



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

August 11, 2009

Mr. Larry Meyer
Site Vice-President
NextEra Energy Point Beach, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2, NRC INTEGRATED
INSPECTION REPORT 05000266/2009003; 05000301/2009003;
05000266/2008012

Dear Mr. Meyer:

On June 30, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed report documents the inspection results, which were discussed on July 8, 2009, with Mr. J. Bjorseth and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed your personnel.

The report documents three NRC-identified findings and one self-revealed finding of very low safety significance (Green). All of these findings were determined to involve violations of NRC requirements. However, because of the very low safety significance and because they are entered into your corrective action program, the NRC is treating these findings as Non-Cited Violations (NCVs) consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest any NCV, 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, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Point Beach. In addition, if you disagree with the characterization of any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III, and the NRC Resident Inspector at Point Beach. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

L. Meyer

-2-

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michael A. Kunowski, Chief
Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 05000266/2009003; 05000301/2009003; 05000266/2008012
w/Attachment: Supplemental Information

cc w/encl: M. Nazar, Senior Vice-President and Nuclear Chief Operating Officer
A. Khanpour, Vice-President, Engineering Support
Licensing Manager, Point Beach Nuclear Plant
M. Cornell, Director, Licensing and Performance Improvement
M. Ross, Vice President and Associate General Counsel
A. Fernandez, Senior Attorney
J. Bjorseth, Plant Manager
R. Anderson, Vice-President, Nuclear Plant Support
R. Kundalkar, Vice-President, Fleet Organizational Support
K. Duveneck, Town Chairman, Town of Two Creeks
Chairperson, Public Service Commission of Wisconsin
J. Kitsemel, Electric Division, Public Service Commission of Wisconsin
P. Schmidt, State Liaison Officer

L. Meyer

-2-

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michael A. Kunowski, Chief
Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 05000266/2009003; 05000301/2009003; 05000266/2008012
w/Attachment: Supplemental Information

cc w/encl: M. Nazar, Senior Vice-President and Nuclear Chief Operating Officer
A. Khanpour, Vice-President, Engineering Support
Licensing Manager, Point Beach Nuclear Plant
M. Cornell, Director, Licensing and Performance Improvement
M. Ross, Vice President and Associate General Counsel
A. Fernandez, Senior Attorney
J. Bjorseth, Plant Manager
R. Anderson, Vice-President, Nuclear Plant Support
R. Kundalkar, Vice-President, Fleet Organizational Support
K. Duveneck, Town Chairman, Town of Two Creeks
Chairperson, Public Service Commission of Wisconsin
J. Kitsemel, Electric Division, Public Service Commission of Wisconsin
P. Schmidt, State Liaison Officer

DOCUMENT NAME: G:\POIN\POI 2009 003.doc

Publicly Available Non-Publicly Available Sensitive Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII						
NAME	MKunowski:ntp						
DATE	08/11/09						

OFFICIAL RECORD COPY

Letter to L. Meyer from M. Kunowski dated August 11, 2009

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2, NRC INTEGRATED
INSPECTION REPORT 05000266/2009003; 05000301/2009003;
05000266/2008012

DISTRIBUTION:

Susan Bagley
RidsNrrDorLpl3-1 Resource
RidsNrrPMPointBeach
RidsNrrDirslrib Resource
Cynthia Pederson
Kenneth Obrien
Jared Heck
Allan Barker
Jeannie Choe
Linda Linn
DRPIII
DRSIII
Patricia Buckley
Tammy Tomczak
[ROPreports Resource](#)

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000266/2009003; 05000301/2009003;
05000266/2008012

Licensee: NextEra Energy Point Beach, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: Two Rivers, WI

Dates: April 1, 2009, through June 30, 2009

Inspectors: J. Jandovitz, Senior Resident Inspector (Acting)
R. Ruiz, Resident Inspector
J. Jacobson, Senior Reactor Inspector
N. Feliz Adorno, Reactor Inspector

Approved by: M. Kunowski, Chief
Branch 5
Division of Reactor Projects

Enclosure

TABLE OF CONTENTS

SUMMARY OF FINDINGS	1
REPORT DETAILS.....	4
Summary of Plant Status.....	4
1. REACTOR SAFETY.....	4
1R01 Adverse Weather Protection (71111.01)	4
1R04 Equipment Alignment (71111.04).....	5
1R05 Fire Protection (71111.05)	9
1R06 Flooding (71111.06).....	10
1R07 Annual Heat Sink Performance (71111.07).....	11
1R11 Licensed Operator Requalification Program (71111.11Q).....	11
1R12 Maintenance Effectiveness (71111.12Q)	12
1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13).....	15
1R15 Operability Evaluations (71111.15)	16
1R18 Plant Modifications (71111.18).....	17
1R19 Post-Maintenance Testing (71111.19)	17
1R21 Component Design Bases Inspection (71111.21)	18
1R22 Surveillance Testing (71111.22).....	20
1EP6 Drill Evaluation (71114.06).....	22
4. OTHER ACTIVITIES	22
4OA1 Performance Indicator (PI) Verification (71151)	22
4OA2 Problem Identification and Resolution (71152).....	23
4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153)	27
4OA5 Other Activities.....	27
4OA6 Management Meetings	27
SUPPLEMENTAL INFORMATION	1
KEY POINTS OF CONTACT	1
LIST OF ITEMS OPENED, CLOSED AND DISCUSSED	2
LIST OF DOCUMENTS REVIEWED.....	3
LIST OF ACRONYMS USED	8

SUMMARY OF FINDINGS

IR 05000266/2009003, 05000301/2009003, 05000266/2008012; 04/01/2009-06/30/2009; Point Beach Nuclear Plant, Units 1 & 2; Equipment Alignment, Maintenance Effectiveness, Component Design Bases Inspection, and Problem Identification and Resolution.

This report covers a 3-month period of inspection by resident inspectors and regional specialists. Four Green findings were either self-revealed or identified by the inspectors this quarter. All of the findings that were identified had associated Non-Cited Violations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure of the licensee's modification process to ensure that new 4160-volt cables installed for proposed auxiliary feedwater (AFW) pump motor replacements were installed in accordance with applicable regulatory requirements. Specifically, no seismic design evaluation was completed prior to the installation of the cable coils suspended above the existing motor-driven AFW pumps for over 6 months. In response to the issue, the licensee installed a new restraint designed to meet seismic criteria and completed calculations that showed the as-left condition of the modification did not challenge operability.

This performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of design control and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)). (Section 1R04.1)

- Green. A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to have adequate work instructions and procedures in place for the March 2009 repair of the 2P-11B component cooling water (CCW) pump. Specifically, the work instructions did not contain sufficient guidance to ensure the proper installation, alignment, and adequacy of material conditions for reuse, of critical pump components. As a result, the CCW pump was returned to service, while still in a degraded state, and required an additional entry into a technical specification action condition 2 weeks later for unplanned corrective maintenance to replace

components and repair an oil leak. In response to the issues, the licensee overhauled the pump and performed an apparent cause evaluation, which identified additional long term corrective actions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the CCW pump was degraded with an oil leak from the inboard bearing motor side oil seal and may not have been able to fulfill the 30-day mission time of the pump. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, did not represent an actual loss of safety function, or represent a single train loss of safety function for greater than the Technical Specification-allowed outage time, and was not potentially risk-significant for external events. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, resources, because the level of training provided to the station personnel limited their ability to identify technical procedural deficiencies encountered during pump maintenance (H.2(b)). (Section 1R12.1)

- Green. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the diesel fuel oil storage volume for the emergency diesel generators (EDGs). Specifically, the licensee failed to account for the fuel consumption of a second EDG when establishing the value for the Technical Specification limit for the 48-hour diesel fuel oil storage volume. In response to the issue, the licensee implemented compensatory actions to maintain an adequate fuel volume.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the EDG to respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because the inspectors determined that the finding was a design deficiency confirmed not to result in loss of operability or functionality and the finding screened as Green using the Significance Determination Process Phase 1 screening worksheet. The inspectors did not identify a cross-cutting aspect associated with this finding because the performance deficiency occurred many years ago. (Section 1R21)

- Green. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criteria V, "Instructions, Procedures and Drawings," for the failure to have work instructions and procedures commensurate with the risk associated with maintenance on the south service water (SW) system header. Specifically, the licensee did not have work instructions and procedures that assigned appropriate operator actions and contained contingency plans to rapidly restore the header to service if directed by the shift manager. The licensee entered this issue into the corrective action system and made procedure changes for work affecting the operability of a SW header.

This finding was determined to be more than minor because the finding was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely

affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences. Specifically, the work instructions for the maintenance activity did not incorporate the risk associated with the loss of all SW, since this system is the only safety-related system that provides cooling water to plant systems required to respond to initiating events. The inspectors determined the finding to be of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)). (Section 4OA2.4)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Unit 1 was at 100 percent power throughout the inspection period with the exception of a planned power reduction to 55 percent power on May 2, 2009, for routine steam dump valve testing and heat exchanger summer readiness cleaning; an unplanned power reduction to 55 percent power from May 22 to May 28 to repair the 1P-25B condensate pump motor; and two planned power reductions of less than 3 percent power for routine testing.

Unit 2 was at 100 percent power throughout the inspection period with the exception of a planned power reduction to 55 percent power on May 16, 2009, for routine steam dump valve testing and heat exchanger summer readiness cleaning, and two planned power reductions of less than 3 percent power for routine testing.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Readiness of Offsite and Alternate Alternating Current (AC) Power Systems

a. Inspection Scope

The inspectors verified that plant features and procedures for operation and continued availability of offsite and alternate AC power systems during adverse weather were appropriate. The inspectors reviewed the licensee's procedures affecting these areas and the communications protocols between the transmission system operator (TSO) and the plant to verify that the appropriate information was being exchanged when issues arose that could impact the offsite power system. Examples of aspects considered in the inspectors' review included:

- coordination between the TSO and the plant during off-normal or emergency events;
- explanations for the events;
- estimates of when the offsite power system would be returned to a normal state; and
- notifications from the TSO to the plant when the offsite power system was returned to normal.

The inspectors also verified that plant procedures addressed measures to monitor and maintain availability and reliability of both the offsite AC power system and the onsite alternate AC power system prior to or during adverse weather conditions. Specifically, the inspectors verified that the procedures addressed the following:

- actions to be taken when notified by the TSO that the post-trip voltage of the offsite power system at the plant would not be acceptable to assure the continued operation of the safety-related loads without transferring to the onsite power supply;

- compensatory actions identified to be performed, if it would not be possible to predict the post-trip voltage at the plant for the current grid conditions;
- re-assessment of plant risk based on maintenance activities which could affect grid reliability, or the ability of the transmission system to provide offsite power; and
- communications between the plant and the TSO when changes at the plant could impact the transmission system, or when the capability of the transmission system to provide adequate offsite power was challenged.

Documents reviewed are listed in the Attachment. The inspectors also reviewed corrective action program (CAP) items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into the CAP in accordance with station corrective action procedures.

This inspection constituted one readiness of offsite and alternate AC power systems sample as defined in Inspection Procedure (IP) 71111.01-05.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Motor-Driven Auxiliary Feedwater Pumps (MDAFWPs) P-32A and P-32B

a. Inspection Scope

The inspectors performed partial system walkdowns of the auxiliary feedwater system motor-driven pumps during maintenance on the Unit 2 turbine-driven AFW pump (2P-29). The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system, and therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, Technical Specification (TS) requirements, outstanding work orders (WOs), condition reports, and the impact of ongoing work activities on redundant trains of equipment to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. Documents reviewed are listed in the Attachment.

This inspection constitutes one partial system walkdown sample as defined in IP 71111.04-05.

b. Findings

Failure to Adequately Design Installation of Cables Above the MDAFWPs for Seismic Requirements

Introduction: A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the modification process to ensure that new 4160-volt cables installed for proposed AFW pump motor replacements were installed in accordance with applicable regulatory requirements. Specifically, no seismic design review or evaluation was completed prior to the installation of the cables that were suspended above the MDAFWPs for over 6 months.

Description: On June 24, 2009, during an alignment inspection of the MDAFWPs, the inspectors noted that significant lengths of cables were suspended above the motors for the MDAFWPs using nylon rope and secured with several types of knots. The inspectors noted that the length and weight of the cables, about 60 feet of 4160-volt cable, could impact components of the MDAFWPs, if the rope broke or the knots became undone. Specific components that could have been damaged or disabled upon impact from a falling cable coil identified included the inboard bearing oil sight glass and instrument tubing. Additionally, the suspended copper ground wire was of a small enough diameter to enter the mesh shaft guard and possibly become entwined in the rotating element, interfering with normal pump operation. The inspectors then reviewed the design documents used to install this modification.

Modification MR 04-17E (EC 8420) was developed to install, but not connect, 4160-volt electrical cables needed to power new P-38A and P-38B AFW pump motors. Other sections of the modification would install the new pump motors with applicable electrical and piping connections. Installation of the cables was accepted as complete on August 30, 2008, in accordance with the work plan IWP 04-17E. The inspectors did not find any design specification for the as-left condition, i.e., tied off with rope. It was determined that after the cable was installed, the remainder of the modification was terminated, and it was never intended that this as-left configuration would remain in-place for an extended period of time. The work plan relied on walkdowns by Seismic Qualification Users Group (SQUG) qualified engineers to accept the modification for seismic requirements. The work plan did not specifically direct the SQUG engineers to review the as-left configuration.

The SQUG engineers who performed the walkdown in 2008, per the work plan, stated they did not review the as-left configuration. In June 2009, another SQUG walkdown was conducted based on questions by the system engineer on this configuration. This walkdown documented the as-left configuration in the field notes but did not provide specific acceptance or evaluation. Therefore, from September 2008 through June 2009, the as-left configuration of the cables was not designed or evaluated to meet seismic requirements.

This concern was addressed in CAP Action Request (AR) 01151964, and the nylon rope was replaced with a restraint designed to meet seismic criteria and an evaluation, including calculations, was completed that showed the as-left condition of the modification had not challenged operability.

Analysis: The inspectors determined that the failure of the modification to include seismic design review or evaluation for the 4160-volt electrical cables hanging over both MDAFWPs was a performance deficiency. This performance deficiency was more than minor because it did not meet the criteria for a minor violation described in example 3.a of IMC 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," dated September 20, 2007, and it was associated with the Mitigating System Cornerstone attribute of design control and affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once the design deficiency was identified, the modification required rework to comply with applicable design requirements and ensure the MDAFWPs would continue to operate after a seismic event.

The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding: (1) was not a design or qualification deficiency confirmed to result in a loss of operability; (2) did not represent a loss of a system safety function; (3) did not represent an actual loss of safety function of a single train for greater than its TS-allowed outage time; (4) did not represent an actual loss of safety function of one or more non-TS trains of equipment designated as risk significant; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

This finding has a cross-cutting aspect in the area of human performance, work control, because the site did not plan the modification consistent with nuclear safety and incorporate its effect on plant systems. Specifically, the licensee did not perform the seismic design review of the cables hanging over the operable MDAFWPs or evaluate the possible effect on the operability of these pumps (H.3(a)).

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions.

Contrary to the above, prior to June 24, 2009, the licensee failed to correctly translate applicable design basis into design specification. Specifically, design control measures failed to account for seismic requirements for the 4160-volt electrical cables hanging over the operable MDAFWPs. Because this violation was of very low safety significance and it was entered into the licensee's CAP as AR 01151964, this violation is being treated as a Non-Cited Violation (NCV) consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000266/2009003-01; 05000301/2009003-01).

In response to the issue, the licensee initiated an AR and installed new robust restraints designed to meet seismic criteria and completed calculations that showed the as-left condition of the modification did not challenge operability.

.2 Quarterly Partial System Walkdowns

a. Inspection Scope

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

- Unit 1 component cooling water system; and
- Unit 1 residual heat removal system Train "A".

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

These activities constituted two partial system walkdown samples as defined in IP 711111.04-05.

b. Findings

No findings of significance were identified.

.3 Semi-Annual Complete System Walkdown

a. Inspection Scope

On May 14, 2009, the inspectors performed a complete system alignment inspection of the site-wide fire water supply system to verify the functional capability of the system. This system was selected because it was considered both safety-significant and risk-significant in the licensee's probabilistic risk assessment. The inspectors walked down the system to review mechanical and electrical equipment line-ups, electrical and diesel power availability, system pressure and temperature indications, as appropriate, component labeling, hangers and supports, and to ensure that ancillary equipment or debris could not interfere with equipment operation. A review of a sample of past and outstanding WOs was performed to determine whether any deficiencies significantly affected the system function. In addition, the inspectors reviewed the CAP database to ensure that system equipment alignment problems were being identified and appropriately resolved. Documents reviewed are listed in the Attachment.

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

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Routine Resident Inspector Tours (71111.05Q)

a. Inspection Scope

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

- fire zones 104 and 105: residual heat removal pump rooms, 1P10A and 1P10B;
- fire zone 151: safety injection pump room;
- fire zones 152 through 154: Unit 1 charging pump rooms;
- fire zone 305: 4160-volt vital switchgear room;
- fire area A01-F: yard area; and
- fire area A01-A: auxiliary building 8-foot elevation.

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

These activities constituted six quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings of significance were identified.

.2 Annual Fire Protection Drill Observation (71111.05A)

a. Inspection Scope

On June 23, 2009, the inspectors observed a fire brigade activation in which the drill scenario included a response to a simulated fire in Warehouse #1 as well as the search and rescue of incapacitated individuals inside the simulated smoky conditions. Based on this observation, the inspectors evaluated the readiness of the plant fire brigade to fight fires and perform rescue duties. The inspectors verified that the licensee staff identified deficiencies, openly discussed them in a self-critical manner at the drill debrief, and took appropriate corrective actions. Specific attributes evaluated were: (1) proper wearing of turnout gear and self-contained breathing apparatus; (2) proper use and layout of fire hoses; (3) employment of appropriate fire fighting techniques; (4) sufficient firefighting equipment brought to the scene; (5) effectiveness of fire brigade leader communications, command, and control; (6) search for victims and propagation of the fire into other plant areas; (7) smoke removal operations; (8) utilization of pre-planned strategies; (9) adherence to the pre-planned drill scenario; and (10) drill objectives. Documents reviewed are listed in the Attachment.

These activities constituted one annual fire protection inspection sample as defined by IP 71111.05-05.

b. Findings

No findings of significance were identified.

1R06 Flooding (71111.06)

.1 Internal Flooding

a. Inspection Scope

The inspectors reviewed selected risk-important plant design features and licensee procedures intended to protect the plant and its safety-related equipment from internal flooding events for the following area:

- subsoil drain system segments inside vital areas.

The inspectors reviewed flood analyses and design documents, including the FSAR, engineering calculations, and abnormal operating procedures to identify licensee commitments. In addition, the inspectors reviewed licensee drawings to identify areas and equipment that may be affected by internal flooding caused by the failure or misalignment of nearby sources of water, such as the fire suppression or the circulating water systems. The inspectors also reviewed the licensee's corrective action documents with respect to past flood-related items identified in the CAP to verify the adequacy of the corrective actions. The inspectors performed a walkdown of the following plant areas to verify drains and sumps were clear of debris and were operable, and that the licensee complied with its commitments. The specific documents reviewed are listed in the Attachment.

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

b. Findings

No findings of significance were identified.

1R07 Annual Heat Sink Performance (71111.07)

.1 Heat Sink Performance

a. Inspection Scope

The inspectors reviewed the licensee's inspection of component cooling water (CCW) system heat exchangers to verify that potential deficiencies did not mask the licensee's ability to detect degraded performance, to identify any common cause issues that had the potential to increase risk, and to ensure that the licensee was adequately addressing problems that could result in initiating events that would cause an increase in risk. The inspectors reviewed the licensee's observations against acceptance criteria, the correlation of scheduled inspections, and the frequency of inspections.

This annual heat sink performance inspection constituted one sample as defined in IP 71111.07-05.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification Program (71111.11Q)

.1 Resident Inspector Quarterly Review

a. Inspection Scope

On May 16, 2009, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator simulator training to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- licensed operator performance;
- clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of abnormal and emergency procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and Emergency Plan actions and notifications.

The crew's performance in these areas was compared to pre-established operator action expectations and training program objectives. Documents reviewed are listed in the Attachment.

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

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12Q)

.1 Unit 2 CCW Pump 2P-11B

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the Unit 2, 2P-11B CCW pump.

The inspectors reviewed and independently verified the licensee's actions to address problems with system performance or condition in terms of the following:

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

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

This inspection constituted one quarterly maintenance effectiveness sample as defined in IP 71111.12-05.

b. Findings

Inadequate Work Instructions and Procedures for 2P-11B CCW Pump Maintenance

Introduction: A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to have adequate work instructions and procedures in place for maintenance of the 2P-11B CCW pump. Specifically, the work instructions did not contain sufficient guidance to ensure the proper installation, alignment, and adequacy of material conditions for reuse of critical pump components. As a result, the 2P-11B CCW pump was returned to service while still in a degraded state and required an additional entry into a TS action condition 2 weeks later for unplanned corrective maintenance to replace components and repair an oil leak.

Description: On March 25, the 2P-11B CCW pump was removed from service for corrective maintenance after an oil sample revealed blackened oil in the inboard bearing. The licensee discovered the oil seal on the inboard shaft coupling end had deformed and was in contact with the rotating shaft such that the seal material degraded under high friction and deposited seal material particles into the oil, causing the blackened oil. The licensee initiated AR 01146905 to document the condition. The as-found condition of the shaft was that the keyway was significantly longer than necessary and that the length of the keyway was a likely factor in the deformation of the oil seal because the sealing surface was in very close proximity to the keyway slot. As corrective actions, the licensee changed the oil; replaced the oil seal; axially adjusted the oil seal about 1/8-inch further away from the keyway slot, in an attempt to eliminate any seal-to-keyway interactions; and polished the keyway area to remove any raised metal or burrs.

The pump was returned to service on March 26 following a successful post-maintenance test. However, less than 48 hours later, on March 28, an operator on rounds identified an oil leak from the inboard bearing cap oil seal-to-shaft interface that had just been worked on. This condition was documented in AR 1147028. Engineering performed an operability determination and concluded that the pump remained operable at the as-found leak rate, and established an operability limit of 11.8 cubic centimeters (cc) per day. Engineering subsequently implemented leak rate trending measures to identify any increase in leakage that might challenge the newly established operability limit. On April 8, the oil leak rate was determined to have increased from the previous day's measurement of 5.3 cc/day, to 11.4 cc/day, and consequently, the licensee removed the 2P-11B CCW pump from service.

On April 8, the licensee began maintenance on the pump under WO 371065 and using routine maintenance procedure (RMP) 9006-5, Component Cooling Water Pump Overhaul, Revision 17. The work scope included a tear-down and overhaul of the pump to determine the cause of the leakage, and to make any appropriate repairs. During the execution of the overhaul, multiple component deficiencies were identified as potential contributors to the leak. The identified physical deficiencies most likely to have led to the oil leak included: the inboard bearing cap, which was found to be off-centered with respect to the shaft centerline, such that uneven clearances around the circumference of the seal resulted; the oil seal-to-shaft clearance was found to be out-of-tolerance at 0.008-inch at its highest point, in excess of the vendor's specified maximum tolerance of 0.003-inch; the pump shaft design differed from the vendor's original design – specifically, the keyway that over extended into the seal area; and the shaft surface in the sealing area, with visible discontinuities and wear patterns, was unsuitable for the adequate operation of the seal.

The inspectors concluded that all of the identified deficiencies were preventable; particularly, given that the majority of the conditions existed during the March 26 pump maintenance (i.e., out-of-tolerance seal clearance, overextended keyway, worn shaft sealing surface), while the other deficiencies were the direct result of the March 26 maintenance (i.e., non-centered bearing cap, and bent oil seal fingers). The inspectors concluded that the physical deficiencies that contributed to the oil leak could have either been prevented, or identified and corrected, prior to returning the 2P-11B CCW pump to service on March 26, had the work instructions or maintenance procedures contained adequate guidance. For example, during the March 26 maintenance, there was no procedural guidance to ensure the bearing cap was properly centered upon reassembly, nor were there any instructions to verify the acceptability of the shaft – either through

visual inspection of the sealing surface or by ways of measurement against established acceptance criteria.

Analysis: The inspectors determined that returning the 2P-11B CCW pump to service while in a degraded condition was a performance deficiency. The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated December 4, 2008, because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the CCW pump was degraded with an inboard bearing oil leak that was increasing and may have resulted in the pump not meeting its 30-day mission time for certain accidents.

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding: (1) was not a design or qualification deficiency confirmed to result in a loss of operability; (2) did not represent a loss of a system safety function; (3) did not represent an actual loss of safety function of a single train for greater than its TS allowed outage time; (4) did not represent an actual loss of safety function of one or more non-TS trains of equipment designated as risk significant; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, resources, because the level of training provided to the station personnel limited their ability to identify technical procedure deficiencies encountered during pump maintenance (H.2(b)).

Enforcement: 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, on March 26, 2009, the 2P-11B CCW pump underwent maintenance that allowed existing deficiencies to remain unidentified and created additional deficiencies as a result of inadequate work instructions or procedural guidance. Because this violation was of very low safety significance and it was entered into the licensee's CAP (as AR 1147600), this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000301/2009003-02).

In response to the issues, the licensee performed prompt corrective actions including: an overhaul of the 2P-11B CCW pump; realignment of critical components; replacement of the oil seal with an upgraded design; replacement of the pump shaft with a brand new shaft of normal keyway length; installation of a dowel pin to ensure future bearing cap alignment (WOs were put in place to ensure that the same dowel pin modification was implemented for all of the other CCW pumps at the next available opportunity); and performance of an Apparent Cause Evaluation (AR 01147600), which attributed the

procedural deficiencies to a lack of site knowledge, and identified long-term corrective actions to address the cause.

.2 Routine Quarterly Evaluations

a. Inspection Scope

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

- service water (SW) system; and
- MDAFWPs.

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

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

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

This inspection constituted two quarterly maintenance effectiveness samples as defined in IP 71111.12-05.

b. Findings

No findings of significance were identified.

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

.1 Routine Quarterly Review

a. Inspection Scope

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

- May 18;
- May 25;
- June 1;
- June 8; and
- June 19.

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

These maintenance risk assessments and emergent work control activities constituted five samples as defined in IP 71111.13-05.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

.1 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following issues:

- AR 01148296 – G03/G04 air start systems are not redundant;
- AR 01151964 – questions regarding coiled cables above P-38A and B;
- AR 01150819 – debris on circulation water pump house exterior drains; and
- AR 01141835 – P-32E vibration trending up.

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

associated with operability evaluations. Documents reviewed are listed in the Attachment to this report.

These reviews constituted four samples as defined in IP 71111.15-05.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18)

.1 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the temporary modification associated with the site's transition from the biocide chemical sodium hypochlorite to a chemical known under the commercial name "Stabrex" as the main microbiologic inhibiting additive for the SW system. The transition to Stabrex also included a modification to SW system to add an in-process sampling panel to a non-essential SW line for both units. The inspectors compared the configuration changes and vendor system design documents against the design basis, the FSAR, and the TSs, as applicable, to verify that the modification did not affect the operability or availability of the affected systems. The inspectors performed field verifications to ensure that the modification was installed as directed; the modification operated as expected; that process monitoring adequately demonstrated that no degradation to system materials occurred; and that operation of the modification did not impact the operability of any interfacing systems. Lastly, the inspectors verified that the operations individuals were aware of expected actions in the event of a system failure or malfunction.

This inspection constituted one temporary modification sample as defined in IP 71111.18-05.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

.1 Post-Maintenance Testing

a. Inspection Scope

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

- SW pump P-32F;
- diesel fire pump P-35B;
- SW valve SW-2890;
- red channel 125-volt direct current instrument inverter 2DY-01; and
- SW pump P-32A.

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

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

b. Findings

No findings of significance were identified.

1R21 Component Design Bases Inspection (CDBI) (71111.21)

a. Inspection Scope

Unresolved item (URI) 05000266/2008009-06; 05000301/2008009-06, was opened during the 2008 CDBI because the licensee's analysis that supported the minimum fuel oil for the emergency diesel generators considered only one EDG running when it was possible that two EDGs could be operating during a design basis accident. This review did not represent an inspection sample.

b. Findings

Non-Conservative TS Limit Value for the 48-Hour Diesel Fuel Oil Storage Volume

Introduction: A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure to establish an adequate value for the 48-hour diesel fuel oil storage TS limit for volume.

Description: On July 25, 2008, the NRC completed a baseline CDBI at Point Beach (ADAMS Accession Number ML082520769). The CDBI team questioned whether the most limiting scenario was used to determine the limiting condition for operation

acceptance criteria that ensure that sufficient diesel fuel oil was stored for one EDG operation for 48 hours at rated load. Specifically, the TS value of 11,000 gallons was calculated using design inputs of fuel consumption for only one EDG running although two EDGs draw fuel oil from the same tank. Therefore, the team identified this issue as an URI pending further NRC review of the licensing basis for the 11,000 gallons limiting condition for operation (URI 05000266/2008009-06; 05000301/2008009-06 (DRS)).

While addressing the concern described in the URI, the inspectors confirmed that the calculation that supports the TS limit value of 11,000 gallons supply of diesel fuel oil (TS 3.8.3) was based on the fuel consumption of one EDG running at design load for 48 hours. The inspectors also confirmed that two EDGs draw fuel oil from the same tank.

In addition, the inspectors noted that the current design basis, as described in the FSAR, stated that sufficient fuel oil was maintained by both trains to provide for a 48-hour run of one EDG at rated design load. However, the FSAR also stated that each EDG will start upon the receipt of an undervoltage condition signal on either its primary or opposite unit train, and the current operations do not require securing the second EDG. Furthermore, EDG load management procedures do not limit the EDG loads to conserve fuel. The intent of the EDG load management procedures was to prevent overloading the EDGs.

The inspectors discussed the issue with the Engineering and Technical Specifications Branch of the NRC's Office of Nuclear Reactor Regulation and determined that:

1. The intent of the minimum volume value is to ensure the capability to support a 48-hour continuous run of one EDG at rated design load without fuel replenishment.
2. Technical Specification 3.8.3 is non-conservative because the TS minimum volume value does not consider the lowest functional capability of the tank, that is, two EDGs running for some period of time.

As a result, the licensee implemented compensatory measures to administratively limit the diesel fuel oil storage volume to greater than 27,000 gallons. In addition, the licensee is considering a TS change per NRC Administrative Letter 98-10, "Dispositioning of Technical Specifications that Are Insufficient to Assure Plant Safety."

Analysis: The inspectors determined that the failure to establish an adequate value for the 4-hour diesel fuel oil storage TS limit for volume was contrary to 10 CFR 50.36 and was a performance deficiency.

The performance deficiency was determined by the inspectors to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated December 4, 2008, because it was associated with the Mitigation System Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the EDG to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the TS fuel oil volume value is insufficient to support one EDG running continuously for 48 hours at design rating because a second EDG would consume fuel from the same volume as described in the design basis and allowed by plant procedures.

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, date January 10, 2008, for the Mitigation Systems Cornerstone. The finding screened as of very low safety significance (Green) because the finding was a design deficiency confirmed not to result in loss of operability or functionality. Specifically, the licensee determined that adequate fuel oil volume was always available to support two EDGs operating continuously for 48 hours.

The inspectors did not identify a cross-cutting aspect associated with this finding because the performance deficiency occurred many years ago; therefore, it is not reflective of current performance.

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions.

Contrary to the above, prior to April 17, 2009, the licensee failed to correctly translate applicable design basis into specifications. Specifically, design control measures (calculations) failed to account for the fuel consumption of a second EDG running from the same fuel oil volume as described in the design basis and allowed by plant procedures when establishing the TS limit value for the 48-hour fuel oil volume requirement (TS 3.8.3). Because this violation was of very low safety significance and it was entered into the licensee's CAP (as AR 01148171), this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000266/2009003-03; 05000301/2009003-03).

The licensee implemented compensatory measures to administratively limit the diesel fuel oil storage volume to greater than 27,000 gallons. In addition, the licensee is considering a TS change per NRC Administrative Letter 98-10, "Dispositioning of Technical Specifications that Are Insufficient to Assure Plant Safety." Unresolved Item 05000266/2008009-06; 05000301/2008009-06 is closed.

1R22 Surveillance Testing (71111.22)

.1 Surveillance Testing

a. Inspection Scope

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

- IT 10 – quarterly MDAFW pump & valve test; (inservice testing (IST))
- 0-PT-EDG-041 – G-04 endurance and margin testing;
- TS 84 – G-04 monthly test; and
- IT 07B/C – SW pumps P-32B/C quarterly tests (IST).

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

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

Documents reviewed are listed in the Attachment.

This inspection constituted two routine surveillance testing samples and two inservice testing samples as defined in IP 71111.22, Sections -02 and -05.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

.1 Drill and Exercise Performance Indicator

a. Inspection Scope

The inspectors observed two drill evolutions, on May 6 and June 25, 2009, which required simulated emergency plan implementation by a licensee operations crew or a response organization. These evolutions were included in performance indicator (PI) data regarding drill and exercise performance. The inspectors observed event classification and notification activities. The inspectors also reviewed the post-evolution critique for the scenario. The focus of the inspectors' activities was to note any weaknesses and deficiencies in the crew's performance and ensure that the licensee evaluators noted the same issues and entered them into the CAP. Documents reviewed are listed in the Attachment

This inspection constitutes two samples as defined in IP 71114.06-05.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Reactor Coolant System (RCS) Leakage

a. Inspection Scope

The inspectors sampled licensee submittals for the RCS Leakage PI for Units 1 and 2 for the second quarter 2008 through the first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's operator logs, RCS leakage tracking data, issue reports, event reports, and NRC Integrated Inspection Reports to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment.

This inspection constituted two RCS leakage samples as defined in IP 71151-05.

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Routine Review of Items Entered Into the CAP

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: the complete and accurate identification of the problem; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrence reviews were proper and adequate; and the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are listed in the Attachment.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings of significance were identified.

.2 Daily CAP Reviews

a. Inspection Scope

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

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

b. Findings

No findings of significance were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the 6-month period of January 1 through June 30, although some examples expanded beyond those dates where the scope of the trend warranted.

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

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

b. Findings

No findings of significance were identified.

.4 Selected Issue Follow-up Inspection: Inadequate Work Instructions for South SW Header Work

a. Inspection Scope

During a review of items entered in the licensee's CAP, the inspectors recognized a corrective action item documenting concerns raised during maintenance work performed on the south SW header regarding the adequacy of procedures, work processes, and controls to effectively mitigate safety challenges of the work. The inspector reviewed the WO, operations procedures, and risk documents, and interviewed personnel to conduct a more in-depth review in accordance with inspection procedure requirements.

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

b. Findings

Introduction: A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for inadequate work instructions for maintenance activities conducted on the south SW header. Specifically, the work instructions did not include operator actions and contingencies to restore the header if directed.

Description: On January 21, 2009, the south SW header was removed from service to perform work under WO 00214647. The work included the replacement of a valve, requiring the old valve to be cut out and the new valve to be welded, impacting the piping pressure boundary. The system would not be operable until the pressure boundary was repaired in compliance with the American Society of Mechanical Engineers Code requirements.

The SW system was composed of two headers, north and south, that provided the only safety-related source of cooling water to both units. From the plant probabilistic risk assessment analysis, loss of SW was 48 percent and 52 percent of the initiator contribution to internal event core damage frequency for Unit 1 and Unit 2, respectively. Hence, the risk characterization for this WO's activities was high or very high and the safety monitor was yellow during the period the work was in progress. Also, the plant was required to enter a 72-hour TS action statement while the header was not operable.

The work instructions for this activity consisted of numerous documents contained in or referenced by WO 00214647 and were considered the work instructions. In particular, the inspectors reviewed two of the documents, WO 00214647 01, and operations procedure 0-SOP-SW-105, "South Service Water Pump Header Isolation." The inspectors identified that these documents did not contain instructions and requirements that were appropriate for the risk associated with this activity. In particular, if the only other SW supply, the north header, were to become inoperable, the work instructions should contain actions and responsibilities for promptly returning the south header to service.

Procedure 0-SOP-SW-105, step 4.8, assigned an operator to perform procedure step 5.1.1 in the pump house in the event the shift manager ordered a rapid restoration of the south SW pump header. The procedure did not define rapid or requirements for how fast the operator was to respond and take actions. It also did not define what other activities the operator could undertake, or his physical location, to be available for "rapid restoration."

Procedure step 5.1.1 stated,

"If at any time the shift manager directs recovery or the south service water pump header, then perform the following

- a. STOP all work and restore the SW system boundaries
- b. Restore the SW pump header by performing the restoration steps in Section 5.2"

Without addition direction and actions, the operator was not able to fulfill step 5.1.1(a) during various phases of the pipe and valve repair when the pressure boundary was affected. The work instructions did not contain information the operator or the shift manager could use to restore or evaluate the SW system pressure boundary. Additional maintenance activities or engineering evaluation were required.

Step 5.1.1(b) directed the operator to restore the SW system boundaries. The licensee noted in an apparent cause evaluation (AR 01142817) that 17 tags would need to be removed to restore flow. No contingency clearance checklist was available until after the

work had already started that would have ensured there were no additional issues for restoring the flow to the header. When identified by an operator, the checklist was prepared and available prior to physical work starting on the piping pressure boundary.

Contingency actions or evaluations were not available to fix or evaluate the piping pressure boundary affected by this activity to determine what was necessary to return the system to service if directed by the shift manager. Contingency planning was discussed in the challenge boards conducted for this activity but was not incorporated into the work instructions.

Analysis: The inspectors determined that the failure of the work instructions to contain operator actions and planned contingencies to restore the south SW header if needed was not commensurate with the risk associated with the loss of all SW and was a performance deficiency. This finding was determined to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated December 4, 2008, because the finding was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the work instructions for the maintenance activity did not incorporate the risk associated with the loss of all service water, although this system was the only safety-related system that provides cooling water to plant systems required to respond to initiating events. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of a systems safety function; (3) did not represent an actual loss of safety function of a single train for greater than its TS allowed outage time; (4) did not represent an actual loss of safety function of one or more non-TS trains of equipment designated as risk significant; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

This finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)). Specifically, operations procedures were vague regarding operator actions required to return the SW header to operable and contingency plans, such as clearance orders and methods to fix the piping pressure boundary, were not included in the work instructions.

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, on January 21, 2009, the work instructions for WO 214647 did not ensure the south SW header could be promptly restored for service commensurate with the risk associated with the loss of all SW. Specifically, operations procedure, 0-SOP-SE-105, did not define specific operator actions to return the south SW header to service if directed; the WO did not provide a contingency clearance order for operations

to return the south header to service if directed; and the WO did not provide contingency actions to restore the SW header pressure boundary. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program as AR 01142817, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000266/2009003-04; 05000305/2009003-04).

In response, the licensee entered this issue into the corrective action system and made procedure changes for work affecting the operability of a SW header.

40A3 Follow-Up of Events and Notices of Enforcement Discretion (71153)

.1 (Closed) Licensee Event Report (LER) 05000266/2009-001-00: CCW Pump Inoperable in Excess of TS Allowed Completion Time

These events, which occurred between January 1 and January 5, 2009, and between January 27 and January 31, 2009, were discovered by the licensee as a result of a review that concluded on March 9, 2009, that the 1P-11B CCW pump would not have performed its safety function for the duration of its 30-day mission time due to oil leaks.

The circumstances surrounding events described in this LER were previously reviewed by the resident inspectors during the first quarter 2009 inspection period and the results of those reviews were documented in Inspection Report 05000266/05000301-2009002. In that report, the inspectors documented two Green NCVs of very low safety significance associated with the events in this LER. This LER is closed.

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

40A5 Other Activities

.1 (Closed) URI 05000266/2008009-06; 05000301/2008009-06: Concerns with Analysis Supporting the EDG Tank Fuel Volume of 11,000 Gallons

This item is discussed in Section 1R21 of this report. The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." This URI is closed.

40A6 Management Meetings

.1 Exit Meeting Summary

On July 8, 2009, the inspectors presented the inspection results to Mr. J. Bjorseth and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

- The closure of CDBI URI 05000266/2008009-06; 05000301/2008009-06 as an NCV with Ms. F. Flentje and other members of the licensee's staff via telephone on May 15, 2009.

The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

J. Bjorseth, Plant Manager
P. Baranowski, System Engineer
S. Brown, System Engineering Manager
F. Flentje, Regulatory Affairs Supervisor
R. Freeman, Emergency Preparedness Manager
R. Harrsch, Operations Site Director
J. Hofstra, Boric Acid Program Engineer
J. Golding, System Engineer - EDG
K. Locke, Regulatory Assurance Representative
L. Meyer, Site Vice-President
A. Mitchell, Design Engineering Manager
T. Vehec, Maintenance Site Director

Nuclear Regulatory Commission

J. Poole, Point Beach Project Manager, Office of Nuclear Reactor Regulations
M. Kunowski, Chief, Division of Reactor Projects, Branch 5

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

05000266/2009003-01; 05000301/2009003-01	NCV	Inadequate Seismic Assessment of Temporary Cable Installations Above Motor-Driven Auxiliary Feedwater Pumps (Section 1R04.1)
05000301/2009003-02	NCV	Inadequate Work Instructions and Procedures for 2P-11B Component Cooling Water Pump Maintenance (Section 1R12.1)
05000266/2009003-03; 05000301/2009003-03	NCV	Non-Conservative Technical Specification Limit Value for the 48-Hour Diesel Fuel Oil Storage Volume (Section 1R21)
05000266/2009003-04; 05000301/2009003-04	NCV	Inadequate Work Instructions for South Service Water Header Work (Section 4OA2.4)

Closed

05000266/2008009-06; 05000301/2008009-06	URI	Concerns with Analysis Supporting the EDG Tank Fuel Volume of 11,000 Gallons (Section 1R21)
05000266/2009-001-00	LER	Component Cooling Water Pump Inoperable in Excess of Technical Specification Allowed Completion Time (Section 4OA5)

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1R01 Adverse Weather Protection

- AR 00596330; ATC Facility Study Requires Conditions on Power System Stabilizer
- AR 01144769; Juno Power Marketing Not Notified of G-05 OOS
- Alarm Response Procedure (ARP) C01 A4-4; Unit 1 Voltage Regulator Trouble; Revision 1
- Alarm Response Book (ARB) C02 E 4-8; 345 KV Switchyard; Revision 12
- Abnormal Operating Procedure (AOP) 0.1; Declining Frequency on 345 KV Distribution System; Revision 12
- NP 2.1.5; Electrical Communications, Switchyard Access and Work Planning; Revision 11
- Operator Narrative Log Search Results Documenting Communications Between Point Beach and ATC

1R04 Equipment Alignment

- CL 13E Part 2; Auxiliary Feedwater Valve Lineup Motor Driven; Revision 42
- AR01147229; AFP Room Recovery From Partial MR-04-017 Not Timely
- P&ID; BECH 6118 M-217 Sheet 1 and 2; Auxiliary Feedwater System
- P&ID; BECH 6118 M-207 Sheet 1A; Service Water System
- NP8.4.8; Requirements for Scaffold Near Safety Related Equipment; Revision 13
- PBF-9114; Scaffold Final Inspection Checklist; Revision 15
- AR 01151284; Scaffold Pole in Contact with 2P-11B Baseplate
- Letter from Flowserve to NextEra Energy dated June 19, 2009; Auxiliary Feed Water Pumps Bryon Jackson Model 3x4x9 DVMX 9-Stage Packing Leakage
- AR 01150713; Clarification of AFP Packing Leakage Expectations
- AR 01119096; P-38A MDAFW Seals Have Excessive Leakage
- 1-CL-CC-001; Component Cooling Unit 1; Revision 14
- P&ID BECH M-207 Sheet 3; Service Water
- P&ID WEST 110E018 SH 3; Auxiliary Coolant System
- CL 7A; Safety Injection System Checklist; Revision 30
- O-PT-FP-006; Monthly Fire Protection Control Valve Position Verification; Revision 4
- PC 73, Part 4; Monthly Fire Protection Control Valve Position Verification; Revision 25
- Drawing 248787; Elementary Wiring Diagram; Alternate Supply 1P-010A/B Breaker B52-55B; Revision 3
- Drawing 309783; Pump Assembly; Revision 6
- Drawing 018980; P&ID Auxiliary Coolant System; Revision 64
- Drawing 018981; Auxiliary Coolant System; Revision 22

1R05 Fire Protection

- AR 01148420; Fire Barrier Installed Greater Than 60 Days
- NP 8.4.11; Penetrating Barriers; Revision 16
- M-7-4-38-N1; Fire Barrier Penetration Permit; May 31, 2007
- Fire Protection Evaluation Report, Revision 9

- FHAR AZ 151; Fire Zone Data – Safety Injection Pump Room; June 2008
- Drawing PBC-218 Sheet 2; Fire Barrier Locations for Turbine Building, Auxiliary Building and Containment Elevation 8'; Revision 16
- Fire Hazards Analysis Report; Revision 6
- NP 1.9.9; Transient Combustible Control
- NP 1.9.13; Ignition Control Procedure; Revision 13
- Duke Engineering and Services Fire Area Analysis Summary Report; Fire Area: A24 4KV Vital Switchgear Room; August 5, 2008
- Duke Engineering and Services Fire Area Analysis Summary Report; Fire Area: A01-F General Plant Area – Yard; August 5, 2008
- Fire Hazards Analysis Report; Revision 5
- Fire Protection Engineering Evaluation 1999-008; Control Building Fire Barrier Features; Revision 3
- Drawing M-5-3-29; Fire Barrier EE Room 319, Floor EL 26'; Revision 3
- Drawing M-7-3-9; Battery Room B306, South Wall, EL 8'-0"; Revision 3
- Drawing M-7-3-10; Battery Room A307, South Wall, EL 8'-0"; Revision 2
- Drawing M-7-3-8; Sheet 1; Fire Barrier, 4 KV SWGR Room 305, East EL 8'; Revision 9
- Drawing M-7-3-8; Sheet 2; Fire Barrier, 4 KV SWGR Room 305, East EL 8'; Revision 3
- Drawing M-7-3-55; 4KV SWGR Room 305 Floor; Elev. 8'; Revision 2
- Drawing M-7-3-23; Sheet 1; Aux. Pump Area, Station Room 312, East Wall El. 8'-0"; Revision 5

1R07 Heat Sink Performance

- AR 1149827; Significant Growth of New Algae Was Found in the Service Water Side of the Component Cooling Water Heat Exchanger (HX-12A)
- CAP 01149827; Significant New Algae Fouling of CCW HX-12A
- CAP 01150086; CCW Repair Coating Is Not a Listed Coating in RMP 9367
- NP 7.7.15; Biofouling Control Methods; Revision 6

1R12 Maintenance Rule Implementation

- AR 01102082; 0P-32A, Service Water Pump Off Increased Testing Frequency
- AR 01122784; P-32B, SW Pump, Called OOS Due To Indication Problem
- AR 01136251; P-32B, Service Water Pump, Base Movement Observed
- AR 01092175; Elevated Vibration On P-32C SW Pump Places It In Alert
- AR 01150641; P-32E SW Pump Test Passed With Little Margin
- AR 01151702; Observed No Seal Leak Off From P-32F SW Pump During Rounds
- AR 01121177; Unclear Guidance For Measuring Bearing ID On SW Pumps
- AR 01146905; 2P-11B Inboard Bearing Oil Sample Particulate on 3/25/09
- 1-PT-SW-1; Service Water System Pressure Test-Inside Containment Unit 1; Rev. 4
- IT 07C; P-32C Service Water Pump (Quarterly) Inservice Test; Revision 25
- IT 07B; P-32B Service Water Pump (Quarterly) Inservice Test; Revision 26
- RCE 01141835-04; Service Water Pump Decreased Operating Life Root Cause Evaluation
- Smart System Status Report, Unit 1 or Common Service Water (SW) System; December 30, 2008
- Maintenance Rule Performance Criteria; Component Service Water System; January 8, 2009
- Maintenance Rule Unavailability Data Sheet; Service Water System; April 1, 2007 – April 1, 2009
- Maintenance Rule (a)(1) System Action Plan Checklist and Approval; May 5, 2009
- Function List for SW Service Water Sorted for Maintenance Rule; June 22, 2009

- Performance Criteria Assessments for SW Since June 1, 2007
- DBD-12, Service Water System (SW) Design Basis Document, Revision 15, February 9, 2009
- RMP 9216-1; Service Water Pump Motor Removal and Installation; Revision 12;
- RMP 9216-3; Service Water Pump Vibration Testing and Balancing for Post Maintenance Testing; Revision 15
- Design Analysis Safety-Related Water Pumps, February 2009

1R13 Maintenance Risk Assessments and Emergent Work Control

- Work Week Execution Schedules for the Applicable Work Weeks
- Operator Logs for the Applicable Work Weeks

1R15 Operability Evaluations

- AR 01151964; Questions Regarding Coiled Cables Above P-38A and B
- EC 8420; MDAFW Pumps P-38A and P-38B Conduit and Cable Installation; November 15, 2007
- Installation Work Plan 04-017*E; Installing New Cables for AFW Pumps P-38A and P-38B; Accepted August 30, 2008
- 2007-0157; 50.59 Screening for AFW Motor-Driven Pump Replacement; Revision 0
- FP-E-MOD-02; Engineering Change Control; Revision 6
- NP 7.7.2; Seismic Qualification of Equipment; Revision 3
- SQ-002341; SQUG walkdown for AFW Pump Room; June 4, 2009
- CR1151964; Technical Assessment for Reportability; July 09, 2009
- AR 01141835; P-32E Vibration Trending Up
- PC 80 Part 7; Lake Water Level Determination; Revision 2
- NP 8.4.17; PBNP Flooding Barrier Control; Revision 10
- DBD-T-41 Module A; Hazards – Internal and External Flooding; Revision 7
- AR 01150819; Debris on CWP House Exterior Drains
- AR 01149556; Subsoil Drains Covers in G-01 and G-02 Are Not Bolted in Place
- Drawing PBC-346; Plant Area Storm Water Plan; Revision 3
- AR 01148296; G03/G04 Air Start Systems Are Not Redundant
- PBNP Diesel Project Design Submittal; September 21, 1993
- WEPCO Diesel Generator Addition Project Standard Review Plans Compliance Summary; June 11, 1993

1R18 Plant Modifications

- CAP 01149283; Issues with Temp Mod Installed in Plant
- Nalco Company Correspondence to Thomas Klesper of Point Beach Nuclear Plant; STABREX-ST70; February 26, 2009
- 10 CFR 50.59/72.48 Screening Data for EC 12779; Changing from Sodium Hypochlorite Treatment of Lake Water to StaBrex ST-70; March 26, 2009
- 10 CFR 50.59/72.48 Screening Data for EC 12779, Revision 1; Changing from Sodium Hypochlorite Treatment of Lake Water to StaBrex ST-70; April 29, 2009

1R19 Post-Maintenance Testing

- AR 01151571; 2DY-01 Sticky Precharge Button
- AR 01151819; 2DY-01 Sticky Precharge Button
- AR 01150587; 2-25/A04 As Found OOTs/Failures

- Work Plan 354338-01; Replace Static Switch Control Board (x201); Unit 2; May 8, 2009
- CAP 01150588; FME Found During 2DY01 Inspection; June 3, 2009
- 2RMP 9036-3; 2DY-01 Red Channel Instrument Bus Static Inverter Maintenance; Revision 17
- IT-07G; Service Water Valves (Quarterly); Revision 5
- 10 CFR 50.59/72.48 Screening Data for Revision to IT-07G Following Re-baseline of SW-2890 and SW-2891
- NUREG 1482; Section 3.5, Pre-Conditioning of Pumps and Valves; Revision 1
- SW-02890; Valve Stroke Time Plots
- Work Order 00363457-01; Header X-Connect SW-2890 Indicates Intermediate When Shut; May 19, 2009
- Work Plan 354338-16; Perform Bench Testing of the Replacement Relays for the SCI Inverter Printed Circuit Boards; Unit 2; June 3, 2009
- Work Plan 354338-10; Wire Lifted and Landed Log Data; June 1 and June 2, 2009
- Work Plan 354338-13; Perform Testing of the Installed Potter Brumfield Relays on SCI Inverter printed Circuit Boards; Unit 2; May 29, 2009
- Work Plan 354338-13; Addendum 1; Additional Testing/Burnishing of Relays Required; Unit 2; June 2, 2009

1R22 Surveillance Testing

- RMP9132-3; 6 Month Diesel Fire Pump Inspection; Revision 0
- O-PT-FP-002; Monthly Diesel Engine-Driven Fire Pump Functional Test; Completed June 129, 2009
- O-PT-EDG-041; G-04 Emergency Diesel Generator Endurance and Margin Testing; Revision 3
- AR01151192; IT-7 Series Procedure Flowpath
- IT-7A\B\C; P-32A\B\C Service Water Pump (Quarterly) Surveillances; Completed June 8, 2009

1EP6 Drill Evaluation

- PBN BR09 081; EP Training Scenario
- ACE 01148617; Drill and Exercise Performance Failed Opportunities in Past 24 Months; May 28, 2009
- Drill and Performance Indicator Paperwork for March 12 and 19, 2009

40A1 Performance Indicator Verification

- Licensee Performance Indicator Data for 2008, Including Data Submitted to the NRC, Operator Logs and Licensee Performance Indicators
- Reactor Coolant System Leakage Data; April, 2007 – March, 2009

40A2 Problem Identification and Resolution

- AR 01152057; Stop Work on "SQUG" Related Work
- AR 01142817; Procedure, Process and Controls for SW Header Work
- AR 01147185; Header Isolation SOPs - Additional Guidance
- AR 01150331; South SW Header Work Non-Cited Violation
- AR 01146863; Areas for Improvement in High Risk Activity Challenge Board
- AP062577; SW-872 and SW-876 Root Isolation Valves Leak Significantly
- CAP065659; Unable to Complete Section XI Pressure Test
- Work Order 00214647; SW-976 Valve Leaks By, January 6, 2009

- Work Plan 0500974; Replace Valve SW-874; Complete January 21, 2009
- PRA 11.0; Point Beach Nuclear Plant Probabilistic Risk Assessment; Revision 1
- Point Beach Unit 1 Safety Monitor Calculations for January 21 and 23, 2009
- ACE 01142817; Concerns with Procedure Adequacy, Dedication of Operators, and IPTE for South Service Water Header Work; Completed February 27, 2009
- O-SOP-SW-105; South Service Water Pump Header Isolation, Revision 4
- AOP-9A; Service Water System Malfunction; Revision 23

NRC ARs

- AR 01148164; Temporary Portable Diesel Parked with 6 Feet of SW Building
- AR 01148171; Potential Design Control Violation of Fuel Oil Volume
- AR 01147855; NRC Inspector Observation – Door 40
- AR 01148535; Communications with NRC Needs Improvement
- AR 01148845; CCW Containers in PAB Have Degraded Labels
- AR 01149589; End of Extension Cord Found in Water
- AR 01149665; Misc Issues Identified by NRC Resident
- AR 01149673; PBC 218 Sheet 2 Inaccurate
- AR 01149690; NRC Identified Issue – Overflowing Drain Line AFP Room
- AR 01151719; NRC Identified Issues
- AR 01151672; Scaffolding Altered, Ensure Seismic / Thermal Growth Issues
- AR 01150332; NRC Question – Condensate Pump Oil Sampling

LIST OF ACRONYMS USED

AC	Alternating Current
AFW	Auxiliary Feedwater
AR	Action Request
CAP	Corrective Action Program
cc	Cubic Centimeters
CCW	Component Cooling Water
CDBI	Component Design Bases Inspection
CFR	Code of Federal Regulations
EDG	Emergency Diesel Generator
FSAR	Final Safety Analysis Report
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IST	Inservice Testing
LER	Licensee Event Report
MDAFWP	Motor-Driven Auxiliary Feedwater Pump
NCV	Non-Cited Violation
NRC	U.S. Nuclear Regulatory Commission
PI	Performance Indicator
RCS	Reactor Coolant System
RMP	Routine Maintenance Procedure
SDP	Significance Determination Process
SQUG	Seismic Qualification Users Group
SW	Service Water
TS	Technical Specification
TSO	Transmission System Operator
URI	Unresolved Item
WO	Work Order