

UNITED STATES NUCLEAR REGULATORY COMMISSION

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

July 8, 2010

EA-2010-111

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

TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000266/2010008; 05000301/2010008 AND EXERCISE

OF ENFORCEMENT DISCRETION

Dear Mr. Meyer:

On May 28, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed a triennial fire protection inspection at your Point Beach Nuclear Plant Units 1 and 2. The enclosed inspection report documents the inspection results, which were discussed on May 28, 2010, with Mr. T. Vehec and other members of your staff. The final results of the inspections were also discussed on June 23, 2010, with Ms. F. Flenge.

As a result of your intent to adopt the National Fire Protection Association Standard (NFPA) 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," as defined by Title 10, Code of Federal Regulations (CFR), Part 50, Section 48(c), the inspection was conducted in accordance with Inspection Procedure (IP) 71111.05TTP, "Fire Protection - NFPA 805 Transition Period (Triennial)," issued December 24, 2009, and effective January 1, 2010. 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 personnel.

Based on the results of this inspection, two NRC-identified violations and one licensee-identified violation were discovered that involved violations of NRC requirements. The inspectors have screened these violations and determined that they warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues and Section 12.01(b) of Inspection Manual Chapter (IMC) 0305.

If you contest the subject or severity of a Non-Cited Violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission – Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Point Beach Nuclear Plant. In addition, if you disagree with the cross-cutting aspect assigned to any finding in this report, you should provide a response

L. Meyer -2-

within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III, and the NRC Resident Inspector at the Point Beach Nuclear Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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 Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Robert C. Daley, Chief Engineering Branch 3 Division of Reactor Safety

Docket No.: 50-266; 50-301 License No.: DPR-24; DPR-27

Enclosure: Inspection Report 05000266/2010008(DRS); 05000301/2010008(DRS)

w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-266; 50-301

License No: DPR-24; DPR-27

Report No: 05000266/2010-008(DRS); 05000301/2010-008(DRS)

Licensee: NextEra Energy Point Beach, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: Two Rivers, WI

Dates: May 10, 2010 through June 23, 2010

Inspectors: R. Langstaff, Senior Reactor Inspector, Lead

A. Dahbur, Senior Reactor Inspector

L. Jones, Reactor Inspector

C. Moore, Operating License Examiner D. Passehl, Senior Reactor Analyst

Observer: R. Vettori, Fire Protection Engineer, NRR

Approved by: R. Daley, Chief

Engineering Branch 3 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000266/2010008(DRS); 05000301/2010008(DRS); 05/10/2010 – 05/28/2010; Point Beach Nuclear Plant, Units 1 and 2; Routine Triennial Fire Protection Baseline Inspection.

This report covers an announced triennial fire protection baseline inspection. The inspection was conducted by Region III inspectors. Based on the results of this inspection, two NRC-identified findings and one licensee-identified finding subject to enforcement discretion were identified. The significance of most findings is indicated by their color (Green, White, Yellow, or 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

Cornerstones: Initiating Events and Mitigating Systems

No violations of high-safety significance were identified.

B. <u>Licensee-Identified Violations</u>

Violations of not high-safety significance that were identified by the licensee have been reviewed by inspectors. Corrective actions planned or taken by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events and Mitigating Systems

1R05 Fire Protection (71111.05TTP)

The purpose of the fire protection triennial baseline inspection was to conduct a design-based, plant specific, risk-informed, onsite inspection of the licensee's fire protection program's defense-in-depth elements used to mitigate the consequences of a fire. The fire protection program shall extend the concept of defense-in-depth to fire protection in plant areas important to safety by:

- preventing fires from starting;
- rapidly detecting, controlling and extinguishing fires that do occur;
- providing protection for structures, systems, and components important to safety so that a fire that is not promptly extinguished by fire suppression activities will not prevent the safe-shutdown of the reactor plant; and
- taking reasonable actions to mitigate postulated events that could potentially cause loss of large areas of power reactor facilities due to explosions or fires.

The inspectors' evaluation focused on the design, operational status, and material condition of the reactor plant's fire protection program, post-fire safe-shutdown systems and B.5.b mitigating strategies. The objectives of the inspection were to assess whether the licensee had implemented a fire protection program that: (1) provided adequate controls for combustibles and ignition sources inside the plant; (2) provided adequate fire detection and suppression capability; (3) maintained passive fire protection features in good material condition; (4) established adequate compensatory measures for out-of-service, degraded, or inoperable fire protection equipment, systems or features; (5) ensured that procedures, equipment, fire barriers, and systems exist so that the post-fire capability to safely shut down the plant was ensured; (6) included feasible and reliable operator manual actions when appropriate to achieve safe-shutdown; and (7) identified fire protection issues at an appropriate threshold and ensured these issues were entered into the licensee's problem identification and resolution program.

In addition, the inspectors' review and assessment focused on the licensee's post-fire safe-shutdown systems for selected risk-significant fire areas. Inspector emphasis was placed on determining that the post-fire safe-shutdown capability and the fire protection features were maintained free of fire damage to ensure that at least one post-fire safe-shutdown success path was available. The inspectors' review and assessment also focused on the licensee's B.5.b related license conditions and the requirements of 10 CFR 50.54 (hh)(2). Inspector emphasis was to ensure that the licensee could maintain or restore core cooling, containment, and spent fuel pool cooling capabilities utilizing the B.5.b mitigating strategies following a loss of large areas of power reactor facilities due to explosions or fires. Documents reviewed are listed in the Attachment to this report.

The fire areas and fire zones and B.5.b mitigating strategies selected for review during this inspection are listed below and in Section 1R05.11. The fire areas and fire zones and B.5.b mitigating strategies selected constitute 3 inspection samples and 1 inspection sample, respectively, as defined in IP 71111.05TTP.

<u>Fire Area</u> <u>Description</u>

A06 1B32 MCC Area

A23S South Side of Auxiliary Feedwater Pump Room

A24 4160V Vital Switchgear Room

.1 <u>Protection of Safe-Shutdown Capabilities</u>

a. <u>Inspection Scope</u>

The inspectors reviewed the functional requirements identified by the licensee as necessary for achieving and maintaining hot shutdown conditions to ensure that at least one post-fire safe-shutdown success path was available in the event of fire in each of the selected fire areas and for alternative shutdown in the case of control room evacuation. In addition, the inspectors reviewed the fire hazards analysis, safe-shutdown analysis, and supporting drawings and documentation to verify that safe-shutdown capabilities were properly protected. The updated final safety analysis report and the licensee's engineering and/or licensing justifications (e.g., NRC guidance documents, license amendments, Technical Specifications, safety evaluation reports, exemptions, and deviations) were also reviewed to determine the licensing basis.

The inspectors reviewed the licensee procedures and programs for the control of ignition sources and transient combustibles to assess their effectiveness in preventing fires and in controlling combustible loading within limits established in the fire hazards analysis. The inspectors performed plant walkdowns to verify that protective features were being properly maintained and administrative controls were being implemented.

The inspectors examined the operators' ability to perform the necessary manual actions for achieving safe-shutdown by reviewing post-fire shutdown procedures, the accessibility of safe-shutdown equipment, the available time for performing the manual actions, and whether manual actions had been verified and validated by plant walkdowns. In addition, the inspectors' evaluated manual actions not supported by an NRC approved exemption or deviation using the guidance provided in Attachment 2 of IP 71111.05TTP.

The inspectors also reviewed the licensee's design control procedures to ensure that the process included appropriate reviews and controls to assess plant changes for any potential adverse impact on the fire protection program and/or post-fire safe-shutdown analysis and procedures.

b. Findings

No findings of significance were identified.

.2 Passive Fire Protection

a. Inspection Scope

For the selected fire areas, the inspectors evaluated the adequacy of fire area barriers, penetration seals, fire doors, electrical raceway fire barriers, and fire rated electrical cables. The inspectors observed the material condition and configuration of the installed barriers, seals, doors, and cables. The inspectors reviewed approved construction details and supporting fire tests. In addition, the inspectors reviewed license documentation, such as NRC safety evaluation reports, and deviations from NRC regulations and the National Fire Protection Association (NFPA) standards to verify that fire protection features met license commitments.

The inspectors walked down accessible portions of the selected fire areas to observe material condition and the adequacy of design of fire area boundaries (including walls, fire doors, and fire dampers) to ensure they were appropriate for the fire hazards in the area.

The inspectors reviewed the installation, repair, and qualification records for a sample of penetration seals to ensure the fill material was of the appropriate fire rating and that the installation met the engineering design.

b. Findings

No findings of significance were identified.

.3 Active Fire Protection

a. Inspection Scope

For the selected fire areas, the inspectors evaluated the adequacy of fire suppression and detection systems. The inspectors observed the material condition and configuration of the installed fire detection and suppression systems. The inspectors reviewed design documents and supporting calculations. In addition, the inspectors reviewed license basis documentation, such as, NRC safety evaluation reports, deviations from NRC regulations, and NFPA standards to verify that fire suppression and detection systems met license commitments.

b. Findings

No findings of significance were identified.

.4 <u>Protection from Damage from Fire Suppression Activities</u>

a. <u>Inspection Scope</u>

For the selected fire areas, the inspectors verified that redundant trains of systems required for hot shutdown would not be subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems including the effects of flooding. The inspectors conducted walkdowns of each of the

selected fire areas to assess conditions such as the adequacy and condition of floor drains, equipment elevations, and spray protection.

b. Findings

No findings of significance were identified.

.5 Alternative Shutdown Capability

a. Inspection Scope

The inspectors reviewed the licensee's systems required to achieve alternative safeshutdown to determine if the licensee had properly identified the components and systems necessary to achieve and maintain safe-shutdown conditions. The inspectors also focused on the adequacy of the systems to perform reactor pressure control, reactivity control, reactor coolant makeup, decay heat removal, process monitoring, and support system functions.

The team conducted selected area walkdowns to determine if operators could reasonably be expected to perform the alternate safe-shutdown procedure actions and that equipment labeling was consistent with the alternate safe-shutdown procedure. The review also looked at operator training, as well as consistency between the operations shutdown procedures and any associated administrative controls.

b. Findings

No findings of significance were identified.

.6 Circuit Analyses

a. Inspection Scope

In accordance with IP 71111.05TTP, "Fire Protection - NFPA 805 Transition Period (Triennial)," issued December 24, 2009, and effective January 1, 2010, this segment of the IP was suspended for facilities in NFPA 805 transition.

b. Findings

No findings of significance were identified.

.7 Communications

a. Inspection Scope

The inspectors reviewed, on a sample basis, the adequacy of the communication system to support plant personnel in the performance of alternative safe-shutdown functions and fire brigade duties. The inspectors verified that plant telephones, page systems, sound powered phones, and radios were available for use and maintained in working order.

b. Findings

No findings of significance were identified.

.8 <u>Emergency Lighting</u>

a. <u>Inspection Scope</u>

The inspectors performed a plant walkdown of selected areas in which a sample of operator actions would be performed in the performance of alternative safe-shutdown functions. As part of the walkdown, the inspectors focused on the existence of sufficient emergency lighting for access and egress to areas and for performing necessary equipment operations. The locations and positioning of the emergency lights were observed during the walkdown and during review of manual actions implemented for the selected fire areas.

b. Findings

No findings of significance were identified.

.9 Cold Shutdown Repairs

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's procedures to determine whether repairs were required to achieve cold shutdown and to verify that dedicated repair procedures, equipment, and material to accomplish those repairs were available onsite. The inspectors also evaluated whether cold shutdown could be achieved within the required time using the licensee's procedures and repair methods. The inspectors also verified that equipment necessary to perform cold shutdown repairs was available onsite and properly staged.

b. Findings

No findings of significance were identified.

.10 Compensatory Measures

a. Inspection Scope

The inspectors conducted a review to verify that compensatory measures were in place for out-of-service, degraded or inoperable fire protection and post-fire safe-shutdown equipment, systems, or features (e.g., detection and suppression systems, and equipment, passive fire barriers, pumps, valves or electrical devices providing safe-shutdown functions or capabilities). The inspectors also conducted a review on the adequacy of short term compensatory measures to compensate for a degraded function or feature until appropriate corrective actions were taken.

b. Findings

No findings of significance were identified.

.11 B.5.b Inspection Activities

a. Inspection Scope

The inspectors reviewed the licensee's preparedness to handle large fires or explosions by reviewing one or more mitigating strategies as identified below. This review ensured that the licensee continued to meet the requirements of their B.5.b related license conditions and 10 CFR 50.54(hh)(2) by determining that:

- Procedures were being maintained and adequate.
- Equipment was properly staged, maintained, and tested.
- Station personnel were knowledgeable and could implement the procedures.
- Additionally, inspectors reviewed the storage, maintenance, and testing of B.5.b related equipment.

The inspectors reviewed the licensee's B.5.b related license conditions and evaluated selected mitigating strategies to ensure they remain feasible in light of operator training, maintenance/testing of necessary equipment and any plant modifications. In addition, the inspectors reviewed previous inspection reports for commitments made by the licensee to correct deficiencies identified during performance of Temporary Instruction (TI) 2515/171 or subsequent performances of these inspections.

The B.5.b mitigating strategies selected for review during this inspection are listed below. The off-site and on-site communications, notifications/ERO activation, initial operational response actions, and damage assessment activities identified in Table A.3-1 are evaluated each time due to the mitigation strategies' scenario selected.

NEI 06-12, Revision 2 Section	Licensee Strategy (Table)	Selected for Review
3.2.2	Off-site and On-site Communications (Table A.3-1)	Evaluated
3.2.3	Notifications/ERO Activation (Table A.3-1)	Evaluated
3.2.4	Initial Operational Response Actions (Table A.3-1)	Evaluated
3.2.5	Initial Damage Assessment (Table A.3-1)	Evaluated
3.3.4	Manually Depressurize SGs and Use Portable Pump (Table A.4-4)	Selected

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution (71152)

a. Inspection Scope

The inspectors reviewed the licensee's corrective action program procedures and samples of corrective action documents to verify that the licensee was identifying issues related to the fire protection program at an appropriate threshold and entering them in the corrective action program. The inspectors reviewed selected samples of condition reports, design packages, and fire protection system non-conformance documents.

b. Findings

(1) Failure to Correctly Install Component Cooling Water Area Sprinkler System:

<u>Introduction</u>: The following finding that affects 10 CFR 50.48 was identified by the NRC and is a violation of NRC requirements. This finding has been screened and determined to warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues.

A finding of very low safety significance and associated violation of license Condition 4.F was identified by the inspectors for the failure to correctly install the component cooling water (CCW) area sprinkler system. Specifically, four sprinkler heads were installed with distances below the ceiling in excess of those permitted by the applicable standard.

<u>Description</u>: The inspectors reviewed Corrective Action Program (CAP) Document 540164, "CCW Pump Room Ceiling Level Sprinklers Potentially Non-Compliant with NFPA 13," dated October 17, 2003. As part of this review, the inspectors noted that several sprinklers in the CCW pump area were not installed in accordance with the applicable NFPA code, NFPA 13 - 1978, "Standard for the Installation of Sprinkler Systems." Specifically, two upright sprinklers above the CCW pumps were installed at 23 and 34 inches below the ceiling. In addition, two sidewall sprinklers located along the east wall were located 16 and 25 inches below the ceiling. The ceiling in the CCW pump area was smooth and was constructed of concrete. Section 4-3.1.1 of NFPA 13 - 1978 specified that sprinklers in bays shall be installed 1 to 12 inches below noncombustible ceilings for smooth ceiling construction.

This issue was originally identified by the NRC in October 2003 and documented as an Unresolved Item (URI) in Inspection Report 05000266/2003009; 05000301/2003009. The URI was subsequently closed in Inspection Report 05000266/2004002; 05000301 when the issue was dispositioned as a Non-Cited Violation. The licensee did not contest the violation. In reviewing the issue during the 2004-2005 timeframe, the licensee mistakenly believed that compliance with NFPA 13 requirements for the sprinkler system in the CCW pump area was not required due to a July 3, 1985, exemption for partial suppression for the fire area. Consequently, the licensee failed to correct the issue in response to the violation. The inspectors noted that the fire area encompassing the CCW pump area (fire area A01-A at the time of this inspection, originally Fire Zone 3) included most of the 8-foot elevation of the auxiliary building, much of which was unsprinklered, as permitted by the exemption. However, the exemption credited the sprinkler system installed in the area of the CCW pumps for protecting cables required

for safe-shutdown. The licensee noted that licensing correspondence in support of the exemption identified that CCW area sprinkler system probably would not meet NFPA 13 requirements. However, the licensing correspondence did not identify any NFPA 13 non-compliances other than the lack of full area coverage (which is an NFPA 13 requirement). Additionally, the August 2, 1979, safety evaluation report, which pre-dated the licensing correspondence in support of the exemption, stated that the sprinkler systems conformed to the applicable provisions of NFPA 13. During this inspection, the licensee presented information that the CCW pump area sprinkler system non-conformances had been justified by internal correspondence dated February 26, 1987, for purposes of avoiding obstructions. The justification had been "accepted" in Inspection Report 05000266/1987007(DRS); 05000301/1987007(DRS). The inspectors noted that inspection reports do not constitute licensing bases and, as discussed by Generic Letter 86-10, "Implementation of Fire Protection Requirements," evaluations of code non-conformances are subject to inspection review.

During this inspection, the licensee initiated Condition Report 1174162, "NRC Triennial - Concerns with CC pump area sprinklers," dated May 26, 2010, and initiated hourly fire watches. The licensee planned to address the sprinkler system as part of their transition to NFPA 805.

Analysis: The inspectors determined that failure to correctly install the CCW area sprinkler system was contrary to NFPA 13 and was a performance deficiency. The finding was determined to be more than minor because the failure to correctly install the CCW area sprinkler system was associated with the Mitigating Systems cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the installation of sprinkler heads with excessive distance below the ceiling would result in delayed activation of the sprinklers in the event of a fire which could result in additional fire damage.

In accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 3b, the inspectors determined the finding degraded the fire protection defense-in-depth strategies. Therefore, screening under IMC 0609, Appendix F, "Fire Protection Significance Determination Process," was required. Based on walkdowns in the area, the inspectors noted that the only credible ignition sources for a fire affecting overhead cable trays were self-ignited cable fires and hot work. Floor based ignition sources, such as the CCW pumps and transient combustibles, would not have caused a fire which would affect the cables due to the cables height above the floor. Per IMC 0609 Appendix F, Attachment 4, "Fire Ignition Source Mapping Information: Fire Frequency, Counting Instructions, Applicable Fire Severity Characteristics, and Applicable Manual Fire Suppression Curves," the area wide ignition frequencies for selfignited cable fires (medium loading) and hot work (medium) were 4.8 × 10⁻⁴ per year and 6.9×10^{-5} per year, respectively for a total ignition frequency of 5.49×10^{-4} per year. The inspectors noted that the sprinkler area of concern was less than 500 square feet of out a total area of approximately 3589 square feet. The inspectors applied an area weighting factor of 0.14 (500 square feet/3589 square feet) to the area ignition frequency $(5.49 \times 10^{-4} \text{ per year})$, which yielded an adjusted frequency of 7.65×10^{-5} per year for the area affected by the finding. As such, the inspectors determined that the finding was not associated with a finding of high-safety significance (i.e., not Red).

Enclosure Enclosure

Cross-cutting aspects are not addressed for findings which warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues.

Enforcement: License Condition 4.F, for Units 1 and 2, required the licensee to implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report (FSAR) and as approved through Safety Evaluation Reports dated August 2, 1979, October 21, 1980, January 22, 1981, July 27, 1988, and January 8, 1997. The Safety Evaluation Report dated August 2, 1979, stated that sprinkler systems conform to the applicable provisions of NFPA 13 and NFPA 15. Title 10 Code of Federal Regulations (CFR) Part 50, Appendix R, Section III.G.2 required an automatic fire suppression system for the CCW pump area. The applicable code of record for the sprinkler system, an automatic fire suppression system, installed in the CCW pump area was NFPA 13 - 1978. The ceiling in the CCW pump area was smooth and was noncombustible. Section 4-3.1.1 of NFPA 13 - 1978 specified that sprinklers in bays shall be installed 1 to 12 inches below noncombustible ceilings for smooth ceiling construction.

Contrary to the above, from original installation through May 28, 2010, the licensee failed to install a sprinkler system, which conformed to the applicable provisions of NFPA 13 and NFPA 15. Specifically, four sprinklers were installed with distances of 16 inches through 34 inches below the ceiling, which was in excess of the 12 inch maximum distance from the ceiling specified by NFPA 13.

The licensee is in transition to NFPA 805; therefore, the NRC-identified violation was evaluated in accordance with the criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48) for a licensee in NFPA 805 transition. The inspectors determined that for this violation: (1) the licensee would have identified the violation during the scheduled transition to 10 CFR 50.48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. The finding also met additional criteria established in Section 06.06.a.2 of IMC 0305. In addition, in order for the NRC to consider granting enforcement discretion the violation must not be associated with a finding of high-safety significance (i.e., Red). Therefore, the inspectors performed a risk evaluation following the guidelines in IMC 0609, Appendix F, and determined that this issue was not associated with a finding of high-safety significance (i.e., not Red). As a result, the inspectors concluded that the violation met all four criteria established and the NRC was exercising enforcement discretion to not cite this violation in accordance with the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues. In addition, the licensee entered this issue into their corrective action program as Condition Report 1174162.

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

- .1 (Closed) Licensee Event Report 05000266/2007-006-00, Fire Inspection Analysis of Pressurizer Power-Operated Relief Valves and Block Valves: The NRC identified that fire damage to the pressure power-operated relief valve (PORV) and block valve circuits as a result of a fire in the cable spreading room could also result in simultaneous damage to a block valve circuit and spurious actuation of a PORV. This issue is discussed in Section 4OA5.2 of this report. This Licensee Event Report (LER) is closed.
- .2 (Closed) Licensee Event Report 05000266/2008-003-00; and 05000266/2008-003-01;
 Appendix R Fire Scenario Resulting in Safe-Shutdown Required Capability Not
 Maintained

<u>Introduction</u>: The following finding that affects 10 CFR 50.48 was identified by the licensee and is a violation of NRC requirements. This finding has been screened and determined to warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues.

A violation of 10 CFR Part 50, Appendix R, Section III.G.2 was identified by the licensee for the failure to ensure safe-shutdown capability for Unit 1. Specifically, the licensee identified that, due to inadequate cable separation, there was a potential for a fire in the Auxiliary Feedwater (AFW) room to propagate to the vital switchgear room, causing a fire in two separate fire areas the loss of all AFW decay heat removal capability for Unit 1.

Description: In June 2008 an inadequate cable separation condition was identified by the licensee while performing an NFPA 805 applicability review. As a result of the inadequate cable separation, the potential was identified for a fire in Fire Area A23S, (south area of the AFW room) to propagate to Fire Area A24 (vital switchgear room). A fire in the (south area of the AFW room) could cause a short circuit in a cable that traversed the AFW room and the (vital switchgear room) causing ignition of the cable. The licensee determined that a fire in areas A23S and A24 could cause three of the four AFW pumps to be unavailable, which did not meet the requirements for Appendix R, safe-shutdown capability for Unit 1. A fire in area A23S was assumed to damage the two AFW pumps within the area, pump 1P29 (turbine-driven AFW pump) and pump P38A (electric-driven AFW pump). A postulated secondary fire in area A24 was assumed to damage circuits for pump P38B (electric-driven pump). Under these circumstances, no AFW pump would have been available to satisfy a 10 CFR Part 50, Appendix R safe shutdown function (decay heat removal) for Unit 1. The licensee reported this deficiency in LER 2008-003-00.

The licensee identified that the direct current (DC) control power for switchgear breakers were located in the same fire area (A23S) as the respective power cables. A fire in A23S could first disable the respective bus 125 DC breaker control power and short circuit the associated power cable. With the loss of breaker control, the power cable protection would be defeated. The cable damage sequence assumed that a secondary fire would occur electrically upstream of the fault location (in fire area A24) due to the cable-withstand rating being exceeded.

The licensee completed an extent of condition evaluation in March 2009 that identified six areas where an inadequate cable separation condition could potentially result in a

loss of significant equipment in areas beyond that postulated in the initiating fire area. The result of this evaluation was documented in LER 2008-003-01.

Following the identification of this issue, the licensee implemented corrective actions (AR 1131517) that included establishing twice-per-shift fire rounds in the affected fire areas, performing thermographs of equipment in the affected zones, and providing additional guidance for enhancing the transient combustibles and hot work controls.

<u>Analysis</u>: The inspectors determined that failure to provide adequate separation of safe-shutdown cables to ensure safe-shutdown capability in the event of a fire was contrary to 10 CFR Part 50, Appendix R, Section III.G.2 and was a performance deficiency.

The finding was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the Point Beach Nuclear Plant safe-shutdown analysis assumed a fire in only a single fire area, and therefore, a fire that could propagate from one fire area to another fire area could have complicated safe-shutdown.

The licensee completed a quantitative risk-assessment evaluation for this issue using the methodology contained in IMC 0609 Appendix F because the finding was fire protection-related and the licensee was in transition to NFPA 805. The licensee's evaluation concluded that the finding was not associated with a finding of high-safety significance based on the calculated frequency for secondary fires of 6.5×10^{-5} per year, which was below the 1.0×10^{-4} per year core damage frequency (CDF) threshold for high safety significance (i.e., below the threshold for Red). The inspectors, in conjunction with regional Senior Reactor Analysts (SRAs), reviewed the evaluation and concluded that it was appropriate.

Cross-cutting aspects are not addressed for findings which warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues.

<u>Enforcement</u>: Title 10 CFR Part 50, Appendix R, Section III.G.2 requires, in part, that where cables or equipment of redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area outside of primary containment, one means of ensuring that one of the redundant trains is free of fire damage shall be provided.

Contrary to the above, from the time of the approval of the Fire Protection Program through June 2008 the licensee failed to ensure that one of the redundant trains was free of fire damage in the event of a fire in the AFW room (A23S). Specifically, the licensee in June 2008 identified that a fire in fire area A23S room could propagate to fire area A24, Vital Switchgear room due to inadequate cable separation in fire area A23S. A fire in both rooms would have resulted in the loss of all three AFW pumps available to provide decay heat removal for Unit 1.

The licensee is in transition to NFPA 805 and therefore, the licensee-identified violation was evaluated in accordance with the criteria established by Section A of the NRC's

Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined that for this violation: (1) the licensee identified the violation during the scheduled transition to 10 CFR 50.48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. The finding also met additional criteria established in Section 06.06.a.2 of IMC 0305. In addition, in order for the NRC to consider granting enforcement discretion the violation must not be associated with a finding of high-safety significance. Therefore, the licensee performed a risk evaluation following the guidelines in IMC 0609, SDP, and determined that this issue was not associated with a finding of high-safety significance. The inspectors reviewed this evaluation and found it acceptable. As a result, the inspectors concluded that the violation met all four criteria established and the NRC was exercising enforcement discretion to not cite this violation in accordance with the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues. In addition, the licensee entered this issue into their corrective action program as condition report 1131517, "Appendix R Common Enclosure Unanalyzed Condition," dated July 16, 2008. This LER is closed.

.3 (Closed) Licensee Event Report 05000266/2008-003-01, Appendix R Fire Scenario Resulting in Safe-Shutdown Required Capability Not Maintained: In June 2008 an inadequate cable separation condition was identified by the licensee while performing an NFPA 805 applicability review. In March 2009, the licensee identified an additional six areas where cable separation was inadequate, which was reported by this supplemental LER. This issue is discussed in Section 4OA3.2 of this report. This LER is closed.

4OA5 Other Activities

- .1 (Closed) Unresolved Item 05000266/2004010-01; 05000301/2004010-01, Potentially Non-Conservative Appendix R Response Times: During the triennial fire protection inspection conducted in 2004, the inspectors identified an unresolved item (URI) associated with the lack of time critical manual actions in the safe-shutdown and fire protection procedures. The inspectors were concerned that procedures AOP-10A "Safe-Shutdown Local Control," Revision 38, and AOP-10C, "Safe-Shutdown following Fire at PAB 26' Central," Revision 0, included non-conservative Appendix R manual action response times for ensuring that the RWST was isolated from draining to containment. Subsequent evaluation identified that the static head of the RWST would not result in significant leakage and, therefore, the actions to close the certain valves were appropriate. As no procedural changes were required for AOP-10A or AOP-10C, the inspectors determined that there was no performance deficiency of more than minor safety significance. This URI is closed.
- .2 (Closed) Unresolved Item 05000266/2007006-02; 05000301/2007006-02, Failure to Protect Circuits Associated with PORVs and Block Valves

<u>Introduction</u>: The following finding that affects 10 CFR 50.48 was identified by the NRC and is a violation of NRC requirements. This finding has been screened and determined to warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues.

A violation of 10 CFR Part 50, Appendix R, Section III.G.3 was identified by the inspectors for the licensee's failure to ensure, in the event of a severe fire in an alternate shutdown area, that alternative shutdown capability and its associated circuits were free of fire damage. Specifically, in the event of a severe fire in either the control room or the cable spreading room (Fire Areas A31 and A30, respectively), the licensee failed to ensure that fire damage to the cables and circuits for the reactor coolant system PORVs would not cause spurious operation of the valves. In addition, the licensee failed to ensure that the PORVs associated block valves were adequately protected (i.e., free of fire damage).

<u>Description</u>: During the triennial fire protection inspection in 2007, the inspectors identified an unresolved item (URI 05000266/2007006-02; 05000301/2007006-02) associated with the licensee's failure to protect circuits associated with PORVs and their associated block valves. This issue was unresolved pending the licensee completion of additional reviews and calculations to determine the risk-significance of the issue.

Drawing 541F091, Sheet 3, "Reactor Coolant System," for Unit 1, showed that PORV 1RC-431C was connected in series with its associated block valve (1RC-515) and PORV 1RC-430 was connected in series with its associated block valve (1RC-516). During normal plant operation, the block valves were normally open and the PORVs were normally closed. The PORVs are air operated valves and fail to the closed position upon loss of power and/or air supply. The block valves are motor operated valves and they fail as-is in their position prior to loss of power. The same design and configuration existed for Unit 2.

Procedure AOP-10A, "Safe-Shutdown - Local Control," Revision 43, provided instructions and steps for safe-shutdown of the plant in the event of a severe fire in either the control room, cable spreading room or vital switchgear room that required control room evacuation. During the 2007 inspection, the inspectors noted that Procedure AOP-10A included steps to close the block valves (1/2RC-515 and 1/2RC-516) and also included later steps to open the feeder breakers to the block valves. These steps were provided to mitigate the spurious operation of the PORVs in the event of fire damage to their associated cables. The inspectors also identified that cables for both the PORVs and their associated block valves were unprotected from fire damage in the cable spreading room and control room (Fire Area A30 and A31. respectively). The inspectors were concerned that operators would not be able to close the block valves from the control room if their associated cables were damaged by fire in either one of these fire areas. The inspectors were also concerned regarding the adequacy of the steps specified in Procedure AOP-10A, since the opening of the feeder breakers to the block valves would only prevent the spurious operation of these valves. but would not close them if their associated cables were damaged in the fire.

The inspectors noted that Attachment C of Procedure AOP-10A included steps to isolate instrument air to Unit 1 and Unit 2 containment and to remove the pipe plugs to vent the air from all air-operated equipment located inside containment. These actions were to be taken at the primary auxiliary building (PAB), 26' elevation, and would fail the PORVs closed. However, the inspectors noted that if the PORV valves suffer a spurious actuation and the associated block valves cannot be closed, the undesirable consequences of the pressurizer relief tank rupture disc failing and loss of reactor coolant system inventory could occur in approximately 200 seconds. The inspectors were concerned that the steps in Attachment C could represent a challenge to the

operators' ability to perform these steps in 200 seconds, especially, if all other actions failed (i.e., closing the block valves, initiating containment isolation as a result of circuit failure concurrent with spurious actuation of the PORVs). The inspectors also noted that within the first six steps of Procedure AOP-10A, instructions were provided to the operators to close the block valves and remove power to the block valves to ensure they remain shut. The inspectors were concerned that the licensee's approach did not assure reactor coolant system inventory control, depressurization control, and safe-shutdown in the event of fire damage to any of the cables/circuits for the block valves prior to operator action in the control room concurrent with spurious actuation of its associated PORV.

Upon discovery of this condition, the licensee established compensatory measures and entered this issue into their corrective action program as CAP 01101461, "Post Coincident Fire Induced Failure of PORVs and Block Valves," dated July 12, 2007. Pursuant to 10 CFR 50.72(b)(3)(ii)(b), on July 12, 2007, the licensee made an event notification (EN) 43487 to the NRC and reported the unanalyzed condition. Subsequently, the licensee issued LER 2007-006-00 and completed a risk-assessment evaluation for this issue in the affected fire areas and determined that the estimated bounding CDF values were lower than the 1.0×10^{-4} per year threshold for high safety significance (i.e., below the threshold for Red).

<u>Analysis</u>: The inspectors determined that the licensee's failure to ensure that the adequate shutdown capability was free of fire damage was contrary to 10 CFR Part 50, Appendix R, Section III.G.3, and was a performance deficiency.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee failed to ensure that the PORVs and their associated block valves cable/circuits were free of fire damage in the alternate shutdown fire areas A30 and A31. The potential of spurious operation of the PORVs and failure to close the associated valves due to fire damage could have complicated safe-shutdown.

The inspectors and a regional SRA reviewed the licensee risk-assessment evaluation completed for this issue and determined that with the exception to the licensee's assumption used in the calculation for the probability of failure of automatic and manual suppression, the estimated bounding CDF values were reasonable. The inspectors noted that licensee had not provided a sufficient basis for the 0.1 value for the probability of failure of automatic and manual suppression used in the CDF calculation for the cable spreading room fire area (for non-high energy arcing faults). The inspectors determined that the 0.1 value for failure of suppression was reasonable because (1) there were multiple raceways between the target raceways and the electrical cabinets (ignition sources); (2) the cables trays had fire-retardant Kaowool blankets and metal covers; (3) the automatic Halon system in the fire area was activated by smoke detectors, having a relatively fast response time, in addition to heat detectors; and (4) the fire brigade training and knowledge. Therefore, the inspectors determined that the licensee's estimated bounding CDF values, which were lower than the 1.0 × 10⁻⁴ per year threshold for high-safety significance (i.e., lower than the threshold for Red), were reasonable.

Cross-cutting aspects are not addressed for findings which warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues.

<u>Enforcement</u>: Section III.G.3 of 10 CFR Part 50, Appendix R requires, in part, that alternative of dedicated shutdown capability and its associated circuits, independent of cables, systems, or components in the area, room, or zone under consideration should be provided where the protection of systems whose function is required for hot shutdown does not satisfy the requirement of Paragraph G.2 of this section.

Contrary to the above, from the time of the approval of the Fire Protection Program through August 24, 2007, the licensee failed to ensure that alternative or dedicated shutdown capability and its associated circuits were independent of cables in the area. Specifically, the licensee failed to ensure that the cables/circuits for the PORVs and their associated block valves were independent of fire areas A30 and A31.

The licensee is in transition to NFPA 805, and therefore the NRC-identified violation was evaluated in accordance with the criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48) for a licensee in NFPA 805 transition. The inspectors determined that for this violation: (1) the licensee would have identified the violation during the scheduled transition to 10 CFR 50.48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. The finding also met additional criteria established in Section 06.06.a.2 of Inspection Manual Chapter (IMC) 0305. In addition, in order for the NRC to consider granting enforcement discretion the violation must not be associated with a finding of high-safety significance. Therefore, the licensee performed a risk evaluation following the guidelines in IMC 0609, SDP, and determined that this issue was not associated with a finding of high-safety significance. The inspectors reviewed this evaluation and found it reasonable. As a result, the inspectors concluded that the violation met all four criteria established and the NRC was exercising enforcement discretion to not cite this violation in accordance with the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues. In addition, the licensee entered this issue into their corrective action program as Condition Report 01101461, "Post Coincident Fire Induced Failure of PORVs and Block Valves," dated July 12, 2007.

.3 (Closed) VIO 05000266/2010010-01; 05000301/2010010-01, "Inaccurate Information Relating to Signatures on Ignition Control Procedures"

Inspection Report 05000266/2010010; 05000301/2010010 identified a Severity Level IV, Cited Violation of 10 CFR 50.9 for the licensee's failure to maintain information required by the Commission complete and accurate in all material respects. Specifically, on several occasions, a Point Beach Nuclear Plant individual and two DZNPS contract employees failed to provide complete and accurate information during the performance of NP 1.9.13, "Ignition Control Procedure," Revision 13, Step 3.0 and Step 4.2, in that, the individuals signed Ignition Control Permits (ICPs) without the authorized person initially inspecting the areas. The NRC reviewed the licensee's response to the associated Notice of Violation and their corrective actions, which included: (1)

termination of site access for the two contract individuals involved; (2) revoking the Fire watch Authorized Person qualification for the NextEra maintenance employee; (3) performing an extent of condition review which included interviews of 13 qualified "Fire Watch Authorized Persons"; (4) revising procedure NP 1.9.13 and its associated ICP form to clarify that only a person who has received "Authorized Person" training may sign the permit after having first performed an inspection of the work site; (5) conducted an information sharing with Fire Watch and Fire Watch Authorized Persons in the Maintenance Department and the affected organization regarding this violation; (6) issued a site-wide communication that discussed the critical elements of the ignition control procedure; (7) conducted a review of the corrective action program; and (8) during the Unit 1 refueling outage in the spring of 2010, supervisors performed daily human performance observations of site personnel and affected contractor personnel and identified no other similar instances. The inspectors determined that the licensee had completed all corrective actions associated with this violation. Documents reviewed as part of this inspection are listed in the Attachment. This Violation is closed.

4OA6 Management Meetings

.1 Exit Meeting Summary

On May 28, 2010, the inspectors presented the inspection results to Mr. T. Vehec and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary. The results of this inspection were also discussed on June 23, 2010, with Ms. F. Flenge.

4OA7 <u>Licensee-Identified Violations</u>

• The following violation of not high safety significance (i.e., not Red) was identified by the licensee and is a violation of NRC requirements. This violation has been screened and determined to warrant enforcement discretion per the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues. A violation of 10 CFR Part 50, Appendix R, Section III.G.2 was identified by the licensee for the failure to ensure safe-shutdown capability for Unit 1. Specifically, the licensee identified that, due to inadequate cable separation, there was a potential for a fire in the Auxiliary Feedwater (AFW) room to propagate to the vital switchgear room, causing a fire in two separate fire areas the loss of all AFW decay heat removal capability for Unit 1. This issue is discussed in Section 4OA3.2 of this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

<u>Licensee</u>

- T. Vehec, Plant Manager
- S. Brown, Engineering Programs Manager
- J. Costedio, Licensing Manager
- K. Locke, Licensing Engineering Analyst
- A. Mitchell, System Engineering Manager
- R. Mrozinsky, Appendix R Engineer
- V. Rubano, Fleet NFPA-805 Project Manager
- J. Schleif, Assistant Operations, Emergency Preparedness Manager
- E. Schmidt, Program Engineering Supervisor
- J. Schweitzer, Operations Support Manager
- C. Trezise, Engineering Director

Nuclear Regulatory Commission

- R. Daley, Chief, Division of Reactor Safety, Engineering Branch 3
- S. Burton, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

None.

Closed

05000266/2004010-01; 05000301/2004010-01	URI	Potentially Non-Conservative Appendix R Response Times
05000266/2007006-00 05000301/2007006-00	LER	Fire Inspection Analysis of Pressurizer Power- Operated Relief Valves and Block Valves
05000266/2007006-02 05000301/2007006-02	URI	Failure to Protect Circuits Associated with PORVs and Block Valves
05000266/2008003-00 05000301/2008003-00 05000266/2008003-01	LER LER	Appendix R Fire Scenario Resulting in Safe- Shutdown Required Capability Not Maintained Appendix R Fire Scenario Resulting in Safe- Shutdown Required Capability Not Maintained
05000266/2010010-01	VIO	Inaccurate Information Relating to Signatures on Ignition Control Procedures

Discussed

None.

None

LIST OF DOCUMENTS REVIEWED

The following is a 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 of 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.

ANALYSES AND CALCULATIONS

Number	Description or Title	Date or Revision
00087.01.00012.02- C07	1B32 Hydraulic Demand Calculation for Fire Zone 156, 0.15 Density	0
00087.01.00012.02- TR01	Evaluation of Fire Suppression Systems Covering Fire Zones 142, 151, 156, and 166	0
FPEE 2002-002	3-Hour Fire Rated Gypsum Board Fire Barrier in the Auxiliary Feedwater Pump Room	0
FPTE-2007-001	Technical Evaluation of Associated Circuits by Common Power Supply and by Common Enclosure	0
N-94-142	Emergency Diesel Generator, Gas Turbine and Fire Pump Diesel Engine Fuel Oil Systems Page 4, 17	5
P0219080007-3204	Erin Engineering and Research, Inc. Enforcement Discretion Evaluation for Point Beach Fire Issue	5/28/09
WE0005-10	Determination of Time Available to isolate the RWST	1

CONDITION REPORTS (CRs) ISSUED DURING INSPECTION

Number	Description or Title	Date or Revision
1172610	Appendix R Time Validation Acceptance Criteria Questioned	5/1/10
1172751	Necessity To Test The Lights After They Are Staged	5/4/10
1172897	NRC Question - Paint on the Fire Sprinkler Glass Bulb Identified During NRC Walkdown	5/6/10
1172918	Inadequate CAP closeout	5/6/10
1172925	NRC Question - Fire Sprinklers Bulb Liquid Color Differences Identified during NRC Walkdown	5/6/10
1173050	PB Does Not Have A Stand Alone Procedure Filling T-30 Diesel Fire Pump Day Tank In The CW Pumphouse	5/10/10
1173079	FP Triennial - Sprinkler Vertical Pipe Nipple Questioned	5/10/10
1173083	FP Triennial - Paint On Sprinkler Bulb	5/10/10
1173136	FP Triennial - Bent Deflector On Spray Nozzle	5/11/10
1173168	FP Triennial - Lack Of Return Bends For Charging Pump Area	5/11/10
1173215	B.5.b Walkdown NRC Debrief Enhancement Recommendations	5/12/10
1173239	FP Triennial - Conduit In Contact With Fire Pipe	5/12/10

CONDITION REPORTS (CRs) ISSUED DURING INSPECTION

Number	Description or Title	Date or Revision
1173240	FP Triennial Obstructions To Sprinkler Piping	5/12/10
1173241	FP Triennial Sprinkler Piping Obstructions	5/12/10
1173254	B5b Heat Tracing Documentation Enhancements	5/12/10
1173366	Bench Mark Other Plants Regarding The Use Of FEP's	5/13/10
1173484	FP Triennial - Degraded Fire Barrier	5/16/10
1173485	FP Triennial - Errors On M-208 Sheet 6	5/16/10
1173486	FP Triennial - Scaffold Pole Obstructing Spray Patter	5/16/10
1173487	FP Triennial - Light Fixture Chain Close To Sprinkler Head	5/16/10
1173631	Bench Mark Other Plants Regarding The Use Of FEP's	5/19/10
1173873	FP Triennial - Question 32 Required Revision	5/22/10
1174121	Appendix R Emergency Lighting Performance Demonstration	5/26/10
1174162	NRC Triennial - Concerns With CC Pump Area Sprinklers	5/26/10
1174205	NRC Triennial - 8' PAB Sprinkler Concerns	5/27/10
1174251	NRC Triennial - Sprinkler Obstruction Concern With Fixture	5/27/10
1174262	NRC Triennial- Evaluate Adding Time Critical Info In FOP 1.2	5/28/10

CONDITION REPORTS (CRs) REVIEWED DURING INSPECTION

Number	Description or Title	Date or Revision
0005120	Appendix R Lighting Issues	9/25/01
0533334	Certain Appendix R Fires May Challenge Operator Response	9/29/03
0540164	CCW Pump Room Ceiling Level Sprinklers Potentially Non-Compliant with NFPA 13	10/17/03
0777883	Potentially Non-Conservative Appendix R Response Times	11/18/04
1129141	NRC VIOL - Diesel Generator Building Sprinkler System Design	6/4/08
1131517	Appendix R Common Enclosure Unanalyzed Condition	7/16/08
1101461	Post Coincident Fire Induced Failure of PORVs and Block Valves	7/12/07
1150907	Fire Protection Valve Does Not Seat	6/7/09
1154168	Cable Issue with Diesel Fire Pump P-35B	8/06/09
1164558	NRC Information Notice 2009-29, Potential Failure	1/12/10

DRAWINGS

Number	Description or Title	Date or Revision
110E017 SH. 1	Safety Injection System	57
110E017 SH. 2	Safety Injection System	61
1289, Sh. 1	Fire Suppression System	2/10/86
499B466 SH. 367	Elementary Wiring Diagram – Electrical Fire Pump P-35A	12
BECH 6118 M- 208, Sh. 1	Fire Water	5/20/91
BECH 6118, Sh. 12	Electrical Layout Fire Detection System Control DBLD Area 3 (El. 8'-0")	1/2/87
M-208, Sh. 6	P&ID Aux. Bldg. Sprinkler Sys.	12/15/99
M-821	Halon Bottles	7/5/84
PBE-294	Elementary Wiring Diagram – Emergency Diesel Fire Pump Control Panel C-061	02
WISC08 PBC- 218, Sh. 2	Fire Protection for Turbine Building Aux Building and1 Containment Elev. 8'-0"	7/1/92

MODIFICATIONS

Number	Description or Title	Date or Revision
MR 99-034	Install New Fire Wall Across The AFP Room	0
	Extending Over The Runnel To The AFP HVAC Room	
MR 99-046	Construct 3-Hour Fire Rated Wall in the U1 MCC	11/29/00
	Room (Fire Zone 156)	
MR-00-016	Appendix R Upgrade of 8' PAB Sprinkler Systems	0

PROCEDURES

Number	Description or Title	Date or Revision
AOP-10A	Safe-Shutdown - Local Control	38
AOP-10A	Safe-Shutdown - Local Control	43
AOP-10A	Safe-Shutdown - Local Control	54
AOP-10C	Safe-Shutdown Following Fire at 26' PAB Central	0
ARB C01 B 4-2	Fire Protection and Smoke Detector Panel	11
DB-OP-06225	MDFP Operating Procedure	15
EDMG-2	Loss of Large Areas of the Plant Due to Fire or Explosion	3
FEP 4.0	Fire Emergency Plan	5
FEP 4.12	Auxiliary Feedwater Pump and vital Switchgear Area	8
FEP 4.2	PAB South	6
FOP 1.2	Potential Fire Affected Safe-Shutdown Equipment	5

PROCEDURES

Number	Description or Title	Date or Revision
FOP 1.2	Potential Fire Affected Safe-Shutdown Equipment	6
FOP 1.2	Potential Fire Affected Safe-Shutdown Components	20
O-PT-FP-	Acceptance Criteria for TS-74, Annual Underground	6/26/95
005/TS-74	Fire Main Flow Test	
PBF-2033	CW Pump House Temperature	77

SURVEILLANCES

Number	Description or Title	Date or Revision
M-821	Test Report Halon System Concentration Test	9/20/84
	In Service Inspection Report No. 2	5/5/09

LIST OF ACRONYMS USED

ADAMS Agencywide Documents Access and Management System

AFW Auxiliary Feedwater

CAP Corrective Action Program
CCW Component Cooling Water
CDF Core Damage Frequency
CFR Code of Federal Regulations

DC Direct Current

DRS Division of Reactor Safety

EN Event Notification

FSAR Final Safety Analysis Report

ICP Ignition Control Permit
IMC Inspection Manual Chapter
IP Inspection Procedure

IR Inspection Report
LER Licensee Event Report
NCV Non-Cited Violation
NEI Nuclear Energy Institute

NFPA National Fire Protection Association
NRC U.S. Nuclear Regulatory Commission
NRR Office of Nuclear Reactor Regulation

PAB Primary Auxiliary Building
PARS Publicly Available Records
PORV Power Operated Relief Valve

RHR Residual Heat Removal RWST Refueling Water Storage

RWST Refueling Water Storage Tank
SDP Significance Determination Process

SRA Senior Reactor Analyst
TI Temporary Instruction
URI Unresolved Item

L. Meyer -2-

within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III, and the NRC Resident Inspector at the Point Beach Nuclear Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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 Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Robert C. Daley, Chief Engineering Branch 3 Division of Reactor Safety

Docket No.: 50-266; 50-301 License No.: DPR-24; DPR-27

Enclosure: Inspection Report 05000266/2010008(DRS); 05000301/2010008(DRS)

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