problem Identification and Resolution (02.05)

### a. Inspection Scope

The inspectors assessed whether problems associated with occupational dose assessment are being identified by the licensee at an appropriate threshold and are properly addressed for resolution in the licensee CAP. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by the licensee involving occupational dose assessment.

### 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**

### 40A1 Performance Indicator Verification (71151)

#### .1 Safety System Functional Failures

##### a. Inspection Scope

The inspectors sampled licensee submittals for the Safety System Functional Failures PI for Point Beach Nuclear Plant, Units 1 and 2, for the period from the fourth quarter 2013 through the third quarter 2014. 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, and NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73" definitions and guidance, were used. The inspectors reviewed the licensee's operator narrative logs, event reports and NRC Integrated IRs to validate the accuracy of the submittals. 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 safety system functional failures samples as defined in IP 71151–05.

b. Findings

No findings were identified.

.2 Mitigating Systems Performance Index—Residual Heat Removal System

a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index (MSPI)—RHR System PI for Point Beach Nuclear Plant, Units 1 and 2, for the period from the fourth quarter 2013 through the second quarter 2014. 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, was MSPI used. The inspectors reviewed the licensee’s operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated IRs 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. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

No findings were identified.

.3 Mitigating Systems Performance Index—Cooling Water Systems

a. Inspection Scope

The inspectors sampled licensee submittals for the MSPI—Cooling Water Systems PI for Point Beach Nuclear Plant, Units 1 and 2, for the period from the fourth quarter 2013 through the second quarter 2014. 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, was used. The inspectors reviewed the licensee’s operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated IRs 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. 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.

.4 Reactor Coolant System Specific Activity

a. Inspection Scope

The inspectors sampled licensee submittals for the reactor coolant system specific activity PI for Point Beach Nuclear Plant, Units 1 and 2 for the period from the first quarter 2013 through the second quarter 2014. The inspectors used PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 2013, to determine the accuracy of the PI data reported during those periods. The inspectors reviewed the licensee's reactor coolant system chemistry samples, TS requirements, issue reports, event reports and NRC Integrated IRs to validate the accuracy of the submittals. 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. In addition to record reviews, the inspectors observed a chemistry technician obtain and analyze a reactor coolant system sample. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two reactor coolant system specific activity samples as defined in IP 71151-05.

b. Findings

No findings were identified.

.5 Occupational Exposure Control Effectiveness

a. Inspection Scope

The inspectors sampled licensee submittals for the Occupational Exposure Control Effectiveness PI for the period from the second quarter 2013 through the second quarter 2014. The inspectors used PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 2013 to determine the accuracy of the PI data reported during those periods. The inspectors reviewed the licensee's assessment of the PI for occupational radiation safety to determine if the indicator related data was adequately assessed and reported. To assess the adequacy of the licensee's PI data collection and analyses, the inspectors discussed with radiation protection staff the scope and breadth of its data review and the results of those reviews. The inspectors independently reviewed electronic personal dosimetry dose rate and accumulated dose alarms and dose reports and the dose assignments for any intakes that occurred during the time period reviewed to determine if there were potentially unrecognized occurrences. The inspectors also conducted walkdowns of numerous locked high and very-high radiation area entrances to determine the adequacy of the controls in place for these areas. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one occupational exposure control effectiveness sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.6 Radiological Effluent Technical Specification/Offsite Dose Calculation Manual  
Radiological Effluent Occurrences

a. Inspection Scope

The inspectors sampled licensee submittals for the radiological effluent Technical Specification/Offsite Dose Calculation Manual (ODCM) radiological effluent occurrences PI for the period from the first quarter 2013 through the second quarter 2014. The inspectors used PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 2013, to determine the accuracy of the PI data reported during those periods. The inspectors reviewed the licensee's issue report database and selected individual reports generated since this indicator was last reviewed to identify any potential occurrences such as unmonitored, uncontrolled, or improperly calculated effluent releases that may have impacted offsite dose. The inspectors reviewed gaseous effluent summary data and the results of associated offsite dose calculations for selected dates to determine if indicator results were accurately reported. The inspectors also reviewed the licensee's methods for quantifying gaseous and liquid effluents and determining effluent dose. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one Radiological Effluent Technical Specification/ODCM radiological effluent occurrences 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 part of the various baseline IPs 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 CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: identification of the problem was complete and accurate; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are included in the Attachment to 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 and documented in Section 1 of this report.

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a screening of items entered into the licensee's CAP. This review was accomplished through inspection of the station's daily condition report packages or equivalent.

These daily reviews were performed by procedure as part of the inspectors' daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP 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 CAP item screening discussed in Section 40A2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the period of the second quarter of 2014 through the third quarter of 2014, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside the normal CAP 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 CAP trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy. Documents reviewed are listed in the Attachment to this report.

This review constituted one semi-annual trend inspection sample as defined in IP 71152-05.

## Observations

As part of their assessment the inspectors reviewed the licensee's last two quarterly trend assessments and then performed an independent trend analysis of the licensee's corrective action system database. The inspectors noted that the licensee identified a number of statistical trends and ensured that, as required, the corrective actions were in progress. The inspectors identified a trend that the licensee did not identify.

The inspectors requested a sort of the corrective action database for the last 2 years of flooding issues. The inspectors noted that there was one AR in 2012, 29 ARs in 2013, and 334 in 2014 (as of the date of the inspection). Since July 1, 2014, there had been 243 flood related ARs issued by the licensee. This was clearly a trend, yet the trend had not been identified by the licensee during their trend analysis.

A number of the flood related ARs had been written in response to a White finding related to an external flood threat in 2013 and subsequent NRC inspection. But the NRC inspection did not close out the White finding and the licensee performed new assessments, evaluations, and corrective actions. The licensee made a large number of inspections and corrective actions, which resulted in a significant fraction of the flood related ARs. In response to requests from the NRC in Fukushima related generic documents, the licensee performed additional flood related assessments and plant changes. This also resulted in a large number of flood related ARs.

The licensee did not designate the flood related ARs as a trend, even though they met the definition of a trend. The trend should have been brought out as such, and then the licensee should have ensured that further analysis was performed to further assess the trend.

Flood related ARs tied to the White finding and subsequent revisions by the licensee will be assessed as part of the IP 95002 effort currently scheduled for the early part of 2015. Flood related ARs associated with the Fukushima assessment will be sampled as part of the NRC verification effort related to the Fukushima Near Term Task Force recommendations.

### b. Findings

No findings were identified.

### .4 Selected Issue Follow-Up Inspection: Never Performed Technical Specification Surveillance Requirement 3.3.3.2

#### a. Inspection Scope

During a review of the licensee's CAP, the inspectors recognized a corrective action item documenting a concern that TS surveillance requirement (SR) 3.3.3.2 had never been completed for the RCS wide range hot and cold leg resistance temperature detectors (RTDs). The licensee's SR 3.3.3.2 required the performance of a channel calibration of post-accident monitoring instrumentation, which included RCS wide range hot and cold leg instrumentation at an 18 month frequency. Per the licensee's TS definitions, a channel calibration "shall be the adjustment, as necessary, of the channel output such that it responds within the necessary range and accuracy to known values of the parameters that the channel monitors. The channel calibration shall encompass all

devices in the channel required for channel operability” and that, “calibration of instrument channels with resistance temperature detector or thermocouple sensors may consist of an in-place qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel”.

The licensee determined that there was not an existing procedure that performed a channel calibration of the RCS wide range RTDs; and therefore, SR 3.3.3.2 for the required wide range RCS RTD functions had never been performed. The inspectors performed a review of the licensee’s corrective action for the affected instrumentation on both units to confirm adequate resolution of this issue. Specifically, the inspectors verified the following attributes during their review of the licensee’s corrective actions for the affected instrumentation:

- complete and accurate identification of the problem in a timely manner commensurate with its safety significance and ease of discovery;
- consideration of the extent of condition, generic implications, common cause, and previous occurrences;
- evaluation and disposition of operability/reportability issues;
- classification and prioritization of the resolution of the problem, commensurate with safety significance;
- identification of the apparent and/or contributing causes of the problem; and
- identification of corrective actions, which were appropriately focused to correct the problem.

The inspectors determined that the failure to perform SR 3.3.3.2 was a failure to implement a requirement. The inspectors used the examples of IMC 0609, Appendix E, “Examples of Minor Issues,” dated August 11, 2009, to inform their characterization of this issue and determined that it had no safety impact since a qualitative assessment was performed by the licensee using a review of traces of the RTDs response for several previous years, and no abnormalities were noted.

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152–05.

b. Findings

No findings were identified.

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153)

.1 Failure and Inoperability of P–32D Service Water Pump with P–32B Pump Out-of-Service

a. Inspection Scope

On October 7, 2014, Control Room personnel declared the P–32D SW pump inoperable due to an unexpected pump trip. Initial investigation by the licensee revealed large amounts of carbon at the base of the P–32D motor, and acrid odor in the vicinity of the SW pumps. At the time of the P–32D SW pump trip, unit 1 was in mode 6 for refueling and unit 2 was in mode 1. On October 5, 2014, the P–32B SW pump was removed from service for a planned pump and motor replacement during the unit 1 outage. This

resulted in an unplanned TS entry for inoperable SW pumps on unit 2 with a 72 hour action statement to restore a SW pump, or be in mode 3. The inspectors monitored operator actions and equipment status from the control room, and performed field observations of the SW pump room. The inspectors also discussed the equipment inoperability, operator performance, and expected actions considering the defueling of unit 1 reactor with operations department management following this event. Documents reviewed are listed in the Attachment to this report.

This event follow-up review constituted one sample as defined in IP 71153-05.

b. Findings

No findings were identified.

.2 Manual Reactor Trip Due to Failure of Condensate Pump 1P-25B

a. Inspection Scope

On December 2, 2014, at approximately 8:36 pm, equipment operators locally observed unusual noise and vibrations at condensate pump 1P-25B. In response to the degradation of the pump, operators entered their abnormal operating procedures and commenced a rapid power reduction. At approximately 8:50, operators locally observed the 1P-25B pump conditions further degrading and smoke coming from the bearings. The licensee determined that failure of the condensate pump was imminent and manually tripped unit 1 from 62 percent power. All equipment functioned as designed, including the auxiliary feedwater (AFW) system that automatically started on low steam generator water level. The licensee's initial investigation revealed that the 1P-25B motor had a phase-to-phase short and that the condensate pump assembly required complete removal for further inspection to be performed at a later time to completely determine the cause of the failure.

A reactor startup was commenced on December 3, 2014, and the main generator was synchronized to the grid on December 4, 2014.

This event was reported by the licensee (event number 50649) in accordance with 10 CFR 50.72(b)(2)(iv)(B), and 10 CFR 50.72(b)(3)(iv)(A) for the manual RPS actuation and the automatic system actuation of the AFW system. Documents reviewed are listed in the Attachment to this report.

This event follow-up review constituted one sample as defined in IP 71153-05.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On January 15, 2015, the inspectors presented the inspection results to Mr. E. McCartney 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:

- On October 10, 2014, the results of the in-plant airborne radioactivity control and mitigation, occupational dose assessment, RCS specific activity, occupational exposure control effectiveness, and RETS/ODCM radiological effluent occurrences PI verification were discussed with Mr. E. McCartney.
- On October 17, 2014, the results of the inservice inspection were discussed with Mr. E. McCartney.
- On December 11, 2014, the annual review of Emergency Action Level and Emergency Plan changes were discussed with Mr. R. Seizert.

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.

## 40A7 Licensee-Identified Violations

The following violations of very low significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of the NRC Enforcement Policy for being dispositioned as an NCV.

- The licensee identified a NCV of TS 5.4.1, "Procedures" for the failure to follow the defined heavy load shipping path inside containment as specified in procedure, SLP-1, "Safe Load Path and Rigging Manual", which resulted in the movement of the polar crane main block over exposed reactor fuel.

The licensee's TS 5.4.1 required, in part, that written procedures shall be implemented covering refueling activities. The licensee's refueling procedure governing the movement of the unit 1 containment crane was SLP-1, which described the predefined safe load travel paths and laydown areas in containment during refueling operations that have been pre-analyzed per the FSAR and NUREG-0612. Procedure SLP-1 stated that the main load block of the polar crane was considered a heavy load because it is not single failure proof and weighed approximately 8,550 pounds; and therefore, shall not be moved over the reactor vessel when the head is removed and fuel is in the vessel, with the exception to lift the vessel internals.

Contrary to the above, on October 11, 2014, while unit 1 was in mode 6 with the reactor vessel head removed, the cavity flooded in excess of 23 feet, and irradiated fuel in the reactor vessel during defueling; the licensee moved the main load block of the polar crane over the reactor vessel during the performance of daily crane checks. The licensee entered this issue into the CAP as AR 01998150 and AR 02020076. The inspectors determined that this issue was of very low safety significance (Green) after reviewing IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, dated May 9, 2014. The inspectors

answered "No" to all questions in Exhibit 2 for Initiating Events. Therefore the finding screened as Green (very low safety significance).

- The licensee identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to incorporate vendor torque specifications into applicable maintenance procedures for all four of the plant's EDGs.

On October 25, 2014, during a fast start test of the G-01 EDG, a six-inch expansion joint coupling on the engine's jacket water system began leaking upon start, and stopped leaking shortly after the EDG reached rated speed. The licensee found upon initial investigation that the coupling band, which secured the joint assembly together, was "less than snug tight". The licensee identified this condition in AR 02002147 and noted that the facility's maintenance procedures, RMP 9043 series procedures, did not contain a torque value for this and other similar couplings located on EDG components.

On November 7, 2014, during a monthly run of the G-04 EDG, the six-inch engine jacket water coupling began leaking in a similar fashion to that as the above described leak for the G-01 EDG. The licensee identified this condition in AR 02005324 and AR 02005443. These ARs included an attachment, vendor technical information, which specified torque values for the couplings of concern. On November 17, 2014, the licensee initiated AR 02007284 which stated that the licensee's system engineering had the vendor information with the torque values since December 2012, but had not initiated changes to the EDG maintenance procedures until the November 7, 2014 condition was discovered.

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. Additionally, instructions and procedures shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, from December 2012 to November 7, 2014, the licensees RMP 9043 series procedures did not contain final torque values for the flexible fittings used in the EDGs jacket water cooling and oil systems. The licensee entered this issue into the CAP as AR 02007284 and AR 02020080, and initiated procedure changes to incorporate the torque specifications for these fittings. Additionally, the licensee updated future WOs to perform torque checks on these fittings prior to the next EDG maintenance runs. 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 July 1, 2012 and IMC 0609, Appendix A, "The Significance Determination Process For Findings At-Power," dated July 1, 2012. The inspectors answered "NO" to all questions in Exhibit 2, Section A, Mitigating structures systems components (SSCs) and Functionality. Therefore, the finding screened as very low safety significance (Green).

- The licensee identified a finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions,



Procedures, and Drawings,” which requires, in part, that activities affecting quality shall be accomplished in accordance with instructions, procedures, and drawings.

During the performance of WO 40118062, on breaker B52–DB50–078, the licensee failed to correctly perform the steps in section 5.4.5 of procedure RMP 9303, DB–50 Breaker Routine Maintenance. Procedure RMP 9303 inspected and bent as necessary, the control relay contacts for the breaker to obtain the proper contact alignment. The breaker was subsequently installed and used in the P–32C SW pump breaker cubicle, 1B52–20C, and failed to close on May 29, 2014, during surveillance testing. The licensee concluded that oxide buildup on the control relay contacts had prevented them from making up, which prevented the breaker from closing. The oxide buildup was the result of improper contact alignment, which inhibited the proper wiping action needed to clean the contacts each time they were cycled. The licensee concluded, based on the contact arms being rigid, that the misalignment was present since the new control relay was installed and RMP 9303 performed in July 2012.

Title 10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be accomplished in accordance with instructions, procedures, and drawings. RMP 9303 is the licensee’s procedure containing instructions for the inspection and adjustment of safety-related control relay contacts, an activity affecting quality.

Contrary to the above, between July 11, 2012 and July 24, 2012, the licensee failed to properly complete RMP 9303 Section 5.4.5, which required the licensee to inspect and adjust contacts to ensure that the contacts had the appropriate gap, contacted in the appropriate sequence, and contacted in the approximate center. The inspectors determined that this issue was more than minor as it impacted the equipment performance attribute of the Mitigation 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,” dated June 19, 2012, and Appendix A, “The Significance Determination Process for Findings At-Power,” Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. Since the breaker operated successfully on May 7 and failed to operate on May 29, the inspectors answered “Yes” to the mitigating systems screening question number 3, and consulted regional senior risk analysts to perform a detailed risk evaluation. The senior risk analysts performed a detailed risk evaluation for the finding as described below.

Since the time of actual failure of the breaker for the P32C SW pump cannot be determined, a “T/2” evaluation provides an exposure time of 11 days (i.e., 22 days from May 7, 2014 to May 29, 2014 divided by 2 or 11 days). The “T/2” exposure time is appropriate based on Risk Assessment Standardization Project manual guidance.

The Point Beach Standardized Plant Analysis Risk model version 8.22, Systems Analysis Programs for Hands-on Integrated Reliability Evaluations (SAPHIRE) version 8.1.2 software, and the Support System Initiating Event (SSIE) methodology that is incorporated into the Standardized Plant Analysis Risk model was used to obtain a  $\Delta$ CDF of  $1.29E-7$ /yr for internal events for the failure-to-start of the P32C SW pump due to the breaker failure. The dominant core damage sequences involve

a loss-of-offsite-power (LOOP) with the failure of AFW and the failure of high pressure recirculation.

Since the total estimated change in core damage frequency was greater than  $1.0E-7/\text{yr}$ , an evaluation was performed for external event delta risk contributions. The total  $\Delta\text{CDF}$  was found to be the sum of the  $\Delta\text{CDF}$  contributions from internal events, fire, and seismic or  $4.46E-7/\text{yr}$  [i.e.,  $1.29E-7/\text{yr} + 3.21E-7/\text{yr} + 8.4E-11/\text{yr} = 4.50E-7/\text{yr}$ ].

#### Large Early Release Frequency

Since the total estimated change in core damage frequency was greater than  $1.0E-7/\text{yr}$ , IMC 0609 Appendix H, "Containment Integrity Significance Determination Process" was used to determine the potential risk contribution due to large early release frequency. Each Point Beach Unit is a 2-loop Westinghouse Pressurized Water Reactor with a large dry containment. Sequences important to large early release frequency include steam generator tube rupture events and inter-system loss-of-coolant-accident events. These were not the dominant core damage sequences for this finding.

Based on the Detailed Risk Evaluation, the inspectors determined that the finding was of very low safety-significance (Green). This issue was entered into the CAP as AR 01968602 and AR 02020073.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

E. McCartney, Site Vice President  
D. DeBoer, Plant General Manager  
S. Aerts, Performance Improvement Manager  
R. Clark, Regulatory Assurance  
M. Durbin, Maintenance Instrumentation and Controls Department Head  
S. Forsha, Program Engineering  
R. Harrsch, Site Engineering Director  
L. Hawki, Engineering Site Manager – ERRT  
W. Jensen, Site NDE Level III  
B. Kopetsky, Security Site Manager  
D. Lauterbur, Training Site Manager  
C. McMillan, Online Manager  
M. Millen, Licensing Manager  
R. Parker, Chemistry Manager  
T. Schneider, Senior Engineer  
R. Seizert, Emergency Preparedness Manager  
R. Webber, Operations Site Director  
R. Welty, Radiation Protection Manager  
J. Wilson, Maintenance Director

#### Nuclear Regulatory Commission

J. Cameron, Chief, Reactor Projects Branch 4

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

Opened

05000301/2014005-01    NCV    Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)

Closed

05000301/2014005-01    NCV    Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)

## 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 (71111.01)

- AOP-13C; Abnormal Operating Procedure; Severe Weather Conditions; Revision 36
- AR 01774095; During Calibration of Thermostat Heater Did Not Come On
- AR 01970137; WW 1435 WO Mistakenly Has Winter Prep for Attribute
- AR 01970285; Performance of ICP-06.070 Instruments Found Out of Tolerance
- AR 01988959; U-1 MSIV Cabinet Heat Trace Work Order Scheduled Late
- AR 01988980; U-2 RWST Heat Trace Work Order Scheduled Late
- AR 01989491; VNDRM-4512 Found Open Prior to Temp Reaching Setpoint
- AR 01989536; Trend CAP – Ineffective Management of Winter Readiness
- AR 01994418; Cold Weather PC 49 Part 3, PAB HVAC Issues
- AR 01994423; PC 49 Part 1 Turbine Hall Ventilation Unit 1 Issue
- AR 02005869; Seasonal Readiness Process
- AR 02008296; Room Heater Non-Functioning HX-272B
- AR 02008721; AR Not Written During PC 49 Part 5 Performance
- Calculation 2005-0055; DGB GOTHIC Model and Temperature Calculation; Revision 0
- DBD-16; Design Basis Document; Emergency Diesel Generator System; Revision 18
- FSAR Appendix D.4; Ventilation System; 2013
- FSAR Section 2.6; Meteorology; 2010
- FSAR Section 8.8; Diesel Generator System; 2012
- FSAR Section 9.6; Service Water System; 2014
- Memo; Seasonal Readiness – Cold Weather 2014; September 24, 2014
- OI 38; Circulating Water System Operation; Revision 65
- OM 3.30; Operations Snow Emergency Staffing; Revision 4
- OP-AA-102-1002; Seasonal Readiness; Revision 5
- PC 49 Part 1; Turbine Hall Ventilation Unit 1; Revision 9
- PC 49 Part 2; Turbine Hall Ventilation Unit 2; Revision 14
- PC 49 Part 3; Auxiliary Building Ventilation; Revision 16
- PC 49 Part 4; Auxiliary Building Miscellaneous and Facades; Revision 29
- PC 49 Part 5; Cold Weather Checklist: Outside Areas and Miscellaneous; Revision 28
- PC 49; Cold Weather Preparations; Revision 10
- Point Beach Daily Quality Summary; November 10, 2014
- WO 40145988-01; Cold Weather Preparation for Outside Areas
- WO 40216569-01; Cold Weather Preparation for Outside Areas
- WO 40279344-01; ICP 6.70 – EDG G-04 Non-Outage Instrumentation
- WO 40281304-01; HX-272A – Replace Motor
- WO 40284839-01; G-04 Coolant Sampling
- WO 40288395-01; G-03 Coolant Sampling
- WO 40291567-01; ICP 6.69 – EDG G-01/02 and G-03 Non-Outage Instrumentation
- WR 94050459; HX-272A/During Cali of Thermostat HTR Did Not Come On; June 7, 2012

#### 1R04 Equipment Alignment (71111.04)

- Calculation 2010-0022; Flow Parameter EOP Setpoints; Revision 1
- CL 11A G-02; G-02 Diesel Generator Checklist; Revision 29
- CL 13E Part 2 Auxiliary Feedwater Valve Lineup Motor Driven; Revision 51
- CL 19; Fire Protection System Valves; Revision 46
- Control Room Logs for November 20, 2014
- CSP-H.1 Unit 1 Red; Response to Loss of Secondary Heat Sink; Revision 36
- CSP-S.1 Unit 1 Red/Orange; Response to Nuclear Generation/ATWS; Revision 36
- Drawing BECH M207; Sheet 1A; P&ID Service Water; Revision 41
- Drawing BECH M209; Sheet 12; EM Diesel Air Starting System; Revision 22
- Drawing BECH M219; Sheet 1; P&ID Fuel Oil System; Revision 46
- Drawing M-208; Sheet 1; Fire Protection
- Drawing M-208; Sheet 2; Fire Protection
- Drawing M-217; Sheet 1; Auxiliary Feedwater System
- Drawing M-217; Sheet 3; Auxiliary Feedwater System

#### 1R05 Fire Protection (71111.05)

- AR 01987266; Fire Barrier Inspection Not Going to Complete on Time
- AR 01989822; Fire Barrier Inspection per RMP 9057 Required Changes
- AR 02009146; Door-486 Latch Plate Bowed
- AR 02009246; NRC Resident Informed WCC of Concrete Delamination by D-109
- AR 02009325; NRC Resident Informed WCC of Concrete Delamination by D-109
- AR 02009406; Cosmetic Repair to Wall Behind D-109
- Drawing M-2005-6-38A; Yellow Inst. Bus Equip. Room West Wall, EL. 26' – 0"; Revision 3
- Drawing PBC-218; Sheet 2; Fire Protection for Turbine Building, Aux Building & Containment Elev 8'; Revision 28
- Drawing PBC-218; Sheet 3; Fire Protection for Turbine Building, Aux Building & Containment Elev 26' - 0"; Revision 15
- Drawing PBC-219; Sheet 26; Fire Emergency Procedure 4.12 Turbine Building & Aux Building Elev 8'-0"; Revision 12
- EPIP 1.2.1; Emergency Action Level Technical Basis; Revision 15
- FEP 4.20; Site; Revision 11
- FHAR Fire Hazards Analysis Report; Revision 6
- FP-AA-104-1004; Control of Combustibles and Ignition Sources; Revision 0
- HPIP 4.51.4; Scott Self-Contained Breathing Apparatus; Revision 11
- Ignition Control Permit for WO 40341312; December 16, 2014
- LR-AMP-010-FP; Fire Protection Program Basis Document for License Renewal; Revision 7
- NP 1.9.13; Ignition Control Procedure; Revision 19 and 20
- NP 1.9.14; Fire Protection Organization; Revision 16
- PC 74; Conducting and Evaluating Drills; Revision 16
- PC 75 Part 1; Monthly and Turnaround Maintenance For the Scott 4.5 Self-Contained Breathing Apparatus; Revision 24
- RMP 9011-1; Safe Shutdown Fire Door Inspections; Revision 16
- RMP 9057; Fire Barrier Penetration Fire Seal Surveillance; Revision 21
- WO 40293426; Fire Barrier Inspection per RMP 9057; November 5, 2014

#### 1R06 Flooding (71111.06)

- AR 01644268; Correct Error in FSAR Table A.7-1

- AR 01911809; SW-2911-BS Packing Blown Out / UE Declared
- AR 01948109; Internal Flooding Hazards in PAB not Fully Evaluated
- AR 01971786; Internal Flooding License Bases Ambiguous, Contains an Error
- AR 01992690; 8" SW Supply Return Pipe for BDE in PAB May Not be Seismic
- AR 02002825; Legacy Flooding Modification Concerns
- AR 02004479; Manhole Sump Pump Level Alarm Maintenance Burden
- AR 02004682; P-295/MH-4 Wiring/Pump Issues
- AR 02004696; Z-65D Manhole #4 Medium Voltage Cables Found Underwater
- AR 02006362; PAB Flooding Alarm Feature Questioned
- AR 02008004; Pipe Penetration Grout/Seal Degraded
- AR 02008551; Seal Penetrations in Half Wall in 19 El. Unit 1 RHR Chase
- ARP 1C20 A 1-4; Alarm Response Procedure; Auxiliary Building 19 Ft Sump Level High; Revision 0
- ARP 1C20 A 4-4; Alarm Response Procedure; Unit 1 or 2 RHR Pump Rooms Level High; Revision 0
- CAP 028664; Testing of Level Switches That Bring in Alarms in the Control Room
- DBD-10; Design Basis Document; Residual Heat Removal; Revision 10
- Drawing 110E029; Sheet 1; P&ID Auxiliary Coolant System; Revision 55
- Drawing 26256-14-S05; Drainage Plan for Electrical Manholes MH-066D, MH-067D, MH-068 & MH-21; Revision 2
- Drawing 26256-14-S06; Drainage Plan for Electrical Manholes MH-066A, 067A; MH-066B,067B & 066C, 067C; Revision 3
- Drawing 26256-14-S10; Drainage of Electrical Manholes Typical Installation of Level Alarm; Revision 3
- Drawing 26256-14-S11; Drainage of Electrical Manholes MH-1 & MH-2; Revision 2
- Drawing 684J971; Sheet 1; P&ID Waste Disposal – Liquid; Revision 59
- Drawing 684J971; Sheet 1A; P&ID Waste Disposal System; Revision 73
- Drawing C-139; Auxiliary Building – Central Part Plan El. 5'-3" & 19'-3" & Sections; Revision 4
- Drawing C-140; PAB Central Part Plan El 8Ft. & 26Ft.; Revision 16
- Drawing C-167; Concrete Auxiliary Bldg. – Central Part Sections; Revision 4
- Drawing M-150; Auxiliary Building Radwaste Drainage Area 8 – Plan at El. 19'-3" & 5'-3" and Details; Revision 6
- Drawing M-152; Auxiliary Building Drainage Area 5 – Plan at Elev. 8'-0"; Revision 4
- Drawing PBC-218; Sheet 2; Fire Protection for Turbine Building, Aux Building, & Containment Elev. 8'-0" Point Beach N.P. Units 1 & 2; Revision 27
- Equivalency Evaluation; EC 280175; SW-2911-BS and SW-2912-BS; Revision 0
- FSAR Appendix A.7; Internal Flooding; 2013
- FSAR Change Request for CR 01639462 FSAR Table A.7-1 Error; December 18, 2011
- Letter; US Atomic Energy Commission to Wisconsin Electric Power Company and Wisconsin Michigan Power Company; September 26, 1972
- Letter; US Atomic Energy Commission to Wisconsin Electric Power Company and Wisconsin Michigan Power Company; December 10, 1974
- Letter; US Atomic Energy Commission to Wisconsin Electric Power Company and Wisconsin Michigan Power Company; September 29, 1975
- Letter; US Atomic Energy Commission to Wisconsin Electric Power Company and Wisconsin Michigan Power Company; November 20, 1975
- Letter; Wisconsin Electric Power Company to US Atomic Energy Commission; February 20, 1973
- Letter; Wisconsin Electric Power Company to US Atomic Energy Commission; February 14, 1975

- Letter; Wisconsin Electric Power Company to US Atomic Energy Commission; February 17, 1975
- Letter; Wisconsin Electric Power Company to US Atomic Energy Commission; April 28, 1975
- Letter; Wisconsin Electric Power Company to US Atomic Energy Commission; October 24, 1975
- Modification M-272; Service Water System; June 2, 1975
- Modification M-597; Safety-related Fire Barriers; April 18, 1979
- NP 7.7.28; Cable Condition Monitoring Program; Revision 5
- NP 8.4.17; PBNP Flooding Program; Table 1 Flood Protection Features Functionality and Inspection Frequency; Revision 17
- NUREG-0800; U.S. NRC Standard Review Plan; Section 2.4.10; Flood Protection; March 2007
- NUREG-0800; U.S. NRC Standard Review Plan; Section 3.4.1; Flood Protection; July 1981
- NUREG-0800; U.S. NRC Standard Review Plan; Section 3.6.2; Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment; July 1981
- NUREG-75/087; U.S. NRC Standard Review Plan; Section 3.4.1; Flood Protection; November 24, 1975
- NUREG-75/087; U.S. NRC Standard Review Plan; Section 3.6.1; Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment; November 24, 1975
- PC 37; Plant Sump Alarm Tests (Semiannual); Revision 2
- Prompt Operability Determination (POD); Internal Flooding Hazards in PAB Not Fully Evaluated; Revision 1
- Prompt Operability Determination (POD); Internal Flooding Hazards in PAB Not Fully Evaluated; Revision 2
- Prompt Operability Determination (POD); Internal Flooding Hazards in PAB Not Fully Evaluated; Revision 3
- Prompt Operability Determination (POD); Internal Flooding Hazards in PAB Not Fully Evaluated; Revision 4
- TLB 23; Tank Level Book; Waste Distillate Tank; Revision 3
- WO 00345505-26; Install EC 11416 Façade Flood Barriers/Pipe Supports
- WO 00387817-01; 1WL-04100 Valve Leak Check
- WO 00387818-01; 1WL-04101 Valve Leak Check
- WO 00393677-01; 2WL-04101 Valve Leak Check
- WO 00393679-01; 2WL-04100 Valve Leak Check
- WO 40141595-01; Test PAB and TB Sump Alarms
- WO 40288380; Pump Electrical Manhole Sumps; November 19, 2014
- WO 40300697-05; PAB/Seal 9 Penetrations Pipeway 3 on M-7-8-25
- WO 40300697-11; PAB/Pipeway 3 Seal Concrete Void
- WO 40300698-06; PAB/Seal 13 Penetrations Pipeway 2

#### 1R08 Inservice Inspection Activities (71111.08)

- 2014U1UT-004; Ultrasonic Examination of Reactor Pressure Vessel Threads in Flange; October 9, 2014
- 2014U1UT-018; Ultrasonic Examination of Steam Generator a Lower Head to Tubesheet Weld; October 15, 2014
- 2014U1UT-019; Ultrasonic Examination of Steam Generator A Tubesheet to Stub Barrel Weld; October 15, 2014
- 54-ISI-494-000; AREVA NDE Procedure for Multi-Frequency Eddy Current Array Probe Examination of Ventline and RVLIS Nozzle Bores; August 8, 2012



- 54-ISI-603-007; AREVA NDE Procedure for Automated Ultrasonic Examination of RPV Closure Head Penetrations Containing Thermal Sleeves; August 22, 2013
- 54-ISI-604-012; AREVA NDE Procedure for Automated Ultrasonic Examination of Open Tube RPV Closure Head Penetrations; September 3, 2013
- AR 01846341; Clean Bolt and Perform VT-3; March 13, 2013
- AR 01855946; HB-19, Hydrostatic Test of Buried Piping Section North of Service Water Header; March 12, 2013
- AR 01948376; Boric Acid Leakage Noted on Vent Cap for 2SI-V-29; March 14, 2014
- AR 01949894; Active Boric Acid Leak Identified on 2SI-871B; March 20, 2014
- AR 01992168; Industry Operating Experience for CRDM Seismic Supports Not in ISI Program; September 18, 2014
- AR 01996865; NRC Identified Error Made in Acceptance Criteria Interpolation During ISI Inspection; October 7, 2014
- AR 01996921; Question from NRC Inspector During ISI Inspection Regarding Procedure
- AR 01999314; NRC Inspector Concern Regarding Documentation of Exam Limitations During ISI Inspection; October 15, 2014
- AR 01999520; NDE Procedure NDE-178 Clarification Concern Identified by NRC Inspector During ISI Inspection; October 16, 2014
- AREVA Report Number 180-9230351; Point Beach Unit 1, U1R25 RVCH Examinations
- BAE Number 13-073-E; F-6 SFP Filter Return to Spent Fuel Pool; July 25, 2013
- BAE Number 14-078-E; P-15A SI Pump Discharge Vent; April 8, 2014
- BAE Number 13-111-E; P-14A Containment Spray Pump Discharge Redundant ISOL; March 26, 2013
- BAE Number 14-157-E; P-14B Containment Spray Pump Suction from HX-11B RHR HX; March 20, 2014
- ISI IWE Program 2<sup>nd</sup> Interval IWE Containment Inspection Program Second Interval; Revision 5
- NDE-163; Manual Ultrasonic Examination of Ferritic Pressure Vessel Welds Greater Than 2 Inches in Thickness; Revision 20
- NDE-165; Manual Ultrasonic Examination of Reactor Pressure Vessel Threads in Flange; Revision 12
- NDE-165; October 7, 2014
- NDE-173; PDI Generic Procedure for the Ultrasonic Examination of Austenitic Piping Welds; Revision 15
- NDE-178; Ultrasonic Examination of Piping for Thermal Fatigue Cracking in Accordance with MRP-146 or MRP-192; Revision 2
- Report No. 2013-010; Chemical and Volume Control Elbow to Pipe Socket Weld
- Report No. 2013-011; Chemical and Volume Control Pipe to Elbow Weld
- WO 00391697-01; SW-00007 Cut Out and Replace Valve; October 23, 2013
- WO 40340842-01; Visual Examination of Reactor Pressure Vessel Closure Head CRDM Seismic Support Structure; October 14, 2014

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

- BG EOP-2; Faulted Steam Generator Isolation; Revision 19
- BG EOP-3; Steam Generator Tube Rupture; Revision 35
- EOP-2 Unit 1; Faulted Steam Generator Isolation; Revision 24
- EOP-3 Unit 1; Steam Generator Tube Rupture; Revision 45
- LMS ID PBN LOC 14E 001S; SEG CPE Style Scenario (DEP); Revision 0
- RP-1B Unit 1; Recovery from Refueling; Revision 4
- RP-1C; Refueling; Revision 74

## 1R12 Maintenance Effectiveness (71111.12)

- ACE 01957064; Unplanned TSAC Entry Unit 2, LCO 3.4.12; May 12, 2014
- ACE 01968602; P-32C SW Pump Failed to Start; August 20, 2014
- ACE 01996936; P-032D Service Water Pump Motor Trip; November 7, 2014
- AR 01383266; Issue with Back Up Nitrogen Supply
- AR 01387238; SW Motor Heaters May Be Causing Adverse Affect
- AR 01817353; Expansion Joint has Approximately 1 DPM Leak While Cold
- AR 01818919; G-03 EDG XJ-3344A Leak
- AR 01857619; Loss IA-6311 PORV Nitrogen Regulator – Canceled
- AR 01940577; MR (A)(1) Evaluation Needed for 1DY-02 Repeat MPFF
- AR 01940839; Received Unexpected C02D 2-2, 1B-02 480V Bus Ground Fault AL
- AR 01972288; IA-6343/PORV Nitrogen Regulator Contingency WO
- AR 01975430; Quarterly Reviews for MRule Missing
- AR 01985644; Damaged Bolts
- AR 01995233; Corrections to MSPI Data for EAC May 2014
- AR 02002147; Leaky Glycol Expansion Joint During G-01 Fast Start ORT-3A
- AR 02005324; G04 EDG Expansion Joint Leaking at 10 DPM
- AR 02005443; G-01 & G-04 Coolant Expansion Joint Leaks
- AR 02006096; G02 Expansion Joint Checks
- AR 02012619; Revise 10CFR50.54(Q) Evaluation for 2014-PB-016
- AR 02013339; ANII Concern with Untimely Corrective Action
- CE 01387238; SW Motor Heaters May Be Causing Adverse Affect
- Control Room Logs from November 7, 2014 to November 8, 2014
- Control Room Logs from October 25, 2014 to October 27, 2014
- EC 282280; G-01 Coolant System Flexible Coupling Alternate Fasteners; August 21, 2014
- ER-AA-100-2002; Maintenance Rule Program Administration; Revision 2
- LI-AA-102-1002; Part 21 Reporting; Revision 5
- Maintenance Rule (a)(1) System Action Plan Checklist and Approval; 480 Volt System; November 6, 2013
- Maintenance Rule Function List; 480 VAC Electrical; March 12, 2013
- Maintenance Rule Function List; Instrument Air System; March 12, 2013
- Maintenance Rule Function List; Reactor Coolant System; March 12, 2013
- Maintenance Rule Functional Failure Evaluation for AR 01857001 and AR 01957064; July 7, 2014
- Maintenance Rule Functional Failure Evaluation for AR 01906122; October 10, 2013
- Maintenance Rule Functional Failure Evaluation for AR 01956825; April 23, 2014
- Maintenance Rule Functional Failure Evaluation for AR 01968602; June 25, 2014
- Maintenance Rule Functional Failure Evaluation for AR 01996936-01; November 18, 2014
- Maintenance Rule Functional Failure Evaluation for AR 02002889; November 25, 2014
- Maintenance Rule Performance Criteria Assessment for 480 Volt; October 2012
- Maintenance Rule Performance Criteria Assessment for 480 Volt; October 2014
- Maintenance Rule Performance Criteria Assessment for Reactor Coolant System; October 2012
- Maintenance Rule Performance Criteria Assessment for Reactor Coolant System; October 2014
- Maintenance Rule Performance Criteria Assessment for Service Water; October 2014
- Maintenance Rule Performance Criteria; 480 Volt System; March 29, 2004
- Maintenance Rule Performance Criteria; Instrument Air System; November 14, 2005
- Maintenance Rule Performance Criteria; Plant Level Criteria; October 3, 2012
- Maintenance Rule Performance Criteria; Reactor Coolant System; January 11, 2002

- Maintenance Rule Unavailability Data Sheet; 480 Volt System; October 1, 2012
- Maintenance Rule Unavailability Data Sheet; Reactor Coolant System; October 1, 2012 - October 1, 2014
- Maintenance Rule Unavailability Data Sheet; Service Water; October 1, 2012 - October 1, 2014
- MI 32.1; Flange and Closure Bolting; Revision 23
- Needs Analysis; Review Breaker Training Frequency; November 18, 2014
- NP 7.2.30; Quality-Basis Values and Quality Group Codes; Revision 0
- NP 7.7.4; Scope and Risk Significant Determination for the Maintenance Rule; Revision 23
- NPM 2014-0186; 2013 Maintenance Rule Quarterly and Annual System Reviews; June 30, 2014
- NPM 2014-0187; 2013 Periodic Maintenance Rule (a)(3) Evaluation; June 30, 2014 October 1, 2014
- PBF-9142; Bolting – Torque and Loading; Revision 5
- Procedure Writer’s Guide for Point Beach (PBNP) Nuclear Plant; Revision 23
- RMP 9043-13; Emergency Diesel Generator G-01 Mechanical Inspection; Revision 29
- RMP 9043-43; Emergency Diesel Generator G-04 Mechanical Inspection; Revision 28
- RMP 9303; DB-50 Breaker Routine Maintenance; Revision 26
- RMP 9303; DB-50 Breaker Routine Maintenance; Revision 27
- Service Contract Between NextEra Energy Point Beach, LLC and Schulz Electric CO for P-032C-M Motor Repair and Refurbishment; February 16, 2010
- SPEC-E-008; FPL Fleet Motor Repair/Refurbishment/Rewind Requirements Specification; February 26, 2010
- Troubleshooting Control Form; SW/P-032D-M; WO 40343184; October 29, 2014
- WO 00383351-01; IA-6310, 1RC-430 N2 Regulator Malfunctioning; March 01, 2010
- WO 40096370; Inspection and Maintenance; May 3, 2013
- WO 40118062-01; B52-DB50-078 Breaker PM per RMP 9303 and RMP 9369-1
- WO 40199030-01; P-032D-M, E-Max Analyze Motor (2B52-27B/2B-04)
- WO 40205529; Group A Mechanical Maintenance Items Inspection and Maintenance; August 27, 2014
- WO 40211869; Group A Mechanical Maintenance Items Inspection and Maintenance; January 21, 2013
- WO 40222191-01; XJ-03344A EXP Joint Approximately 1 DPM Leak While Cold; October 29, 2012
- WO 40234743-01; IA-06310 Noisy During Valve Stroke; April 7, 2013
- WO 40241097-01; B52-DB50-078 Breaker Maint per RMP 9303 and RMP 9369-1
- WO 40273559-03; B52-DB50-001 Breaker Maint per RMP 9303 and RMP 9369-1
- WO 40324523-01; B52-DB50-008 Inspect Control Relay Contacts
- WO 40332379-01; G-01/3” Flexible Coupling Clamp; August 21, 2014
- WR 94060825; XJ-03344A EXP Joint Approximately 1 DPM Leak While Cold; October 27, 2012
- WR 94107513; G04 EDG Expansion Joint Leaking at 10 DPM; November 7, 2014

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

- AOP-9A; Service Water Malfunction; Revision 30
- AR 01658300; Valve Will Not Shut
- AR 01970110; Qualitative Risk Assessment Not Performed for Scheduled Work
- AR 01974333; No Qual Risk Assessment for RE-234/235 OOS
- AR 01989752; Safety Monitor Look Ahead for IT-09B
- AR 01993062; Risk in EDMG-2 Due to WO 40092306 Being Pushed Out Again

- AR 01996936; P-32D Service Water Pump Tripped
- AR 01997038; P-32D SW Pump Motor Steady Bushing Out of Spec.
- Control Room Logs from August 7, 2014 to October 8, 2014
- Control Room Logs from August 16, 2014 to October 17, 2014
- Control Room Logs; October 1, 2014
- Drawing M-208; Sheet 1; Fire Water; Revision 47
- EC 282885; Temporary Modification to Support FP-32 Replacement; December 16, 2014
- EC 282956; Temporary Replacement of Valve FP-32 With Blind Flanges Contingency EC; December 15, 2014
- Execution Week Look-Ahead; October 1, 2014
- FPER; Fire Protection Evaluation Report; Revision 14
- NP 10.3.5; Risk Monitoring and Risk Management; Revision 2
- NP 10.3.7; On-Line Safety Assessment; Revision 33
- NP 7.7.4; Scope and Risk Significant Determination for the Maintenance Rule; Revision 23
- Point Beach Station Daily Status Report; Unit 1 and 2; October 1, 2014
- Unit 1 PBNP Shutdown Safety Assessment and Fire Condition Checklist for October 7, 2014
- Unit 1 PBNP Shutdown Safety Assessment and Fire Condition Checklist for October 8, 2014
- Unit 1 PBNP Shutdown Safety Assessment and Fire Condition Checklist for October 15, 2014
- Unit 1 Risk Safety Monitor for October 1, 2014
- Unit 1 Risk Safety Monitor for December 17, 2014
- Unit 2 Risk Safety Monitor for October 1, 2014
- Unit 2 Risk Safety Monitor for October 7, 2014
- Unit 2 Risk Safety Monitor for October 8, 2014
- Unit 2 Risk Safety Monitor for October 16, 2014
- WO 40285925; North/South Supply Header Tie; Revision 0
- WP 2014-059; Restore Fire Protection Header With Flanges in Place for FP-32, North/South Supply Header Tie if Needed Under EC-282956; December 15, 2014

#### 1R15 Operability Determinations and Functional Assessments (71111.15)

- AR 01751804; Inadequate Operability Evaluation for Doors
- AR 01983501; Door 019 needs repair or replacement
- AR 01987680; Flooding Analysis for Turbine Building Truck Bay Doors Invalid
- AR 01996698; EQ Seals for Steam and Feedwater Flows were not Replaced after Breaking the Connections
- AR 02001319; Door 019 is a high energy line break (HELB) barrier and the degraded condition (door without lower cane bolt) was not evaluated
- AR 02001720; D-501 Battery High Inter-Tier Cable Connection Resistances
- AR 02004596; D-501 Inter Tier Cable Sets
- Drawing PB 01 MF WK00000152; Feedwater System; Revision 52
- EN-AA-203-1001; Operability Determinations / Functionality Assessments
- FA 2001720; D-501 Battery High Inter-Tier Cable Connection Resistances; October 30, 2014
- IEEE STD 450-1987; Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations
- NP 8.4.16; PBNP HELB Barriers/Vent Paths; Revision 19
- RMP 9011-2; Industrial Fire Door, HELB Door, and Seismic 2/1 Door Inspections; Revision 9
- RMP 9046-3; Non-Safety-related Station Battery; Revision 15

## 1R18 Plant Modifications (71111.18)

- 10 CFR 50.59 Report; Replacement of Inverters 1DY01, 1DY02, 2DY01, 2DY02; March 12, 1992
- 10 CFR 50.59; screening 2013-0200-001 for EC 278750
- ACE 01980140; 1DY-03 Shifted Loads to Alternate Source; August 21, 2014
- AR 01612681; Equip Database Correction Needed for Breakers 1,2Y-104-14
- AR 01655791; Equip Database Correction Needed for XFMRS 1,2XY-114
- AR 01932879; Actions not Initiated for MTN Training Review of TDAFWP Mods
- AR 01940267; Install Equipment Hold Downs for NRC Order 12-046 Flex
- AR 01980140; Unit 1 Unexpected LCO Entry, 1DY-03 Shift to Backup Power
- AR 02002385; RF 490, 1P-29 Auxiliary Feed Pump Exhaust Stack
- AR 02003137; DEV of Add'l LARS – AF Steam X-tie/Other for NFPA 805 Use
- Calculation 2005-0021; Turbine Driven Auxiliary Feedwater Pump Motive Force; Revision 1
- DBD-17; Vital 120 VAC System Design Basis Document; Revision 7
- Design Description for EC 260347; 120V Vital Cable Short Circuit Protection for Units 1 and 2
- Draft General Design Criteria for Nuclear Power Plant Construction Permits; October 2, 1967
- Drawing 3978-D03; 125VDC Distribution Panel D-03 Compartment Assembly; Revision 2
- Drawing 6118 E-7; Sheet 24; Connection Diagram 120V AC Instrument Bus Distribution Panel 1Y-103; Revision 4
- Drawing 6118 E-7; Sheet 28; Connection Diagram 120V AC Instrument Bus Distribution Panel 1Y-203; Revision 1
- Drawing 6118 E-98; Sheet 50A; Connection Diagram 120V AC Instrument Bus Supply System; Revision 6
- Drawing Bechtel 10477; P-103; Sheet 1; Emergency Feedwater Pumps to Main Feedwater Lines 4" and 3"; Revision 13
- Drawing Bechtel 10477; P-103; Sheet 2; Emergency Feedwater Pumps to Main Feedwater Lines (cross-connection); Revision 0
- Drawing Bechtel 10477; P-106; Sheet 1; Main Steam to Auxiliary Feedwater Pump 1P-29; Revision 9
- Drawing Bechtel 10477; P-106; Sheet 2; Main Steam to Auxiliary Feedwater Pump (cross-connect); Revision 0
- Drawing Bechtel M-201; Sheet 1; Main and Reheat Steam System; Revision 58
- Drawing Bechtel M-217; Sheet 1; Auxiliary Feedwater System P&ID; Revision 94
- Drawing Bechtel M-2201; Sheet 1; Main and Reheat Steam System; Revision 51
- Drawing PBA-1073; Sheet 1; Terry Turbine Steam Exhaust; (AFW Pump 1-P29); Revision 1
- EA-12-049; Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (ML12054A401); March 12, 2012
- EC 260347; 120V Vital Cable Short Circuit Protection for Units 1 and 2; 10 CFR 50.59/72.48 Screening; October 29, 2012
- EC 278750; NRC Order Fukushima FLEX Unit 1 Turbine Driven Auxiliary Feedwater Pump Cross-Connection; Revision 0
- EC 278750; NRC Order Fukushima FLEX Unit 1 Turbine Driven Auxiliary Feedwater Pump Cross-Connection; Revision 4
- ECR 280393; Engineering Change to Move EC 260347 Implementation from Refuel Outage to Online; November 20, 2013
- FSAR Appendix A.6; Shared Systems Analysis
- JLD-ISG-2012-01; Compliance with Order EA-12-049; Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (ML12229A174); Revision 0
- MDB 3.2.11 1Y103; PBNP Master Data Book; Instrument Panels; Revision 7

- MDB 3.2.11 1Y113; PBNP Master Data Book; Instrument Panels; Revision 4
- MDB 3.2.12 D03; PBNP Master Data Book; DC Distribution; Revision 6
- Modification Request 90-01; E-206 and E-207 Upgrade of Power Supplies Instrument Busses; July 31, 1979
- NextEra Energy Point Beach, LLC's Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049); February 22, 2013
- NextEra Energy Point Beach, LLC's Third Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049); August 28, 2014
- Partial Control Room Logs; July 24, 2014 – July 28, 2014
- Point Beach Nuclear Plant, Units 1 and 2 – Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies); January 27, 2014
- Procedure 1-SOP-Y-103; 1Y-103, White 120V Vital Instrument Panel; February 27, 2014
- Technical Evaluation Report Related to Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design Basis External Events; ADAMS ascension number ML14006A187
- WO 40202881-01; 1Y-103/EC 260347 120 VAC Vital Cables Short Ckt Rating
- WO 40202881-09; 1Y-103-F/Electrical PMT EC 260347

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

- 0-SOP-G04-001; Maintenance Operation for EDG G-04; Revision 12
- 1REPC 44.12; Incore Program Unit 1; Revision 0
- 1RESP 6.1; Core Power Distribution and Nuclear Power Range Detector Calibration Unit 1 (performed at 28 percent power); November 1, 2014
- 1RESP 6.1; Core Power Distribution and Nuclear Power Range Detector Calibration Unit 1 (performed at 74 percent power); November 2; 2014
- 1RESP 6.1; Core Power Distribution and Nuclear Power Range Detector Calibration Unit 1 (performed at 100 percent power); November 5, 2014
- AR 01950551; (P) U1R35 IT 08A—Need Date of October 20, 2014
- AR 01964516; (P) PBTP 257 – 1P-29 TDAFP Site Acceptance Test
- AR 02004198; Unit 1 Flux Map Detector B Drift Unacceptable at 29% Power
- AR 02004227; Rod Position C-09 Did Not Meet Review Criteria
- Control Room Logs for November 7, 2014
- Control Room Logs for November 20, 2014
- DBD-12; Service Water (SW) Design Basis Document; Revision 22
- EC 272527; Turbine Driven Auxiliary Feedwater Pump 1P-29 Turbine and Governor Replacement; Design Description; Revision 2
- FSAR Section 10.2; Auxiliary Feedwater System; 2014
- IT 07B; P-32B Service Water Pump (Quarterly); October 22, 2014
- IT 07D; P-32D Service Water Pump (Quarterly); October 9, 2014
- IT 08A; Cold Start of Turbine-Driven Auxiliary Feed Pump and Valve Test (Quarterly) Unit 1; Revision 73
- IT 230; Leak Test of Class 1 Components Following a Refueling Shutdown Unit 1; Revision 36
- IT-08A; Cold Start of Turbine-Driven Auxiliary Feed Pump and Valve Test (Quarterly) Unit 1; November 20, 2014
- OI-62B; Turbine-Driven Auxiliary Feed System (P-29); Revision 32
- PBTP 257; 1P-29 Turbine Driven Auxiliary Feed Pump Site Acceptance Test; Revision 0
- REI 6.1; Flux Map Analysis; Revision 16

- REPC 44.11; TRACES; Revision 3
- REPC 44.13; INCSUM; Revision 2
- RMP 9216-3; Service Water Pump Vibration Testing and Balancing for Post Maintenance Testing; October 9, 2014
- SCR 2014-0182; 10 CFR 50.59 Screening for Establishing New Inservice Testing Program Acceptance Criteria for P-32D, After Motor Replacement; October 9, 2014
- SCR 2014-0193; 10 CFR 50.59 Screening for Establishing New Inservice Testing Program Acceptance Criteria for P-32B, Following Motor and Pump Replacement; October 22, 2014
- WO 40103521; P-32B Replace Pump per EC 272153
- WO 40343184; P-32D; Breaker Tripped on Stratup; October 9, 2014
- WR 94107513; G04 EDG Expansion Joint Leaking at 10 DPM; November 7, 2014

#### 1R20 Outage Activities (71111.20)

- 1RMP 9118-2; Containment Building Crane Inspections; Revision 8
- 2RMP 9118-1; Containment Building Crane OSHA Operability Inspections; Revision 11
- AOP Index; Abnormal Operating Procedures; Revision 482
- AR 01995198; Ensure PBNP is in Compliance with NRC Order EA-12-051
- AR 01998150; SLP 1 Violation Main Hook Block Taken Over the Core
- AR 01998338; RMP 9002-1 & SLP-1 Issue
- AR 01998499; Safe Load Path Violations
- AR 01999986; Questionable Result From EMPCENTER Pending Waiver
- ARB 1C04 1A 1-3; Alarm Response Book; Source Range High Flux Level at Shutdown; Revision 6
- BG SEP-1.1; Background Documents; Alternate Core Cooling; Revision 7
- Calculation CALC-WE0005-06; Natural Circulation with one Auxiliary Feedwater Pump; Revision 2
- Calculation N-89-040; Accuracy of Level Indication from LT-447; August 28, 1989
- Calculation PBN-1FJF-14-093; Point Beach Unit 1 Cycle 36 Loading Pattern; Revision 0
- Completed As-Found RCS Leak Test VT-2 sheets; October 4, 2014
- Fatigue Waiver 3931 Dated October 17, 2014
- FSAR Appendix A.3; Control of Heavy Loads; FSAR 2012
- NP 10.3.6; Shutdown Safety Review and Safety Assessment; Revision 45
- NRC IN 95-35; Degraded Ability of Steam Generators to Remove Decay Heat by Natural Circulation
- PBF-9240; Large Overhead Crane Daily Inspections; Revision 5
- RESP 4.1; BOL Physics Tests; October 30, 2014
- RP 1B Unit 1; Recovery from Refueling; Revision 4
- RP 1C; Refueling; Revision 74
- RP Index; Refueling Procedures; Revision 373
- SEP Index; Shutdown Emergency Procedures; Revision 81
- SEP-1.1 Unit 1; Shutdown Emergency Procedure; Alternate Core Cooling; Revision 13
- SLP-1; Safe Load Path and Rigging Manual, Items Lifted by Containment Polar Crane Unit 1; Revision 28
- U1R35 Outage Safety Review; Revision 2
- WO 40254008-01; As-Found Walkdown – General Areas Containment

#### 1R22 Surveillance Testing (71111.22)

- AR 01975294; TS-32 Acceptance Criteria Discrepancies
- AR 01977277; TS-87 (18 MO) Initial Conditions, Prereq., and IV Confusion

- AR 02006096; G02 Expansion Joint Checks
- DBD-16; Emergency Diesel Generator System Design Basis Document; Revision 18
- Drawing 684J741; Sheet 2; Chemical and Volume Control; Revision 73
- Drawing 684J971; Sheet 1A; Waste Disposal System; Revision 73
- Drawing CBDM-201; Sheet 1; ISI Classification Diagram Main & Reheat Steam System; Revision 30
- Drawing CBDM-2215; Sheet 2; ISI Classification Diagram R211-212 Flow Diagram; Revision 8
- FSAR Section 5.2; Containment Isolation System; 2013
- IT 14 G-01; Inservice Test of Fuel Oil Transfer System Pumps and Valves G-01; Revision 2
- IT 14 G-02; Inservice Test of Fuel Oil Transfer System Pumps and Valves G-02; November 13, 2014
- Lab Number V5016019; Certificate of Analysis for T-175A Fuel Oil; November 4, 2014
- Lab Number V5016025; Certificate of Analysis for T-175B Fuel Oil; November 4, 2014
- ORT 3B; Safety Injection Actuation With Loss of Engineered Safeguards AC (Train B) Unit 1, Revision 43
- PBF-3005A; Point Beach Nuclear Plant Quarterly Sampling of Emergency Fuel Oil Tanks; Revision 6
- PMID 60214; TS-80, Sampling of Emergency Fuel Oil Tanks history
- PMID 60425; IT 14, FO Transfer Pumps/Valves for G-01 history
- PMID 60426; IT 14, FO Transfer Pumps/Valves for G-02 history
- TS 80; Sampling of Emergency Fuel Oil Tanks (Quarterly); October 16, 2014
- TS 82; Emergency Diesel Generator G-02 Monthly; Revision 85
- WO 40287459; IT-14, FO Transfer System Pumps/Valves for G-01; October 18, 2014
- WO 40287473; TS-80, Sampling of Emergency Fuel Oil Tanks; October 16, 2014
- WR 94107766; G02/Expansion Joint Torque Checks; November 11, 2014

#### 1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

- 1EPIP 10.2; Core Damage Estimation Unit 1; Revision 1
- 2EPIP 10.2; Core Damage Estimation Unit 2; Revision 2
- EP 5.0; Organizational Control of Emergency; Revisions 57, 58, and 59
- EP 6.0; Emergency Measures; Revision 55, 56, 57, 58, and 60
- EP 7.0; Emergency Facilities and Equipment; Revision 55 and 57
- EP Appendix B; Emergency Classification; Revision 28
- EP Appendix J; Evacuation Time Estimate; Revisions 17 and 18
- EPIP 1.2.1; Emergency Action Level Technical Basis; Revisions 13, 14, and 15
- EPIP 1.2; Emergency Classification; Revision 52
- EPIP 1.3; Dose Assessment and Protective Action Recommendations; Revision 46
- EPIP 2.1; Notifications – ERO, State, and NRC; Revision 47

#### 2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03)

- HPIP 3.52; Airborne Radioactivity Surveys; Revision 38
- HPIP 4.51.1; Maintenance, Storage and Inspection of Respiratory Equipment; Revision 20
- HPIP 4.58; Issuance of Respiratory Equipment; Revision 24
- PC 68; Quarterly Operation and Check of the Baron II High Pressure Breathing Air System; September 19, 2014
- HPIP 11.54; Control Room F-16 Filter Testing; January 23; 2014
- Posi3 USB Test Results; Various Dates
- RP-AA-104-1000-F06; TEDE ALARA Assessment; Various Dates



#### 4OA1 Performance Indicator Verification (71151)

- Control Room Logs for October 2013 and May 2014
- LER 05000266 2013-003-00; Condition Prohibited by Technical Specifications; June 12, 2013
- MSPI Document for Point Beach; Revision 22
- MSPI Performance Sheets; Monthly Unavailability and Verification for Residual Heat Removal and Cooling Water for December 2013 and June 2014
- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7
- Occupational Exposure PI Data; Various Dates
- POR 01958167; NRC Identified Items in Unit 2 Containment; Revision 3
- Radiological Effluent Occurrences PI Data; Various Dates
- Reactor Coolant Specific Activity PI Data; Various Dates
- U1 and U2 Availability and Unreliability Deviation Reports for Residual Heat Removal and Cooling Water for June 2014
- U1 and U2 Margin Reports; June 2014

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

- 1RMP 9071-2; A-06 4160/480 Degraded and Loss of Voltage Monthly Surveillance; Revision 27
- 2RMP 9096-1; Reactor Vessel Head Removal and Installation Using BIACH Tensioning System; Revision 16
- ACE 01983930; D-107 Current Limit Out of Range; October 29, 2014
- ACE 01986509; TS 3.3.3 SR 2 RC Loop Wide Range RTD Calibration
- AOP-1B Unit 1, Reactor Coolant Pump Malfunction; Revision 22
- AR 01983930; D-107 Current Limit Out of Range
- AR 01985239; 2TI-451A RC Cold Leg Temperature Indication Drifting on ASIP Panel
- AR 01986509; TS 3.3.3 SR 2 RC Loop Wide Range RTD Calibration
- AR 01986585; When Switch Placed in Local. Local Indications is Incorrect
- AR 01986860; RESP 3.1 Part 2 – Primary System Tests Mode 4
- AR 01988113; Potential Area for Improvement Derived From Fleet OE
- AR 02000680; RP 1B Vessel Flange Leakoff
- AR 02000922; Incore Flux Mapping Seal Table Degraded Condition
- AR 02001729; R-1: CET Transsition/Head Area Cable Connections
- AR 02002346; Pressure Standard ICTIS-1033 Found in Unacceptable Condition
- AR 02002770; Unit 1 Component Cooling WaterCCW Issues Discovered
- AR 02002889; Relay With High Resistance
- AR 02002912; EDG Exhaust Drains
- AR 02004108; Received an Unexpected RX Vessel Flange Leak Off Temp Alarm
- AR 02004861; G-03/04 Exhaust Stack Impacts from Max Precipitation Event
- AR 02006038; G-03/G-04 Exhaust Drain Lines Inadequate
- AR 02006544; SW Pipe Support JB-2-S589/HB-19-S589 is Overstressed
- AR 02008569; RMP 9359-6A – D-105 Station Battery, D-107 Battery Charger M
- AR 02008835; Sump 'A' Drained 14 Times on U-1 Vs Twice on U-2 Since Nov 1
- AR 02009076; NRC IN 2014-12: Crane & Heavy Lift Issues Identified by NRC
- AR 02009094; NRC IN 2014-14: Potential Safety Enhancements to SFP Storage
- AR 02010267; Material Leakage Onto Containment Penetration 1Q-26
- AR 02013145; Water Level in Manholes 19 & 4
- AR 02013925; Completed Past Operability Review Lacks Rigor
- Control Room Logs from November 10, 2014 to November 11, 2014

- EQCK-WEST-015; Checklist for Environmental Qualification Assessment of Westinghouse Incore Thermocouple Connectors and MI Cables; Revision 1
- POD 01986509; TS 3.3.3 SR 2 RC Loop Wide Range RTD Calibration
- RCE 01985239; Unit 2 RCS Cold Leg Temperature Indicators 2TI-451A & 451C Readings Drifted Low; October 7, 2014
- RESP 3.1 Part 2; Primary System Tests Mode 4; Revision 3
- RMP 9312; Removal and Installation of Reactor Vessel Head CETNA Assemblies; Revision 20
- RP 1B Unit 1; Recovery from Refueling; Revision 4

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153)

- AR 02010593; 1MS-2055 Did Not Indicate Open During Unit 1 Trip
- AR 02010594; 1MS-2054 Did Not Indicate Open During Unit 1 Trip
- AR 02010595; Unit 1 MFPS Were Secured Post Unit 1 Rx Trip Response
- BG AOP-2B; Feedwater System Malfunction Background Document; Revision 14
- Control Room Logs for December 2, 2014
- Copy of AOP 17A Unit 1 completed December 2, 2014; Rapid Power Reduction; Revision 19
- Copy of AOP-2B Unit 1 completed December 2, 2014; Feedwater System Malfunction; Revision 17
- Copy of EOP-0.1 Unit 1 completed December 2, 2014; Reactor Trip Response; Revision 42
- Copy of EOP-1 Unit 1 completed December 2, 2014; Reactor Trip or Safety Injection; Revision 59
- EN# 50649; Manual Reactor Trip Due to Failure of Condensate Pump; December 3, 2014
- IT 07B; P-32B Service Water Pump (Quarterly); October 22, 2014
- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7
- NP 5.3.3; Incident Investigation and Post-Trip Review; Completed December 3, 2014
- PBF-2071; Control Room Post Trip Checklist; Completed December 2, 2014
- Sequence of Events Report; December 2, 2014
- WO 40103521; P-32B Replace Pump per EC 272153
- Written Statements from the operating crew for swing shift; December 2, 2014

## LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access Management System
AFW	Auxiliary Feedwater System
ALARA	As-Low-As-Is-Reasonably-Achievable
AR	Action Request
ASME	American Society of Mechanical Engineers
BACC	Boric Acid Corrosion Control
CAP	Corrective Action Program
CCW	Component Cooling Water
CFR	Code of Federal Regulations
EDG	Emergency Diesel Generator
FSAR	Final Safety Analysis Report
HELB	High Energy Line Break
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report
ISI	Inservice Inspection
LOOP	Loss of Offsite Power
MSPI	Mitigating Systems Performance Index
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OSP	Outage Safety Plan
PARS	Publicity Available Records System
PBNP	Point Beach Nuclear Plant
PI	Performance Indicator
PMT	Post-Maintenance Testing
POD	Prompt Operability Determination
RCS	Reactor Coolant System
RFO	Refueling Outage
RHR	Residual Heat Removal
RTD	Resistance Temperature Detector
SDP	Significance Determination Process
SG	Steam Generator
SR	Surveillance Requirement
SSIE	Support System Initiating Event
SSC	Structures Systems Component
SW	Service Water
TDAFWP	Turbine-Driven Auxiliary Feedwater Pump
TS	Technical Specification
WO	Work Order
WR	Work Request

E. McCartney

-2-

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Sincerely,

**/RA/**

Jamnes Cameron, Chief  
Branch 4  
Division of Reactor Projects

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