

August 24, 2007

Mr. Dennis L. Koehl
Site Vice-President
Point Beach Nuclear Plant
Nuclear Management Company, LLC
6590 Nuclear Road
Two Rivers, WI 54241-9516

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2
FIRE PROTECTION TRIENNIAL BASELINE INSPECTION
NRC INSPECTION REPORT 05000266/2007006(DRS);
05000301/2007006(DRS)

Dear Mr. Koehl:

On July 13, 2007, the U. S. Nuclear Regulatory Commission completed an inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on July 13, 2007, with Mr. Jim McCarthy and other members of your staff.

As a result of your intent to adopt the National Fire Protection Association (NFPA) Standard 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)," dated May 9, 2006. The inspection examined activities conducted under your license, as they relate to safety and to compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures, analyses and records, observed activities, and interviewed personnel.

Based on the results of this inspection, two NRC-identified findings were discovered that involved violations of NRC requirements. However, because one violation was of very low safety significance and because the finding was entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation (NCV) in accordance with Section VI.A.1 of the NRC's Enforcement Policy. The other NRC-identified finding was not associated with a finding of high safety significance (Red) and met the four 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. Therefore, we are exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy.

If you contest the subject or severity of a 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, D.C. 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 facility.

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 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/

Julio F. Lara, Chief
Engineering Branch 3
Division of Reactor Safety

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

Enclosure: Inspection Report 05000266/2007006(DRS);
05000301/2007006(DRS)
w/Attachment: Supplemental Information

cc w/encl: F. Kuester, President and Chief
Executive Officer, We Generation
D. Cooper, Senior Vice President and Chief
Nuclear Officer
J. McCarthy, Site Director of Operations
D. Weaver, Nuclear Asset Manager
Plant Manager
Regulatory Affairs Manager
Training Manager
Site Assessment Manager
Site Engineering Director
Emergency Planning Manager
J. Rogoff, Vice President, Counsel & Secretary
K. Duveneck, Town Chairman
Town of Two Creeks
Chairperson
Public Service Commission of Wisconsin
J. Kitsembel, Electric Division
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State Liaison Officer

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Point Beach Inspection Report to Mr. D. Koehl from Mr. J. F. Lara dated August 24, 2007.

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FIRE PROTECTION TRIENNIAL BASELINE INSPECTION
NRC INSPECTION REPORT 05000266/2007006(DRS);
05000301/2007006(DRS)

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U.S. NUCLEAR REGULATORY COMMISSION
REGION III

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

Report No: 05000266/2007006(DRS); 05000301/2007006(DRS)

Licensee: Nuclear Management Company, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: Two Rivers, WI 54241

Dates: June 25 - 29 and July 9 - 13, 2007

Inspectors: George Hausman, Senior Reactor Inspector, Lead
Alan Dahbur, Reactor Inspector
Dariusz Szwarc, Reactor Inspector

Approved-by: J. Lara, Chief
Electrical Engineering Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000266/2007006(DRS); 05000301/2007006(DRS); 06/25/2007 - 07/13/2007; Point Beach Nuclear Plant (PBNP), Units 1 and 2; Fire Protection Triennial 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 were discovered that involved violations of NRC requirements. One finding was of very low safety significance (Green) and was treated as a Non-Cited Violation (NCV) in accordance with Section VI.A.1 of the NRC's Enforcement Policy. The second finding was associated with transition to the National Fire Protection Association (NFPA) Standard 805, where the NRC exercised enforcement discretion. 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 3, dated July 2000.

A. Inspector-Identified and Self-Revealed Findings

Cornerstone: Initiating Events

No findings of significance were identified.

Cornerstone: Mitigating Systems

- Other. The inspectors identified a violation of 10 CFR Part 50, Appendix R, Section III.G.2, involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown (HSD) conditions was free of fire damage. Specifically, in the event of a severe fire in Fire Zone 151 in Fire Area A02, the licensee failed to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected by a 20-foot separation with no intervening combustibles. The violation was entered into the licensee's corrective action program (CAP) as 01101444, "Compliance with Appendix R, Section III.G.2 in Fire Zone 151," dated July 12, 2007. The licensee initiated compensatory measures and will evaluate the violation during transition to NFPA 805. The inspectors determined there was no cross-cutting aspect to this finding.

This finding was more than minor because the finding was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and 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 licensee's failure to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected, by maintaining a 20-foot separation with no intervening combustibles, left the charging pumps' cables and/or circuits vulnerable to fire damage and did not ensure the availability and reliability of systems that respond to initiating events. Because the NRC-identified violation was a circuit-related finding that was not associated with a finding of high safety significance (Red), the inspectors evaluated the violation in accordance with the four 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 would have identified the violation during the scheduled transition to 10 CFR Part 50, Section 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. As a result, the inspectors concluded that the violation met all four criteria established by Section A, and the NRC is exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy. (Section 1R05.2b.1)

- Green. The inspectors identified a finding of very low safety significance and an associated NCV of the PBNP's Operating License for failure to take prompt corrective action for a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in Fire Zones 308 and 309 (i.e., emergency diesel generator (EDG) rooms G-01 and G-02, respectively) were not in compliance with the NFPA 13-1966 Code, Section 3066. The violation was entered into the licensee's CAP as 01101421, "Untimely Corrective Actions," dated July 12, 2007, to increase the priority of the modification that was to correct the sprinkler heads' non-compliant condition. The finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective action to address the safety issue in a timely manner commensurate with its safety significance and complexity.

This finding was more than minor because the finding was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems Cornerstone and 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 licensee's failure to promptly correct the lack of return bends condition for four sprinklers heads in the EDG rooms and take appropriate action to restore the operability of these sprinkler heads in a timely manner could have affected the suppression capability of the fire suppression systems in these rooms. The finding was of very low safety significance based on a Phase 2, SDP evaluation completed in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process." (Section 1R05.4b)

B. Licensee-Identified Violations

No findings of significance were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events and Mitigating Systems

1R05 Fire Protection (71111.05TTP)

The licensee, in letters (ADAMS Accession Numbers ML053460342 and ML060730265) to the U. S. Nuclear Regulatory Commission (NRC) dated November 30, 2005, and March 14, 2006, respectively, committed to adopt the NFPA 805 Standard, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," as defined by 10 CFR Part 50, Section 48(c) for the Point Beach Nuclear Plant (PBNP). The NFPA 805 Standard establishes a comprehensive set of requirements for Fire Protection Programs (FPPs) at nuclear power plants. The standard incorporated both deterministic and risk-informed, performance-based concepts. The deterministic aspects of the standard are comparable to traditional requirements. However, the transition to a risk-informed performance-based FPP requires an in-depth nuclear safety circuit analysis for equipment identified for nuclear safety functions such as safe shutdown (SSD). Because the conversion and licensing process to NFPA 805 was expected to identify and address a variety of issues that were normally the subject of the triennial fire protection (FP) baseline inspection, the NRC modified the FP inspection program and Enforcement Policy for licensees in transition to NFPA 805. As a result, this inspection was conducted in accordance with IP 71111.05TTP, "Fire Protection - NFPA 805 Transition Period (Triennial)," dated May 9, 2006. Associated with the transition to NFPA 805, when a circuit-related finding not associated with a finding of high safety significance meets the four 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), the violation would receive enforcement discretion in accordance with the NRC's Enforcement Policy.

The purpose of this inspection was to review the PBNP's FPP for selected risk-significant fire areas. Emphasis was placed on determining that the post-fire SSD capability and the fire protection features were maintained free of fire damage to ensure that at least one post-fire SSD success path was available. The inspection was performed in accordance with the NRC's regulatory oversight process using a risk-informed approach for selecting the fire areas and attributes to be inspected. The inspectors used the PBNP's Individual Plant Examination of External Events (IPEEE) to choose several risk-significant areas for detailed inspection and review. The fire areas chosen for review during this inspection are listed below and constitute four inspection samples:

Fire Area/Zone	Description
A01-A/142	Auxiliary Building - 8' Elevation and Below/CCW Pump Room
A01-B/187	Auxiliary Building - 26' Elevation/Monitor Tank Area
A02	Containment Spray/Safety Injection Pump Room
A32	Computer Room

For each of these fire areas, the inspection focused on the fire protection features, the systems and equipment necessary to achieve and maintain SSD conditions, determination of licensee commitments, and changes to the FPP.

.1 Shutdown from Outside Main Control Room

Title 10 CFR Part 50, Appendix R, Section III.G.1, required that structures, systems, and components (SSCs) that were necessary to achieve and maintain post-fire SSD from outside the main control room be protected by FP features, such that, one train of systems necessary to achieve and maintain HSD conditions was free of fire damage; and systems necessary to achieve and maintain cold shutdown (CSD) could be repaired within 72-hours.

a. Inspection Scope

The inspectors reviewed the functional requirements identified by the licensee as necessary for achieving and maintaining HSD conditions to ensure that at least one post-fire SSD 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. The inspectors reviewed the plant systems required to achieve and maintain post-fire SSD to determine if the licensee had properly identified the components and systems necessary to achieve and maintain SSD conditions for each fire area selected for review. Specifically, the review was performed to determine the adequacy of the systems selected for reactivity control, reactor coolant inventory makeup, reactor heat removal, process monitoring, and support system functions. The review also included the fire Safe Shutdown Analysis (SSA) to ensure that all required components in the selected systems were included in the licensee's SSA.

The inspectors reviewed PBNP's post-fire SSA, Off Normal Operating Procedures (ONP), piping and instrumentation drawings (P&IDs), electrical drawings, the Updated Final Safety Analysis Report (UFSAR), and other supporting documents to verify that hot and cold shutdown could be achieved and maintained from outside the control room for fires that rely on shutdown from outside the control room. This review included verification that shutdown from outside the control room could be performed both with and without the availability of offsite power.

The inspectors also examined the operators' ability to perform the necessary manual actions for achieving SSD by reviewing post fire shutdown procedures, the accessibility of SSD equipment, and the available time for performing the actions.

The inspectors reviewed the UFSAR and the licensee's engineering and/or licensing justifications (e.g., NRC guidance documents, license amendments, Technical Specifications, Safety Evaluation Reports (SERs), exemptions, and deviations) to determine the licensing basis.

b. Findings

No findings of significance were identified.

.2 Protection of Safe Shutdown Capabilities

Title 10 CFR Part 50, Appendix R, Section III.G.1, required the licensee to provide fire protection features that were capable of limiting fire damage to systems, structures, and components important to SSD. The systems, structures, and components that were necessary to achieve and maintain post-fire SSD were required to be protected by fire protection features that were capable of limiting fire damage to the SSCs so that:

- one train of systems necessary to achieve and maintain HSD conditions from either the control room or emergency control station(s) was free of fire damage; and
- systems necessary to achieve and maintain cold shutdown from either the control room or emergency control station(s) could be repaired within 72-hours.

Specific design features for ensuring this capability were specified by 10 CFR Part 50, Appendix R, Section III.G.2.

a. Inspection Scope

For each of the selected fire areas, the inspectors reviewed the fire hazards analysis, SSA and supporting drawings and documentation to verify that SSD capabilities were properly protected.

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 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 FPP and/or post-fire SSA and procedures.

b. Findings

b.1 Failure to Meet Separation Requirements for Redundant Trains

Introduction: The inspectors identified a violation of 10 CFR Part 50, Appendix R, Section III.G.2, involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain HSD conditions was free of fire damage. Specifically, in the event of a severe fire in Fire Zone 151 in Fire Area A02, the licensee failed to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected by a 20-foot separation with no intervening combustibles. The violation was entered into the licensee's CAP as 01101444, "Compliance with Appendix R, Section III.G.2 in

Fire Zone 151,” dated July 12, 2007. The licensee initiated compensatory measures and will evaluate the violation during transition to NFPA 805.

Description: Fire Zone 151 in Fire Area A02 contained redundant power and control cables for the charging pumps. A distance of more than 20-feet separated these cables with fire detection and an automatic fire suppression system installed in the area. However, intervening combustibles existed between the redundant cables.

Fire Zone 151 is located in a room on the 8-foot elevation of the primary auxiliary building. The room contained trains A, B, and C of the charging pump power and control cables as well as four containment spray and four safety injection pumps. The room was protected with ceiling-mounted photoelectric smoke detectors and a wet pipe sprinkler system.

On June 30, 1982, the licensee requested an exemption from the 10 CFR Part 50, Appendix R, Section III.G.2 requirement that cables and equipment, and associated non-safety circuits of redundant trains be separated by a horizontal distance of more than 20-feet. Prior to that time the redundant trains of charging pump cables were horizontally separated by less than 20-feet. In a letter dated April 28, 1983, the licensee proposed to relocate the charging pump “B” power and control cables to provide 30-feet of horizontal separation between redundant trains. The licensee stated that the intervening combustibles consisted of three cable trays parallel to the relocated circuit but still 20-feet remote from the redundant charging pump cables. On July 3, 1985, the NRC acknowledged the licensee’s proposal to relocate the division “B” charging pump’s power and control cables to achieve 20-feet of horizontal separation free of intervening combustibles. However, the NRC stated that the licensee met the 20-foot separation requirement for the zone and an exemption was not needed.

The inspectors performed a walkdown of Fire Zone 151 in order to verify the 20-feet of separation between redundant cables and that the separation area was free of intervening combustibles. The inspectors verified that the redundant trains of charging pump cables were horizontally separated by at least 20-feet, but noted that the separation area was not free of intervening combustibles. Four containment spray pumps were located within the 20-foot separation area. The four pumps contained lubricating oil, which represented intervening combustibles and an ignition source in the form of the pump motors.

The licensee entered the inspectors’ finding into the PBNP’s CAP as 01101444, “Compliance with Appendix R Section III.G.2 in Fire Zone 151.” The licensee established twice per shift fire watches in Fire Area 151 at the end of the inspection. The licensee will evaluate these concerns during PBNP’s transition to NFPA 805.

Analysis: The inspectors determined that the failure to provide 20-feet of separation between redundant cables free of intervening combustibles was a performance deficiency. This finding was more than minor because the finding was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and 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). The requirement to have at least 20-foot separation with no intervening combustibles between redundant trains of SSD equipment was to ensure the availability

and capability of systems that respond to initiating events to prevent undesirable consequences.

Since the finding was a fire protection-related finding and the licensee was in transition to NFPA 805, the licensee completed a quantitative risk assessment evaluation for this issue using the methodology contained in IMC 0609 Appendix F. The licensee's evaluation concluded that the finding was not associated with a finding of high safety significance based on the number of the ignition sources and the effectiveness of the automatic/manual suppression in the area. The inspectors reviewed the evaluation and concluded it was appropriate.

The inspectors determined there was no cross-cutting aspect to this finding.

Enforcement: Section III.G.2 of 10 CFR Part 50, Appendix R stated, in part, that where cables or equipment of redundant trains of systems necessary to achieve and maintain HSD 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. For this particular area, the requirement was to provide separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20-feet with no intervening combustibles or fire hazards in accordance with Appendix R requirements.

Contrary to the above, between July 1985 and July 2007, the licensee failed to ensure that one of the redundant trains of charging pumps cables would be free of fire damage. Specifically, Fire Zone 151 in Fire Area A02 contained redundant power and control cables for the charging pumps. A distance of more than 20-feet separated these cables and fire detection and an automatic fire suppression system were installed in the area. However, intervening combustibles existed between the redundant cables in the form of containment spray and safety injection pumps. The pumps contained lubricating oil and were therefore considered to be combustibles.

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 Part 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 Part 50, Section 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. 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 by Section A and the NRC was exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy (Other 05000266/2007006-01(DRS); 05000301/2007006-01(DRS)).

b.2 Failure to Protect Circuits Associated with PORVs and Block Valves

Introduction: The inspectors identified an Unresolved Item (URI) involving 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/circuits for the reactor coolant system's power-operated relief valves (PORVs) would not cause spurious operation of the valves. In addition, the licensee failed to ensure that the PORV's associated block valves were adequately protected (i.e., free of fire damage).

Description: The P&ID 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.

Abnormal Operating Procedure (AOP)-10A, "Safe Shutdown - Local Control," Revision 43, provided instructions and steps for safe shutdown (SSD) 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. The inspectors noted during the review of Procedure AOP-10A that it 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.

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 PRT rupture disc failing and loss of RCS inventory could occur in approximately 200 seconds. The inspectors were concerned that the steps in Attachment C could represent a challenge to the operators's 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, 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, the licensee's approach did not assure RCS inventory control, depressurization control, and SSD.

Upon discovery of this condition, this issue was entered into the licensee's CAP as 01101461, "Post Coincident Fire Induced Failure of PORVs and Block Valves," dated July 12, 2007. The licensee initiated compensatory measures and will evaluate this finding during transition to NFPA 805. Pursuant to 10 CFR Part 50, Section 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.

Since the licensee is in transition to NFPA 805, this finding is considered an URI pending the licensee's completion of a risk assessment evaluation to determine the risk significance in accordance with the established NRC Enforcement Discretion regarding plants in transition to NFPA 805. Subsequent NRC review of the risk evaluation will determine if this finding meets the four criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR 50.48). (URI 05000266/2007006-02(DRS); 05000301/2007006-02(DRS))

.3 Passive Fire Protection

Branch Technical Position APCS 9.5-1, Section IV.B.1, "General Guidelines for Plant Protection Building Design," Section IV.B.3, "Cable Construction, Cable Trays and Penetrations," and Section IV.D.2, "Control Room," identified the requirements for the licensee's fire protection passive features.

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 compared the as-installed configurations to the approved construction details and supporting fire tests. In addition, the inspectors reviewed license documentation, such as NRC SERs, and deviations from NRC regulations and the NFPA codes 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.

.4 Active Fire Protection

Branch Technical Position APCSB 9.5-1, Section IV.C.1, "Fire Detection," Section IV.C.3, "Water Sprinkler and Hose Standpipe Systems," Section IV.C.5, "Carbon Dioxide Suppression Systems," and Section IV.D.2, "Control Room," identified the requirements for the licensee's fire protection active features.

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 SERs, deviations from NRC regulations and the NFPA codes to verify that fire suppression and detection systems met license commitments.

b. Findings

Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms

Introduction: The inspectors identified a finding of very low safety significance and an associated NCV of the PBNP's Operating License for failure to take prompt corrective action for a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in Fire Zones 308 and 309 (i.e., EDG rooms G-01 and G-02, respectively) were not in compliance with the NFPA 13-1966 Code, Section 3066. On October 6, 2006, the licensee declared the four sprinkler heads (i.e., one in Room G-01 and three in Room G-02) out-of-service and did not take corrective measures in a timely manner. The finding was entered into the licensee's CAP as 01101421, "Untimely Corrective Actions," dated July 12, 2007, to increase the priority of the modification that was to correct the sprinkler heads' non-compliant condition.

Description: During the review of the equipment out-of-service list, the inspectors identified that four sprinkler heads installed in the EDG rooms G-01 and G-02 (i.e., Fire Zones 308 and 309, respectively) had been on the out-of-service list since July 17, 2002. Corrective action (00201108) identified a lack of return bends for these four sprinkler heads. All four sprinkler heads were configured in a pendent position; one sprinkler head was installed in G-01 and three heads were installed in G-02. The pipes supplying these heads were routed from the bottom of the associated branch line instead of a return bend as required by NFPA 13-1966. Because the sprinkler system in the G-01 and G-02 EDG rooms gets its water supply from the service water system and since service water system is constantly flowing water, the dead legs in the sprinkler piping tend to build up silt quicker than similar piping supplied by a fire protection water system. Therefore, it was concluded that the current configuration of these four sprinkler heads could result in a buildup of sediment in the drop nipples and could impair the function of the sprinkler

heads. Section 3066 of NFPA 13-1966 stated in part, where piping on wet systems is concealed, with sprinklers installed in pendent position below a ceiling, return bends will be required when water supply to the sprinkler system is from a raw water source, millpond, or from open top reservoirs. Return bends should be connected to the top of branch lines in order to avoid accumulation of sediment in the drop nipples.

Work Orders 0212351 and 0212354 were completed the week of February 24, 2003, to determine if these sprinkler heads had been blocked by silt. The work orders verified that a minor amount of silt had collected in the heads (less than one inch depth) after 18 months of service, and that the accumulated silt was loose and did not block water flow. Based on the work orders finding of silt after 18 months of service, the licensee's evaluation recommended that corrective actions should be performed to correct this condition. The corrective actions stated that either the pendant heads should be modified to include return bends or periodic flushing of piping of these four sprinklers should be established to prevent excessive silt buildup. On September 21, 2004, the licensee added an item to the modification list to modify the nonconforming sprinkler heads to minimize the potential for sprinklers being blocked in the future.

Corrective action program document 00879628 was initiated by the licensee on August 24, 2005, to identify that there were no action items in the CAP for tracking the G-01 and G-02 sprinkler lack of return bend issue. The action request indicated that this issue represented a potential condition adverse to quality and the corrective actions which were tracking this issue were previously closed.

Corrective action program document 01054160 was also initiated by the licensee on October 05, 2006, to identify that 44 months had passed since work orders 0212351 and 0212354, which cleaned the four sprinkler heads in G-01 and G-02 rooms, were performed. The CAP indicated that this item has been carried on the out-of-service list since July 17, 2002, and no further action has been taken since the work orders were implemented in 2003. In the 44 months, sediment buildup could have been occurring, and it was likely that it was more than the amount found after 18 months of installation. As a result all four sprinkler heads were declared inoperable as of October 2006. Although a CAP was initiated on October 5, 2006, which declared the sprinkler heads inoperable, no work was scheduled to modify the piping nor to flush the heads.

Analysis: The inspectors determined that the failure to promptly correct the lack of return bends issue for four sprinklers located in G-01 and G-02 rooms in a timely manner and take appropriate corrective actions was a performance deficiency warranting a significance evaluation. The inspectors concluded that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," issued on November 02, 2006, because the finding adversely affected the suppression capability of the fire suppression systems in the G-01 and G-02 rooms. As such, this finding involved the attribute of protection against external factors (i.e., fire) and affected the mitigating systems cornerstone. This finding has a cross cutting aspect in the problem identification and resolution area because the licensee failed to properly prioritize a condition adverse to quality (P(1)(c)). Specifically, on several occasions between 2002 and the triennial fire protection inspection in July 2007, the licensee failed to properly implement corrective actions for an identified non-conforming condition.

The inspectors reviewed IMC 0609, "Significance Determination Process," Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," dated March 23, 2007, and determined that since the finding affected fire protection, a significance determination evaluation under IMC 0609, Appendix F, was required. The inspectors completed a significance determination of this issue using IMC 0609, Appendix F, "Fire Protection Significance Determination Process," dated February 28, 2005. This finding screened to a Phase 2 analysis in accordance with SDP Phase 1 based on review of the "Water Based Suppression" Section of IMC 0609, Appendix F, Attachment 2, "Degradation Rating Guidance Specific to Various Fire Protection Program Elements." The inspectors assigned a degradation rating of moderate to this finding because less than 25 percent of the sprinkler heads in EDG G-02 room were non-conforming (three degraded heads) and the degradation rating in G-01 room was low (one degraded head). However, the fire protection element impacted by the finding was still expected to provide some substantial defense-in-depth benefit due to there being functional heads within 10-feet of the combustibles of concern. The inspectors determined that because both of the EDG rooms (Fire Zones 308 and 309) contained only one train of emergency power and based on the availability of a SSD train, which would not be impacted by a fire in these zones and the availability of other functional heads within 10-feet of the combustibles of concern, the change in core damage frequency value as a result of a fire in this fire zone was very low. Therefore, the inspectors determined that the finding was of very low safety significance (Green).

Enforcement: License condition 4.F of the Unit 1 and Unit 2 of Point Beach Nuclear Plant Operating License required, in part, that the licensee implement and maintain in effect all provisions of the approved FPP as described in the FSAR for the facility and as approved in the Safety Evaluation Report dated August 2, 1979, (and Supplements dated October 21, 1980, January 22, 1981, and July 27, 1988) and the safety evaluation issued January 8, 1997, for Technical Specification Amendment No. 170. Section 6.6 "Quality Assurance," of Safety Evaluation Report dated August 2, 1979, stated, in part, the design, procurement, installation, testing, and administrative controls for the FPP will be controlled in accordance with the PBNP's 10 CFR Part 50, Appendix B, quality assurance program, implementing the quality assurance provision contained in Branch Technical Position 9.5-1, Appendix A. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that conditions adverse to quality are promptly identified and corrected.

Contrary to the above, from July 2002, to July 13, 2007, the licensee failed to promptly correct a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in the EDG G-01 and G-02 rooms were not in compliance with Section 3066 of NFPA 13-1966, and as of July 2007, had not corrected the nonconforming condition. Once identified, the licensee entered the issue into the CAP under 01101421 to increase the priority of the modification to correct the noncompliance condition for the four sprinkler heads. Because this violation was of very low safety significance and it was entered into the licensee's CAP, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy. (NCV 05000266/2007006-03(DRS); 05000301/2007006-03(DRS))

.5 Protection from Damage from Fire Suppression Activities

Title 10 CFR Part 50, Appendix A, Criterion 3, "Fire Protection," required that firefighting systems shall be designed to minimize the adverse effects of fires on SSCs important to safety and to assure that their rupture or inadvertent operation does not significantly impair the safety capability of these SSCs.

a. Inspection Scope

For the selected fire areas, the inspectors verified that redundant trains of systems required for HSD 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.

.6 Alternative Shutdown Capability

Title 10 CFR Part 50, Appendix R, Section III.G.1, required that SSCs important to safe shutdown be provided with fire protection features capable of limiting fire damage to ensure that one train of systems necessary to achieve and maintain HSD conditions was free of fire damage. Options for providing this level of fire protection were delineated in 10 CFR Part 50, Appendix R, Section III.G.2. Where the protection of systems whose function was required for HSD did not satisfy 10 CFR Part 50, Appendix R, Section III.G.2, an alternative or dedicated shutdown capability independent of the area under consideration was required to be provided. Additionally, alternative or dedicated shutdown capability must be able to achieve and maintain hot standby conditions and achieve cold shutdown conditions within 72-hours and maintain cold shutdown conditions thereafter. During the post-fire SSD, the reactor coolant process variables must remain within those predicted for a loss of normal ac power, and the fission product boundary integrity must not be affected (i.e., no fuel clad damage, rupture of any primary coolant boundary, or rupture of the containment boundary).

a. Inspection Scope

The inspectors reviewed the licensee's systems required to achieve alternative SSD to determine if the licensee had properly identified the components and systems necessary to achieve and maintain SSD 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 a field walkdown to determine if operators could reasonably be expected to perform the alternate SSD procedure actions and that equipment labeling was consistent with the alternate SSD 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.

.7 Circuit Analyses

a. Inspection Scope

In accordance with IP 71111.05TTP, "Fire Protection - NFPA 805 Transition Period (Triennial)," dated May 9, 2006, this section of the IP was suspended for facilities in NFPA 805 transition.

b. Findings

No findings of significance were identified.

.8 Communications

Branch Technical Position APCS 9.5-1, required that emergency communication equipment be provided. For a fire in an alternative shutdown fire area, control room evacuation may be required and a shutdown is performed from outside the control room. Radio communications are relied upon to coordinate the shutdown of both units and for fire fighting.

a. Inspection Scope

The inspectors reviewed, on a sample bases, the adequacy of the communication system to support plant personnel in the performance of alternative SSD functions and fire brigade duties.

b. Findings

No findings of significance were identified.

.9 Emergency Lighting

Title 10 CFR Part 50, Appendix R, Section III.J, required that emergency lighting units with at least an 8-hour battery power supply be provided in all areas needed for operation of SSD equipment and in access and egress routes thereto.

a. Inspection Scope

The inspectors performed a plant walkdown of areas in which a sample of operator actions would be performed. As part of the walkdowns, the inspectors focused on the existence of sufficient emergency lighting for access and egress to areas and for performing necessary equipment operations.

b. Findings

No findings of significance were identified.

.10 Cold Shutdown Repairs

Title 10 CFR Part 50, Appendix R, Section III.G.1.b, required that equipment and systems comprising the means to achieve and maintain cold shutdown conditions should not be damaged by fire; or the fire damage to such equipment and systems should be limited so that the systems can be made operable and cold shutdown achieved within 72-hours. Materials for such repairs shall be readily available onsite and procedures shall be in effect to implement such repairs.

a. Inspection Scope

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 on-site. 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.

.11 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 SSD equipment, systems, or features (e.g., detection and suppression systems, and equipment, passive fire barriers, pumps, valves or electrical devices providing SSD 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.

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems (71152)

a. Inspection Scope

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

b. Findings

No findings of significance were identified.

4OA6 Meetings

.1 Exit Meeting

On July 13, 2007, at the conclusion of the inspection, the inspectors presented the inspection results to Mr. Jim McCarthy and other members of licensee management. 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

No interim exits were conducted.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

C. Butcher, Engineering Director
A. Capristo, Business Manager
G. Casadonte, Fire Protection Coordinator
G. Corell, RP/Chemistry Manager
F. Flentje, Regulatory Affairs Supervisor
R. Harrsch, Ops Manager
F. Hennessy, Program Engineering Supervisor
R. Ladd, PRA Engineer
K. Locke, Regulatory Affairs Analyst
J. McCarthy, Director-Site Operations
B. McLean, Fire Protection Engineer
R. Merkes, Operation Team Lead
C. Monarch, Fire Protection Engineer
R. Mrozinski, Appendix R Engineer
J. Olvera, Nuclear Engineer
M. Ray, Regulatory Affairs Manager
J. Schweitzer, Manager of Projects
G. Sherwood, Program Engineering Manager
B. Simiril, Appendix J Engineer
C. Sizemore, Training Manager
W. Smith, Production Planning Manager (Acting Plant Manager)
S. Tulley, EP Manager
B. VanderVelde, Maintenance Manager

Nuclear Regulatory Commission

R. Kresek, Senior Resident Inspector
G. Gibbs, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000266/2007006-01; 05000301/2007006-01	Other	Failure to Meet Separation Requirements for Redundant Trains (Section 1R05.2b.1)
05000266/2007006-02; 05000301/2007006-02	URI	Failure to Protect Circuits Associated with PORVs and Block Valves (Section 1R05.2b.2)
05000266/2007006-03; 05000301/2007006-03	NCV	Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms (Section 1R05.4b)

Closed

05000266/2007006-01; 05000301/2007006-01	Other	Failure to Meet Separation Requirements for Redundant Trains (Section 1R05.2b.1)
05000266/2007006-03; 05000301/2007006-03	NCV	Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms (Section 1R05.4b)

Discussed

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 team 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.

CALCULATIONS

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
00087.01.00012.02-C06	Hydraulic Calculation for Fire Zone 151, 0.15 Density	0
FPEE-1999-015	NFPA 12A Code Deviation - Halon Agent Storage Container Pressures	0
FPEE-2006-001	Minimum Spacing Requirements for Penetration Seal Typical Details M-W-03-02, M0209- H0203, and W-E-20-04	0
FPEE-2006-002	Evaluation of Boot Seal Assemblies on Pipes Over 2" in Diameter	0
FPTE 007	Technical Evaluation of PBNP Point-to-Point Portable Radio Communications for an Appendix R Fire	2
FPTE 016	Resolution of Identified Deviations to NFPA Code Requirements	1

CORRECTIVE ACTION PROGRAM (CAP) DOCUMENTS ISSUED DURING INSPECTION

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
01096787	SSAR Post Fire Repair Table Requires Updating	June 14, 2007
01096963	Triennial FP - Appendix R Emergency Light EL-75 four OOS	June 14, 2007
01097873	2007 NRC Triennial: Incorrect Code-of-Record Listed in DBD	June 20, 2007
01098331	Triennial FP - NRC Noted Condition of a Supply Air Register During Walkdown	June 21, 2007
01098484	EL-026 Stuck on Equalize & Battery Low	June 22, 2007
01098534	EL-007 & EL-157 on Fast Charge Too Often	June 22, 2007
01099270	Credited AFW Pumps for Fire Area A32 - Computer Room	June 26, 2007
01099280	Valves 1/2CS-02125 Not Included in Appendix R SSEL	June 26, 2007
01099418	Halon Discharge from Computer Room to Control Room	June 27, 2007
01099485	Discrepancy in Required Fire Detection	June 27, 2007
01099537	FHAR Appendix A for Area A02 Has Misleading Statement	June 27, 2007
01099538	CSD Repair Activity Inadequately Documented During 2007 Triennial Inspection: NRC Questioned Validity of Repair Activity	June 27, 2007
01099699	Loose Paper Found in FZ 187 During NRC Walkdown Inspection	June 28, 2007
01099828	Ensure Resolution of Issues with 2N32 under NFPA805	June 29, 2007

CORRECTIVE ACTION PROGRAM (CAP) DOCUMENTS ISSUED DURING INSPECTION

Number	Description or Title	Date or Revision
01100068	Corrective Action Closeout Based on Incorrect Information	July 2, 2007
01100766	Potential Adverse Trend - FP/App R Documentation	July 9, 2007
01100783	Evaluate Use of Continuous Fire Watches	July 9, 2007
01100985	Cable ZA1327FA Not Included in Appendix R Cable Database	July 10, 2007
01101026	Error Noted on Drawing West 499B466 Sheet 716A	July 10, 2007
01101421	Untimely Corrective Actions	July 12, 2007
01101444	Compliance with App. R Section III.G.2 in Fire Zone 151	July 12, 2007
01101461	Potential Coincident Fire Included Failure of PORVs and Block Valves	July 12, 2007
01101506	NFPA 13 Issues with G-01 and G-02 Room Sprinklers	July 12, 2007

CORRECTIVE ACTION PROGRAM (CAP) DOCUMENTS ISSUED PRIOR TO INSPECTION

Number	Description or Title	Date or Revision
CA028133	No Intervening Combustibles Area Not Correct on Drawing	February 18, 2003
00028758	Sprinklers Not Installed in Accordance with NFPA 13-1966	July 17, 2002
00031163	No Intervening Combustibles Area Not Correct on Drawing	February 14, 2003
00717086	Penetration Fire Seal Tests and Details Not Bounding for Sampled Configurations	May 26, 2004
00879628	Non-Conforming Equipment Tracked Outside of the CAP	August 24, 2005
01054160	G-01 and G-02 Pendant Sprinklers	October 05, 2006
01093630	Cable ID Mismatches Between SSAMS and CARDS	May 22, 2007

DRAWINGS

Number	Description or Title	Date or Revision
499B466 Sheet 716A	Wiring Diagram - Pressurizer 1RC-431C Power Operated Relief Valve Isolation 1RC-515	9
499B466 Sheet 716B	Wiring Diagram - Pressurizer 1RC-430C Power Operated Relief Valve Isolation 1RC-516	4
499B466 Sheet 757A	Wiring Diagram - RCS Remote Operated Valve 1RC431C	5
541F091 Sheet 3	P&ID Reactor Coolant System	17
APPR-FIG-263 Sheet 2	Appendix R Logic Diagram; Reactor Coolant System	1
APPR-FIG-267 Sheet 1	Appendix R Logic Diagram; Auxiliary Feedwater System	2

IMPAIRMENT/REMOVAL PERMITS

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
	Equipment Out-Of-Service List	May 31, 2007
	Equipment Out-Of-Service List	November 21, 2006
	Equipment Out-Of-Service List	December 06, 2004

MODIFICATIONS

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
84-22	Fire Barrier Modification for Auxiliary Building El. 8'-0"	January 30, 1984

REFERENCES

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
	PBNP - USNRC Fire Protection Safety Evaluation Report	August 2, 1979
FEP 4.1	PAB West and Central	8
FHAR	Fire Hazards Analysis Report	4
FPER	Fire Protection Evaluation Report	6
LER	Postulated Fire and Inability to Isolate PORV Outside	August 19, 1999
1999-006-00	Appendix R Design Basis	
NFPA 12A	Standard on Halon 1301 Fire Extinguishing Systems	1980
NFPA 13	Standard for the Installation of Sprinkler Systems	1966
NFPA 72D	Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems	1967
NFPA 72E	Standard on Automatic Fire Detectors	1974
NPC 38927	PBNP Fire Protection Review	June 1977
TACS 61809 and 61810	Letter from D.H. Wagner to C.W. Fay: Exemption from Certain Requirements of 10 CFR Part 50, Appendix R, Section III.G - PBNP Units 1 and 2	May 23, 1988
V878-04-TD-5	Qualification of Fire Barrier Penetration Seal Typical Detail Designs	0
	Response to 10 CFR Part 50, Appendix R Fire Protection of SSD Capability	June 30, 1982
	Letter from C.W. Fay to H.R. Denton: Docket Nos. 50-266 and 50-301 Appendix R Exemption Requests PBNP Units 1 and 2	April 28, 1983

VENDOR DOCUMENTS

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
CR4926	Fire and Hose-Stream Tests for Penetration Seal Systems	March 19, 1982
CR4739	Fire and Hose-Stream Tests for 200 lb Density Lead-Filled Silicone Rubber Penetration Seal System	May 1981
8610-102570	Fire Endurance Test of 3M Interam Fire Wrap Fire Protective Envelope	May 19, 1998

Work Orders

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
0212351	FP Inspect G-01 Sprinkler Heads (1 Total)	February 24, 2003
0212354	FP Inspect G-02 Sprinkler Heads (3 Total)	February 25, 2003

LIST OF ACRONYMS USED

ADAMS	Agency-Wide Document Access and Management System
AFW	Auxiliary Feedwater
AOP	Abnormal Operating Procedure
APCSB	Auxiliary and Power Conversion Systems Branch
App R	Appendix R
CAP	Corrective Action Program
CCW	Component Cooling Water
CFR	Code of Federal Regulations
CSD	Cold Shutdown
DRS	Division of Reactor Safety
EDG	Emergency Diesel Generator
FEP	Fire Emergency Plan
FHAR	Fire Hazards Analysis Report
FP	Fire Protection
FPEE	Fire Protection Engineering Evaluation
FPER	Fire Protection Evaluation Report
FPP	Fire Protection Program
FPTE	Fire Protection Technical Evaluation
FZ	Fire Zone
HSD	Hot Shutdown
HVAC	Heating, Ventilation, Air Conditioning
IMC	Inspection Manual Chapter
IPEEE	Individual Plant Examination of External Events
IR	Inspection Report
LER	Licensee Event Report
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NUREG	NRC Technical Report Designation
OOS	Out-of-Service
P&ID	Piping and Instrumentation Drawing
PAB	Primary Auxiliary Building
PARS	Publically Available Records System
PBNP	Point Beach Nuclear Plant
RHR	Residual Heat Removal
SDP	Significance Determination Process
SER	Safety Evaluation Report
SSA	Safe Shutdown Analysis
SSAR	Safe Shutdown Analysis Report
SSCs	Structures, Systems, and Components
SSD	Safe Shutdown
SSEL	Safe Shutdown Equipment List
UFSAR	Updated Final Safety Analysis Report