UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

May 1, 2023

Michael Strope
Site Vice President
NextEra Energy Point Beach, LLC
6610 Nuclear Road
Two Rivers, WI 54241-9516

SUBJECT: POINT BEACH NUCLEAR PLANT – INTEGRATED INSPECTION REPORT 05000266/2023001 AND 05000301/2023001

Dear Michael Strope:

On March 31, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Point Beach Nuclear Plant. On April 10, 2023, the NRC inspectors discussed the results of this inspection with Thad Edmonds, Operations Site Director, 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. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the 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 Nuclear Plant.

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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Signed by Dickson, Billy
on 05/01/23

Billy C. Dickson, Jr., Chief
Reactor Projects Branch 2
Division of Operating Reactor Safety

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

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

Letter from Michael Strope from Billy C. Dickson dated May 1, 2023.

SUBJECT: POINT BEACH NUCLEAR PLANT – INTEGRATED INSPECTION REPORT 05000266/2023001 AND 05000301/2023001

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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:	05000266/2023001 and 05000301/2023001
Enterprise Identifier:	I-2023-001-0063
Licensee:	NextEra Energy Point Beach, LLC
Facility:	Point Beach Nuclear Plant
Location:	Two Rivers, WI
Inspection Dates:	January 01, 2023 to March 31, 2023
Inspectors:	K. Barclay, Senior Reactor Inspector J. Masse, Resident Inspector J. Park, Reactor Inspector V. Petrella, Project Manager A. Shaikh, Senior Reactor Inspector M. Stafford, Senior Resident Inspector
Approved By:	Billy C. Dickson, Jr., Chief Reactor Projects Branch 2 Division of Operating Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Point Beach Nuclear Plant, 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.

List of Findings and Violations

Unsupported Motor-Operated Valve Rate-of-Loading Assumption			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000266,05000301/2023001-01 Open/Closed	None (NPP)	71111.21M
The inspectors identified a finding of very low safety significance (Green) and an associated non-cited violation (NCV) of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(b)(3)(ii) for the licensee's failure to establish a program that ensured motor-operated valves (MOVs) continued to be capable of performing their design basis safety functions. Specifically, the licensee failed to validate their rate-of-loading (ROL) assumptions and used incorrect values in its MOV operating parameters calculation. The error resulted in a reduction in the capability margin for the majority of the safety-related MOVs at Point Beach with one MOV having a negative final design margin.			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
URI	05000266,05000301/ 2022010-01	Potential Inadequate Basis/Justification for Motor-Operated Valve Rate-of-Loading Assumptions	71111.21M	Closed

PLANT STATUS

Unit 1 began the inspection period at rated thermal power and remained at or near full power throughout the remainder of the inspection period.

Unit 2 began the inspection period at rated thermal power. On February 15, 2023, the unit began coastdown for the upcoming refueling outage. On March 11, 2023, the unit was shut down for a refueling outage and remained shut down throughout 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 activities described in IMC 2515, Appendix D, "Plant Status," observed risk significant activities, and completed on-site portions of IPs. 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

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (6 Samples)

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

(1) G-04 emergency diesel generator starting air, the glycol cooling system, and fuel oil transfer system on February 24, 2023
(2) 1P-29 turbine driven auxiliary feedwater pump on March 6, 2023
(3) Control room emergency filtration system on March 7, 2023
(4) Unit 2 residual heat removal system on March 12, 2023
(5) G-02 emergency diesel generator starting air on March 22, 2023
(6) Spent fuel pool cooling system on March 23, 2023

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (7 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

(1) Fire Zones 304N, 304S, 311, and 318 on January 25, 2023
(2) Fire Zones 305, 306, 307, 308, 309, and 310 on January 25, 2023

(3) Fire Zones 137, 138, 139, 140, 141, 142A, and 143 on January 26, 2023
(4) Fire Zones 326, 333, 334, 335, 336, and 337 on January 26, 2023
(5) Fire Zones 142, 150, and 151 on January 27, 2023
(6) Fire Zones 152, 153, 154, 155, 156, 156A, and 159 on January 27, 2023
(7) Fire Zones 608, 611, 615, and 618 on March 27, 2023

Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the onsite fire brigade training and performance during an unannounced fire drill on February 19, 2023.

71111.06 - Flood Protection Measures

Flooding Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated internal flooding mitigation protections in the Unit 1 and Unit 2 turbine driven auxiliary feedwater pump rooms.

71111.08P - Inservice Inspection Activities (PWR)

PWR Inservice Inspection Activities Sample - Nondestructive Examination and Welding Activities (IP Section 03.01) (1 Sample)

The inspectors verified that the following nondestructive examination and welding activities were performed appropriately:

(1) Ultrasonic Examination
- Reactor Pressure Vessel Baffle to Former Bolts
- Reactor Pressure Vessel Clevis Insert Bolts
- Loop A Hot Leg Pipe to Elbow (07) and Elbow to Pipe (02) Welds

Dye Penetrant Examination
- Regenerative Heat Exchanger Bottom Shell Attachment Weld

Visual Examination
- Bare Metal Visual of 36 Bottom Head Penetrations
- Reactor Pressure Vessel Internal Vessel Visual Examination

Volumetric or Surface Examination Records and Associated Evaluations for Relevant Indications from the Previous Outage that the Licensee Analytically Evaluated and Accepted for Continued Service
- Recordable Liquid Penetrant Examination Indications Identified on 2SI-833B Final Weld W-4
- Recordable Liquid Penetrant Examination Indications Identified on Unit 2 A Reactor Coolant Pump Welded Attachment

Welding Activities
- Welded Fabrication of Unit 1 A Loop Hot and Cold Leg Resistive Temperature Detectors Manifolds

PWR Inservice Inspection Activities Sample - Boric Acid Corrosion Control Inspection Activities (IP Section 03.03) (1 Sample)

The inspectors verified the licensee is managing the boric acid corrosion control program through a review of the following evaluations:

(1)
- AR 02446867
- AR 02446969
- AR 02445603
- AR 02408032
- AR 02421780
- AR 02422583
- AR 02431209

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

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

(1) The inspectors observed and evaluated licensed operator performance in the Control Room during the Unit 2 shutdown on March 11, 2023.

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

(1) The inspectors observed and evaluated operator requalification in the simulator on January 3, 2023, and January 10, 2023.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

(1) Unit 1 elevated risk due to entry into a 10-hour shutdown statement and reduced coincidence during the performance of 1ICP 02.005B, Engineered Safety Features System Logic Train B Actuation Logic Test, on January 5, 2023
(2) Unit 1 elevated risk due to reduced coincidence on reactor protection and safeguards analog logic during the performance of 1ICP 02.001RD, Reactor Protection and Engineered Safety Features Red Channel Analog Surveillance Test, on January 3, 2023
(3) Unit 2 elevated risk due to turbine trip block testing and trip transient potential during stop valve testing during the performance of TS 4A, Turbine Trip Test Unit 2, on January 5, 2023
(4) Units 1 and 2 elevated risk due to planned maintenance on-site fire alarm control panels, on February 9, 2023
(5) Unit 2 elevated risk due to core reload on March 24, 2023

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (4 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

(1) Operability of 1PT-4069A, 1P-53 auxiliary feedwater pump suction narrow range pressure transmitter
(2) Operability of W-13B2, control room recirculation fan
(3) Functionality of G-05, station blackout gas turbine
(4) Operability of G-02, emergency diesel generator, exhaust line

71111.18 - Plant Modifications

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

The inspectors evaluated the following temporary or permanent modifications:

(1) Engineering Change (EC) 298339, Temporary Power B29-X-90 from PP-87-20

71111.20 - Refueling and Other Outage Activities

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

(1) (Partial)
The inspectors evaluated refueling outage 2R39 activities from February 16 to March 31, 2023.

71111.21M - Comprehensive Engineering Team Inspection

The inspectors evaluated the following components and listed applicable attributes, permanent modifications, and operating experience:

Structures, Systems, and Components (SSCs) (IP section 03.01) (1 Partial)

(1) (Partial)
Unresolved Item 2022010-01; Potential Inadequate Basis/Justification for Motor-Operated Valve Rate-of-Loading Assumptions

71111.24 - Testing and Maintenance of Equipment Important to Risk

The inspectors evaluated the following testing and maintenance activities to verify system operability and/or functionality:

Surveillance Testing (IP Section 03.01) (3 Samples)

(1) TS 5, Rod Exercise Test Unit 1, on January 17, 2023
(2) TS 82, Emergency Diesel Generator G-02 Monthly, on January 8, 2023

(3) ORT 3B, Safety Injection Actuation with Loss of Engineered Safeguards AC (Train B) Unit 2, on March 16, 2023

Inservice Testing (IST) (IP Section 03.01) (2 Samples)

(1) IT 400, Test of 1P-53 Motor-Driven Auxiliary Feed Pump and Valves, on February 28, 2023
(2) IT 765, Flow Test of High Head Safety Injection Check Valves (Refueling) Unit 2, on March 20, 2023

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

(1) ORT 59, Train A Spray System Containment Isolation Valve Leakage Test Unit 2 on March 28, 2023

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

(1) Drill and Exercise Performance (DEP) opportunity during an operator requalification scenario in the simulator on January 3, 2023, and January 10, 2023

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (2 Samples)

(1) Unit 1 (January 1, 2022 through December 31, 2022)
(2) Unit 2 (January 1, 2022 through December 31, 2022)

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (2 Samples)

(1) Unit 1 (January 1, 2022 through December 31, 2022)
(2) Unit 2 (January 1, 2022 through December 31, 2022)

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 02.03) (2 Samples)

(1) Unit 1 (January 1, 2022 through December 31, 2022)
(2) Unit 2 (January 1, 2022 through December 31, 2022)

71152S - Semiannual Trend Problem Identification and Resolution

Semiannual Trend Review (Section 03.02) (1 Sample)

(1) The inspectors reviewed the licensee's corrective action program for potential adverse trends with a focus on risk management actions.

INSPECTION RESULTS

Unsupported Motor-Operated Valve Rate-of-Loading Assumption			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000266,05000301/2023001-01 Open/Closed	None (NPP)	71111.21M

The inspectors identified a finding of very low safety significance (Green) and an associated non-cited violation (NCV) of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(b)(3)(ii) for the licensee's failure to establish a program that ensured motor-operated valves (MOVs) continued to be capable of performing their design basis safety functions. Specifically, the licensee failed to validate their rate-of-loading (ROL) assumptions and used incorrect values in its MOV operating parameters calculation. The error resulted in a reduction in the capability margin for the majority of the safety-related MOVs at Point Beach with one MOV having a negative final design margin.

Description:

During the 2022 Point Beach power operated valve (POV) inspection, the inspectors identified Unresolved Item 2022010-01 following their review of calculation 2003-0014, "MOV Operating Parameters," Revision 8. Specifically, the inspectors questioned the appropriateness of assuming a zero ROL for valve 1AF-4000, "Unit 1 Turbine Driven Auxiliary Feedwater Pump Discharge Valve to Steam Generator A Inlet." The term "ROL" is used to refer to the loss of thrust output of an MOV actuator during operation of the valve under dynamic (pressure or flow) conditions compared to static (no pressure or flow) conditions caused by the stem lubricant being squeezed out of the interface between the stem and stem nut threads under stress load conditions. Since its original usage, the ROL term has been more accurately referred to as "load sensitive behavior" where the conversion efficiency of actuator torque to output stem thrust is reduced by the load on the interface between the stem and stem nut threads in either the valve opening or closing directions. The inspectors questioned the licensee's low ROL assumption and reviewed the supporting reference, licensee internal correspondence PBM 92-1200, "Rate of Loading/Stem-To-Stem Nut Coefficient of Friction," dated October 7, 1992. The inspectors and NRC MOV subject matter experts from the Office of Nuclear Reactor Regulation found the licensee's methodology for incorporating the ROL effects into the Point Beach MOV program was not consistent with existing industry methods.

A review of correspondence between the NRC and the licensee found the NRC staff's concern with ensuring proper validation of the ROL methodology dated back to the inspection and closeout of NRC Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," and GL 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves." NRC Inspection Report 50-266/95007 (DRS), 50-301/95007 (DRS), dated July 13, 1995, which described the NRC staff's inspection of the licensee's response to GL 89-10, stated, "The licensee developed a method to predict the effects of rate of loading for valves without a dynamic test; however, in-plant test data was inconclusive to fully support the method. Based on dp [differential pressure] test results, the method used plots taken during static testing which correlated torque from the stem thrust

versus spring pack deflection. The inspectors encouraged the licensee to continue their research but were concerned with the inconclusive data from the valves that had been tested and the lack of data used to verify the method. The licensee committed to continue to compile data from periodic verification tests, both static and dynamic, to validate the rate of loading assumptions and prediction methodology."

On March 17, 1997, the licensee submitted a letter titled, "Response to NRC Generic Letter 96-05 Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," to the NRC. This letter stated, in part, "NRC Inspection Reports 50-266/95007 (DRS) and 50-301/95007 (DRS), dated July 13, 1995, document our commitments in response to the GL 89-10 closeout inspection items. As documented in this report, the following commitments were made and will be completed within 5 years of that inspection report: "… 3. We will collect and trend further static and dynamic periodic results to validate the valve factor study and rate of loading assumptions and prediction methodology."

NRC Inspection Reports 50-266/99012 (DRS) and 50-301/99012 (DRS), dated July 14, 1999, which described the NRC staff's inspection of the licensee's response to GL 96-05, stated, "The inspectors reviewed the status of the long-term MOV actions planned following completion of GL 89-10 close-out inspection. In particular, the licensee had not completed the overall review of the assumptions for valve factor and load sensitive behavior because of the limited progress made in performing dynamic testing as part of the long-term MOV program." The report stated further, "With respect to the long-term GL 89-10 issues, the licensee had not adhered to its efforts to implement planned dynamic tests, to perform an overall evaluation of program assumptions for valve factor or load sensitive behavior, or to perform qualitative and quantitative trending of MOV performance."

During the 2022 POV inspection, the inspectors requested the licensee information and data used to validate the ROL assumptions and prediction methodology. The licensee found historical MOV program trend reports that stated there were no valves identified that exhibited rate-of-loading effects; however, the licensee was unable to locate formal documentation detailing the methods used to make these determinations or details of the test data evaluations that validated the licensee's ROL assumptions and prediction methodology.

At the conclusion of the 2022 Point Beach POV inspection, the licensee entered the ROL issue into its Corrective Action Program and created an action to perform an ROL study to document the basis for the ROL assumptions in calculation 2003-0014. The licensee, with the support of an independent contractor, reviewed the existing ROL methodology at Point Beach. The independent review concluded the original ROL basis was outdated and did not include other important considerations (such as plant or industry data, standard methods, and lessons learned since early 1990s). The independent review also concluded the use of a zero ROL factor for most of the MOVs at Point Beach was not supported by plant test data and the basis for the existing non-zero ROL factor used for a few MOVs at Point Beach was not well defined. The ROL evaluation performed as part of the independent review determined the correct ROL value to be 15 percent based on the licensee's valve test data. In response to the independent review, the licensee applied the corrected ROL value to its MOVs, which reduced their overall capability margin. The licensee found that after the 15 percent ROL value was applied to MOV 1SI-866A, "Cold Leg Injection Line Isolation," the MOV had a negative capability margin, which required the licensee to perform an operability assessment. The inspectors reviewed the operability assessment and did not identify any performance deficiencies.

Corrective Actions: The licensee's short-term corrective actions included assessing the operability of MOV 1SI-866A. The licensee's planned long-term corrective actions included updating the MOV operating parameters calculation, adjusting the closing thrust for SI-866A on both Units to restore margin above 5 percent, and assessing the impact the margin reductions had on MOV test frequencies.

Corrective Action References:
AR 2417688; 2022 POV Inspection - Calc 2003-0014 RE. MOV Rate of Loading
AR 2437188; 2022 POV Inspection - MOV Rate of Loading
AR 2452194; URI - MOV ROL Debriefed As Potential Green NCV

Performance Assessment:

Performance Deficiency: The inspectors determined the licensee's failure to validate the rate of loading assumption for their MOVs was contrary to their 1995 commitment and was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Design Control attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to validate ROL assumptions and verify MOV 1SI-866A was capable of closing during a design basis event adversely affected the objective of the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Similar to example 3.I of IMC 0612, Appendix E, the licensee had to re-perform many MOV design calculations to demonstrate multiple safety-related MOVs could meet their design basis functions. In addition, two MOVs were found to require more frequent testing per the site MOV program procedures because of the loss of capability margin that occurred once the correct ROL was applied to the valves.

Significance: The inspectors assessed the significance of the finding using IMC 0609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined the finding was of very low safety significance (Green) because they answered "Yes" to Question 1 in Exhibit 2, "Mitigating Systems Screening Questions," Section A, "Mitigating SSCs and PRA Functionality (except Reactivity Control Systems)."

Cross-Cutting Aspect: Not Present Performance. No cross-cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance. Specifically, the incorrect ROL values were selected prior to the 3-year period used to assess present licensee performance.

Enforcement:

Violation: Title 10 CFR 50.55a(b)(3)(ii) states, in part, the licensee must establish a program to ensure that MOVs continue to be capable of performing their design basis safety functions.

Calculation 2003-0014, "MOV Operating Parameters," Revision 8, is a licensee calculation established to determine the operating parameters necessary to ensure that MOVs are capable of performing their design basis safety functions. Correct ROL inputs are necessary to determine the minimum required stem thrust to operate each valve under dynamic conditions. The determination of the minimum required stem thrust to operate a valve is essential to provide reasonable assurance that an MOV is capable of performing its design

basis safety functions. Without a proper assumption for ROL (or load sensitive behavior), the requirement in 10 CFR 50.55a(b)(3)(ii) for a licensee to ensure that its MOVs are capable of performing their design basis safety functions cannot be met.

Contrary to the above, as of September 19, 2022, the licensee failed to establish a program that ensured MOVs continued to be capable of performing their design basis safety functions. Specifically, the licensee did not use correct ROL values in Calculation 2003-0014 for numerous MOVs. The incorrect ROL values resulted in valve 1SI-866A having negative margin and did not ensure this MOV continued to be capable of performing its design basis safety functions.

Based upon the issuance of this green NCV, Unresolved Item 2022010-01 is considered closed.

Enforcement Action: This violation is being treated as an NCV, consistent with Section 2.3.2 of the Enforcement Policy.

The disposition of this finding and associated violation closes URI: 05000266,05000301/2022010-01

URI	Potential Inadequate Basis/Justification for Motor-Operated Valve Rate-of-Loading Assumptions URI 05000266,05000301/2022010-01	71111.21M
Description: This item was closed to a Green NCV included in this inspection report.		

Observation: Semiannual Trend Review	71152S

The inspectors performed a semiannual review to identify trends that might indicate the existence of a more significant issue. For this review, the inspectors focused on risk management actions.

From January 2023 through March 2023, the inspectors identified two issues related to risk management actions and reviewed a third example identified by the licensee.

The inspectors noted that these cases involved a gap in communication between work groups, which failed to recognize specific risk management actions. In these cases, the various work groups performed the correct actions but were unaware of having assigned responsibilities per the work activity risk management plan. The licensee discussed these observations with the different work groups. The inspectors did not notice any further examples of communication gaps or failure to recognize risk management actions.

The inspectors did not identify any findings or violations during their review.

EXIT MEETINGS AND DEBRIEFS

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

- On March 28, 2023, the inspectors presented the Inservice Inspection Exit Meeting inspection results to Michael Strope, Site Vice President and other members of the licensee staff.

- On March 31, 2023, the inspectors presented the Motor-Operated Valve Rate-of-Loading Assumption Unresolved Item 2022010-01 inspection results to Kim Locke, Regulatory Affairs and other members of the licensee staff.
- On April 10, 2023, the inspectors presented the integrated inspection results to Thad Edmonds, Operations Site Director and other members of the licensee staff.

THIRD PARTY REVIEWS

Inspectors reviewed the most recent Institute of Nuclear Power Operations report from 2021 during this inspection period.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Drawings	110E018, Sheet 4	Auxiliary Cooling System	53
		110E029, Sheet 1	P&ID Auxiliary Coolant System	54
		M-144, Sheet 2	Heating & Ventilation Temperature Control P&ID	24
		M-202, Sheet 2	Feedwater System	56
		M-209, Sheet 12	Em. Diesel Air Starting Sys.	29
		M-209, Sheet 15	P&ID Starting Air System Diesel Generator Building	13
		M-214, Sheet 4	P&ID Auxiliary Steam, Heating Steam, Chilled & Hot Water Systems & Details	38
		M-217, Sheet 1	P&ID Auxiliary Feedwater System	107
		M-219, Sheet 3	P&ID Fuel Oil System Diesel Generator Building	17
		M-227, Sheet 2	P&ID Glycol Cooling System Diesel Generator Building	11
	Procedures	CL 11A G-02	G-02 Diesel Generator Checklist	33
		CL 11A G-04	G-04 Diesel Generator Checklist	13
		CL 13E Part 1	Auxiliary Feedwater Valve Lineup Turbine-Driven Unit 1	53
		CL 5C	Spent Fuel Pool Cooling and Refueling Water Circulating Pump Normal Operation Valve Lineup	15
		OP 7A	Placing Residual Heat Removal System in Operation	57
		OP 8A	Spent Fuel Pool Cooling Water System Operation	26
71111.05	Corrective Action Documents	02448803	Radio Communications 8' PAB MDAFW Pump	02/19/2023
	Corrective Action Documents Resulting from Inspection	02446856	PFP-0-CB NRC Technical Questions on Walkdown	01/26/2023
		02446877	PFP-0-PAB 8 NRC Technical Question on Walkdown	01/26/2023
		02447769	PFP-0-PAB 8 - Pre-Fire Plan Primary Auxiliary Building Eleva	02/07/2023
		02450428	Additional Questions from NRC Walkdown of PFP-0-PAB 8	03/08/2023
	Fire Plans	PFP-0-CB	Pre-Fire Plan Control Building Elev 8 ft, 26 ft, 44 ft and 66 ft	5
		PFP-0-PAB-8	Pre-Fire Plan Primary Auxiliary Building Elevations 8' and Below	5
		PFP-2-CONT-FAC	Pre-Fire Plant Unit 2 Containment Building/Facade	3
	Procedures	AOP-40	Response to Fire	8

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		AOP-40F	Response to Fire in PAB 8 ft. Central Area and Below	7
		PC 74	Conducting and Evaluating Fire Drills	26
71111.06	Calculations	2014-0007	Allowable Flood Levels	5
		2014-02058	Internal Flooding Effects	2
	Corrective Action Documents	02450341	Eye Wash Station Inadvertently Actuated	03/07/2023
	Drawings	M-223, Sheet 1	Potable Water	52
		M-223, Sheet 2	Potable Water	27
	Miscellaneous	DBD-T-41	Hazards - Internal and External Flooding (Module A)	16
	Procedures	AOP-13C	Severe Weather Conditions	53
		NP 8.4.17	PBNP Flooding Program	37
		RMP 9422	Circulating Water Pumphouse and Turbine Hall Barrier Placement	2
71111.08P	Corrective Action Documents	AR 02407819	Recordable Indications on 2SI-833B Final Weld FW-4	10/16/2021
		AR 02408032	Dry White Boric Acid on RVLIS Piping of Unit 2 Reactor Head	10/18/2021
		AR 02408088	Indications Identified on Unit 2 A RCP Welded Attachment	10/18/2021
		AR 02421780	LE-40A-B Boric Acid Buildup Above SFP Water Level	03/17/2022
		AR 02422583	Boric Acid Leak on 2CV-300B Post Valve Adjustment	03/24/2022
		AR 02431209	Boric Acid Residue at Packing on 2SI-870A	07/03/2022
		AR 02445603	2SI-897A Boric Acid Leak	01/10/2023
		AR 02446867	2SI-888B, Active (Damp) Boric Acid Leak 1Q23 BALCM	01/26/2023
		AR 02446969	2SI-829B, Active (Wet) Boric Acid Leak 1Q23 BALCM	01/27/2023
	NDE Reports	INR-2R39-001	Framatome Indication Notification Report	03/21/2023
		INR-2R39-002	Framatome Indication Notification Report	03/21/2023
		INR-PBU-23-001	Framatome Indication Notification Report	03/19/2023
		P32-UT-23-004	Ultrasonic Examination on Loop A RC-10-AC-2001-02 Elbow to Pipe Weld	03/15/2023
		PB2-PT-23-001	Liquid Penetrant Examination of Regenerative Heat Exchanger Bottom Shell Attachment Weld	03/15/2023
		PB2-UT-23-006	Ultrasonic Examination Loop A RC-10-AC-2001-07 Pipe to Elbow Weld	03/15/2023
		PB2-VT-23-006	Visual Examination of Boric Acid (BMV) of 36 Bottom Head	03/12/2023

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Penetrations	
	Operability Evaluations	WEPM-RV010-TM-LO-000001	Point Beach Units 1 and 2 Clevis Insert Wear Prediction	03/22/2023
	Procedures	54-9308165-001	Procedure for Automated Ultrasonic Examination of Baffle to Former Bolts in Westinghouse 2-Loop NPP	0
		ER-AP-116-1000	Boric Acid Corrosion Control Program	7
		Framatome 54-ISI-138-001	Ultrasonic Examination of Westinghouse 2-Loop Replacement Baffle to Former Bolts	001
	Work Orders	WO 40678285	Replace Unit 1 A Loop Hot and Cold Leg RTD Manifolds	03/23/2022
71111.11Q	Procedures	OP 3A Unit 2	Power Operation to Hot Standby Unit 2	22
		OP 3B	Reactor Shutdown	49
71111.13	Corrective Action Documents	02410227	TS-4A, Discovered Overspeed Trip Oil Pressure Out of Range	11/03/2021
		02432550	TS 4A - Turbine Trip Test Unit 2	07/22/2022
		02445203	2P-37D DC Pump Start Pressure Out of STPT Doc Tolerance	01/05/2023
		02445702	During TS-4A, 2PI-6032 Outside the Normal Range (Overspeed)	01/11/2023
	Corrective Action Documents Resulting from Inspection	02445794	TS 4 - Main Turbine Stop and Governor Valves with Turb	01/12/2023
	Miscellaneous		Work Activity Risk Management Plan for the 1 ICP 02.005B	01/05/2023
			Work Activity Risk Management Plan for the 1 ICP 02.001RD	01/03/2023
			Work Activity Risk Management Plan for the Unit 2 Turbine Trip Block Testing, TS 4A	01/05/2023
		PBF-1562	PBNP Shutdown Safety Assessment and Fire Inspection Checklist	03/23/2023
	Procedures	NP 1.9.14	Fire Protection Plan	26
		OI 40A	Fire Alarm Control Panel and Fireworks PC Operation	10
		OM 3.27	Control of Fire Protection and NFPA 805 Equipment	82
		WM-AA-100-1000	Work Activity Risk Management	24
	Work Orders	40773690-08	T-32B/OPS Support of Reprogramming of Fire Det. Sys.	02/07/2023

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		40809342-01	TS-4A, Unit 2 Turbine Trip Test	01/05/2023
		40849051-01	1ICP 2.5B - Safeguards Logic Test - Train B	01/10/2023
71111.15	Calculations	WE-200079	EDG Exhaust Piping from the Turbocharger Exhaust Flange to the Top of the Vent Stack at Elev. 118'-0"	2
	Corrective Action Documents	02446619	1PT-4069A 6 PSIG Step Change on PPCS	01/23/2023
		02448438	102-1/G-05 Relay 11P has LOP 60 LED Illuminated	02/15/2023
		2449183	W-13B1 Started Inappropriately During TS-9	02/22/2023
		AR 02445396	G-02 Exhaust Leak from Exhaust Pipe at Wall	01/08/2023
	Drawings	P-100 Job 10447	Diesel Generator Exhaust Inside Turbine Building 22"-HB-29	8
	Procedures	0-SOP-480-B11	Gas Turbine (G-05) Auxiliaries 480V Buses	12
		TS 9	Control Room Heating and Ventilation System Checks	53
	Work Orders	40737837-22	G-02/Perform Inspection West of Cross Fitting	07/12/2022
		40825731	TS-9, Control Room H/V System Checks	02/23/2023
71111.18	Corrective Action Documents	02448624	Two Blown Fuses on A29-X-90	02/16/2023
		02448706	X-90 SFMR to PP-97 Found with Internal Damage from Arcing	02/17/2023
		02448724	Temp Generator Trip Results in Loss of Water Treatment	02/18/2023
		02449791	PP-87-20	03/01/2023
	Engineering Changes	298339	Temporary Power B29-X-90 from PP-87-20	1
71111.20	Corrective Action Documents	02451564	Indications on PB2 Reactor Vessel Clevis Inserts	03/18/2023
		02451906	Foreign Material Identified During MRP-227/IVVI Visual Exams	03/21/2023
	Corrective Action Documents Resulting from Inspection	02450820	NRC Identified During U2 as Found Walkdown	03/11/2023
		02452441	W-35 Abnormal Noise, Possible Belt Slap Noted	03/27/2023
		02452885	Writing on Wall of U2C SG A Platform Wall	03/31/2023
	Procedures	2RMP 9096-1	Reactor Vessel Head Removal and Installation Using Biach Tensioning System	24
		MA-AA-101-1000	Foreign Material Exclusion Procedure	30
		NP 7.7.36	Diverse and Flexible Coping Strategies (FLEX) Program	9
		OI 105	RCS Heatup/Cooldown Plotting	12
		OM-AA-101-1000	Shutdown Risk Management	19

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		OP-AA-1000	Conduct of Infrequently Performed Tests or Evolutions	19
71111.21M	Calculations	2003-0014	MOV Operating Parameters	8
	Miscellaneous		IST Background Document; Appendix N; 1SI-866B	1
		0292-0081-RPT-001	Determination of Plant Specific ROL and Updated ROL Methodology for PBNP MOV Margin Assessment	0
		PBM 92-1200	Rate of Loading / Stem-To-Stem Nut Coefficient of Friction Evaluation	10/07/1992
71111.24	Corrective Action Documents	02446082	Detector B for Position D7 Didn't Go in on Scan for 2nd Pass	01/17/2023
		02449475	IT 400 - Test of 1P-53 Motor-Driven Auxiliary Feed Pump ANDV	02/26/2023
		02449742	IT 400- Test of 1P-53 Motor-Driven Auxiliary Feed Pump ANDV	02/28/2023
		02451195	Procedural Issue in IT 765 SI Flow Test	03/15/2023
	Procedures	IT 400	Test of 1P-53 Motor-Driven Auxiliary Feed Pump and Valves	17
		IT 765	Flow Test of High Head Safety Injection Check Valves (Refueling) Unit 2	20 and 21
		ORT 3B	Safety Injection Actuation with Loss of Engineered Safeguards AC (Train B) Unit 2	50
		ORT 59	Train A Spray System CIV Leakage Test	37
	Work Orders	40726502	ORT 59, 2P-14A/2SI-862A/2SI-864A	01/16/2022
		40795727-01	ORT 3B, SI/Loss of AC (Train B) U2 (IPTE)	03/14/2023
		40801985-01	IT-765, U2 High Head SI Check Flow Test (RF)	03/17/2023
		40802032	ORT 59, 2P-14A/2SI-862A/2SI-864A	03/20/2023
		40819831-01	TS-82, G-02 Emergency Diesel Generator Operability Test	01/10/2023
		40826498-01	IT-400, 1P-53 Motor-Driven Auxiliary Feed Pump and Valves	02/28/2023
		40831234-01	TS-5, Unit 1 Control Rod Exercise	01/17/2023
71114.06	Miscellaneous		Nuclear Accident Reporting System Form (NARS) for the Operator Requalification on 1-3-2023	01/03/2023
			Nuclear Accident Reporting System Form (NARS) for the Operator Requalification on 1-10-2023	01/10/2023
71151	Procedures	LI-AA-100-1003	NRC Performance Indicator	4
		NP 5.2.16	NRC Performance Indicators	23
71152S	Corrective Action	02448296	Required 1-Hour Fire Round Not Implemented	02/13/2023

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents			
	Procedures	MA-AA-100	Conduct of Maintenance	27
		MA-AA-100-1002	Scaffold Installation, Modification, and Removal Requests	15
		WM-AA-100	Risk Management Program	3
		WM-AA-100-1000	Work Activity Risk Management	24