

UNITED STATES NUCLEAR REGULATORY COMMISSION

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

May 3, 2016

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 05000266/2016001; 05000301/2016001

Dear Mr. McCartney:

On March 31, 2016, 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 April 1, 2016, with you and other members of your staff.

Based on the results of this inspection, one self-revealed finding of very low safety significance was identified. This finding did not involve a violation of NRC requirements.

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

In addition, if you disagree with the cross-cutting aspect assigned to the 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.

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

-2-

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 05000266/2016001; 05000301/2016001

cc: Distribution via LISTSERV®

U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket Nos: 50-266; 50-301

License Nos: DPR-24; DPR-27

Report No: 05000266/2016001; 05000301/2016001

Licensee: NextEra Energy Point Beach, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: Two Rivers, WI

Dates: January 1, 2016, through March 31, 2016

Inspectors: D. Oliver, Senior Resident Inspector

K. Barclay, Resident Inspector J. Draper, Resident Inspector

M. Garza, Emergency Preparedness Inspector

J. Rutkowski, Project Engineer V. Myers, Senior Health Physicist T. Bilik, Senior Reactor Inspector L. Alvarado, Inspector-in-Training

Approved by: J. Cameron, Chief

Branch 4

Division of Reactor Projects

TABLE OF CONTENTS

SUMM	IARY		2
REPOI	RT DETA	AILS	3
Sum	mary of	Plant Status	3
1. R	REACTOR SAFETY		
1	1R01	Adverse Weather Protection (71111.01)	
1	1R04	Equipment Alignment (71111.04)	4
	1R05	Fire Protection (71111.05)	5
	1R08	Inservice Inspection Activities (71111.08P)	6
	IR11	Licensed Operator Requalification Program (71111.11)	9
	IR12	Maintenance Effectiveness (71111.12)	
	IR13	Maintenance Risk Assessments and Emergent Work Control (71111.13)	
	IR15	Operability Determinations and Functional Assessments (71111.15)	
	IR18	Plant Modifications (71111.18)	
	IR19	Post-Maintenance Testing (71111.19)	
	1R20	Outage Activities (71111.20)	
	1R22	Surveillance Testing (71111.22)	
	IEP5	Maintenance of Emergency Preparedness (71114.05)	
· I	IEP6	Drill Evaluation (71114.06)	18
2. R	ADIATIO	N SAFETY	
2	2RS1	Radiological Hazard Assessment and Exposure Controls (71124.01)	19
2	2RS2	Occupational As-Low-As-Reasonably-Achievable Planning and Controls (71124.02)	21
2	2RS3	In-Plant Airborne Radioactivity Control and Mitigation (71124.03)	22
2	2RS4	Occupational Dose Assessment (71124.04)	
4 O	THER A	CTIVITES	23
	10A1	Performance Indicator Verification (71151)	
	10A2	Identification and Resolution of Problems (71152)	
	10A3	Follow-Up of Events and Notices of Enforcement Discretion (71153)	
	10A6	Management Meetings	
SUPPL	LEMENT	AL INFORMATION	1
Key	Points of	Contact	1
List	of Items	Opened, Closed, and Discussed	2
		nents Reviewed	
List of	of Acrony	/ms Used	19

SUMMARY

Inspection Report 05000266/2016001; 05000301/2016001; 01/01/2016 – 03/31/2016; Point Beach Nuclear Plant, Units 1 & 2; Identification and Resolution of Problems.

This report covers a 3-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors. One Green finding was self-revealed. This finding did not involve any violations of the U.S. Nuclear Regulatory Commission (NRC) requirements. The significance of inspection findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," dated April 29, 2015. Cross-cutting aspects are determined using IMC 0310, "Aspects Within the Cross-Cutting Areas," dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated February 4, 2015. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," dated February 2014.

Cornerstone: Initiating Events

<u>Green</u>. A finding of very low safety significance was self-revealed for the licensee's failure to follow electrical safety procedures when hanging danger tags on electrical components with exposed conductors. Specifically, danger tags were attached directly to the exposed energized portion of switchgear test switches, which exposed employees to an electrical hazard and contributed to the lockout of the 2X-01 main transformers and the subsequent Unit 2 plant transient. The licensee's corrective actions included a change to tagging procedures to include specific direction for tagging knife switches. The proposed changes included a prohibition for hanging tags on metal parts of the switches, and installing robust operational barriers using tags plus devices when danger tags are to be utilized.

The inspectors determined that the finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone. and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to use insulated tools on exposed electrical equipment greater than 50 volts presented an electrical injury hazard and actually resulted in a plant transient for Unit 2, which included lifting of a pressurizer power-operated relief valve (PORV), loss of forced reactor coolant system (RCS) flow. and actuation of the auxiliary feedwater (AFW) system. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, because Unit 2 was in mode 3 at the time of the event. Additionally, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012 applied. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Transient Initiators screening question. This finding has a cross-cutting aspect of Resources (H.1), in the area of Human Performance for failing to ensure that personnel, equipment procedures and other resources were available and adequate to support nuclear safety. Specifically, the licensee failed to ensure that employees had all necessary tools, direction, and supervision to support successful work performance. (Section 4OA2.3)

REPORT DETAILS

Summary of Plant Status

Unit 1

The unit operated at or near full power until March 2, 2016, when the unit began coastdown in preparation for the planned refueling outage (RFO) U1R36. The unit was shut down on March 11, 2016, for U1R36 and remained shutdown 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 External Flooding

a. <u>Inspection Scope</u>

The inspectors evaluated the design, material condition, and procedures for coping with the design basis probable maximum precipitation and the facility features for handling that precipitation to prevent flooding or building failures. The evaluation included a review to check for deviations from the descriptions provided in the Final Safety Analysis Report (FSAR) for features intended to mitigate the potential for flooding from external factors. As part of this evaluation, the inspectors checked for obstructions that could prevent draining, checked that the roofs did not contain obvious loose items that could clog drains in the event of heavy precipitation, and determined that features required to mitigate the impacts from precipitation were in place and operable. Additionally, the inspectors performed a walkdown of the protected area to identify any modification to the site which would inhibit site drainage during a probable maximum precipitation event or allow water ingress past a barrier. The inspectors also walked down below-grade areas potentially susceptible to flooding from that contained multiple train or multiple function risk-significant cables. The inspectors also reviewed the abnormal operating procedure (AOP) for mitigating the design basis flood to ensure it could be implemented as written. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one external flooding sample as defined in Inspection Procedure (IP) 71111.01–05.

b. Findings

.2 Readiness for Impending Adverse Weather Condition—Heavy Snowfall Conditions with High Winds

a. Inspection Scope

On March 22, 2016, a winter weather advisory was issued for expected heavy snow with high gusting winds. The inspectors observed the licensee's preparations and planning for the significant winter weather potential. The inspectors reviewed licensee procedures and discussed potential compensatory measures with operations and security personnel. The inspectors focused on plant management's actions for implementing the station's procedures for ensuring adequate personnel for safe plant operation and emergency response would be available. The inspectors conducted a site walkdown including walkdowns of various plant structures and systems to check for maintenance or other apparent deficiencies that could affect system operations during the predicted significant weather. The inspectors also reviewed corrective action program (CAP) items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their CAP in accordance with station corrective action procedures. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one readiness for impending adverse weather condition sample as defined in IP 71111.01–05.

b. Findings

No findings were identified.

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:

- 2P-53 motor-driven auxiliary feedwater (AFW) pump after testing;
- G-04 emergency diesel generator (EDG) with G-02 EDG out-of-service (OOS) for maintenance; and
- service water system following IT-70D/E; P-32D/E service water pump quarterly surveillance.

The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, FSAR, Technical Specification (TS) requirements, outstanding work orders (WOs), condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of

the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

No findings were identified.

1R05 <u>Fire Protection</u> (71111.05)

.1 Routine Resident Inspector Tours (71111.05Q)

a. <u>Inspection Scope</u>

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 305: 4160V vital switchgear room;
- Fire Zone 308: diesel room G01;
- Fire Zone 309: diesel room G02; and
- Fire Zone 310: air compressor room.

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

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

b. Findings

No findings were identified.

1R08 Inservice Inspection Activities (71111.08P)

From March 14, 2016, through March 25, 2016, the inspectors conducted a review of the implementation of the licensee's Inservice Inspection (ISI) Program for monitoring degradation of the reactor coolant system, steam generator tubes, emergency feedwater systems, risk-significant piping and components, and containment systems.

The inspections described in Sections 1R08.1, 1R08.2, 1R08.3, 1R08.4 and 1R08.5 below constituted one inservice inspection sample as defined in IP 71111.08.

.1 Piping Systems ISI

a. Inspection Scope

The inspectors either observed or reviewed the following non-destructive examinations mandated by the American Society for 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 U.S. Nuclear Regulatory Commission (NRC)-approved alternative requirement:

- Ultrasonic (UT) examination of feedwater pipe-to-expander weld FW-16-FW-1002-17;
- UT of 3" tee-to-pipe weld, RC-03-PSF-1002-03;
- UT of 3" pipe-to-elbow weld, RC-03-PSF-1002-04;
- UT of 3" elbow-to-pipe weld, RC-03-PSF-1002-05;
- UT of upper head to upper shell weld, PZR-Cweld-1;
- UT of upper shell vertical weld (AZ 255), PZR-Vweld-1;
- Dye Penetrant (PT) examination of coupling-to-pipe weld, CH-2501R-6, weld W5;
- PT of pipe-to-elbow welds, CH-2501R-6, welds W3, 4;
- Magnetic particle (MT) examination of feedwater nozzle-to-shell weld, SG-B-6;
- MT of shell-to-main steam nozzle weld, SG-B-7;
- Visual examination (VT-3) of reactor coolant spring hanger RC-2501R-2-RC14;
- VT-1 of reactor pressure vessel (RPV) closure head washers, 33-48; and
- VT-1 of RPV closure head nuts, 33-48.

The inspectors reviewed the following examinations completed during the previous outage with relevant/recordable conditions/indications accepted for continued service to determine if acceptance was in accordance with the ASME Code, Section XI or an NRC-approved alternative:

- VT-1, welded attachment service water (SW) supply header on 46 FT U1 CTMT, (WO 40254351);
- VT-3, U1 spring hanger on RCS surge line, (IDR 2014-039);
- VT-3, spring hanger, (IDR 2014-041);
- MT/PT, piping near 1FE-4037; (WO 40419947); and
- PT, turbine-driven auxiliary feedwater (TDAFW) pump (spare), (IDR 2015-019).

The inspectors either observed or reviewed the following pressure boundary welds completed for risk-significant systems since the beginning of the last refueling outage to determine if the licensee applied the preservice non-destructive examinations and acceptance criteria required by the Construction Code and ASME Code, Section XI. Additionally, the inspectors reviewed the welding procedure specification and supporting weld procedure qualification records to determine if the weld procedures were qualified in accordance with the requirements of Construction Code and the ASME Code, Section IX:

- WO 40223237; TDAFW cross-tie, tie-in AFW piping;
- WO 40098756; IP-029-T replace turbines, governors, and correct issue;
- WO 40311384; 1LT-00972/Install EC 281572 to increase sensing line size; and
- WO 40454445; 1CV-200B, 2" socket welds 3-5.

b. Findings

No findings were identified.

.2 Reactor Pressure Vessel Upper Head Penetration Inspection Activities

a. <u>Inspection Scope</u>

No exams were required this outage. Therefore, no NRC review was completed for this inspection procedure attribute.

The licensee did not perform any welded repairs to vessel head penetrations since the beginning of the preceding outage. Therefore, no NRC review was completed for this inspection procedure attribute.

b. Findings

No findings were identified.

.3 Boric Acid Corrosion Control

a. <u>Inspection Scope</u>

The inspectors performed an independent walkdown of the reactor coolant system and related lines in the containment, which had received a recent licensee boric acid walkdown and verified whether the licensee's boric acid corrosion control visual examinations emphasized locations where boric acid leaks can cause degradation of safety-significant components.

The inspectors reviewed the following licensee evaluations of reactor coolant system components with boric acid deposits to determine if degraded components were documented in the CAP. The inspectors also evaluated corrective actions for any degraded reactor coolant system components to determine if they met the ASME Section XI Code:

- 1HX-011B, Boric Acid at Bolted Connection;
- 1RH-720, Boric Acid at Bolted Connection;
- 1FE-661, Boric Acid at Bolted Connection;

- 1P-14A/B, Boric Acid at Bolted Connection; and
- 1SC-966B, Boric Acid at Bolted Connection.

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

- AR 01995570; Active Boric Acid Leakage on 1SI-888B;
- AR 01995709; Valves in IT-540C with Boric Acid Build-Up on Packing; and
- AR 02015711; Walkdown BA Indication.

b. <u>Findings</u>

No findings were identified.

.4 <u>Steam Generator Tube Inspection Activities</u>

a. Inspection Scope

The NRC inspectors observed acquisition of eddy current (ET) data, interviewed ET data analysts, and reviewed documentation related to the steam generator (SG) ISI program to determine if:

- In-situ SG tube pressure testing screening criteria used were consistent with those identified in the Electric Power Research Institute (EPRI) TR-1025132, Steam Generator In-Situ Pressure Test Guidelines and that these criteria were properly applied to screen degraded SG tubes for in-situ pressure testing;
- the numbers and sizes of SG tube flaws/degradation identified was bound by the licensee's previous outage Operational Assessment predictions;
- the SG tube ET examination scope and expansion criteria were sufficient to meet the TS, and the EPRI 1013706, Pressurized Water Reactor Steam Generator Examination Guidelines, Revision 7;
- the SG tube ET examination scope included potential areas of tube degradation identified in prior outage SG tube inspections and/or as identified in NRC generic industry operating experience applicable to these SG tubes;
- the licensee identified new tube degradation mechanisms and implemented adequate extent of condition inspection scope and repairs for the new tube degradation mechanism;
- the licensee implemented repair methods which were consistent with the repair processes allowed in the plant TS requirements and to determine if qualified depth sizing methods were applied to degraded tubes accepted for continued service:
- the licensee implemented an inappropriate "plug on detection" tube repair threshold (e.g., no attempt at sizing of flaws to confirm tube integrity);
- the licensee primary-to-secondary leakage (e.g., SG tube leakage) was below 3 gallons-per-day or the detection threshold during the previous operating cycle:
- the ET probes and equipment configurations used to acquire data from the SG tubes were qualified to detect the known/expected types of SG tube degradation in accordance with Appendix H, Performance Demonstration for

Eddy Current Examination of EPRI 1013706, Pressurized Water Reactor Steam Generator Examination Guidelines, Revision 7; and

 the licensee performed secondary side SG inspections for location and removal of foreign materials.

The licensee did not perform in-situ pressure testing of SG tubes. Therefore, no NRC review was completed for this inspection attribute.

b. Findings

No findings were identified.

.5 Identification and Resolution of Problems

a. Inspection Scope

The inspectors performed a review of ISI/SG 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/SG 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 Title 10 of the *Code of Federal Regulations* (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 <u>Licensed Operator Requalification Program</u> (71111.11)

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

a. Inspection Scope

On February 11, 2016, the inspectors observed crew B licensed operators in the plant's simulator during licensed operator requalification training. The inspectors verified that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and that training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

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

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

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

This inspection constituted one quarterly licensed operator requalification program simulator sample as defined in IP 71111.11–05.

b. Findings

No findings were identified.

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

a. Inspection Scope

On March 11, 2016, the inspectors observed the Unit 1 reactor shutdown for RFO U1R36. 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;
- correct use and implementation of 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 performance in these areas was compared to pre-established operator action expectations, procedural compliance and task completion requirements. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

1R12 Maintenance Effectiveness (71111.12)

.1 Routine Quarterly Evaluations

a. Inspection Scope

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

- chemical and volume control system (CVCS) using a problem-oriented approach;
 and
- review of the licensee's 10 CFR 50.65(a)(3) periodic evaluation.

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

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

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

This inspection constituted two quarterly maintenance effectiveness samples 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:

- January 19, 2016: 1P-14A containment spray pump, switchyard line Q-303,
 P-23B service water pump, and 1DY-03 white channel instrument bus inverter OOS;
- March 1, 2016: D-108 battery charger, 1P-2C charging pump, and 1P-10B residual heat removal (RHR) pump OOS with switchyard maintenance in progress;
- March 14, 2016: Unit 1 drain down with switchyard maintenance and abnormal electrical alignments; and
- March 16, 2016: Unit 1 in lowered inventory with maintenance in-progress.

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 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 four 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:

- POD 02103921: 1DY-03 overloaded alarms; and
- POD 02112145: W-46A Ventilation Support Contacting SW Piping.

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 two samples as defined in IP 71111.15–05.

b. Findings

No findings were identified.

.2 <u>Annual Sample: Review of Operator Workarounds</u>

a. Inspection Scope

The inspectors evaluated the licensee's implementation of their process used to identify, document, track, and resolve operational challenges. Inspection activities included, but were not limited to, a review of the cumulative effects of operator workarounds (OWAs) on system availability and the potential for improper operation of the system, for potential impacts on multiple systems, and on the ability of operators to respond to plant transients or accidents.

The inspectors performed a review of the cumulative effects of OWAs. The documents listed in the Attachment were reviewed to accomplish the objectives of the inspection procedure. The inspectors reviewed both current and historical operational challenge records to determine whether the licensee was identifying operator challenges at an appropriate threshold, had entered them into their CAP and proposed or implemented appropriate and timely corrective actions which addressed each issue. Reviews were conducted to determine if any operator challenge could increase the possibility of an Initiating Event, if the challenge was contrary to training, required a change from long-standing operational practices, or created the potential for inappropriate compensatory actions. Additionally, all temporary modifications were reviewed to identify any potential effect on the functionality of Mitigating Systems, impaired access to equipment, or required equipment uses for which the equipment was not designed. Daily plant and equipment status logs, degraded instrument logs, and operator aids or tools being used to compensate for material deficiencies were also assessed to identify any potential sources of unidentified operator workarounds.

This review constituted one operator workaround annual inspection sample as defined in IP 7111502.

b. Findings

1R18 Plant Modifications (71111.18)

.1 Plant Modifications

a. Inspection Scope

The inspectors reviewed the following modification(s):

- EC 272841: Unit 1 Charging Pump Low Net Positive Suction Head Trip; and
- EC 279310: NFPA 805 Modification For Conduit D04-7 Fire Wrap.

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. 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. <u>Inspection Scope</u>

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

- 1P-2A charging pump testing after maintenance;
- 2P-10A RHR pump testing after oil change and circuit breaker replacement;
- degraded voltage relay 2-274/A05 testing after replacement; and
- WL-1723/1728 unit 1 sump 'A' drain containment isolation valve testing after solenoid replacement.

These activities were selected based upon the structure, system, or component's (SSC'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, and licensee procedures, to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with post-maintenance tests to determine whether the licensee was identifying problems and entering them in the CAP and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

No findings were identified.

1R20 Outage Activities (71111.20)

.1 Refueling Outage Activities

a. <u>Inspection Scope</u>

The inspectors reviewed the Outage Safety Plan (OSP) and contingency plans for the Unit 1 RFO, which began March 12, 2016, 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;
- 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;
- maintenance of secondary containment as required by TS;
- licensee fatigue management, as required by 10 CFR 26, Subpart I;
- refueling activities, including fuel handling and sipping to detect fuel assembly leakage; 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 partial RFO sample as defined in IP 71111.20–05. The remaining portions of RFO inspection will be completed in the second quarter.

b. Findings

No findings were identified.

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

.1 Surveillance Testing

a. <u>Inspection Scope</u>

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:

- Degraded Voltage Surveillance (routine);
- Unit 2 Reactor Protection System Logic Train B Surveillance Test (routine);
- IT 80: Main Steam Valves (Quarterly) Unit 1 (in-service testing); and
- ORT 42: local leak rate testing of RMUW to Unit 1 Containment (isolation valve).

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, American Society of Mechanical Engineers code, and reference values were consistent with the system design basis;

- where applicable, test results not meeting acceptance criteria were addressed with an adequate operability evaluation or the system or component was declared inoperable;
- where applicable for safety-related instrument control surveillance tests, reference setting data were accurately incorporated in the test procedure;
- where applicable, actual conditions encountering high resistance electrical contacts were such that the intended safety function could still be accomplished;
- prior procedure changes had not provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- equipment was returned to a position or status required to support the performance of its safety functions; and
- all problems identified during the testing were appropriately documented and dispositioned in the CAP.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted two routine surveillance testing samples, one in-service test sample, and one containment isolation valve sample as defined in IP 71111.22, Sections-02 and-05.

b. <u>Findings</u>

No findings were identified.

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

.1 <u>Maintenance of Emergency Preparedness</u>

a. Inspection Scope

The inspectors reviewed AR 02098401, "Potentially Missed Event Classification," in order to evaluate the licensee's efforts to identify, evaluate, and resolve an issue identified by the site's Nuclear Oversight group. The inspectors evaluated the licensee's actions and plant indications to determine if conditions warranted an event classification of HA2, "Fire or Explosion Affecting the Operability of Plant Systems Required to Establish or Maintain Safe Shutdown," when the 2P-11B component cooling water pump failed on December 17, 2015. Documents reviewed are listed in the Attachment to this report.

The review of the licensee's evaluation counted as a partial sample. The entire sample of this inspection will be completed by the end of calendar year 2016.

b. Findings

1EP6 Drill Evaluation (71114.06)

.1 Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors evaluated the conduct of a routine licensee emergency drill on February 23, 2016, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the Control Room Simulator, Technical Support Center, and Emergency Operations Facility, to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the licensee drill critique to compare any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the CAP. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the Attachment to this report.

This emergency preparedness drill inspection constituted one sample as defined in IP 71114.06–06.

b. Findings

No findings were identified.

.2 Training Observation

a. Inspection Scope

The inspector observed a simulator training evolution for licensed operators on February 4, 2016, which required emergency plan implementation by a licensee operations crew. This evolution was planned to be evaluated and included in performance indicator data regarding drill and exercise performance. The inspectors observed event classification and notification activities performed by the crew. The inspectors also attended the post-evolution critique for the scenario. The focus of the inspectors' activities was to note any weaknesses and deficiencies in the crew's performance and ensure that the licensee evaluators noted the same issues and entered them into the CAP. As part of the inspection, the inspectors reviewed the scenario package and other documents listed in the Attachment to this report.

This inspection of the licensee's training evolution with emergency preparedness drill aspects constituted one sample as defined in IP 71114.06–06.

b. Findings

2. RADIATION SAFETY

Cornerstones: Public Radiation Safety and Occupational Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

.1 Radiological Hazard Assessment (02.02)

a. <u>Inspection Scope</u>

The inspectors assessed whether changes to the station's radiological profile due to operating protocols, primary chemistry changes, and plant modifications were adequately addressed in the licensee's radiation protection survey program. The inspectors conducted walk-downs of various locations and reviewed surveys to evaluate radiological conditions.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. Findings

No findings were identified.

.2 <u>Instructions to Workers</u> (02.03)

a. Inspection Scope

The inspectors assessed whether workers were adequately informed of radiological hazards present through radiation work permits, alarming dosimeter set points, area postings, and labelling of containers.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. Findings

No findings were identified.

.3 Contamination and Radioactive Material Control (02.04)

a. Inspection Scope

The inspectors determined whether workers and materials were adequately assessed for radioactive contamination before leaving the radiologically controlled area(s). Additionally, the inspectors assessed whether sealed sources were adequately identified, stored, and did not leak.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. Findings

.4 Radiological Hazards Control and Work Coverage (02.05)

a. Inspection Scope

The inspectors observed work in progress and reviewed processes to ensure adequate implementation of:

- Radiological controls;
- Radiation protection job coverage;
- Dosimeter selection and placement;
- Airborne radioactive materials monitoring and controls; and
- Controls for highly activated materials stored in the spent fuel pool.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. Findings

No findings were identified.

.5 <u>High-Radiation Area and Very-High Radiation Area Controls</u> (02.06)

a. <u>Inspection Scope</u>

The inspectors observed the physical controls for high-radiation areas and very-high radiation areas. The inspectors ensured the controls prevented an individual from gaining unauthorized access to very-high radiation areas.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. Findings

No findings were identified.

.6 Radiation Worker Performance and Radiation Protection Technician Proficiency (02.07)

a. <u>Inspection Scope</u>

The inspectors observed radiation workers and radiation protection technicians to assess whether they were aware the radiological conditions in their workplace and whether their performance reflected the radiological hazards that were present.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. <u>Findings</u>

.7 Identification and Resolution of Problems (02.08)

a. Inspection Scope

The inspectors assessed whether problems associated with radiation surveys, radiological controls, and exposure control are being identified by the licensee at an appropriate threshold and are properly addressed for resolution. For selected issues, the inspectors assessed the appropriateness of the corrective actions. Additionally, the inspectors reviewed events that were caused by radiation worker error or radiation protection technician error to assess whether the corrective action approach taken by the licensee was adequate to resolve the reported problems.

These inspection activities constituted one sample as defined in IP 71124.01-05.

b. Findings

No findings were identified.

2RS2 Occupational As-Low-As-Reasonably-Achievable Planning and Controls (71124.02)

.1 <u>Implementation of As-Low-As-Reasonably-Achievable and Radiological Work Controls</u> (02.04)

a. Inspection Scope

The inspectors observed in-plant work to assess whether the planned radiological administrative, operational, and engineering controls were discussed during pre-job briefs and implemented as intended. The inspectors assessed whether methods for tracking work in progress ensured prompt communications and actions to reduce dose. The inspectors reviewed emergent work activities to assess whether this work received an appropriate level of review from station management, as-low-as-reasonably-achievable (ALARA) staff, and the affected work group(s).

These inspection activities constituted one sample as defined in IP 71124.02-05.

b. Findings

No findings were identified.

.2 Radiation Worker Performance (02.05)

a. <u>Inspection Scope</u>

The inspectors observed radiation worker and radiation protection technician performance during work activities being performed in radiation areas, airborne radioactivity areas, or high-radiation areas to assess the ALARA philosophy as applied and whether the skill level displayed was sufficient with respect to the radiological hazards that were present. The inspectors interviewed individuals to assess their knowledge and awareness of planned and/or implemented radiological and ALARA work controls.

These inspection activities constituted one sample as defined in IP 71124.02-05.

b. <u>Findings</u>

No findings were identified.

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

.1 Engineering Controls (02.02)

a. <u>Inspection Scope</u>

The inspectors assessed the licensee's use of ventilation systems as engineering controls to reduce the amount of airborne radioactivity to the extent practicable. The inspectors also assessed whether airborne monitoring protocols included adequate alarm setpoints as well as provisions for alpha monitoring.

These inspection activities constituted one sample as defined in IP 71124.03-05.

b. Findings

No findings were identified.

2RS4 Occupational Dose Assessment (71124.04)

.1 Source Term Characterization (02.02)

a. <u>Inspection Scope</u>

The inspectors assessed whether the radiation types and energies being monitored have been adequately characterized and have developed scaling factors to quantify difficult to detect radionuclides, include alpha emitters for internal dose assessments.

These inspection activities constituted one sample as defined in IP 71124.04-05.

b. Findings

No findings were identified.

.2 External Dosimetry (02.03)

a. <u>Inspection Scope</u>

The inspectors reviewed the parameters used to routinely monitor individuals, including setup, storage, and use of passive and active dosimeters to assess the ability to adequately determine the dose received by workers.

These inspection activities constituted one sample as defined in IP 71124.04-05.

b. Findings

4. OTHER ACTIVITES

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

4OA1 Performance Indicator Verification (71151)

.1 Unplanned Scrams per 7000 Critical Hours

a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Scrams per 7000 Critical Hours performance indicator (PI) (IE01) for Point Beach Nuclear Plant, Units 1 and 2, for the first quarter through the fourth quarter of 2015. 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, was used. The inspectors reviewed the licensee's operator narrative logs, issue reports, event reports, and NRC integrated inspection reports (IRs) during this time period to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP 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 unplanned scrams per 7000 critical hours samples as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Unplanned Scrams with Complications

a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Scrams with Complications PI (IE04) for Point Beach Nuclear Plant, Units 1 and 2, for the first quarter through the fourth quarter of 2015. 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, event reports, and NRC Integrated IRs during this time period to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP 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 unplanned scrams with complications samples as defined in IP 71151–05.

b. Findings

.3 <u>Unplanned Transients per 7000 Critical Hours</u>

a. <u>Inspection Scope</u>

The inspectors sampled licensee submittals for the Unplanned Transients per 7000 Critical Hours PI (IE03) for Point Beach Nuclear Plant, Units 1 and 2, for the first quarter through the fourth quarter of 2015. 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, CAP reports, maintenance rule records, event reports, and NRC Integrated IRs during this time period 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 unplanned transients per 7000 critical hours samples as defined in IP 71151–05.

b. Findings

No findings were identified.

4OA2 <u>Identification and Resolution of Problems</u> (71152)

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

a. Inspection Scope

As part of the various baseline inspection procedures 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

.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 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 Annual Follow-up of Selected Issues: 2X-01 Main Transformer Lockout in Mode 3

a. Inspection Scope

During a review of Licensee Event Report (LER) 05000301/2015-005-00/01; Main Transformer Lockout and Associated Loss of Busses Results in System Actuation, the inspectors determined that a detailed review of the corrective actions resulting from the licensee's root cause evaluation was necessary. A description of this event, which was characterized by the licensee as a significant condition adverse to quality, is documented in section 4OA3 of this report.

The inspectors verified the following attributes during their review of the licensee's corrective actions for the event:

- complete accurate and timely documentation of the identified problem in the CAP;
- evaluation and time disposition of operability and reportability issues:
- consideration of the extent of condition, generic implications, common cause, and previous occurrences;
- classification and prioritization of the resolution of the problem, commensurate with safety significance;
- identification of root and contributing causes of the problem;
- identification of corrective actions that are appropriately focused to address the root and contributing causes;
- actions taken in the correction of the identified problems;
- identification of negative or worsening trends associated with equipment performance either directly or indirectly caused by the event; and
- operating experience was adequately evaluated for applicably, and lessons learned were to be communicated to the appropriate organizations for implementation.

b. Observations:

The inspector's review of the licensee's root cause evaluation (RCE), corrective actions, control room logs, and transient assessment documentation revealed that the licensee identified a single root cause and two main contributing causes. The licensee

determined that the transformer lockout occurred during the task of clearing danger tags for the Unit 2 main transformer, 2X-01. During this activity, the licensee induced a short-circuit between two adjacent open knife switches when a conductive cutting tool was used to cut tie wraps that affixed danger tags directly to the knife portion of the switches. This caused the 2X-01 transformer to trip and lockout, resulting in the loss of power to non-vital 4kV busses and a subsequent plant transient.

(1) Complete, accurate, and timely documentation:

During the course of this review, the inspectors determined that the licensee did not implement procedures for equipment quarantine and for the plant transient review immediately following the event. As a result, the inspectors observed that useful relevant information was not preserved that was pertinent to the RCE, but ultimately did not affect the corrective actions resulting from the RCE. Both the RCE and the licensee's LER describe the event in a manner that lead the reader to conclude that the operating crew encountered little or no difficulty in the course of the event. While the inspectors acknowledge that the operating crew was able to effectively work as a team and utilize their training and knowledge in an uncertain condition, the direction provided by the licensee's procedure, AOP-18; Electrical System Malfunction, focused solely on the restoration of the lost electrical busses and provided no direction for the effects of the lost busses. Consequently, prioritization and specific information was not provided in a readily evident way to give direction for securing the AFW system, establishing and monitoring natural circulation RCS decay heat removal, or for managing RCS inventory. Concerns with the procedural direction that were raised by the operating crew were in the form of a routine work task after the fact and independent of the root cause analysis team, rather than as an Action Request (AR), and not through the established programmatic transient review process. This prevented the deficiencies from being brought to the light of the licensee's management until concerns were raised by the inspectors.

Root cause evaluation, extent considerations, and resulting actions: The licensee concluded that the root cause of the event was that Revision 7 of procedure 2-SOP-19KV- 001 removed the use of detailed temporary information tags for configuration control of knife switches for the 2X-01 transformer lockout circuit in favor of danger tags. The licensee determined that the use of danger tags was inappropriate because personnel protection was not factor in the application of these particular tags. When using danger tags, the licensee's procedure OP-AA-101-1000; Clearance and Tagging, required operators to apply additional measures called "tags plus," which provides an additional barrier of personal protection. The licensee's RCE stated that the task of removing the combination of danger tags and tags plus measures created an unnecessary and difficult situation that ultimately led to the event. As a result, one of the corrective actions to prevent recurrence (CAPR) to address the root cause was to specify the use of caution tags when required by 2-SOP-19KV-001, as well as for 1-SOP-19KV-001. Inspectors determined that the licensee's decision to use caution tags rather than returning to the use of temporary information tags (which could be taped to panels near the knife switches) was due to temporary information tags being considered a weak configuration control barrier. Inspectors performed a detailed review of 2-SOP-19KV-001, and determined that the type of tags to be hung on the knife switches was actually not specified. The use of danger tags and caution tags are controlled under OP-AA-101-1000, which does not differentiate between the types of tags with respect to how they are physically hung. The inspectors confirmed, based

upon interviews of operators qualified to apply these tags, that regardless of tag type prior to this event, tags would have been attached directly to the knife portion of the switch, and would have applied additional measures in the form of tags plus regardless of the tag type.

Additionally, the inspectors determined that the knife switches described above were located on various electrical switchgear components throughout the plant and on the back of the main control boards. Prior to this event, OP-AA-101-1000, the licensee's procedure for hanging information, caution, and danger tags, failed to provide any specific direction on how to tags and apply the tags plus methodology to these knife switches. The inspectors concluded that failure to provide this direction did not meet nuclear and electrical utility industry standards and contributed to the finding documented below as well as unknowingly exposed employees to the potential for injury from electrical hazards.

The licensee determined that the lack of guidance in OP-AA-101-1000, a NextEra fleet procedure, was a contributing cause for the event. As a result, the licensee created an action to change the fleet procedure to include specific direction for this activity. The inspectors concluded that the CAPR created to address the root cause by itself would not have prevented recurrence because it created a reliance on a procedure determined by the licensee as flawed and was determined to be a contributing cause of the event. Inspectors reviewed the licensee's root cause analysis procedure PI-AA-100-1005, and determined that the lack of guidance contained in OP-AA-101-1000 should have been considered a second root cause or that a second CAPR was needed to address tagging procedures.

The licensee's RCE stressed that the brief for the final danger tag removal was not adequate because the site specific tagging pre-job brief was not utilized, and among other things, electrical hazards were not discussed. The inspectors noted that the RCE did not discuss the pre-job brief and supervision for the initial tag hang. The inspectors determined that, based on the evidence provided in the RCE, this failed barrier was more pertinent because it was instrumental in setting up the conditions for the event.

(2) Operating experience, lessons learned, and industry practices:

The inspector's research into Point Beach's internal operating experience also revealed that tagging issues in the 2009 timeframe were partially attributed to a multitude of procedures that were in existence to accomplish tagging components. At some point since then, a decision was made to create a single fleet standard procedure under OP-AA-101-1000 that was applicable to all sites. Despite several revisions since its inception, OP-AA-101-1000 contains a collection of site specific attachments with general tagging information that is not unique and could be part of the main procedure. For example, the Point Beach site specific attachment has specific direction for hanging tags on panel, field, and instrument fuses. Inspectors confirmed that Point Beach's physical design does not differ from the other plants in the NextEra fleet with respect to much of the site specific information. Similarly, the inspectors confirmed that other sites in the licensee's fleet have knife switches in a similar configuration as Point Beach, but no specific direction on how to hang tags on knife switches was able to be historically found.

The inspectors determined from reviewing both industry and site-specific operating experience that, generally, test switches are not considered an appropriate energy isolation boundary to establish a zone of protection for danger tagging. Accordingly, inspectors were unable to find substantial industry guidance for danger tagging these components. The inspectors concluded from this review that the lack of direction contained in OP-AA-101-1000 regarding knife switches was likely due to the aforementioned considerations.

Inspectors also noted that OP-AA-101-1000, with limited specific exceptions, failed to address the inherent risks involved with physical tag hang and clear activities, including reference to electrical safety precautions.

As a final observation, the inspectors communicated to the licensee's management their concerns with the practices and culture that have created an assumption of safety among workers, rather than challenging assumptions.

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

c. Findings

(1) Failure to Follow Electrical Safety Procedures Results in Plant Transient

<u>Introduction</u>: A finding of very low safety significance (Green) was self-revealed for the licensee's failure to follow electrical safety procedures when hanging danger tags on electrical components with exposed conductors. Specifically, danger tags were attached directly to the exposed energized portion of switchgear test switches, which exposed employees to an electrical hazard and contributed to the lockout of the 2X-01 main transformers and the subsequent Unit 2 plant transient.

Description: On October 3, 2015, the licensee hung danger tags on switchgear knife switches on the back of the main control boards for routine outage work on the 2X-01 main transformer. These knife switches isolated 125 VDC from a multifunction relay, which included 2X-01 main transformer trip and lockout logic. This work was sequenced using the licensee's procedure 2-SOP-19KV-001, and the danger tags were attached directly to the exposed metal "knife" portion of the switch, using plastic cable ties. The licensee's procedure, OP-AA-101-1000; Clearance and Tagging, required the use of tags plus when danger tagging components. Tags plus was defined by the licensee as "the practice that provides for the additional means to be considered as part of the demonstration of full employee protection and includes the implementation of additional safety measures such as the removal of an isolating circuit element, blocking of a controlling switch, opening of an extra disconnecting device, or the removal of a valve handle to reduce the likelihood of an inadvertent energizing." The use of cable ties was a typical practice for operators applying tags plus in conjunction with danger tagging components. In the case of the knife switches above, an additional cable tie was attached to each knife switch as a tags plus device, independent of the cable tie already affixing the danger tag. This created the need for a second action besides removing the tag itself to allow the knife switch to be closed.

According to the licensee's RCE 02086949, licensee personnel applied the danger tags and tags plus cable ties without knowledge of the operating voltages present (125 VDC), and under the assumption that the energy source, once the switch was open, was only on the fixed portion of the switch, and not on the metal knife switch.

On October 20, 2015, the licensee performed a temporary lift of the danger tags on the knife switches without incident, and on October 24, 2015, danger tags were re-hung with tags plus as in the same configuration described for the October 3, 2015, hang activity.

On October 29, 2015, at approximately 2:48 AM, the licensee conducted a pre-job brief for the work to be performed for 2-SOP-19KV-001, which included the clearing of the danger tags from the 2X-01 knife switches. According to the licensee's RCE, this pre-job brief did not include discussion of electrical safety requirements, location of energy sources and did not include a tagging specific pre-job discussion, required by OP-AA-101-1000. As described by the licensee's RCE, the licensee's personnel were successful in removing the first danger tag and additional cable tie from one knife switch using a pair of metal side cutters. The licensee described that this removal was difficult due to positioning and tightness of the cable ties. Because of the difficulty encountered during the removal of the first tag, the licensee decided to remove the danger tag from the second knife switch, while leaving the first knife switch open, believing that an equipment actuation would not be possible with one switch open. During an attempt to cut the cable tie from the second knife switch, the metal side cutters contacted both open energized knife switches and created a short, causing the 2X-01 trip and lockout circuitry to actuate.

The inspectors determined that the licensee's procedure FP-MA-ES-01; Electrical Safety, applied to work involving voltages of 50 volts or greater, and prescribed specific requirements for work on exposed and energized equipment including the level of supervision required, qualifications of personnel, requirements for the use of insulated tools, personal protective equipment and other pertinent and specific information that was applicable to the above described work. The inspectors concluded that the appropriate electrical safety precautions and instructions described in FP-MA-ES-01, which are standard for the industry where electrical hazards are present and are in place for employee protection, were not utilized.

Analysis: The inspectors determined that the licensee's failure to take appropriate electrical safety precautions when hanging danger tags on exposed energized equipment was contrary to the licensee's procedure FP-MA-ES-01; Electrical Safety, and was a performance deficiency. The finding was determined to be more than minor because it was associated with the human performance attribute of the initiating events cornerstone, and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to use insulated tools on exposed electrical equipment greater than 50 volts presented an electrical injury hazard and actually resulted in a plant transient for Unit 2 that included lifting of a pressurizer PORV, loss of forced RCS flow, and actuation of the AFW system.

The inspectors determined the finding could be evaluated using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, because Unit 2 was in mode 3 at the time of the event. Additionally, Appendix A, "The Significance Determination Process for Findings

At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012, was applicable. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the transient initiators screening question.

This finding has a cross-cutting aspect of Resources (H.1), in the area of Human Performance for failing to ensure that personnel, equipment procedures and other resources are available and adequate to support nuclear safety. Specifically, the licensee failed ensure that employees had all necessary tools, direction, and supervision to support successful work performance.

<u>Enforcement</u>: This finding does not involve enforcement action because no violation of a regulatory requirement was identified. As corrective actions, the licensee created procedure changes for procedure OP-AA-101-1000, to include specific direction for tagging knife switches. The proposed changes included a prohibition for hanging tags on metal parts of the switches, and installing robust operational barriers as tags plus devices when danger tags are to be utilized. Because this finding does not involve a violation and is of very low safety significance, it is identified as a finding. (FIN 05000301/2016001–01, Failure to Follow Electrical Safety Procedures Results in Plant Transient).

.4 <u>Annual Follow-up of Selected Issues: Records Management and Implementation of Electronic Work Packages</u>

a. <u>Inspection Scope</u>

During a review of items entered in the licensee's CAP, the inspectors selected numerous corrective action items concerning the implementation of the license's Electronic Work Package (EWP) program. Specifically, the licensee's CAP documented errors in the archiving and transfer of information from the online electronic storage to the offline permanent databases.

The inspectors performed a detailed review of the licensee's corrective actions for this and related issues regarding handling and retention of quality assurance (QA) records. Specifically, the inspectors verified the following attributes during their review of the licensee's corrective actions:

- complete, accurate and timely documentation of the identified problem in the CAP:
- consideration of the extent of condition, generic implications, common cause, and previous occurrences;
- classification and prioritization of the resolution of the problem, commensurate with safety significance; and
- action taken in the correction of the identified problem.

Observations: The inspectors conducted a historical review of the condition and sampled safety-related QA records for both Unit 1 and 2 completed surveillance and maintenance activities to evaluate the licensee's corrective actions respective to the attributes listed above. Inspectors determined that the condition had existed since the implementation of EWP. Several ARs were written for difficulties encountered during the transition to EWP, including instances of lost data requiring, in some cases, the complete re-performance of surveillances. The inspectors sampled several technical

specification required surveillances completed between the third quarter and fourth quarters of 2015. This sampling revealed that several surveillances were completed in EWP, an "online" system, and remained in EWP rather than being transferred to the licensee's approved QA records permanent storage location. Licensee procedures and industry standards related to electronic storage of QA records required the licensee to transfer these records to their approved offline archive facility within 90 days of creation and certification of the record. Based on the inspector's observations, the licensee determined that over 3,200 QA records were not archived. Furthermore, the licensee determined that this backlog of records not being archived was due to sequencing of steps taken by users during work task completion. The inspectors determined that multiple performance deficiencies existed related to this selected issue. The inspectors dispositioned these issues as minor because the inspectors determined that all required QA records of completed surveillances and other maintenance activities affecting quality existed in an unalterable form with two sets of redundant in-process databases. Prior to this in-depth review, the licensee had discovered instances where surveillance data had been completely lost, but in those cases, the licensee immediately re-performed the surveillances satisfactorily and completely documented the condition of lost data, with corrective actions pending or concluding at the time of this review.

Numerous corrective actions taken or planned by the licensee for this selected issue included the creation of a plan to close out the backlog of unarchived QA records, improve operations department coordination of work activities, and the creation of standard instructions for individuals responsible for work task completion to facilitate the proper auto-archival process.

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

a. Findings

No findings were identified.

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

.1 (Closed) Licensee Event Reports 05000301/2015-005-00; 05000301/2015-005-01:
Main Transformer Lockout and Associated Loss of Busses Results in System Actuation

a. Inspection Scope

On October 29, 2015, during the process of clearing a tagout for the Unit 2 main transformer, 2X-01, the licensee induced a short-circuit which caused the 2X-01 to trip and lockout, resulting in the loss of power to non-vital 4kV busses. Unit 2 was in mode 3, with preparations for startup from the scheduled refueling outage at the time. On December 16, 2015, this event was reported by the licensee in accordance with 10 CFR 50.73(a)(2)(iv)(A) for the actuation of the a specified safety system, which was subsequently clarified with Revision 1 of the LER on December 28, 2015 as the actuation of the AFW system.

The inspectors reviewed the information contained in the original revision of the LER and determined that the licensee failed to describe pertinent details of the event. Specifically, as a result of the 2X-01 lockout, power was lost to busses for all running reactor coolant pumps (RCPs), causing the plant to enter a natural circulation condition.

The AFW system actuated from the Anticipated Transient without Scram Mitigation System Actuation Circuitry sensing a loss of RCPs, which resulted in the Unit 2 TDAFW and motor-driven AFW pumps feeding SGs along with the standby SG feed pumps, which had been supplying feedwater flow the SGs prior to the event. Additionally, the licensee was maximizing letdown flow from the CVCS system in preparation for reactor startup. The above factors resulted in a rapid lowering of pressurizer level, until letdown automatically isolated, followed by a rapid rise in pressurizer level. While operators were in the process of restoring normal charging and letdown flow, a pressurizer PORV (2RC-430) lifted once as a consequence of the combination of the natural circulation condition and the volume of water charged into the RCS. The inspectors assessed the failure to describe all aspects of the complete event to be a minor performance deficiency. The licensee entered the issue into their CAP as AR 02099249 and revised the LER.

Based on a review of the LER, the licensee's root cause analysis of the failure, and the proposed corrective actions, the inspectors determined that one self-revealed finding existed, which is documented in Section 4OA2 of this report. Documents reviewed are listed in the Attachment to this report. Both the original and revised LER are closed.

These event follow-up reviews constituted two samples as defined in IP 71153-05.

b. Findings

One self-revealed finding was documented in Section 4OA2 of this report.

.2 (Closed) Licensee Event Reports (LERs) 05000266/2015-006-00; 05000266/2015-006-01: Unit 1 Automatic Reactor Trip

a. <u>Inspection Scope</u>

On November 28, 2015, Unit 1 automatically tripped from full power as previously documented in IR 05000266/2015004; 05000301/2015004. A reactor startup was commenced on December 2, 2015, and the main generator was synchronized to the grid later that day. On December 16, 2015, this event was reported by the licensee in accordance with 10 CFR 50.73(a)(2)(iv)(A) for the manual reactor protection system actuation.

The inspectors reviewed the information contained in the original revision of the LER and determined that the licensee failed to report that AFW actuated during the event as a result of low steam generator water level. The inspectors assessed the failure to report the actuation of AFW to be a minor performance deficiency. The licensee entered the issue into their CAP as AR 02099249 and revised the LER.

Based on a review of the revised LER, the licensee's root cause analysis of the failure, and the proposed corrective actions, the inspectors determined that no findings or violations of NRC requirements existed. Documents reviewed are listed in the Attachment to this report. Both the original and revised LER are closed.

These event follow-up reviews constituted two samples as defined in IP 71153–05.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On April 1, 2016, 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 <u>Interim Exit Meetings</u>

Interim exits were conducted for:

- On February 3, 2016, the inspection results of the emergency preparedness AR report review were discussed with Mr. R. Seizert, Emergency Preparedness Manager;
- On March 18, 2016, the inspection results for the areas of radiological hazard assessment and exposure controls; occupational ALARA planning and controls; in-plant airborne radioactivity control and mitigation; and occupational dose assessment with Mr. E. McCartney, Site Vice President; and
- On March 25, 2016, the inspection results of the Inservice Inspection were discussed with Mr. E. McCartney, Site Vice President.

The inspectors confirmed that none of the potential report input discussed was considered proprietary. Proprietary material received during these inspections were returned to the licensee.

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
- M. Blew, Principal Engineering Analyst
- C. Ford, Maintenance Support Department Head
- S. Forsha, Principal Engineer
- B. Gerbers, Engineering Supervisor
- R. Harrsch, Engineering Site Director
- W. Jensen, Principal Engineering Analyst
- R. Parker, Chemistry Manager
- J. Ramski, Outage Manager
- T. Schneider, Senior Engineer
- R. Seizert, Emergency Preparedness Manager
- G. Strharsky, Site Quality Manager
- R. Webber, Site Operations Director
- R. Welty, Radiation Protection Manager
- B. Woyak, Licensing Manager
- J. Yindra, Procedure Writer

U.S. Nuclear Regulatory Commission

J. Cameron, Chief, Reactor Projects Branch 4

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Opened</u>									
05000301/2016001–01	FIN	Failure to Follow Electrical Safety Procedures Results in Plant Transient (Section 4OA2.3)							
Closed									
05000301/2016001–01	FIN	Failure to Follow Electrical Safety Procedures Results in Plant Transient (Section 4OA2.3)							
05000301/2015-005-00	LER	Main Transformer Lockout and Associated Loss of Busses Results in System Actuation (Section 4OA3.1)							
05000301/2015-005-01	LER	Main Transformer Lockout and Associated Loss of Busses Results in System Actuation (Section 4OA3.1)							
05000266/2015-006-00	LER	Unit 1 Automatic Reactor Trip (Section 4OA3.2)							
05000266/2015-006-01	LER	Unit 1 Automatic Reactor Trip (Section 4OA3.2)							

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; Severe Weather Conditions; Revision 41
- AR 02119180; TB [turbine building] 2 Supply Fan Intake Structure Roof Section Peeled Back
- Calculation 2014-0002; Effects on Safety Equipment of Bypassing the Installed Wave Run-Up Barriers Through the Storm and Subsoil Drain System; Revision 1
- Calculation FPL-076-CALC-014; PBNP Precipitation and Snow Intensity Determination and Roof Drainage Evaluation; Revision 1
- Calculation FPL-076-CALC-017; Maximum Precipitation Analysis for Past Reportability; Revision 0
- NP 8.4.17; PBNP Flooding Program; Revision 22
- PC 6 Part 9; Flood Mitigation Inventory Checks; Revision 1
- RMP 9423; Installation and Removal of PAB Truck Access Presray Fastlogs; Revision 0
- Station Log Entries; March 23, 2016
- UFSAR, Section 2.5; Hydrology; Revision 2015

1R04 Equipment Alignment (71111.04)

- AR 01232361; SW Pipe Support Issues in PAB
- AR 01736681; 1SW-02907 Missing Insulation
- AR 01871398; 1SW-2907 Packing Leak to be Repaired in 2030?
- AR 02069472; 2SW-447 Found Open, CL-10C Position Is Shut
- AR 02085282; Human Performance Error During ORT 3A U2 Safeguards Testing
- AR 02088171; Unit 2 VCT Pressure Lower Than Expected
- AR 02093455; Excessive Packing Leakage From 1SW-2907 Fan Cooler FCV
- AR 02100756; Unexpected Alarms Received During DY-0B Restoration
- AR 02105765; Inspect 1SW-2907 Body to Bonet Bolting
- AR 02106379; Corrosion on Flange Bolting Below 1CV-360 (RMW Isolation)
- AR 02110655; Wire Found Disconnected, Goes to Crankcase Oil Level Switch
- Calculation WE-300023-00-B; HB-19 Piping from Anchor A-110 to CCW/HX, to Containment Penetrations: To Anchors SW-1-S15, A113 and WEPCO-471; Revision 0
- Checklist CL 10D; Fuel Oil Systems; Revision 24
- Checklist CL 11A G-04; G-04 Diesel Generator Checklist; Revision 11
- Checklist CL 13E Part 2; Auxiliary Feedwater Valve Lineup Motor Driven; Revision 53
- CL 10J; Safeguards Service Water System Checklist Unit 1; Revision 27
- CL 10J; Safeguards Service Water System Checklist Unit 2; Revision 31
- Control Room Logs; Dated February 17, 2016
- Drawing 6118, M-209 Sheet 15; P&ID Starting Air System Diesel Generator Building; Revision 13
- Drawing 6118, M-217 Sheet 1; P&ID Auxiliary Feedwater System; Revision 103
- Drawing 6118, M-219 Sheet 3; P&ID Fuel Oil System Diesel Generator Building; Revision 15
- Drawing 6118, M-2217 Sheet 1; P&ID Auxiliary Feedwater System; Revision 5
- Drawing 6118, M-227 Sheet 2; P&ID Glycol Cooling System Diesel Generator Building; Revision 10

- Drawing M-207, Sheet 1; Service Water System Unit 1; Revision 87
- Drawing M-207, Sheet 4: Service Water System; Revision 30
- Drawing M-2207, Sheet 2; Service Water System Unit 2; Revision 19
- Drawing P-115, Sheet 1; Service Water Supply HX-15B & 15D in Pipeway #2; Revision 01
- Drawing P-116, Sheet 1; Service Water Supply HX-15A & 15C in Pipeway #2; Revision 01
- Drawing P-316, Sheet 2; Pipe Hanger/Support Detail HB-19-H121
- IT 07D; P-32D, Service Water Pump Quarterly; Revision 37
- NP 2.1.3; Administrative Control of Red Locks, Lead Seal Wires, and Padlocks On Plant Equipment (Valves, Switches, etc); Revision 10
- WO 00315031; 1SW-2907, Has Serious Packing Leak / Repack; Dated March 20; 2007
- WO 40068689; 1SW-02907, Operations to Perform PMT/RTS Testing; Dated July 10, 2011
- WO 40140028; 1SW-02907, Valve Internal Inspection; Dated July 16, 2015
- WO 40236693; 1SW-02907 Retorque Packing; Dated November 3, 2013
- WR 00044081; 1SW-02907, HX-15A-D Cont. Recirc FCV Leaking From Stem; Dated July 6, 2010

1R05 Fire Protection (71111.05)

- Fire Hazards Analysis Report (FHAR) FZ 305; 4160V Vital Switchgear Room;
 Dated September 2015
- FHAR FZ 308; Diesel Room G01; Dated September 2015
- FHAR FZ 309; Diesel Room G02; Dated September 2015
- FHAR FZ 310; Air Compressor Room; Dated September 2015
- Drawing PBC-218, Sheet 2; Fire Protection for Turbine Building, Aux Building & Containment Elev. 8'-0"; Revision 32
- NP 1.9.9; Transient Combustible Control; Revision 27

1R08 Inservice Inspection Activities (71111.08P)

- AR 01945128; Part 21, Dresser-Rand/Valve-Stem Defective Raw Material; Dated March 3, 2014
- AR 01953205; SG "A" FOSAR Results; Dated March 30, 2014
- AR 01953734; SG "B" FOSAR Results; Dated April 1, 2014
- AR 01953805; Incorrect Calibration Block Utilized for Examination; Dated April 1, 2014
- AR 01995709; Valves in IT-540C with Boric Acid Buildup on Packing; Dated October 3, 2014
- AR 01996685; Inadequate Weld Fit-up; Dated October 7, 2014
- AR 01996865; Error Made In Acceptance Criteria Interpolation; Dated October 7, 2014
- AR 01999314; NRC Concern Regarding Documentation of Exam (Potential NCV);
 Dated October 15, 2014
- AR 02009234; New CCW Pump Radiographs and Data Sheets Do Not Meet Code; Dated November 24, 2015
- AR 02013339; ANII Concern with Untimely Corrective Action; Dated December 26, 2014
- AR 02041900; Extension of ISI Period to Complete Pressure Test; Dated April 20, 2015
- AR 02043823; NDE Locate Thin Spots and Weld Repair As Appropriate; Dated April 27, 2015
- AR 02046768; EOC Engineered Lifting Devices Not Proof Tested or Labeled;
 Dated May 9, 2015
- AR 02059121; Work Order Plan Did Not Specify Required RT of Welds; Dated July 8, 2015
- AR 02059308; Attention to Detail in RMPS; Dated July 9, 2015
- AR 02072895; NRC RIS 2015-10: Applicability of ASME Code, Case N-770-1; Dated September 10, 2015
- AR 02093466; Slow Through Wall Leak on U2 CVCS Piping; Dated November 24, 2015

- AR 02075730; Current ASME Code Year Not Used For Welder Qualification;
 Dated September 22, 2015
- AR 02101752; 1PPG CH 2502R-03 Replace H-12 Hanger Clevis Nut; Dated January 11, 2016
- AR 02081518; ISI Weld Configuration Prevents Complete Coverage; Dated October 13, 2015
- AR 02082787; NRC ISI Inspection, Weakness in Disposition of Indication; Dated October 16, 2015
- AR 02085633; Rejectable Indication during NDE on Valve 2MS-2309; Dated October 26, 2016
- WO 40120429; SW-02890 Lug Repaired; Dated November 9, 2011
- WO 40454445; Letdown Orifice B Outlet Control; Dated March 17, 2016
- FP-PE-B31-P1P1-GTSM-001; WPS Manual GTAW/SMAW P1-P1; Revision 3
- GMP 102-311'; GS: PQR, PQR Manual GTAW/SMAW P1-P1; Dated July 24, 1987
- SM-1-1; PQR Manual GTAW/SMAW P1-P1; Dated January 2, 1978
- FP-PE-WLD-01; Welding Manual Program Document; Revision 7
- FP-PE-WLD-02; General Welding Specification; Revision 9
- AZ-QA-PT-1.1; Procedure for Solvent Removable, Visible and Fluorescent Liquid Penetrant Examinations; Revision 1
- AZ-QA-MT-1.1; Procedure for MT Examinations: Yoke Method, Wet and Dry, Visible and Fluorescent: Revision 0
- WP-6: PQR for Manual GTAW P1-P1: Revision 0
- WPS 4-5B-TS-W-B6; Manual GTAW/SMAW P4-P5B; Revision 0
- PQR 147; PQR for WPS 4-5B-TS-W-B6, Manual GTAW/SMAW P4-P5B; Dated November 21, 2001
- PQR 179 (PCI); PQR for WPS 4-5B-TS-W-B6, Manual GTAW/SMAW P4-P5B; Revision 0
- PQR 179 R/1; PQR for WPS 4-5B-TS-W-B6, Manual GTAW/SMAW P4-P5B;
 Dated July 13, 1990
- PT Exam Record for 1CV-200B; Dated March 18, 2016
- NDE 173; PDI Generic Procedure for the Ultrasonic Examination of Austenitic Piping Welds;
 Revision 16
- NDE 350; Magnetic Particle Examination Alternating Current (AC) Yoke; Revision 32
- NDE-451; Visible Dye Penetrant Examination Temperature Applications 45°F to 125°F; Revision 28
- NDE-750; Visual Examination (VT-1) of Nuclear Power Plant Components; Revision 27
- NDE-753; Visual Examination (VT-2) Leakage Detection of Nuclear Power Plant Components; Revision 18
- NDE-754; Visual Examination (VT-3) of Nuclear Power Plant Components; Revision 2

1R11 Licensed Operator Requalification Program (71111.11)

- LOC Cycle 16A Schedule; Revision 2
- PBN LOC 16A 001E; Simulator Exercise Guide for As-Left Simulator Evaluation of Crew B Cycle 16A with DEP; Revision 0
- OP 5B; Blender Operation/Dilution/Boration; Revision 40
- OP-AA-03: Reactivity Management: Revision 0
- OP-AA-103-1000; Reactivity Management; Revision 5
- OP-AA-100-1000; Conduct of Operations; Revision 16
- OP-AA-100; Operations Expectations; Revision 1

1R12 Maintenance Effectiveness (71111.12)

- ACE [apparent cause evaluation] 01983225; 2OS-DV-1 Failed To Shut;
 Dated February 27, 2015
- AR 01927784; MRFF Evaluations Need Attribute Revisions

- AR 01950839; 2FI-116 Found OOT During Performance Of ICP 05.063
- AR 01975423: Failures Not Included in Quarterly Reviews For Maintenance Rule
- AR 01975430; Quarterly Reviews Maintenance Rule Missing
- AR 01979844; 1P-2C Charging Pump Failed To Start During Fine Work
- AR 01984412; 1P-2B Charging Pump Failed To Start
- AR 01984544; OOS Time Was Not Reduced By Actions Taken For AR 1833175
- AR 01994327; Emergency Borate Valve (1CV-350) Failed To Open
- AR 02010735; Functions To Be Added To Maintenance Rule Scope
- AR 02066591; 2P-2C Charging Pump Work Extended ~48 Hours Beyond Schedule
- AR 02070991; 1P-2C Charging Pump Failed To Start
- AR 02083505; PBNP Service Air System Meets Criteria For (a)(1)
- AR 02083827; MRFF Assignments Not Created As Required By Procedure
- AR 02087362; MRFF Assignments Inappropriately Assigned
- AR 02091134; Maintenance Rule Regulatory Near Miss
- AR 02092018; MRFF Needed For Previous 2Z-16 Air Reel Failure
- AR 02097052; 2P-2C Failure To Start Following Fault Codes On VFD
- AR 02101450; Errors in Maintenance Rule Scoping Data
- AR 02110024: PB Repeat Critical Equipment Associated With Maintenance Drivers
- AR 02116405; Failure Not Included In 4th Quarter Maintenance Rule System Summary
- AR 1990326; 1P-2B Charging Pump Not Available To Attain 55 GPM During IT 21
- AR 40418884 03; 2P-002C / Perform Video Probe Inspection
- Condition Report Search; Chemical and Volume Control; Dated March 2, 2014 -March 2, 2016
- Condition Report Search; Crossover Steam Dump System; Dated December 15, 2014 March 15, 2016
- Condition Report Search; M&TE; Dated March 11, 2015 March 11, 2016
- CVCS Maintenance Rule Data Sheet; Dated January 26, 2016
- Documentation of Maintenance Rule Performance Criteria; CV System;
 Dated March 4, 2015
- Drawing 685J175; Sheet 2; P&ID Chemical & Volume Control; Revision 60
- ER-AA-100-2002; Maintenance Rule Program Administration; Revision 2
- Inservice Testing Program Table CV; Page 6 of 12; Revision 1
- January 1, 2014 January 1, 2016
- Maintenance Rule (a)(1) Action Plan; Gas Turbine System; Dated April 15, 2015
- Maintenance Rule (a)(1) Action Plan; Rod Position Indication; Dated June 3, 2015
- Maintenance Rule (a)(1) Action Plan; Steam Dump System; Dated February 5, 2014
- Maintenance Rule Performance Criteria; Gas Turbine System; Dated February 7, 2006
- NP 7.2.30; Quality Basis Values and Quality Group Codes; Revision 0
- NP 7.7.5; Maintenance Rule Monitoring; Revision 26
- NPM 2014-0186; 2013 Maintenance Rule Quarterly and Annual System Reviews
- NPM 2014-0187; 2013 Periodic Maintenance Rule (a)(3) Evaluation
- Numarc 93-01; Industry Guideline For Monitoring The Effectiveness of Maintenance at Nuclear Power Plants; Revision 4A
- PBNP Inservice Testing Background Valve Data Sheet; 1CV-142; Charging Line Flow Control Valve; Dated December 11, 2009
- PBNP Maintenance Rule Unavailability Data Sheet; Charging Pumps;
- Performance Criteria Assessments For CV System Since January 1, 2016
- SAQH 02096157; Maintenance Rule (a)(3) Periodic Assessment; Dated January 29, 2016
- Station Log Search for P-2; Dated January 1, 2014 January 31, 2014
- System Health Report; Crossover Steam Dump; Dated March 15, 2017

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

- OP-AA-102-1003; Guarded Equipment; Revision 10
- OP-AA-102-1003-F01; Guarded/Protected Equipment Work Approval Form; Revision 0
- Point Beach Station Daily Status Report; Unit 1; Dated January 19, 2016
- Point Beach Station Daily Status Report; Unit 2; Dated January 19, 2016
- Unit 1 Safety Monitor for January 19, 2016
- Unit 1 Safety Monitor Plant Configuration Changes for January 19 20, 2016
- Unit 2 Safety Monitor for January 19, 2016
- Unit 2 Safety Monitor Plant Configuration Changes for January 19 20, 2016
- Unit 1 PBNP Shutdown Safety Assessment and Fire Condition Checklists;
 Dated March 16, 2016
- Unit 1 PBNP Shutdown Safety Assessment and Fire Condition Checklists;
 Dated March 14, 2016
- NP 10.3.6; Shutdown Safety Review and Safety Assessment; Revision 47
- NP 10.3.7; Online Safety Assessment; Revision 36
- Point Beach Station Daily Status Report; Unit 1; Dated March 1, 2016
- Point Beach Station Daily Status Report; Unit 2; Dated March 1, 2016
- Unit 1 Safety Monitor for March 1, 2016
- Unit 2 Safety Monitor for March 1, 2016
- Station Logs; Dated March 1, 2016
- Tech Spec Equipment OOS and Fire Impairment Log; Dated March 1, 2016
- Non-Tech Spec Equipment OOS Log; Dated March 1, 2016
- Phoenix Risk Monitor Change Notice; Dated March 11, 2016
- Station Logs; Dated March 14, 2016
- Unit 2 Risk Summary Report for March 14, 2016
- PBN1-36 Refueling Outage 0400 Turnover; Dated March 14, 2016
- Unit 2 Risk Summary Report for March 16, 2016
- Station Logs; Dated March 16, 2016
- Unit 1 Safety Monitor Plant Configuration Changes for March 1, 2016

1R15 Operability Determinations and Functional Assessments (71111.15)

- 1-SOP-Y-Y103; 1Y-103, White 120V Vital Instrument Panel; Revision 7
- Abnormal Alignments for January 15, 2016
- AR 01970933; Deficiencies Related to Control of Operator Burdens
- AR 02026175; OP-AA-109 Control of Time Critical Operator Actions R0
- AR 02039244; Significant Change To OD/FA Process Not Trained
- AR 02052648; EN-AA-203-1001 Operability Determination / Functionality
- AR 02084184; Full Qualification Vs. Nonconforming Condition for EQ
- AR 02093813; Timeliness of AR020093466 Slow Through Wall Leak on U2 CVCS
- AR 02103921; 1DY-03 Overload Alarms
- AR 02104428; Rev On Card Has Effect On All Over Current Parameters
- AR 02104732; Evaluate the Operation of K-3A Air Comp As An Ops Workaround
- AR 02104737; Received Unexpected 1T-34B SI Accum Low Press Alarm
- AR 02107718; OP-AA-109, Control of Time Critical Operator Actions
- AR 02107944; 2LC-462A/B Needs Refurbishment/Replacement
- AR 02108111; VIB-BFV PPCS Point is Spiking High
- AR 02109131; OP-AA-109, Control of Time Critical Operator Actions
- AR 02112145: W-46A Ventilation Support Contacting SW Piping
- AR 02112226; Administrative Process Not Fully Vetted
- Calculation N-93-058; DC ETAP Calc Reconstitution Project; Revision 8; Sheet 19 of 99

- Calculation N-93-058; DC ETAP Calc Reconstitution Project; Revision 7; Attachment R
- Category X; Operator Challenge Assessment Sheet for Unit 1 First Stage IN or OUT Switch Can't Be Changed Unless <97% (1C-039 / Governor Valve Program EC 0281339); Dated January 22, 2016
- Category X; Operator Challenge Assessment Sheet for Unit 2 First Stage IN or OUT Switch Can't Be Changed Unless <97% (2ICP 4.39-1 – Turbine Valve Calibration); Dated January 22, 2016
- Cognos Report of AR Keywords & Trend Causes for Depts; Dated January 15, 2016
- Control Room Log Entries from December 15, 2015 January 9, 2016
- Drawing Bech 6118 E-7; Sheet 12; Connection Diagram 120V AC Instrument Bus Distribution Panel 1Y-03: Revision 2
- Drawing Bech 6118 E-7; Sheet 24; Connection Diagram 120V AC Instrument Bus Distribution Panel 1Y-03; Revision 4
- Fire Hazards Analysis Report; Appendix A; Fire Hazard Analysis; Fire Area A01-E General Plant Area Turbine Building; Revision 5
- Guide to the Application of the Single Failure Criterion to Nuclear Power Plant Protection Systems; Dated October 16, 1967
- Letter From Elgar to Wisconsin Electric Company, dated September 8, 2000; Response to letter, dated August 30, 2000; ECN Summary Reports for Circuit Board Assemblies Used In INV 253-1-103
- Letter from Westinghouse Electric Corporation to Bechtel Corporation, dated November 20, 1967; Point Beach Project Instrument Cables
- Master Data Book MDB 3.2.11; Instrument Panels; 1Y103; Revision 7
- Master Data Book MDB 3.2.11; Instrument Panels; 1Y104; Revision 6
- Master Data Book MDB 3.2.11; Instrument Panels; 1Y114; Revision 5
- Master Data Book MDB 3.2.11; Instrument Panels; 2Y103; Revision 8
- Master Data Book MDB 3.2.11; Instrument Panels; 2Y11; Revision 6
- Master Data Book MDB 3.2.11; Instrument Panels; 2Y113; Revision 4
- Master Data Book MDB 3.2.11; Instrument Panels; 2Y114; Revision 4
- Master Data Book MDB 3.2.11; Instrument Panels; 2Y31; Revision 6
- Modification EC 260347; 120V Vital Circuit Protection Modification for Units 1 and 2
- Non-Tech Spec Equipment OOS for January 15, 2016
- OP-AA-100-1000; Conduct of Operations; Revision 16
- OP-AA-108-1000; Operator Challenges Program Management; Revision 2
- OP-AA-108-1000-F01; Operator Challenge Assessment Sheet; Revision 2
- OP-AA-108-1000-F02; Category X, Operator Challenge Assessment Sheet; Revision 1
- Operator Challenge Assessment Sheet for Unit 1 First Stage IN or OUT Switch Can't Be Changed Unless <97% (1C-039 / Governor Valve Program EC 0281339); Dated December 23, 2015
- Operator Challenge Assessment Sheet for Unit 2 First Stage IN or OUT Switch Can't Be Changed Unless <97% (2ICP 4.39-1 – Turbine Valve Calibration);
 Dated December 23, 2015
- POD 02103921; 1DY-03 Overload Alarms
- Point Beach Nuclear Plant SM Watch Turnover Guide for January 15, 2016
- Procedure 0-SOP-IC-002; Technical Specification LCO-Instrument Cross Reference; Revision 23
- Procedure 1RMP 9045-2; 1DY-03 White Channel Instrument Bus Static Inverter Maintenance Procedure; Completed on August 31, 2010
- Procedure EN-AA-203-1102; Safety Classification Determination
- Procedure NP 7.2.30; Quality-Basis Values and Quality Group Codes; Revision 0

- Spare Parts Equivalency Evaluation Document (SPEED) 2001-085; Revisions to the Inverter Analog Logic Board by OEM, Elgar
- Spare Parts Equivalency Evaluation Document (SPEED) 94-007; Analog Logic Board Revision For Elgar Inverters; Dated January 28, 1994
- STA Turnover for January 15, 2016
- Station Log Entries for February 7, 2016
- STPT 21.1; Sheet 77, Protective Relay Setpoints; Bus 2A05, Cubicle 76; Revision 11
- Tech Spec Equipment OOS and Fire Impairments for January 15, 2016
- Total Operator Challenge List for January 15, 2016
- Unit 2 Control Operator Turnover; Dated January 15, 2016
- WO 355679 01; 1DY-03, Maintain and Inspect Inverter
- WO 40173655 01; 2DY-03, Perform 10 Year Circuit Board Replacements
- WO 40175036 13; 2DY-04, Replace Analog Logic Board J3
- WO 40175037 01; 2DY-04 Overhaul Inverter
- WO 40220271 01; DY-0C, Maintain and Inspect Inverter
- WO 40278020 01; DY-0C, Perform 10 Year Circuit Board Replacements

1R18 Plant Modifications (71111.18)

- 1-SOP-CV-002; Draining CVCS; Revision 7
- Advanced Work Authorization Form EC279310R3#001; Steel Tube Fire Wrap Change
- Advanced Work Authorization Form EC279310R3#003; Less Than 2" Firewrap Coverage
- AR 01695569; Evaluate OPS Training Material For EC 261021 Impact
- AR 01898035; EC 261021/272841; Add Charging Pump Low Suction Pressure Trip
- AR 02059433; Incorporate Strainer Attachment Methodology To New DDFP
- AR 02061009; SOER 10-2 REC 1B FSA Area For Improvement
- AR 02062087; Modification EC 283450 Closeout Timeline
- AR 02062709; P-35B Modification Unclear Raceway Grounding Requirements
- AR 02064037; Missed Visual Exam on Root Welds During Prefab
- AR 02064525; Discrepancies Noted During QC Inspection
- AR 02087241; Control Building AFP Room Halon Fire Suppression Issues
- AR 02094384; EC 272841 Missed Closeout Date
- AR 02102101; Cognitive Trend Not Linking ECS When Procedures Issued
- AR 02104428; Rev On Card Has Effect On All Over Current Parameters
- AR 02107872; CL 10F Issued Prior To Field Work Being Completed
- AR 02108277; Procedure NP 8.4.13 Issued With Prior To Install of Mod
- AR 02110356; NAMS Seismic Code Discrepancies For ECS 272841/261021 SSCs
- AR 02114440; 1ICP 06.021 Has New Steps In VFD Without Training
- AR 02114494; No Training Provided For New Equipment Added Per EC 272841
- Drawing 499B466, Sheet 316B; Elementary Wiring Diagram Charging Pumps 1P-2A; Revision 7
- Drawing 684J741, Sheet 2; P&ID Chemical and Volume Control; Revision 75
- Drawing CBD684J741, Sheet 2; ISI Classification Diagram Chemical & Volume Control;
 Revision 31
- EC 272841; Unit 1 Charging Pump Low Net Positive Suction Head Trip; Revision 7
- EC 279310; NFPA-805 Modification For Conduit D04-7 Fire Wrap; Revision 1
- Eval 2012-001; 10 CFR 50.59 Evaluation for EC 272841; Dated March 7, 2012
- FEP 4.1; PAB West and Central-El. (-)19';(-)5'; 8' CCW, CS/SI, AFW; Revision 12
- FEP 4.2; PAB South-El. 8' Unit 1 CV; Unit 1 HVAC; Revision 8
- FEP 4.3; PAB North-El. 8' Charging Pump Area Unit 2, Cryogenic Equipment Area; Revision 10

- Fire Protection Conformance Checklist for EC-272841; Dated May 14, 2015
- Fire Protection Program Impact Screen For EC 279310; Dated August 19, 2015
- Neo-Dyn® Series 180P Product Sheet; Vacuum Pressure Switch / Internal Adjustment; Dated July 2013
- Procedure AOP-1D, Unit 1; Chemical and Volume Control System Malfunction; Revision 13
- Procedure ARP 1C04 1C 1-8; Charging Pump Speed Control Trouble; Revision 4
- Procedure CL 5A; Chemical and Volume Control System Unit 1; Revision 28
- Procedure NP 7.4.3; Post-Maintenance NDE Requirements For Power Piping
- Procedure OI 15; Charging Pump Local Control Station Operation; Revision 20
- SCR 2014-0136-03; 10 CFR 50.59 Screening for EC 279310; Dated January 28, 2016
- SCR 2014-0136-04; 10 CFR 50.59 Screening for EC 279310; Dated February 22, 2016
- SCR-2011-0317; 10 CFR 50.59 Screening for EC 272841; Dated February 17, 2012
- Setpoint Change Sheet EC 272841; Dated February 16, 2012
- Station Log Search; 1P-2A; Dated August 15, 2015 August 20, 2015
- WO 40103778 05; 1P-002A Demo and Install 3/4" Suction Line
- WO 40103778 09; 1P-002A / EC 272841 U1 Elec. Component Bench Test
- WO 40103778 15; Functional Testing of Uncoupled 1P-002A Charging Pump VFD Controls Including New NPSH Trip Feature
- WO 40103778 20; 1P-002A / EC 272841 OPS PMT/RTS
- WO 40103778 26; 1P-002A / Perform UT To Verify Existing Wall Thickness
- WO 40104658 10; 2P-002C Perform SQUG Walkdown
- WO 40104659 02; 1P-002C / Pre-Fabrication of 3/4" Piping and Components
- WO 40104659 20; 1P-002C / Demo & Install of 3/4" Discharge Line
- WO 40104659 24; Perform NDE On Welds
- WO 40329646 18; Perform Resistor Verification of DY-0C Inverter For EC 279310

1R19 Post-Maintenance Testing (71111.19)

- AR 02086830; K-3B SA Compressor Post-Maintenance Test Unsatisfactory
- AR 02088517; Call Out Due To Work Schedule Pull Up
- AR 02102664; NRC Question with Respect to TS Undervoltage Testing
- AR 02108066; RS-SA-9; Stroke Times Outside of IST Acceptance Criteria
- AR 02111089; DA-201 Failed PMT, Leakage at the Lower Union Connection
- AR 02111441; North Flange Parrallelism Check
- AR 02111537; Multiple Procedures with Incorrect ASME Code References
- AR 02118715; During Performance of WO 40455112, Found 480V Phasing Error
- Asea Brown Boveri Descriptive Bulletin 41-233S; Type 27N and 59N Undervoltage and Overvoltage Relay; Dated September 1990
- Asea Brown Boveri Instruction Book 7.4.1.7-7; Single Phase Voltage Relays; Issue D
- Calculation FAI/08-212; MAAP4 Analysis for Appendix R Timing of Restoration of AFW & Charging Flow for Point Beach Nuclear Plant EPU; Dated February 10, 2009
- Drawing 499B466; Sheet 295A; Elementary Wiring Diagram 4160V Switchgear 2A05 Bus Tie Breaker 2A52-76; Revision 12
- Drawing 499B466; Sheet 296B; Elementary Wiring Diagram 4160V Switchgear; Bus 2A05 Undervoltage and Diff. L.O. Relays; Revision 10
- Drawing SK-8540; Sheet 1; 1&2P2A-C Charging Pump Sectional View
- Drawing SK-8540; Sheet 2; 1&2P2A-C Charging Pump Sectional View
- OPSDT-003; Monarch DB Digital Photo Strobe; Report of Calibration; Dated September 27, 2015
- Procedure MA-AA-203-1000; Maintenance Functional Testing; Revision 3

- SCR 2003-0426-01; Changes to IT-21 and IT-22 (Lower Charging Pump Speed During Inservice Testing); Dated January 20, 2004
- SCR 2011-0327; Revise IT 60 After Post Maintenance Rebaselining 1WL-1723 During U1R33
- SCR 2011-0343; Revisions to IT 60 Following Rebaselining 1WL-1728
- STPT 21.1; Sheet 77, Protective Relay Setpoints, 480V Breaker Overloads; Revision 38
- STPT 21.1; Sheet 77, Protective Relay Setpoints, Bus 2A05, Cubicle 76; Revision 11
- WO 40265960; IT-58A Found Depressurized During CHP Test
- WO 40273231; 1WL-1728-S; Replace SOV
- WO 40273233; 1WL-1723-S; Replace SOV
- WO 40313450; 2A-05 / 15 Year relay Replacement
- WO 40350233 01; B52-DB50-047, Breaker Maint Per RMP 9369-1
- WO 40372110; Breaker Maint Per RMP 9303 and RMP 9369
- WO 40376556; 2P-10A Change Oil As Required
- WO 40376564; 2P-010A-M, MCE Analyze Motor (2B52-36A/2B-03)
- WO 40422006; 1P-002A / Charging Pump Seal Leakage 120 cc/min
- WO 40433074; IT-70A, Charging Pump Discharge Accumulator

1R20 Outage Activities (71111.20)

- AR 01996601; CL 1E Requirements Not Incorporated Into Work Plan
- AR 02000557; Outage Accident Fan Cooler Work Not Completed as Scheduled
- AR 02001852; OP4A Filling & Venting RCS Improvement Needed
- AR 02008830; U1R35 Shutdown Risk Management Post Outage Assessment
- AR 02075870; PSL Rapid OE: Loss of Electrical Bus Due to Bus Fault
- AR 02080931; Weakness Identified With Shutdown Safety Assessment
- AR 02089683; Shutdown Risk Management Post Outage Assessment
- AR 02090198; Outage Response to PSL OE Regarding Loss of 6.9 KV Bus
- AR 02110870; Spent Fuel Handling Bridge Crane Control of Heavy Loads RQMT
- AR 02116682; OPS Procedure Use Not in Accordance With AD-AA-100-1006
- AR 02116869; Feedback From Containment Walkdowns
- AR 02116921; Unit 1 RCS Boration During Shutdown Exceeds Target U1R36
- AR 02117235; Boric Acid Found on 1CV-00200B
- Fire Brigade Member Individual Shift Staffing Report, from February 28, 2016 to March 10, 2016
- NP 10.3.6; Shutdown Safety Review and Safety Assessment; Revision 47
- OP 4D Part 1; Draining the Reactor Coolant System; Revision 87
- OP 5A; Reactor Coolant Volume Control; Revision 46
- PB-1R36; Critical Path; Dated February 26, 2016
- PB-1R36; Execution Summary; Dated February 26, 2016
- PBF-1562; PBNP Shutdown Safety Assessment and Fire Condition Checklist; Revision 23
- RP 1A; Preparation for Refueling; Revision 94
- RP 1C; Refueling; Revision 75
- SEP-1 Unit 1: Degraded RHR System Capability: Revision 14
- U1R36; Mechanical and Electrical Maintenance Represented Employees Work Schedules; Dated March 8, 2016
- U1R36; Operations Shift Represented Employees Work Schedules; Dated March 1, 2016
- U1R36; Operations Shift Supervisory Employees Work Schedules; Dated March 1, 2016
- U1R36; Outage Safety Review Supporting Documentation
- U1R36; SDS Risk Profile Printed on February 2, 2016
- U1R36; Shutdown JITT Roster and Schedules; Dated February 2, 2016

- Unit 1, Operating Supervisor Individual Shift Staffing Report, from February 28, 2016 to March 10, 2016
- Unit 2, Operating Supervisor Individual Shift Staffing Report, from February 28, 2016 to March 10, 2016

1R22 Surveillance Testing (71111.22)

- 10 CFR 50.59, Screening Form; Establishing a second set of reference values with RS-SA-009 and RS-SA-010 (IT 80); Dated December 2, 2015
- 10 CFR 50.59/72.48, Screening; Revision to IT 80 Following Maintenance on RS-SA-009; Dated March 19, 2011
- 10 CFR, Applicability Determination Form; AR 02094798, IT 80; Main Steam Valves (Quarterly) Unit 1; Dated February 10, 2016
- 2ICP 02.003B; Reactor Protection System Logic Train B 31 Day Surveillance Test;
 Revision 15
- AR 02099997; 1SI-850B, Open Stoke Time Outside of Acceptance CR
- AR 02102174; Temporary PM Change for 1SI-850B
- AR 02108022; RS-SA-009 Leaking at Stem Seal
- AR 02108066; RS-SA-9 Stroke Times Outside of IST Acceptance Criteria
- AR 02120926; 1MS-02008 Requires Removal For Scope Expansion Testing
- AR 02121043; Received an OOT Report During the Post Calibration for M&TE
- CE 02099997; 1SI-850B Open Stoke Time Outside of Acceptance CR; Dated January 14, 2016
- Drawing M-201, Sheet 1; Main and Reheat Steam System, Unit 1; Revision 62
- Drawing M-2201, Sheet 1; Main and Reheat Steam System, Unit 2; Revision 56
- Drawing West 617F354, Sheet 4B1; Schematic Diagram Inputs Reactor Protection System Train "B"; Revision 3
- Drawing West 617F354, Sheet 4B2; Schematic Diagram Reactor Protection System Train "B"; Revision 4
- IT 80; Main Steam Valves (Quarterly) Unit 1; Revision 37
- IT 80; Main Steam Valves (Quarterly) Unit 1; Revision 38
- NP 7.4.4; ASME OM Code Pump and Valve Inservice Testing; Revision 9
- NP 7.7.37: Surveillance Frequency Control Program Manual: Revision 2
- NP 8.7.1; Measurement and Test Equipment; Revision 28
- OI 58; Leak Testing of Containment Isolation Valves Unit 1 and 2 General Instructions and Information; Revision 27
- ORT 42; RMUW to Containment Unit 1; Revision 23
- WO 40357460; ORT 42, RMW to Containment; Dated March 15, 2016
- WO 40380531; Calibrate 2A-05 Tech Spec Relays
- WO 40419081; 1SI-850B/Open Stroke Time Outside of Acceptance Criteria;
 Dated December 31, 2015
- WO 40441409; IT 40 Train B Partial for 1SI-850B; Dated February 1, 2016
- WO 40447481: RS-SA-009-O Overhaul Actuator: Dated February 8, 2016
- WR 94132191; 1SI-850B/Open Stroke Time Outside of Acceptance Criteria; Dated December 30, 2015

1EP5 Maintenance of Emergency Preparedness (71114.05)

- 2P-11B, Component Cooling Pump Motor Failure Evaluation
- AR 02098401; Potentially Missed Event Classification
- Control Room Log Entries for December 17, 2015

- Drawing E-180; Sheet 5, Electrical Layout Fire Detection System Aux Bldg. Area 5 (EL 8'-0"); Revision 2
- Drawing M-208; Sheet 6, Aux Bldg. Sprinkler Sys; Revision 7
- EPIP 1.2.1; Emergency Action Level Technical Basis; Revision 15
- Failure Analysis Report; Point Beach Component Cooling Water Pump Motor;
 Dated December 20, 2015
- PBF-1959; Fire Event Reporting Data Collection Form for 2P-11B Component Cooling Water Motor Short to Ground; Dated January 12, 2016

<u>1EP6 Drill Evaluation (71114.06)</u>

- 1Q16 ERO; Drill Binder; Dated February 23, 2016
- 1Q16 ERO; Drill Executive Debrief; Dated February 23, 2016
- AR 02065175; EPIP 2.1 Notifications ERO, State, and Counties, and NRC
- AR 02066514; 2015-PREEX Sensitivity to Hostile Action Response
- AR 02067650; Evaluate Training Needs for Operations Security Topics
- AR 02074401; 2015 HAB EX Resource Management for AOP-29 Implementation
- AR 02074403; 2015 HAB EX Control Room Roll Up Items
- AR 02082328; CMP for Increasing DEP Opportunities in 2016
- AR 02093753; EP 7.0 Emergency Facilities and Equipment
- AR 02096923; PBNP ERO Response for 4Q15 Phone Augmentation Drill
- AR 02100524; DEP Opportunity Cancelled
- AR 02101535; EPIP 1.1 Course of Action, Use and Adherence
- AR 02102985; PBSA-PS-16-03 Review of HU Clock Reset Drivers/Gaps
- AR 02103414; Weaknesses Identified During a Review of Crew Notebooks
- AR 02110793; ID and Disposition of Gaps in Operator EP Actions
- AR 02112502; 1Q16 Drill: Failed Objective OSC
- AR 02112857; 1Q16 Drill: RP OSC Practices
- AR 02112858; 1Q16 Drill: EOF Priority/Focus
- AR 02112860; 1Q16 Drill: Information Sharing Weak Among Facilities
- AR 02112886; 1Q16 Drill: Electrical Plant Field Verification Timeliness
- AR 02112887; 1Q16 Drill: ERO Mentoring and Qualification Process
- AR 02112888: 1Q16 Drill: Understanding of Inputs to Dose Assessment
- AR 02112890; 1Q16 Drill: Potential Trend on Timeliness of ERO Paging
- AR 02112891; 1Q16 Drill: Fission Product Barrier Status Change Impacts
- AR 02113226; Data Missing in Verbal NARS Transmission Sim Eval
- CE 02074401; 2015 HAB EX Resource Management for AOP-29 Implementation;
 Dated October 19, 2015
- Completed Event Notification Form for Simulator Scenario; Dated February 4, 2016
- Completed NARS Form for Simulator Scenario; Dated February 4, 2016
- EPIP 1.1; Course of Actions; Revision 72
- EPIP 2.1; Notifications ERO, State and Counties, and NRC; Revision 50
- LOC Cycle 16A Schedule: Revision 2
- LOCT Cycle 15A, B, C, D, and 16A; Individual Crew Comments and Observations Associated with DEP Opportunities
- PBN LOC 16A 001E; Simulator Exercise Guide for As-Left Simulator Evaluation of Crew B Cycle 16A with DEP; Revision 0

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

- AR 02082587; Air Samples Not Counted In Accordance With Procedure;
 Dated October 16, 2015
- AR 02082593; Air Sample Forms Do Not Align With the Procedure; Dated October 16, 2015
- AR 02083840; Extremity EPD Dose Alarm Setpoints Exceeded on RWP;
 Dated October 20, 2015
- AR 02110227; Unanticipated HRA Discovered in 39' U1 LDGS Building; Dated February 15, 2016
- AR 02116979; Direct RP Coverage Not Provided for Entry into LHRA; Dated March 13, 2016
- HP 2.14; Containment Keyway Personnel Access; Revision 18
- HP 2.17; Very High Radiation Area Personnel Access; Revision 11
- HP 3.2.8; Posting Requirements for Areas Affected By Fuel Movement; Revision 26
- HP 3.2; Radiological Labeling, Posting and Barricading Requirements; Revision 62
- HPIP 3.52; Airborne Radioactivity Surveys; Revision 41
- HPIP 8.0; Source Control Program; Revision 13
- PBF-4022; Airborne Radioactivity Survey; Various Dates
- Point Beach Alpha Characterization Study Update 2014; Dated March 30, 2015
- RP-AA-102-1000; Alpha Monitoring; Revision 02
- RP-AA-102-1001; Area Radiological Surveys; Revision 01
- RP-AA-103-1001; Posting Requirements for Radiological Hazards; Revision 03
- RP-AA-103-1002; High Radiation Area Controls; Revision 04
- RWP 16-1015; Cavity Decon Activities; Revision 00
- RWP 16-1016; Remove/Reinstall RV Head; Revision 00
- RWP 16-1018; Seal Table Activities; Revision 00
- RWP 16-1029; Transfer Tube Inspections; Revision 00
- RWP 16-1043; S/G Sludge Lance; Revision 00
- RWP 16-1044; FOSAR Activities; Revision 00
- RWP 16-1049; Cavity Underside Inspections; Revision 00
- Source Leak Test and Inventory; Dated January 27, 2016
- VSDS Standard Map Survey Report; Various Dates

2RS2 Occupational ALARA Planning and Controls (71124.02)

- RP-AA-104-1000; ALARA Implementing Procedure; Revision 07

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

- RDW 14.2.2; Use of HEPA Ventilation Equipment; Revision 03

2RS4 Occupational Dose Assessment (71124.04)

- NP 4.2.27; Personnel Exposure Monitoring Device Minimum Requirements and General Use; Revision 23
- RP-AA-101; Personnel Monitoring Program; Revision 00
- RP-AA-101-1001; Personnel Monitoring Device Issue; Revision 00

4OA1 Performance Indicator Verification (71151)

- AR 02094054; 1N-31 Indicates Lower Than Expected
- AR 02094061; Unit 1 Reactor Trip, Due to Generator Lockout
- AR 02094067; Unit 1 Reactor Trip, Due to Generator Lockout
- AR 02094051; Condenser Steam Dump Stuck at ~50% Post-Trip
- AR 02094052; U1 "D" MSR Inlet Valve 20% Open

- AR 02094065; U1 AE Condenser Relief Valve Appears Failed
- Control Room Logs; Dated April 22, 2015
- Control Room Logs; Dated November 18, 2015
- Control Room Logs; Dated November 28, 2015
- Control Room Logs; Dated December 2, 2015
- Control Room Logs; Dated March 5, 2015
- Control Room Logs; Dated October 3, 2015
- Control Room Logs; Dated October 29, 2015
- LER 266/2015-006-00; Unit 1 Automatic Reactor Trip
- LER 266/2015-006-01; Unit 1 Automatic Reactor Trip Revision
- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7
- NP 5.2.16; NRC Performance Indicators; Revision 19
- Performance Indicators; Units 1 And 2, Unplanned Power Changes Per 7000 Critical Hours; 1Q/2015 to 4Q/2015
- Performance Indicators; Units 1 And 2, Unplanned Power Scrams Per 7000 Critical Hours; 1Q/2015 to 4Q/2015
- Performance Indicators; Units 1 And 2, Unplanned Power Scrams with Complications Per 7000 Critical Hours; 1Q/2015 to 4Q/2015
- Point Beach PI Reporting Data; Units 1 And 2, 1Q15 Through 4Q15 For Unplanned Power Changes Per 7,000 Critical Hours
- Point Beach PI Reporting Data; Units 1 And 2, 1Q15 Through 4Q15 For Unplanned Scrams Per 7,000 Critical Hours
- Point Beach PI Reporting Data; Units 1 And 2, 1Q15 Through 4Q15 For Unplanned Scrams with Complications Per 7,000 Critical Hours

4OA2 Identification and Resolution of Problems (71152)

- 1-PT-MS-003; Crossover Steam Dump (Quarterly); Revision 13
- 2R34; Refuel Outage FPL Maintenance Change Log for 2 19K SOP-19KV-001
- 2-SOP-19KV-001; Transformers 2X-01/2X-02 Outages and Electrical Operations; Revision 23
- AR 02047740; 2015 NERC Annual Assessment PB
- AR 02050563; Picture of Document Lost From Work Package in EWP
- AR 02054571; 1ER L-4-15-21: Proficiency Shortfalls in Operator Performance
- AR 02058590; K-2A Relay Calibration Tagging Issue
- AR 02059242; INPO 15-006 Equipment Clearances Issued
- AR 02062403; EWP Inefficiencies and Challenges
- AR 02063840; Procedures Lost to Electronic Oblivion for TS-3A
- AR 02072332; Missing Emergency Light Data Sheets from WO 40346794
- AR 02072920; Lost Data Due to Forced Check in EWP
- AR 02073062; Operator Training Analysis for Rev. 11 of OP-AA-101-1000
- AR 02073101; Reperform Portion of Quarterly on E Lights Due to Lost Data
- AR 02078745; Tagout Requirements for P-35B Diesel Fire Pump Not Clear
- AR 02082483: Weaknesses Identified During PORV NFP-805 Continuity Checks
- AR 02086645; Relief Valve for TSAC Work Will not be Onsite as Scheduled
- AR 02086865; SEL Camera Removed From Service
- AR 02086949; 2X01 Lockout Generated
- AR 02087640; A52-DHVR-3000-16 Reperform Maintenance Due to EWP; Dated November 4, 2015
- AR 02087894; PB Rapid OE Loss of Power During Clearance Restoration
- AR 02088125; Rapid OE Point Beach Main Transformer Lockout
- AR 02088190; Review AOP-18 for Enhancements for Loss of Multiple Busses

- AR 02089094; U2R34 Operations Trend
- AR 02091151; PBF-2527 Tagging Pre-Job Discussion Sheet (RCE 2086949)
- AR 02091660; OP-AA-101-1000 Clearance and Tagging Note (RCE 02086949)
- AR 02091842; 1-SOP-19KV-001 Transformers 1X-01/1X-02 (RCE 2086949)
- AR 02091844; 2-SOP-19KV-001 Transformers 2X-01/2X-02 (RCE 2086949)
- AR 02096116; Lack of Governing Control Procedure During Loop in Mode 3
- AR 02096430; EWP Data Lost for Maintenance Work per RMP 9303
- AR 02098691; 2RC-430 Leaks
- AR 02098973; LCO 3.4.11 Is Not Being Implemented Per The Bases Document
- AR 02099969; Effectiveness of Immediate Actions Is Needed
- AR 02101222; Differing Professional Opinion Unintended Consequence
- AR 02101241; Adverse Trend Identified In CE02089094 ? U2R34 Operations
- AR 02102077; ERG Revision 3 Implementation Date Severely Challenged
- AR 02102606; INPO 16-001 Equipment Clearance Process Description
- AR 02104437; Unit 1 Crossover Steam Dump Testing Temperature & Output
- AR 02105126; NRC Question Of Staged Fire Hoses Outside U1 Containment
- AR 02105466; Feedback: Understanding of Tages-Plus
- AR 02108008; Electronic QA Records with Errors; Dated February 1, 2016 Thru February 5, 2016
- AR 02108366; EOP-0.2 Rev 3 Being Further Evaluated by Westinghouse
- AR 02109502; Conclusion of RCE 02086949, 2X-01 Lockout, Questioned
- AR 02112791; FSAR Submittals
- AR 02113034; Lost of Signatures in EWP
- AR 02114423; Work Orders Did Not Archive, Greater Than 90 Days
- BG AOP-18; Background Documents; Electrical System Malfunction; Revision 4
- BG EOP-0; Reactor Trip or Safety Injection; Revision 40
- CE 02089094; U2R34 Operations Trend; Dated January 13, 2016
- Clearance Coversheet for 2 19K SOP-19-KV-001 Multi and/or Non-Numbered Equipment
- Clearance Tag List for 2 19K SOP-19KV-001
- Control Room Log Entries for January 21, 2016
- Control Room Log Entries for October 29, 2015
- Drawing E-2010; Generator & Main Transformer Meters and Relays; Revision 23
- Drawing E-2061; Sheet 3; 345 KV Breaker Control; Revision 6
- Drawing E-6; Sheet 1, 125V DC Dist. System; Revision 66
- EN-AA-108-1001; Procedure for Failure Investigation Process; Revision 2
- EOP-0; Unit 1, Emergency Operating Procedure, Reactor Trip or Safety Injection; Revision 61
- FP-MA-ES-01; Electrical Safety; Revision 19
- INPO 15-006; Equipment Clearances; Dated July 15, 2015
- INPO 15-006; Equipment Clearances; Dated June 2015
- NIRMA TG15-1998; Management of Electronic Records
- NP 5.3.3; Incident Investigation and Post-Trip Review; Revision 16
- NPM 97-0212; WE Internal Correspondence, NRC 96EC #19; Dated April 22, 1997
- NPM 97-0416; WE Internal Correspondence, Outage Review Committee Meeting Minutes June 13, 1997; Dated July 7, 1997
- NUC TAG 001: Clearance Process Introduction Lesson Plan
- NUC TAG 003 WBT and NUC TAG 1001 LPC; Fleet Equipment Clearance and Tagging Lesson Plan; Dated October 13, 2008
- NUC TAG 004; Fleet Clearance and Tagging Continuing Training Lesson Plan; Dated October 24, 2011
- NUC TAG 1003; Clearance Hanger Lesson Plan; Dated January 16, 2012

- NUC TAG 1004; Clearance Order Development and Distribution Lesson Plan; Dated February 6, 2012
- NUC TAG 2003; Fleet Clearance Hanger OJT/TPE Qualification Guide Lesson Plan; Dated September 14, 2011
- OM 4.3.2; EOP/AOP Verification/Validation Process; Revision 24
- OP-AA-101-1000; Clearance and Tagging; Revision 13
- OP-AA-104-1000; Operations Performance Management; Revision 5
- OP-AA-104-1000-F02; Transient Assessment Documentation for the Loss of 2A-01 and 2A-02; Dated October 29, 2015
- PBF-9044; Energized Electrical Work Safety Checklist; Revision 12
- PBN LOC 15F 002S; Simulator Exercise Guide for Crew B Cycle 15F; Revision 0
- PBN LOC 16A 004S; Simulator Exercise Guide for LOCT; Revision 0
- PBN TRQM 17.35; Danger Tagger and Independent Verification/Concurrent Checker Lesson Plan; Revision 22
- PBN-LOC-15E-001L; Pre-Outage Topics Lesson Plan
- PCR 2030280; Incident Investigation and Post-Trip Review; Dated March 5, 2015
- PI Trend; Unit 1, 15-Minute Rolling Average Rated Thermal Output;
 Dated January 21 22, 2016
- PI Trend; Unit 1, Reactor Thermal Output; Dated January 21, 2016
- PI Trend; Unit 1, TREF; Dated January 20 21, 2016
- PI Trend; Unit 2; Cold Calibrated Pressurizer Level; Dated October 29, 2015
- PI-AA-100; Condition Assessment and Response; Revision 8
- PI-AA-100-1005; Root Cause Analysis; Revision 13
- Procedure Writer's Guide; Revision 24
- RCE 02086949; 2X-01 Lockout Generated; Dated January 5, 2016
- RM-AA-01; Records Management; Revision 1
- RM-AA-100-1000; Processing Quality Assurance Records; Revision 4
- RM-AA-102; Electronics Records Program; Revision 6
- SEP-3.0; Unit 2, Shutdown Emergency Procedure; Loss of All AC Power While on Shutdown Cooling; Revision 32
- WO 40305389; 2ICP 2.20BL—RP/SG Analog Blue (Post-Refueling);
 Dated October 19, 2015
- WO 40305390; 2ICP 2.20RD—RP/SG Analog Red (Post-Refueling); Dated October 20, 2015.
- WO 40316460; IT 01 Train A; Dated March 15, 2015
- WO 40316460; IT-01 Train A, Unit 1; Dated March 16, 2015
- WO 40326251; IT-405; Test of 2P-053 Motor Driven Aux Feed Pump and Valves; Dated May 12. 2015
- WO 40340453; 1ICP-2.32—1P-29 Auxiliary Feedwater Suction Pressure Trip; Dated July 24, 2015
- WO 40345470; 2ICP-2.31—2P-53 AF Suction Header Pressure Trip; Dated January 20, 2016
- WO 40345470; 2ICP-2.31—2P-53 AF Suction Pressure Trip; Dated February 14, 2016
- WO 40356738; IT 01 Train A; Dated March 16, 2015
- WO 40356738; IT-01 Train A, Unit 1; Dated March 16, 2015
- WO 40359909; 1ICP-2.32—1P-29 Auxiliary Feedwater Suction Pressure Trip; Dated November 1, 2015
- WO 40359926; 2ICP 2.1RD—RP/SG Analog Red; Dated October 18, 2015
- WO 40361271; 2ICP 2.1YL—RP/SG Analog Yellow; Dated October 30, 2015
- WO 40363836; IT 405A 2AF-4067, 2P-53 AFP, Service Water Supply Isolation Exercise Test Unit 2 (Quarterly); Dated November 10, 2015

- WO 40363836; IT-405A, 2AF-4067, 2P-53 AFP SW Supply Isolation Test;
 Dated November 10, 2015
- WO 40377807; 1ICP-2.32—1P-29 Auxiliary Feedwater Suction Pressure Trip; Dated January 22, 2016

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

- AR 02094050; Security Status Level Change
- AR 02094054; 1N-31 Indicates Lower Than Expected
- AR 02094061; Unit 1 Reactor Trip, Due to Generator Lockout
- AR 02094067; Unit 1 Reactor Trip, Due to Generator Lockout
- AR 02094169; U1 Reactor Startup Aborted
- AR 02099249; Revise LER 2015-005 and LER 2015-006
- RCE 02094061; Unit 1 Reactor Trip, Due to Generator Lockout; Dated January 7, 2016

LIST OF ACRONYMS USED

ADAMS Agencywide Document Access and Management System

AFW Auxiliary Feedwater

ALARA As-Low-As-Reasonably-Achievable AOP Abnormal Operating Procedure

AR Action Request

ASME American Society for Mechanical Engineers

CAP Corrective Action Program

CAPR Corrective Action to Prevent Recurrence

CFR Code of Federal Regulations

CVCS Chemical Volume and Control System

EC Engineering Change

EDG Emergency Diesel Generator
EPRI Electric Power Research Institute

ET Eddy Current Testing
EWP Electronic Work Package
FSAR Final Safety Analysis Report
IMC Inspection Manual Chapter
IP Inspection Procedure
IR Inspection Report
ISI Inservice Inspection

MT Magnetic Particle Examination
NARS Nuclear Accident Reporting System

Licensee Event Report

NEI Nuclear Energy Institute

NRC U.S. Nuclear Regulatory Commission

OOS Out-of-Service

LER

ORT Operational Readiness Test

OSP Outage Safety Plan
OWA Operator Work Around
PARS Publicly Available System
PBNP Point Beach Nuclear Plant
Pl Performance Indicator

POD Prompt Operability Determination
PORV Power-Operated Relief Valve
PT Dye Penetrant Examination

QA Quality Assurance
RCE Root Cause Evaluation
RCP Reactor Coolant Pump
RCS Reactor Coolant System

RFO Refueling Outage
RHR Residual Heat Removal
RPV Reactor Pressure Vessel

SG Steam Generator

SSC Structure, System, and Component

SW Service Water

TDAFW Turbine-Drive Auxiliary Feedwater

TS Technical Specification

UT Ultrasonic Test
VT Visual Examination

WO Work Order WR Work Request

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 05000266/2016001; 05000301/2016001

cc: Distribution via LISTSERV®

DISTRIBUTION:

Jeremy Bowen
RidsNrrDorlLpl3-1 Resource
RidsNrrPMPointBeach
RidsNrrDirsIrib Resource
Cynthia Pederson
Darrell Roberts
Richard Skokowski
Allan Barker

Carole Ariano Linda Linn DRPIII DRSIII Jim Clay

Carmen Olteanu

ROPreports.Resource@nrc.gov

ADAMS Accession Number: ML16124B058													
	☑ Publicly A	vailable 🔲 No	on-Public	ly Available] Sensitive 🛛 🗎 🛚	Non-S	Sensitive					
To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy													
	OFFICE	RIII	RIII			RIII		RIII					
	NAME	BBartlett for	JCa	JCameron									
		JRutkowski:jw											
	DATE 05/02/46		05/0	2/16									

OFFICIAL RECORD COPY