

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

July 30, 2019

Mr. Robert Craven Site Director NextEra Energy Point Beach, LLC 6610 Nuclear Road Two Rivers, WI 54241-9516

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2—INTEGRATED

INSPECTION REPORT 05000266/2019002 AND 05000301/2019002

Dear Mr. Craven:

On June 30, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Point Beach Nuclear Plant, Units 1 and 2. On July 22, 2019, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. The inspectors documented a licensee-identified violation which was determined to be of very low safety significance in this report. The NRC is treating this violation as non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest a violation or the significance or severity of a violation documented in this inspection report, 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 the Regional Administrator, Region III; the Director, Office of Enforcement; and the NRC Resident Inspector at Point Beach.

If you disagree with a cross-cutting aspect assignment 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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; and the NRC Resident Inspector at Point Beach.

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This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Eric R. Duncan, Chief Branch 4 Division of Reactor Projects

Docket Nos. 05000266 and 05000301 License Nos. DPR-24 and DPR-27

Enclosure:
As stated

cc: Distribution via LISTSERV®

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Letter to Robert Craven from Eric Duncan date July 30, 2019

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2—INTEGRATED INSPECTION REPORT 05000266/2019002 AND 05000301/2019002

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U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Numbers: 05000266 and 05000301

License Numbers: DPR-24 and DPR-27

Report Numbers: 05000266/2019002 and 05000301/2019002

Enterprise Identifier: I-2019-002-0060

Licensee: NextEra Energy Point Beach, LLC

Facility: Point Beach Nuclear Plant

Location: Two Rivers, WI

Inspection Dates: April 1, 2019 to June 30, 2019

Inspectors: K. Barclay, Resident Inspector

M. Domke, Reactor Inspector G. Edwards, Health Physicist

T. Hartman, Senior Resident Inspector D. Kimble, Senior Resident Inspector D. Krause, Senior Resident Inspector V. Myers, Senior Health Physicist

R. Ng, Project Engineer

Approved By: Eric R. Duncan, Chief

Branch 4

Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Point Beach in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information. A Licensee-identified non-cited violation is documented in Report Section: 71152.

List of Findings and Violations

Human Performance Error Causes Unplanned Pressurizer Pressure Drop					
Cornerstone Significance Cross-Cutting Report					
		Aspect	Section		
Initiating Events	Green	[H.12] - Avoid	71111.20		
	NCV 05000266/2019002-01	Complacency			
	Open				

A self-revealed finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification 5.4.1, "Procedures," was identified when licensee personnel failed to adequately implement a procedure for the normal sequence of startup of the plant following a refueling outage. Specifically, the licensee exceeded the single step power limit of 3 percent when power was increased from 50.0 percent to 53.4 percent. The resulting temperature transient caused pressurizer pressure to drop below the Core Operating Limits Report (COLR) minimum pressure limit of 2205 pounds per square inch gauge (psig).

Additional Tracking Items

None.

PLANT STATUS

Unit 1 began the inspection period shutdown for a refueling outage. On April 18, 2019, Unit 1 was restarted. On April 19, 2019, Unit 1 was synchronized to the grid and on April 24, 2019, achieved full power. On May 16, 2019, Unit 1 was reduced in power to 43 percent to support main condenser water box cleaning. Unit 1 subsequently returned to full power on May 18, 2019, and remained at or near full power for the remainder of the inspection period.

Unit 2 began the inspection period at full power. On May 8, 2019, Unit 2 was reduced in power to 59 percent to support turbine stop valve testing. Following the completion of this testing, Unit 2 returned to full power on May 9, 2019. On May 28, 2019, Unit 2 was reduced in power to 60 percent to investigate elevated B steam generator feed pump vibrations. Following repairs, Unit 2 returned to full power on May 31, 2019, and remained at or near full power for the remainder of the inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515 Appendix D, "Plant Status" and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Summer Readiness Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated the summer readiness of offsite and alternate alternating current (AC) power systems

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 1 Train B Component Cooling Water (CCW) pump on April 9, 2019
- (2) Unit 1 Chemical and Volume Control System (CVCS) when credited as a shutdown inventory flowpath on April 11, 2019
- (3) Unit 1 Turbine-Driven Auxiliary Feedwater (TDAFW) pump following testing on May 11, 2019

71111.04S - Equipment Alignment

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated system configurations during a complete walkdown of the Unit 1 and Unit 2 CCW systems on May 1, 2019

71111.05Q - Fire Protection

Quarterly Inspection (IP Section 03.01) (5 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

- (1) Fire Zones 225 and 228 on April 10, 2019
- (2) Fire Zones 306 and 307 on April 10, 2019
- (3) Fire Zones 142 and 151 on May 22–23, 2019
- (4) Fire Zones 156 and 156A on May 22–23, 2019
- (5) Fire Zone 166 on May 22–23, 2019

71111.08P - Inservice Inspection Activities (PWR)

PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

(1) The inspectors verified that the Reactor Coolant System (RCS) boundary, steam generator tubes, reactor vessel internals, risk-significant piping system boundaries, and containment boundary were appropriately monitored for degradation and that repairs and replacements were appropriately fabricated, examined, and accepted by reviewing the following activities from March 25, 2019 to April 9, 2019:

03.01.a - Nondestructive Examination and Welding Activities.

- Volumetric ultrasound examination of Reactor Coolant System (RCS) components RC-03-AS-1001-02, elbow-to-tee; RC-03-PS-1002-24, tee-topipe; RC-03-PS-1002-25, pipe-to-reducer, on 3-inch diameter piping located in the pressurizer upper cubicle of containment
- Volumetric ultrasound examination of RCS components RC-03-PS-1001-08, pipe-to-elbow; RC-03-PS-1001-09, elbow-to-pipe; on 3-inch diameter piping located in the head laydown area of containment
- Surface liquid dye penetrant examination of Residual Heat Removal (RHR) piping welded attachment AC-601R-6-H4-IWA
- Pressure boundary field welds W-2 and W-3 for Safety Injection (SI) system check valve 1SI-845E replacement for seat leakage per Work Order (WO) 40479783
- Pressure boundary field welds W-1 and W-3 for Auxiliary Feedwater (AF) system gate valve 1AF-00195A for body-to-bonnet leakage per WO 40459909

03.01.b - Pressurized Water Reactor Vessel Upper Head Penetration Examination Activities.

 Bare Metal Visual (BMV) examination of reactor vessel head nozzles 40, 28, 20, 16 and 32

- 03.01.c Pressurized Water Reactor Boric Acid Corrosion Control Activities.
 - Boric acid leakage evaluation on SI system component 1P-15B SI pump 17-198B-E
 - Boric acid leakage evaluation on charging system component 1P-2A charging pump discharge drain first off isolation, 18-021-E
 - Boric acid leakage corrective action on SI system component 1SI-D-25, WR 94168630

03.01.d – Pressurized Water Reactor Steam Generator Tube Examination Activities.

- Steam Generators A and B tubes were subjected to eddy current examinations
- Steam Generators A and B were subjected to secondary side visual examinations

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

<u>Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01)</u> (1 Sample)

(1) The inspectors observed and evaluated licensed operator performance in the main control room during a Unit 1 reactor startup following a refueling outage on April 18, 2019

<u>Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)</u>

(1) The inspectors observed and evaluated a licensed operator simulator scenario on May 27, 2019

71111.12 - Maintenance Effectiveness

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (1 Sample)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

(1) K-3B Service Air Compressor

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

- (1) Unit 1 elevated risk due to lowered reactor inventory for reactor pressure vessel head placement, on April 9, 2019
- (2) Elevated risk for G-05 Gas Turbine Generator maintenance and Service Water pump testing, on May 15, 2019

- (3) Elevated risk for DY-0A Red Inverter maintenance and Unit 1 Emergency Core Cooling System (ECCS) testing, on June 19-20, 2019
- (4) Elevated risk during Unit 1 Train B ECCS testing, on June 27, 2019

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 02.02) (5 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Unit 1 Steam Generator (SG) Snubber HS-9 Failed Functional Test on April 2, 2019
- (2) Unit 1 Reactor Coolant Loop Flow Relay Found De-energized on April 26, 2019
- (3) Unit 1 Train A Containment Sump Recirculation Valve Operator Corrosion on May 21, 2019
- (4) Unit 1 Train A CCW Pump Elevated Vibrations on May 23, 2019
- (5) Unit 1 RCS Flow Transmitter Error on June 5, 2019

71111.18 - Plant Modifications

<u>Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02)</u> (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

(1) EC 293289 - Flood Protection Lake Level Change on June 18, 2019

71111.19 - Post-Maintenance Testing

Post Maintenance Test Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) 1P-11B, Unit 1 Train B CCW pump following replacement/upgrade on April 9, 2019
- (2) 1DY-02 Inverter following maintenance on April 30, 2019
- (3) 1P-2A Charging Pump following maintenance on May 21, 2019
- (4) K-3B Service Air Compressor following maintenance on May 23, 2019

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated Refueling Outage (RFO) U1R38 activities from March 22–April 17, 2019

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

(1) ORT 28, Demineralized Water Supply to Unit 1 Containment, on April 13, 2019

<u>Inservice Testing (IP Section 03.01) (1 Sample)</u>

(1) IT 45, Unit 2 Safety Injection Valves Train B, on April 11, 2019

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

- (1) IT 7C, P-32C Service Water Pump Quarterly Test, on March 5, 2019
- (2) ORT 6, Unit 1 Containment Spray Sequence Test, on April 11, 2019
- (3) IT 230, Unit 1 Leak Test of Class 1 Components Following a Refueling Shutdown, on April 16, 2019

71114.06 - Drill Evaluation

<u>Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01)</u> (1 Sample)

The inspectors evaluated the conduct of the following planned licensee Emergency Preparedness (EP) drill:

(1) A full scale EP site drill conducted on May 21, 2019

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Controls

Contamination and Radioactive Material Control (IP Section 02.03) (1 Sample)

The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material.

- (1) The inspectors verified the following sealed sources are accounted for and were intact:
 - 1113-7
 - 2602-9
 - 9121

High Radiation Area and Very High Radiation Area Controls (IP Section 02.05) (1 Sample)

(1) The inspectors evaluated risk-significant high radiation area and very high radiation area controls

Instructions to Workers (IP Section 02.02) (1 Sample)

The inspectors evaluated instructions to workers including radiation work permits used to access high radiation areas.

(1) Radiation Work Packages

- 19-1064; Unit 1B Reactor Coolant Pump Impeller Change Out and Pump Bowl Inspection
- 19-1053; Unit 1 Narrow Range Resistance Temperature Detector Replacement
- 19-1057; Steam Generator Eddy Current Testing

Electronic Alarming Dosimeter Alarms

- AR 02309081; Unanticipated Rate Alarms Received During U-1 "A" Steam Generator Sludge
- AR 02308787; Unanticipated Dose Rate Alarm
- AR 02286293; Dosimeter Rate Alarm Received During Walk Down

Labeling of Containers

- Unit 1 Containment 8' Elevation Hot Trash Container
- Unit 1 Containment 66' Elevation Hot Trash Container
- Auxiliary Building Trash Containers (Various Locations)

Radiation Worker Performance and Radiation Protection Technician Proficiency (IP Section 02.06) (1 Sample)

(1) The inspectors evaluated radiation worker performance and radiation protection technician proficiency

Radiological Hazard Assessment (IP Section 02.01) (1 Sample)

The inspectors evaluated radiological hazards assessments and controls.

(1) The inspectors reviewed the following:

Radiological Surveys

- 'B' Reactor Coolant Pump (RCP) Platform
- Resistance Temperature Detector (RTD) Tent
- Refuel Floor
- Spent Fuel Pool
- Reactor Cavity

Risk-Significant Radiological Work Activities

- 'B' RCP Internals Removal
- RTD Removal and Repair
- Steam Generator Eddy Current Testing

Air Sample Survey Records

- 30-105
- 30-108
- 30-112
- 30-106

Radiological Hazards Control and Work Coverage (IP Section 02.04) (1 Sample)

The inspectors evaluated in-plant radiological conditions during facility walkdowns and observation of radiological work activities.

- (1) Radiological work package for areas with airborne radioactivity
 - 19-1064; Unit 1B RCP Impeller Change Out and Pump Bowl Inspection
 - 19-1053; Unit 1 Narrow Range RTD Replacement
 - 19-1057; Steam Generator Eddy Current Testing

71124.02 - Occupational ALARA Planning and Controls

Implementation of ALARA and Radiological Work Controls (IPSection 02.03) (1 Sample)

The inspectors reviewed as low as reasonably achievable practices and radiological work controls.

- (1) The inspectors reviewed the following activities:
 - 19-1064; Unit 1B Reactor Coolant Pump Impeller Change Out and Pump Bowl Inspection
 - 19-1053; Unit 1 Narrow Range Resistance Temperature Detector Replacement
 - 19-1057; Steam Generator Eddy Current Testing

Radiation Worker Performance (IP Section 02.04) (1 Sample)

The inspectors evaluated radiation worker and radiation protection technician performance during:

(1) the observations of activities listed in Section 02.03

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

Engineering Controls (IP Section 02.01) (1 Sample)

The inspectors evaluated airborne controls and radioactive monitoring.

- (1) Installed Ventilation Systems
 - Unit 1 Containment Purge

Temporary Ventilation Systems

- High Efficiency Particulate Air (HEPA) ventilation for steam generator work
- HEPA ventilation for RTD tent work

Portable or Installed Monitoring Systems

- Continuous Air Monitors on the Refueling Floor
- Continuous Air Monitors in the Auxiliary Building

<u>Use of Respiratory Protection Devices (IP Section 02.02) (1 Sample)</u>

The inspectors evaluated the licensee's use of respiratory protection devices by:

- (1) Evaluations for the Use of Respiratory Protection
 - 19-1053; Unit 1 Narrow Range Resistance Temperature Detector Replacement
 - 19-1064; Unit 1B Reactor Coolant Pump Impeller Change Out and Pump Bowl Inspection

Respiratory Protection Use During Work Activities

- 19-1053; Unit 1 Narrow Range Resistance Temperature Detector Replacement
- 19-1064; Unit 1B Reactor Coolant Pump Impeller Change Out and Pump Bowl Inspection

Medical Fitness for Use of Respiratory Protection Devices

- Three individuals wearing respirators for steam generator work
- Two individuals wearing respirators for RTD work

Observation of Donning, Doffing and Functional Test

- Three individuals wearing respirators for steam generator work
- Two individuals wearing respirators for RTD work

Respiratory Protection Device Evaluation

- Three OptimAir powered air purifying respirators
- Two OptimAir MM 2K respirators

71124.04 - Occupational Dose Assessment

External Dosimetry (IP Section 02.02) (1 Sample)

(1) The inspectors evaluated the external dosimetry program implementation

Internal Dosimetry (IP Section 02.03) (1 Sample)

The inspectors evaluated the internal dosimetry program implementation.

- (1) Whole Body Counts
 - Dose assessment completed on April 8, 2017
 - Two dose assessments completed on October 29, 2017
 - Dose assessment completed on May 14, 2018

In-Vitro Internal Monitoring

None available

Dose Assessments Performed using Air Sampling and DAC-hr Monitoring

None available

Source Term Categorization (IP Section 02.01) (1 Sample)

(1) The inspectors evaluated the licensee's characterization of the source term and use of scaling factors for the use of hard-to-detect radionuclide activity

Special Dosimetric Situations (IP Section 02.04) (1 Sample)

The inspectors evaluated the following special dosimetric situation:

- (1) Declared Pregnant Workers
 - Declaration Date July 10, 2018

Effective Dose Equivalent for External Exposures

None available

Shallow Dose Equivalent

- Dose assessment completed on October, 28, 2017
- Dose assessment completed on March 9, 2018

Neutron Dose Assessment

None available

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Instrumentation and Equipment (IP Section 02.04) (1 Sample)

The inspectors reviewed the following radioactive effluent discharge system surveillance test results:

(1) The inspectors reviewed effluent instrumentation and equipment

OTHER ACTIVITIES - BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

BI02: RCS Leak Rate Sample (IP Section 02.11) (2 Samples)

- (1) Unit 1 (April 1, 2018 March 31, 2019)
- (2) Unit 2 (April 1, 2018 March 31, 2019)

MS05: Safety System Functional Failures (SSFFs) Sample (IP Section 02.04) (2 Samples)

- (1) Unit 1 (April 1, 2018 March 31, 2019)
- (2) Unit 2 (April 1, 2018 March 31, 2019)

71152 - Problem Identification and Resolution

Semiannual Trend Review (IP Section 02.02) (1 Sample)

(1) The inspectors reviewed the licensee's corrective action program, trend reports, major equipment problem lists, system health reports, self-assessments, and additional documents, to identify trends that might indicate the existence of a more significant safety issue.

INSPECTION RESULTS

Licensee-Identified Non-Cited Violation

71152

This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Violation: Point Beach Nuclear Plant, Units 1 and 2, Renewed Facility Operating License Condition 4.F, required, in part, that the licensee implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), "National Fire Protection Association Standard NFPA 805," as specified in the license amendment requests, and as approved in the Safety Evaluation Report (SER) dated September 8, 2016. "National Fire Protection Association (NFPA) 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," Section 3.3.1.2, "Control of Combustible Materials," required, in part, that procedures for the control of transient combustibles shall be developed and implemented.

Licensee procedure NP 1.9.9, "Transient Combustible Control," was developed by the licensee to implement the requirements of NFPA 805 for the control of transient combustibles. Revision 36 of NP 1.9.9, Step 4.12.3.b, stated, "Except as permitted by Step 4.12.3.f, up to 100 pounds of Class A combustible materials may be brought into and left unattended in an Ordinary Risk fire zone without a TCCP [transient combustible control permit]."

Contrary to the above, on April 4, 2019, the licensee failed to implement the requirements of Revision 36 of NP 1.9.9, Step 4.12.3.b associated with the control of transient combustibles. Specifically, the licensee brought in and left unattended in excess of 1000 pounds of Class A combustible materials in the primary auxiliary building truck bay, an Ordinary Risk fire zone, without a TCCP. This amount of material significantly exceeded the 100 pound limit of Class A combustible material specified in Step 4.12.13.b of NPP 1.9.9 and the Class A combustible material did not qualify for the Step 4.12.3.f exemption.

Significance: Green.

Corrective Action References: AR 2308895

Observation: Semi-Annual Trend Review

71152

The licensee documented a trend in procedure use and adherence errors on March 1, March 29, and April 10, 2019. A licensee Recovery Plan, issued on April 15, 2019, included actions for first-line supervisors to emphasize procedure use and adherence within their work groups; managers to perform observations of procedure use and adherence in the field; and operations, maintenance, chemistry, engineering, and radiation protection departments to

perform information sharing to reinforce human performance and procedure use and adherence.

The inspectors reviewed a licensee Interim Effectiveness Review that was issued on May 13, 2019, and that assessed the effectiveness of the Recovery Plan. The licensee concluded that their recovery actions were effective based on a reduction in the number of identified procedure use and adherence errors documented in condition reports.

The inspectors observed that although some improvements in procedure use and adherence were noted, challenges with procedure use and adherence, which were also documented in the previous semi-annual trend inspection, continued to be identified in the first and second quarter of 2019. For example, procedure use, and adherence errors associated with the control of transient combustibles during the Unit 1 refueling outage were observed. In particular, the inspectors identified three condition reports that identified a failure to obtain a required transient combustible permit, one of which is documented in this report as a finding of very low safety significance with an associated non-cited violation.

The inspectors concluded that more time was required to determine whether the efforts to reduce procedure use and adherence errors were effective and sustainable.

Human Performance Error Causes Unplanned Pressurizer Pressure Drop					
Cornerstone	Significance	Cross-Cutting Aspect	Report Section		
Initiating Events	Green NCV 05000266/2019002-01 Open	[H.12] - Avoid Complacency	71111.20		

A self-revealed finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification 5.4.1, "Procedures," was identified when licensee personnel failed to adequately implement a procedure for the normal sequence of startup of the plant following a refueling outage. Specifically, the licensee exceeded the single step power limit of 3 percent when power was increased from 50.0 percent to 53.4 percent. The resulting temperature transient caused pressurizer pressure to drop below the Core Operating Limits Report (COLR) minimum pressure limit of 2205 pounds per square inch gauge (psig).

Description:

On April 21, 2019, with Unit 1 at 49 percent following the U1R38 refueling outage, the licensee inadvertently commenced power ascension at a rate of 3 percent per minute instead of 3 percent per hour and stepped reactor power from 49 percent to 53.4 percent. A reactor operator communicated that the turbine ramp rate was being set for 3 percent per hour but misread an operator aid and inadvertently established a ramp rate of 3 percent per minute. The reactor operator then requested a peer check for the ramp rate that had been established from a second reactor operator, who improperly concurred with the incorrect setting. The reactor operator informed the Unit 1 senior reactor operator (SRO) that the turbine ramp rate had been set and requested permission to commence the power ascension. The SRO gave permission to proceed and the power ascension was commenced. The reactor operator observed that the turbine setter display value had begun to increase, confirming that the ramp had commenced, and stated that the turbine was ramping up. About 2 minutes after the power ascension was initiated, the reactor operator

noted that reactor coolant system (RCS) temperature was unexpectedly lowering and the second reactor operator communicated that RCS pressure was also unexpectedly lowering. The second reactor operator subsequently suspended the power ascension by placing the turbine controls in hold.

The resulting temperature transient caused pressurizer pressure to drop below the Core Operating Limits Report (COLR) minimum pressure limit of 2205 psig required by Technical Specification (TS) Limiting Condition for Operation (LCO) 3.4.1, "RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits." The Technical Specification Action Condition (TSAC) required that when pressurizer pressure drops below the minimum pressure required by the COLR, that pressurizer pressure be restored to within the COLR limit of 2205 psig within 2 hours. The licensee entered TSAC 3.4.1.a at 8:06 a.m., restored pressurizer pressure to within the COLR limit at 8:09 a.m., and subsequently exited the TSAC.

OP 1C, "Startup To Power Operation Unit 1," Step 3.3.2, stated, in part, that the rate of core power change is not limited by the fuel up to the conditioned power level or the threshold power of 50 percent, whichever is greater. OP 1C also stated that to be conditioned above 50% power, the plant must have been operated in the current cycle at or above a given power level greater than 50 percent for at least 72 hours out of the last 7 days of power operation.

For the step change in power on April 21, the conditioned power level was not above 50 percent in the current cycle since the plant was restarting immediately following a refueling outage. Therefore, the threshold power level of 50 percent applied. OP 1C, Step 3.3.2, also stated, in part, that the following power limit increases shall not be exceeded: 4 percent over any 1-hour period; 7 percent over any 2-hour period; 10 percent over any 3-hour period; and no single step change in power of more than 3 percent of full power.

Corrective Actions: After identifying the issue, the licensee immediately halted the load ramp and reduced power to about 51 percent. The licensee contacted the fuel vendor, who validated that the step change in power did not adversely impact the fuel. Long-term corrective actions included revising the operator aid used to set the ramp rate and conducting a human performance investigation.

Corrective Action References: AR 2311530

Performance Assessment:

Performance Deficiency: The inspectors determined that the failure to adequately implement OP 1C, "Startup To Power Operation Unit 1," Step 3.3.2, was contrary to TS 5.4.1, "Procedures," and was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance attribute of the Initiating Events cornerstone. The performance deficiency 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 licensee violated the step change limits for power ascension and violated the COLR limit for pressurizer pressure.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors

determined that the finding was of very low safety significance (i.e., Green) because they answered "No" to the Transient Initiators Question in Exhibit 1 - Initiating Events Screening Questions. Specifically, the finding did not cause a reactor trip, or the loss of mitigating equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition.

Cross-Cutting Aspect: H.12 - Avoid Complacency: Individuals recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Individuals implement appropriate error reduction tools. Specifically, the operators failed to implement appropriate error reduction tools.

Enforcement:

Violation: Technical Specification 5.4.1.a, of Technical Specification 5.4, "Procedures," required, in part, that written procedures shall be established, implemented, and maintained covering the normal sequence of startup, operation, and shutdown of components, systems, and the overall plant. Point Beach Nuclear Plant Operating Procedure OP 1C, "Startup To Power Operation Unit 1," is the procedure used in the normal sequence of startup of the overall plant subject to the requirements of Technical Specification 5.4.1.a. OP 1C, Step 3.3.2, stated, in part, that the rate of core power change is not limited by the fuel up to the conditioned power level or the threshold power of 50 percent, whichever is greater. OP 1C, Step 3.3.2 also stated, in part, that no single step in power shall exceed 3 percent of full power.

Contrary to the above, on April 21, 2019, the licensee failed to implement a procedure for the normal sequence of startup of the overall plant as required by Technical Specification 5.4.1.a. Specifically, with the reactor at the threshold power of 50 percent, which was the greater of the conditioned power level and the threshold power level, the licensee exceeded the single step power increase limit of 3 percent of full power specified in OP 1C, Step 3.3.2, when a step change in power from 50 percent to 53.4 percent occurred.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On April 5, 2019, the inspectors presented the radiation protection inspection results to Mr. R. Craven, Site Director, and other members of the licensee staff.
- On April 9, 2019, the inspectors presented the Inservice Inspection Exit to Mr. B. Wojak, Site Engineering Director and other members of the licensee staff.
- On July 22, 2019, the inspectors presented the integrated inspection results to Mr. R. Craven and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents Resulting from Inspection	2314350	NRC Items Identified during Switchyard Walkdown	05/14/2019
	Miscellaneous	PBNP-MISO- NUC-001	Nuclear Plant Operating Agreement for Point Beach Nuclear Plant	7
	Procedures	NP 2.1.5	Electrical Communications, Switchyard Access and Work Planning	32
		NP 5.2.19	NERC Standard NUC-001 Nuclear Plant Interface Coordination Agreement Control	2
71111.04	Drawings	110E018, Sheet 3	Auxiliary Coolant System	45
		110E018, Sheet 5	CCW Minimum Flow Recirculation Cross Connect Details	00
		M-201, Sheet 1	P&ID Main & Reheat Steam System	62
		M-217, Sheet 1	P&ID Auxiliary Feedwater System	104
	Miscellaneous		Shutdown Safety Assessment and Fire Inspection Checklist	04/11/2019
	Procedures	1-CL-CC-001	Component Cooling Unit 1	20
		CL 13E Part 1	Auxiliary Feedwater Valve Lineup Turbine-Driven Unit 1	52
		CL 5A	Chemical and Volume Control System Unit 1	31
71111.04S	Drawings	110E018, Sheet 1	P&ID Auxiliary Coolant System	71
		110E018, Sheet 2	P&ID Auxiliary Coolant System	22
		110E018, Sheet 3	P&ID Auxiliary Coolant System	45
		110E029, Sheet 1	P&ID Auxiliary Coolant System	57
		110E029, Sheet 2	P&ID Auxiliary Coolant System	17
		110E029, Sheet 3	P&ID Auxiliary Coolant System	46
		110E029, Sheet 4	P&ID Auxiliary Coolant System	00
	Procedures	1-CL-CC-001	Component Cooling Unit 1	20
		2-CL-CC-001	Component Cooling Unit 2	19
71111.05Q	Corrective Action Documents Resulting from Inspection	2300129	Material Missing From Structural I Beams	1/31/2019
	Fire Plans	PFP-0-CB	Control Building Elevation 8', 26', 44' and 66'	1

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		PFP-0-PAB-26	Auxiliary Building 26'	0
		PFP-0-PAB-8	Primary Auxiliary Building Elevations 8' and Below	0
		PFP-0-PAB-8	Pre-Fire Plan Primary Auxiliary Building Elevations 8' and Below	0
71111.08P	Corrective Action	AR 2309189	Anomaly During U1R38 SG Tube Plug Installation	04/05/2019
	Documents	AR 2309427	Debris Found on Unit 1 Reactor Pressure Vessel Closure Head	04/08/2019
		AR 2309430	Boric Acid Streaking from CETNA 37 on Unit 1 RPV Head	04/08/2019
		AR 2309467	Boric Acid Streaking from CETNA 35 on Unit 1 RPV Head	04/08/2019
		AR 2309598	Recordable Indication on RTD Bypass Piping Support RC-2501R-14-102R	04/09/2019
	Corrective Action	AR 2307462	Weld Data Sheets in Incorrect Record	03/26/2019
-	Documents Resulting from Inspection	AR 2309226	Incorrect Revision of Code Case N-729 Referenced in NDE Procedure	04/05/2019
	Engineering Evaluations	17-198B-E	Safety Injection Pump Inboard Seal Leakoff Area and Pump Skid Below	04/17/2018
		18-021-E	1P-2A CHG Pump Discharge Header Drain First Off Isolation/8/PAB/U1	03/27/2018
		LTR-CECO-19- 029	Evaluation of Roll Expanded Mechanical Tube Plug Extending from the Tubesheet in Tube R13C49 in SGA Cold Leg at Point Beach Unit 1	04/08/2019
	Miscellaneous	NPM 2007-0145	Documentation of Point Beach Nuclear Plant's Position on the Use of Liquid Penetrant and Magnetic Particle Materials Contained in Aerosol Containers and Stored Under Ambient Conditions	04/24/2007
		NSAL-12-1	Nuclear Safety Advisory Letter for Steam Channel Head Degradation	Revision 1
		NSD-TB-94-03- R0	Westinghouse Technical Bulletin for Steam Generator Secondary Side Erosion-Corrosion	05/02/1994
		SG-CDMP-19-3	Point Beach U1R38 Steam Generator Degradation Assessment	Revision 1
	NDE Reports	2019U1PT-001	Liquid Penetrant Examination of Component AC-601R-6-H4-IWA	04/02/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
	Procedures	FP-PE-B31- P1P1-GTSM-001	ASME–Welding Procedure Specification	Revision 6
		FP-PE-B31- P8P8-GTSM-037	ASME–Welding Procedure Specification	Revision 5
		MRS-GEN-1217	Rolled Mechanical Plug Installation Using the Advanced Rolling Tool and the Universal Platform Control Box	Revision 5
		NDE-173	PDI Generic Procedure for the Ultrasonic Examination of Austenitic Piping Welds	Revision 17
		NDE-201	Radiographic Examination	Revision 6
		NDE-451	Visible Dye Penetrant Examination Temperature Applications 45°F to 125°F	Revision 30
	Work Orders	WO 40459909 01	1AF-00195A/Replace Valve (Welding)	10/13/2017
		WO 40479783 01	1SI-845E/Cut Out and Replace Valve	10/17/2017
		WO 40514558 01	Perform NDE/UT of Pressurizer Spray Piping Welds	10/13/2017
		WO 40514567 02	Perform NDE/RC-03-PS-1001-08	10/12/2017
		WO 40573724 01	Reactor Pressure Vessel Closure Head	01/17/2019
71111.11Q	Corrective Action Documents	2314216	Simulator Issue Negatively Affected LOC Evaluated Scenario	5/13/2019
	Procedures	OP 1B	Reactor Startup	77
		OP-AA-100-1000	Conduct of Operations	27
71111.12	Corrective Action	2263887	K-3B SA Compressor High Temp/Standby Compressor Start	05/11/2018
	Documents	2264862	K-3B Service Air Compressor Discharge Temp High Alarm Received	05/17/2018
		2291891	K-3B Service Air Compressor Improper Operation	11/21/2018
		2297959	K-3B Service Air Compressor Rapid Motor Vibration Increase	01/15/2019
		2308290	NI System Maintenance Rule Evaluation Inconsistencies Identified	04/01/2019
		2316963	U1 CW System Exceeds Maintenance Rule Performance Criteria	06/05/2019
		2317207	SA System Exceeds Maintenance Rule Performance Criteria	06/07/2019
	Corrective Action Documents Resulting from	2308290	NI System Maintenance Rule Evaluation Inconsistencies Identified	4/1/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
	Inspection			
	Miscellaneous		Service Air Reliability Event Report	04/01/2017- 04/29/2019
71111.13	Corrective Action Documents	2319493	IT-90 Train B Test Moved PRA Risk Review Not Done In Advance	06/27/2019
	Resulting from Inspection	2319494	DGB Door 107 Not Self Latching	06/27/2019
	Miscellaneous		Station Logs	05/15- 16/2019
			Point Beach Station Unit 1 and 2 Daily Status Report	06/19/2019
			Point Beach Station Unit 1 and 2 Daily Status Report	05/15/2019
			PBNP Shutdown Safety Assessment and Fire Inspection Checklist	04/11/2019
			Current Risk Summary Reports; PBN Unit 1 and 2	06/18- 21/2019
			Current Risk Summary Report; PBN Unit 1 and 2	05/15/2019
			Current Risk Summary Reports; PBN Unit 1 and 2	06/27- 28/2019
			Point Beach Station Unit 1 and 2 Daily Status Report	06/28/2019
71111.15	Calculations	CN-CPS-07-8	Point Beach Reactor Coolant Flow Instrumentation Setpoint and Uncertainty Calculation (1C-41)	3
	Corrective Action	2308372	Steam Generator Snubber HS-9 Failed Functional Test	04/01/2019
	Documents	2312347	Relay 1RC-3A Found De-Energized During Visual Inspection	04/26/2019
		2315175	1P-011A IST PMT Not Performed After 1P-011B Re-Piping U1R38	05/21/2019
	Corrective Action	2311877	CR 02308372 Canceled Versus Processed	04/23/2019
	Documents Resulting from Inspection	2312945	Water Up to ISI-850A-O (Operator) in Tendon Gallery	05/01/2019
	Drawings	617F354, Sheet 4A1	Schematic Diagram - Inputs, Reactor Protection System Train "A," Unit 1	3
	Miscellaneous	01257	Model 1154 Alphaline Pressure Transmitter	7
	Operability Evaluations	165	SSC Affected by Condition: 1&2 SI-00850A&B, RHR Pump Suction from Sump B	11/06/2005

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		2315095	1P-11A had Elevated Vibrations During IT-12 Train A	05/21/2019
	Procedures	MA-AA-203-1000	Maintenance Testing	13
		RMP 9061-3	Anker Holth Snubber Removal, Functional Testing, and Installation	17
	Work Orders	40573498	1ICP 4.2-1 - RCS Flow Transmitter Outage Calibration	04/04/2019
		40608261 37	1FT-414, 1FT-415, 1FT-416, RC Loop B Flow Transmitters Span Adjustment	04/17/2019
		40665209	1P-11A CCW Pump - Coupling Alignment Verification	06/12/2019
71111.18	Calculations	2014-06279	Time Available to Respond to Rising Lake Level	0
	Engineering	EC - 281811	External Wave Run-up Flood Mitigation Strategy	0
	Changes	EC-293289	Basis for Changing Monitored Lake Level from the Highest of All Reporting Stations to the Mean of All Reporting Stations	06/05/2019
	Miscellaneous	2316179	PBF-2124A - Maximum Converted Lake (Doc Dist)	05/30/2019
		PBF-2124a	Maximum Converted Lake Level Calculation	1
		PBF-2124a	Average Converted Lake Level Calculation	2
		PCR 2316179	10 CFR 50.59 Screening Form: PBF-2124a, Maximum	06/05/2019
			Converted Lake Level Calculation	
	Procedures	AOP-13C	Severe Weather Conditions	47
71111.19	Corrective Action	2304474	PMT Failed on HX-105A	03/05/2019
	Documents	2304487	Leakage on HX-105A	03/06/2019
		2305348	PMT for WO 40543692, 2P-10A Coupling Lubrication	03/12/2019
		2306539	Work Planning/Manage: PMT Guidance Inadequate	03/20/2019
		2308538	1CV-296 1HX-2 Regen Hx To Aux Spray Valve Has No PMT Task	04/02/2019
		2315175	1P-011A IST PMT Not Performed After 1P-011B Re-Piping U1R38	05/21/2019
	Procedures	IT 12A	CC Pumps and Valves While Aligned for RHR Operation (Cold Shutdown) Unit 1	26
	Work Orders	2312548	K-2 Relay Found With Broken Center Post	04/29/2019
		40543692 02	2P-010A/OPS PMT	01/17/2019
		40582325 01	B52-DB50-011; Breaker Maintenance Per RMP-9303 and RMP-9369-1	03/05/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		40611338	1DY-02, Maintain and Inspect Inverter	04/25/2019
		40624975	1P-002A-Z/Replace Signal Conditioner Module	05/21/2019
		40626242 02	1B52-13A; Setup and Stage Spare Breaker	05/02/2019
		40664989 03	K-3B/Replace 1st and 2nd Stage Discharge Check Valves	06/27/2019
		40664989 04	K-3B/OPS PMT	05/23/2019
		WO 40104553-49	1P-011B - Operations PMT - RTS	
71111.20	Corrective Action	2310563	Deficiencies Noted During CL 20/20A Walkdown	4/14/2019
	Documents	2310581	CL-20 CTMT Walkdown Items Identified	4/15/2019
	Corrective Action Documents Resulting from Inspection	2310884	NRC Observations During NOP/NOT & Key Way Walkdown	04/16/2019
	Drawings	500B728; Sheet 53	Main Control Board Component Wiring	4
		541F091; Sheet 1	P&ID Reactor Coolant System	56
		541F091; Sheet 2	P&ID Reactor Coolant System	41
	Engineering Changes	EC 292423	Point Beach Unit 1 Cycle 39 Core Reload Modifications	0
	Miscellaneous		PBNP Shutdown Safety Assessment and Fire Inspection Checklist	03/26 - 04/15/2019
			Spent Fuel Pool Map After U1R38 Core Offload	4/30/2019
			Spent Fuel Pool Map After U1R38 Outage	4/30/2019
			Point Beach Component Move Sheet; U1R38 Core Reload	4/7-9/2019
			Point Beach Component Move Sheet; U1R38 Core Offload	3/27-31/2019
			Point Beach Component Move Sheet; U1R38 Insert Moves	3/31/2019
			Point Beach Component Move Sheet; U1R38 Fuel Cleaning	3/31- 4/2/2019
			Fatigue Management Work History from 03/23/2019 to 04/12/2019	04/12/2019
			Outage Work Schedules for Operations, Maintenance, and Fire Brigade	04/12/2019
		1 AF AF-4000-O	Clearance Package	4/11/2019, 4/15/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		1 OP-3C Accum	Clearance Package	4/15/2019
	Procedures	ARB 1C04 1C 2-8	Alarm Response Book; BA Flow Deviation or Potential Dilution in Progress	9
		CL 2A	Defueled to Mode 6 Checklist	04/07/2019
		CL 2B	Mode 6 to Mode 5 Checklist	04/07/2019
		CL 2C	Mode 5 to Mode 4 Checklist	04/10/2019
		CL 2D	Mode 4 to Mode 3 Checklist	04/16/2019
		CL 2E	Mode 3 to Mode 2 Checklist	04/18/2019
		CL 2F	Mode 2 to Mode 1 Checklist	04/18/2019
		OP 1C Unit 1	Startup to Power Operation	42
		OP 3C Unit 1	Hot Standby to Cold Shutdown Unit 1	03/26/2019
	Work Orders	40511562	1ICP 6.15 - Perform Steps 5.1 through 5.5.7	9/1/2017
		WO 40521042	1ICP 13.14 - Core Exit T/C Recorder Calibration	12/18/2017
		WO 40573349	1ICP 2.8-1 NI Axial Offset Calibration	4/22/2019
71111.22	Corrective Action Documents	2296665	South SW Header Flowmeter Calibration	01/04/2019
		2304475	P-32C SW Pump Performance Outside Acceptance Criteria	03/05/2019
		2305377	Service Water South Header Flow Appears High	03/12/2019
		2305380	Calibration of the SW South Header Flow Meter	03/12/2019
	Corrective Action	2310121	Procedure Use and Adherence Issue	04/11/2019
	Documents Resulting from Inspection	2310869	Rebaselining of P-32A and P-32C Improvements	04/16/2019
	Miscellaneous	2291226	10CFR50 Appendix J Program Routing Task - 2018-2019	04/14/2019
		IST Program Document	Inservice Testing Program Document	8
		SCR 2014-0011	Revisions to IT 07C Following Rebaselining of P032C, Service Water Pump	01/17/2014
	Procedures	1-PT-RCS-1	Reactor Coolant System Pressure Test - Inside/Outside Containment Unit 1	9
		IT 230	Leak Test of Class 1 Components Following a Refueling Shutdown Unit 1	38
		IT 45 Train B	Safety Injection Valves Train B Unit 2	8

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		OI 58	Leak Testing of Containment Isolation Valves - Unit 1 and 2 General Instructions and Information	28
		ORT 6	Containment Spray Sequence Test Unit 1	28
	Work Orders	40573810 01	ORT 28, Cont DI H2O	04/13/2019
		40610316 01	IT-07C, P-32C Service Water Pump Comprehensive Test	03/06/2019
71114.06	Corrective Action	2315151	EP Drill - Accountability in NES	05/21/2019
	Documents	2315188	EP Pre-Existing Accountability	05/21/2019
		2315195	NA Identified Gaps - EP Pre-Éxercise (TSC)	05/21/2019
	Miscellaneous	PBN EPR 192 001D	Emergency Preparedness (EP) Drill Manual for the 2019 EP Pre-Exercise	05/21/2019
71124.01	Corrective Action	02255246	Source Leak Check Documentation Gaps	03/21/2018
	Documents	02270541	Neutron Correction Factor Not Auto Adding Correctly	06/29/2018
		02285855	Dosimeter - Rate Alarm Encountered During Snubber Inspection	10/15/2018
		02286293	Dosimeter Rate Alarm Received During Walk Down	10/17/2018
		02308787	Unanticipated Dose Rate Alarm	04/03/2019
		02309081	Unanticipated Rate Alarms Received During U-1 'A' S/G Sludge	04/05/2019
	Procedures	RP-AA-100-1002	Radiation Worker Instruction and Responsibilities	Revision 8
		RP-AA-102-1000	Alpha Monitoring	Revision 4
	Radiation	30-105	Airborne Radioactivity Survey	04/03/2019
	Surveys	30-106	Airborne Radioactivity Survey	04/03/2019
		30-108	Airborne Radioactivity Survey	04/03/2019
		30-112	Airborne Radioactivity Survey	04/03/2019
		PBPROD-M- 20190300-20	Unit 1 Reactor Cavity - Upper Level - Initial Entry	03/22/2019
		PBPROD-M- 20190325-30	U-1 Reactor Upper Cavity - Post Decon on Floor	03/25/2019
		PBPROD-M- 20190331-39	66' U-1 Containment Shiftly Routine	03/31/2019
		PBPROD-M- 20190401	66' U-1 Containment Shiftly Routine	04/01/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		PBPROD-M- 20190402-40	U1 Daily Outage Routines Spent Fuel Pool	04/02/2019
		PBPROD-M- 20190402-55	Unit 1 Containment 'B' Elevation 10 Foot Platform	04/02/2019
		PBPROD-M- 20190403-21	Unit 1 "B" Cold Leg RTD Manifold Removal	04/02/2019
		PBPROD-M- 20190403-25	BG C/L RTD Rebuild Tent	04/03/2019
		PBPROD-M- 20190404-2	Reactor Coolant Pump Lower, B Side U1 Post Shielding/Contamination Survey	04/04/2019
		PBPROD-M- 20190404-30	Reactor Coolant Pump Lower, B Side U1 Job Coverage	04/04/2019
		PBPROD-M- 20190404-32	Reactor Coolant Pump Lower, B Side U1 Impeller Removal	04/04/2019
		PBPROD-M- 20190404-41	U1 Daily Outage Routines Spent Fuel Pool	04/04/2019
	Radiation Work	19-1021	B RCP Maintenance Seal Replacement	Revision 2
	Permits (RWPs)	19-1053	Unit 1 Narrow Range RTD Replacement	Revision 2
	,	19-1056	FOSAR Activities	Revision 1
		19-1057	S/G Eddy Current Testing	Revision 00
		19-1064	Unit 1B RCP Impeller Change Out and Pump Bowl Inspection	Revision 1
71124.02	ALARA Plans	R-003	Replace "B" Loop Hot Leg RTD Manifold and Refurbish "B" Cold Leg Manifold (Mechanical Cut-Out and Replace)	03/29/2019
		R-023	B RCP Rotating Element Change-Out	04/01/2019
		R005	"B" RCP Seal, Motor Replacement and Maintenance	03/07/2019
		R011	Steam Generator Eddy Current	03/06/2019
	Corrective Action Documents	02308213	Narrow Range RTD Replacement Work is Tracking Above Estimate	03/31/2019
		02308215	Additional Dose Needed for Added Scope on RV Head Work	03/31/2019
		02309059	Dose Estimate Adjustment Needed on FOSAR Work	04/04/2019
	Procedures	RP-AA-104-1000	ALARA Implementing Procedure	Revision 15
71124.03	ALARA Plans		Respirator Assessment for Radiation Work Permit 19-1064	04/01/2019
			Respirator Assessment for Radiation Work Permit 19-1053	03/29/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
	Corrective Action Documents	02290219	HPIP 3.58.1 Air Sampling Process Instruction Review	11/09/2018
	Miscellaneous	HP-100-101718	Review of Steam Generator Channel Head Ventilation Practices	10/18/2018
	Procedures	NISP-RP-008	Use and Control of HEPA Filtration and Vacuum Equipment	Revision 1
		NP 4.2.32	Respiratory Protection Program	Revision 18
	Self-Assessments	02256550-02	Shared Ownership Gaps - Respiratory Protection Program	05/03/2018
		AR 02294511-04	2018 Annual Respiratory Protection Program Assessment	01/11/2019
71124.04	Calculations		High Level Contamination Report and Associated Dose Calculations for RWP 17-1027	10/28/2017
			High Level Contamination Report and Associated Dose Calculations for RWP 17-1016	10/28/2017
			Whole Body Count Evaluation for Radiation Protection Individual	04/08/2017
			Whole Body Count Evaluation for Radiation Protection Individual	10/29/2017
			Whole Body Count Evaluation for BHI Individual	10/29/2017
			Whole Body Count Evaluation for Maintenance Individual	05/14/2018
	Corrective Action Documents	02253282	WBC Procedural Guidance Not Updated Following Evaluation	03/08/2018
		02255763	Error in DACDOS Calculation	03/23/2018
	Procedures	NP 4.2.15	Fetal Protection Policy Implementation	Revision 7
71124.06	Calculations		Calibration Factor Steam Line Monitors	06/21/1983
		2013-0018	Radiological Effluent Initiating Condition Values For Emergency Action Level RS1 and RG1	Revision 03
		99-0106	Dose Rate Calculations for Steam Line Monitors Calibration Factor	Revision 0
	Miscellaneous		Permanent Procedure and Procedure Revision Review and Approval for HPCAL 3.7, Steam Line Radiation Monitor Calibration Procedure	04/21/1993
			Permanent Procedure and Procedure Revision Review and Approval for HPCAL 3.7, Steam Line Radiation Monitor Calibration Procedure	08/20/1990
		349-17-1	Certificate of Gamma Standard Source for Cs-137 Source	08/01/1989

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
			Number 349-17-1	
		65089-10	Certificate of Radioactivity Calibration for Kr-85 Source Number 65089-10	10/01/1981
		SDD-RASCAL- 20140110	Unified RASCAL Interface Technical Design Description	Revision 02
		SRS-RASCAL- 20140110	Requirements Specification Unified RASCAL Interface	Revision 02
	Procedures	HPCAL 3.17	SPING Calibration Procedure	Revision 0
	Work Orders	4035767401	1RE-231 Calibration	03/18/2016
		4046900301	RM-SPRING-23 Calibration	02/13/2017
		4046911302	RM-SPING23 Pre-Calibration	02/13/2017
		4047338801	1RE-231 Calibration	10/15/2017
71152	Corrective Action Documents	2286174	Thermal Loading from Design-Basis Accident Exceeds Platform [Capacity]	10/16/2018
		2297419	Unit 2 Manway Platforms Thermal Loading Results	01/10/2019
		2303987	Management Escalation: Procedure Use and Adherence Gap	03/01/2019
		2307731	MOV Diagnostic of 1SI-860C	03/28/2019
		2307741	Maintenance Department Clock Reset	03/28/2019
		2308008	Cognitive Trend: Procedure Use and Adherence	03/29/2019
		2308185	Trend AR - BHI Human Performance Behaviors	03/31/2019
		2308252	Combustible Liquid Quantity Exceeds TCCP Limit	03/31/2019
		2308260	Compressed Flammable Gas Cylinders Exceed Limit	03/31/2019
		2308895	Untreated Wood in PAB Truck Bay	04/04/2019
		2309962	Escalation: Procedure Use and Adherence	04/10/2019
		2311488	Data Entry Error During Generation of NIS Currents	04/20/2019
		2311530	Unit 1 Enters LCO 3.4.1 PZR Pressure Less than 2205	04/21/2019
	Corrective Action Documents Resulting from Inspection	2314702	OP 3A, Power Operations to Hot Standby Step Performance	05/16/2019
	Fire Plans	PFP-0-PAB 26	Pre-Fire Plan Unit 1 & Unit 2 Auxiliary Building 26'	0
		PFP-1-TB 8	Pre-Fire Plan Unit 1 Turbine Hall Building Elevation 8'	0

Inspection	Туре	Designation	Description or Title	Revision or
Procedure				Date
	Procedures	1RESP 6.1	Core Power Distribution and Nuclear Power Range	04/20/2019
			Calibration Unit 1	
		NP 1.9.9	Transient Combustible Control	36
		OP 3A Unit 1	Power Operation to Hot Standby Unit 1	17
	Self-Assessments	2304521-01	Negative Trend in Fleet Engineering Program	05/14/2019
			Implementation	
		2304925	PBN L1A on HU Recovery Effectiveness (RWA 02304925-	03/28/2019
			01)	