

February 4, 2005

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
NRC INTEGRATED INSPECTION REPORT 05000266/2004012;
05000301/2004012

Dear Mr. Koehl:

On December 31, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on January 5, 2005, with you and members of your staff.

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

Based on the results of this inspection, three NRC-identified findings of very low safety significance were identified. These findings were determined to involve violations of NRC requirements. However, because these violations were of very low safety significance, non-willful and non-repetitive, and because the violations were entered into your corrective action program, the NRC is treating these findings as Non-Cited Violations consistent with Section VI.A. of the NRC Enforcement Policy.

In addition to the routine NRC inspection and assessment activities, Point Beach performance is being evaluated quarterly as described in the Annual Assessment Letter - Point Beach Nuclear Plant, dated March 4, 2004. Consistent with Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," plants in the multiple/repetitive degraded cornerstone column of the Action Matrix are given consideration at each quarterly performance assessment review for (1) declaring plant performance to be unacceptable in accordance with the guidance in IMC 0305; (2) transferring to the IMC 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition with Performance Problems," process; and (3) taking additional regulatory actions, as appropriate. During this inspection period, the NRC reviewed Point Beach operational performance, inspection findings, and performance indicators for the fourth quarter of 2004. Based on this review, we concluded that Point Beach is operating safely.

We determined that no additional regulatory actions, beyond the already increased inspection activities and management oversight, are currently warranted.

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 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 document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Steven A. Reynolds
Deputy Director
Division of Reactor Projects

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

Enclosure: Inspection Report 05000266/2004012; 05000301/2004012
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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: 05000266/2004012; 05000301/2004012

Licensee: Nuclear Management Company, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: 6610 Nuclear Road
Two Rivers, WI 54241

Dates: October 1, 2004, through December 31, 2004

Inspectors: P. Krohn, Senior Resident Inspector
R. Krsek, Senior Resident Inspector
M. Morris, Resident Inspector
D. McNeil, Senior Operations Engineer
R. Alexander, Radiation Specialist
J. Giessner, Reactor Engineer
A. Klett, Reactor Safety Engineer

Approved by: P. Loudon, Chief
Branch 5
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000266/2004012, 05000301/2004012; 10/01/2004 - 12/31/2004; Point Beach Nuclear Plant, Units 1 and 2; Operability Evaluations and Post Maintenance Testing.

This report covers a 3-month period of baseline resident inspection, operator licensing requalification examination inspection and announced radiation protection inspections for the Point Beach Nuclear Plant, Units 1 and 2, conducted by Region III and resident inspectors. Two Green findings with associated Non-Cited Violations, and a Severity Level IV Non-Cited Violation were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process". Findings for which the Significance Determination Process 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-Revealing Findings

Cornerstone: Mitigating Systems

- Green. A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take actions for a condition adverse to quality. Specifically, in September 2003 a condition report was written to address the susceptibility of fouling of a small mesh strainer installed in a fire protection line which provided emergency cooling to the turbine driven auxiliary feedwater pumps and turbine bearing coolers. The condition report also identified that procedure guidance did not exist for operators to utilize an existing flush valve on the strainer if the strainer became clogged during use. The inspectors identified that in August 2004, the condition report was closed with no actions taken to address this condition adverse to quality. At the end of the inspection, the licensee took corrective actions to ensure that as a minimum, the appropriate procedural guidance existed if the strainer became clogged during use.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This finding was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. (Section 1R15.1)

- Severity Level IV. The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for changes made to the Final Safety Analysis Report. Specifically, the licensee 'screened out' a change to the Final Safety Analysis Report which modified operator response times for the Steam Generator Tube Rupture Chapter 14 Accident Analysis contained in the Final Safety Analysis Report. Specifically, a time requirement of 44 minutes for equalizing primary and secondary pressure was removed from the Final Safety Analysis Report. In addition, the licensee changed the time in which isolation of the affected Steam Generator could be achieved from 10 minutes to 30 minutes. At the end of the inspection period the licensee initiated a corrective action to perform a safety evaluation in accordance with 10 CFR Part 50.59 for this Final Safety Analysis Report change.

Because the issue potentially affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. This finding was determined to be more than minor because the inspectors could not reasonably determine that the change would not ultimately require NRC approval. The inspectors determined that even though the change was not adequately evaluated in accordance with 10 CFR Part 50.59, this violation was of very low safety significance because the design basis safety-related functions of mitigating systems to respond to this initiating event scenario were not adversely affected. The inspectors evaluated the results of the finding using the Significance Determination Process for the mitigating systems cornerstone. The inspectors determined that the results of the finding were of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. Therefore, the results of the violation were determined to be of very low safety significance and the violation was classified as a Severity Level IV Non-Cited Violation. (Section 1R15.2)

- Green. A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to establish and perform testing required to demonstrate that components will perform satisfactorily in service with written test procedures which incorporate applicable requirements and acceptance limits. The licensee performed post-maintenance testing of a component cooling water pump control switch, a safety-related component, without the use of a written test procedure which incorporated the applicable requirements and acceptance limits for testing to demonstrate the component would perform satisfactorily in service. The licensee's extent of condition identified the potential for at least 11 additional activities for which safety-related components did not have the appropriate test procedures established. At the end of the inspection period, the licensee developed actions to correct the identified deficiencies and to ensure licensee personnel were aware of the requirements to use procedures for the testing of safety-related components.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the

mitigating systems cornerstone attribute of procedure quality, specifically maintenance and testing (pre-event) procedures, and the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. (Section 1R19.1)

B. Licensee-Identified Violations

No findings of significance were identified.

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at 100 percent power and remained there until November 11, 2004, when power was decreased to 97 percent for auxiliary feedwater (AFW) pump testing and subsequently returned to 100 percent on November 12. The unit remained at 100 percent until November 27 when power was decreased to 66 percent for atmospheric steam dump valve testing. The unit was returned to 100 percent power on November 28 and remained there until December 8 when power was decreased to 94 percent for the installation of a power supply stabilizer on the turbine generator. The unit returned to 100 percent that same day and remained there for the rest of the inspection period.

Unit 2 began the inspection period at 100 percent power and remained there until October 8, 2004, when power was decreased to 50 percent for planned maintenance on Offsite Power Line 151 to Kewaunee. Power was returned to 100 percent on October 13 and remained there until October 23 when power was decreased to 65 percent for planned work on a transformer and Offsite Power Line R-304. Power was returned to 100 percent on October 25. Power was reduced again on October 28 to 91 percent for planned work on Offsite Power Line R-304. The power was increased to 100 percent on November 6. Power was decreased to 97 percent and returned to 100 percent for AFW pump testing on November 12 and 14. On November 19, the licensee identified a steam leak upstream of a main steam flow transmitter isolation valve which required a Technical Specification (TS) shutdown to facilitate repairs. The unit was shutdown and repairs were completed on November 21. Criticality was achieved on November 24, and the unit was returned to full power operations on November 25. On December 1 and December 9, power was reduced to 94 percent for the installation of a power supply stabilizer on the turbine generator and returned to 100 percent power that same day. Power remained at 100 percent for the rest of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors walked down accessible portions of risk-significant equipment and systems susceptible to cold weather freezing. The inspectors also reviewed the licensee's preparation of the facade structures and buildings inside the protected area. The inspectors reviewed the corrective actions and work orders (WOs) written to correct identified problems and assessed whether completion dates would ensure that corrective maintenance was completed prior to the onset of cold weather. The inspectors also walked down areas which had freeze problems during the last 4 years. This observation constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdowns

a. Inspection Scope

The inspectors performed partial walkdowns of accessible portions of risk-significant systems to determine the operability of the systems. The inspectors utilized system valve lineup and electrical breaker checklists, tank level books, plant drawings, and selected operating procedures to determine if the systems were correctly aligned to perform the intended design functions. The inspectors also examined the material condition of the components and observed operating equipment parameters to determine if there were no obvious deficiencies. The inspectors reviewed completed WOs and calibration records associated with the systems for issues that could affect component or train functions. The inspectors used the information in the appropriate sections of the Final Safety Analysis Report (FSAR) to determine the functional requirements of the system. Partial system walkdowns of the following systems constituted six inspection procedure samples:

- Service Water (SW) System;
- Unit 2 Containment Walkdown at Power;
- Unit 1 Walkdown of Systems Containing Boric Acid in Primary Auxiliary Building;
- Unit 2 Walkdown of Systems Containing Boric Acid in Containment;
- Unit 1 Containment Isolation Walkdown; and
- Unit 2 Containment Isolation Walkdown.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdowns

a. Inspection Scope

The inspectors performed a complete system alignment inspection of the component cooling water (CCW) system. This safety-related system was selected based on the risk-significance of the system in the licensee's probabilistic risk assessment. The walkdown of the CCW system constituted one inspection procedure sample.

The inspection consisted of the following activities:

- Review of plant procedures (including selected abnormal and emergency procedures), drawings, and the FSAR to identify proper system alignment;
- Review of outstanding or completed temporary and permanent modifications to the system;

- Review of open corrective action program documents (CAPs) and WOs that could impact operability of the system; and
- Walkdown of mechanical and electrical components in the system to assess alignment, component accessibility, availability, and current condition.

The inspectors also reviewed selected documented issues to determine if the issues were properly addressed in the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Walkdown of Selected Fire Zones

a. Inspection Scope

The inspectors conducted fire protection walkdowns which focused on the following attributes: the availability, accessibility, and condition of fire fighting equipment; the control of transient combustibles and ignition sources; and the condition and status of installed fire barriers. The inspectors selected fire areas for inspection based on the area's overall fire risk contribution, as documented in the Individual Plant Examination of External Events or the potential to impact equipment which could initiate a plant transient.

In addition, the inspectors assessed these additional fire protection attributes during walkdowns: fire hoses and extinguishers were in the designated locations and available for immediate use; unobstructed fire detectors and sprinklers; transient material loading within the analyzed limits; and fire doors, dampers, and penetration seals in satisfactory condition. The inspectors also determined if minor issues identified during the inspection were entered into the licensee's corrective action program (CAP). The walkdown of the following selected fire zones constituted six inspection procedure samples:

- Fire Zone FZ 237, Component Cooling Water system Heat Exchanger and Boric Acid Tank Room;
- Fire Zone FZ 238 Gas Stripper and Spent Fuel Pool Cooling Rooms;
- Fire Zone FZ 225, Battery Room D106;
- Fire Zone FZ 217, Corridor to Valve Gallery and Battery Rooms;
- Fire Zone 304N, Auxiliary Feedwater (AFW) system Pump Room North Section;
- and Fire Zone 304S, AFW Pump Room South Section.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures - Internal Floods (71111.06)

a. Inspection Scope

The inspectors completed a walkdown of the Unit 1 and Unit 2 Facade and Primary Auxiliary Building flood zones to assess the overall readiness of internal flood protection equipment and barriers. The inspectors evaluated flood protection features, such as flood doors, door gaps, and subsoil drains, to determine if the components were in satisfactory physical condition, unobstructed, and capable of providing an adequate flood barrier. The inspectors also reviewed design basis documents and risk analyses and evaluated the affects of non-seismically qualified facade tank ruptures on the submergence of primary containment sump recirculation valve limit switches. This walkdown of the flood protection measures constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

.1 Review of 'A' Component Cooling Water (CCW) Heat Exchanger Inspection

a. Inspection Scope

The inspectors assessed the condition and cleanliness of the 'A' CCW heat exchanger and the effectiveness of biofouling controls through direct observation of the component during scheduled cleaning and inspection activities. In addition, the inspectors reviewed the inspection results against pre-established licensee acceptance criteria to determine if the number of plugged tubes affected heat exchanger operability. The inspectors also determined if the inspection frequency was appropriate to detect degradation prior to the loss of heat removal capabilities below design basis values. Finally, the inspectors interviewed the system engineer to determine whether previous thermal performance test results appropriately considered test instrument inaccuracies. This review of heat sink performance constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

.1 Annual Operating Test Results

a. Inspection Scope

The inspectors reviewed the overall pass or fail results of individual Job Performance Measure operating tests, simulator operating tests, and written examinations (required to be given per 10 CFR 55.59(a)(2)) administered by the licensee during calendar year

2004. The overall results were compared with the Significance Determination Process (SDP) in accordance with NRC Inspection Manual Chapter (IMC) 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process." Review of the annual operating test results constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

.2 Resident Inspector Quarterly Observation of Licensed Operator Requalification

a. Inspection Scope

On October 21, 2004, the inspectors observed the operating crew performance during a simulator annual requalification examination. The inspectors also reviewed some of the changes to the simulator model against modifications made in the plant. Observation of the requalification quarterly evaluation constituted one inspection procedure sample.

The inspectors assessed crew performance in the areas of:

- Clarity and formality of communications;
- Understanding of the interactions and function of the operating crew during an emergency;
- Prioritization, interpretation, and verification of actions required for emergency procedure use and interpretation;
- Oversight and direction from supervisors; and
- Group dynamics.

Crew performance in these areas was also compared to licensee management expectations and guidelines, as presented in Nuclear Procedure NP-2.1.1, "Conduct of Operations," Revision 1.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors performed maintenance effectiveness reviews of the systems listed below. The inspectors reviewed repetitive maintenance activities to assess maintenance effectiveness, including maintenance rule activities, work practices, and common cause issues. Inspection activities included, but were not limited to, the licensee's categorization of specific issues, including evaluation of performance criteria, appropriate work practices, identification of common cause errors, extent of condition, and trending of key parameters. Additionally, the inspectors reviewed implementation of the Maintenance Rule (10 CFR 50.65) requirements, including a review of scoping,

goal-setting, performance monitoring, short-term and long-term corrective actions, functional failure determinations, and current equipment performance status.

For each system reviewed, the inspectors reviewed significant WOs and CAPs to determine if failures were appropriately identified, classified, and corrected, and if unavailable time was correctly calculated. The reviews of maintenance effectiveness for the following components and systems constituted three inspection procedure samples:

- Diesel Generator and Gas Turbine Fuel Oil System;
- 125-Volt Alternating Current System; and
- Condensate and Feedwater System.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors reviewed risk assessments for the following maintenance activities, completing risk assessment and emergent work control inspection procedure samples. During these reviews, the inspectors compared the licensee's risk management actions to those actions specified in the licensee's procedures for the assessment and management of risk associated with maintenance activities. The inspectors assessed whether evaluation, planning, control, and performance of the work was done in a manner to reduce the risk and minimize the duration where practical, and whether contingency plans were in place where appropriate.

The inspectors used the licensee's daily configuration risk assessment records, observations of shift turnover meetings, and observations of daily plant status meetings to determine if the equipment configurations were properly listed, that protected equipment was identified and controlled as appropriate, and that significant aspects of plant risk were communicated to the necessary personnel. The reviews of maintenance risk assessment and emergent work evaluation constituted seven inspection procedure samples:

- Unavailability of the service water system pumps, for planned maintenance during the week of October 4, 2004;
- Venting of the safety injection system for planned maintenance testing during the week of October 11, 2004;
- Unavailability of the CCW pump for planned maintenance during the week of October 18, 2004;
- Unavailability of the emergency diesel generator G-04 for planned maintenance and the battery charger inspection during the week of October 25, 2004;
- Unavailability of the SW Pump 'D', Unit 1 'A' CCW pump, and Battery Charger D-09 for planned maintenance during the week of November 1, 2004;
- Combined unavailability of the CCW pump and firewater pump for maintenance, during the week of November 7, 2004; and

- Combined unavailability of instrument inverter DY0A and emergency diesel generator G-03 for maintenance during the week of December 6, 2004.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

.1 Failure to Take Corrective Actions for a Condition Adverse to Quality

a. Inspection Scope

The inspectors reviewed the operability evaluation associated with CAP050483 which dealt with the fire protection supply to the Unit 1 and Unit 2, turbine-driven auxiliary feedwater pump and the turbine bearing coolers. The inspectors reviewed design basis information, the FSAR, TS requirements, and licensee procedures to assess the technical adequacy of the operability evaluations. In addition, the inspectors assessed whether compensatory measures were implemented, as required. The inspectors determined if system operability was properly justified and if the system remained available, such that no unrecognized increase in risk occurred. This review of the operability evaluation constituted one inspection procedure sample.

b. Finding

Introduction: A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to take corrective actions for a condition adverse to quality. Specifically, in September 2003, CAP050483 was written to address the susceptibility of fouling of a small mesh strainer installed in a fire protection line which provided emergency cooling to the turbine-driven auxiliary feedwater pumps and the turbine bearing coolers. The CAP also identified that procedure guidance did not exist for operators to use an existing flush valve on the strainer. In August 2004, CAP050483 was closed with no actions taken to address this condition adverse to quality.

Description: The inspectors reviewed CAP050483, "Fire Protection Supply to the Unit 1 and Unit 2 Turbine Driven Auxiliary Feedwater Pump Bearing Coolers During a Station Blackout," written in September 2003, and the associated basis for operability. The CAP documented a condition adverse to quality, in that, the fire protection line, which provides emergency cooling to the turbine and pump bearings, contained a strainer that had a 0.045-inch mesh and no bypass around the strainer existed if the strainer clogged. The fire protection system was a raw water system which took a suction from the intake structure and discharged the water into the fire protection system header without a strainer on the discharge of the pump.

Therefore, if the fire protection system emergency cooling line was used, the water to the bearing coolers would first be strained by a 0.045-inch mesh strainer susceptible to debris accumulation. The CAP also noted that this strainer was equipped with a flush line, which could be utilized to address debris accumulations or symptoms of clogging;

however, there was no procedure guidance available for the operators to perform a flush of this type. The inspectors also noted that operating experience at the site has demonstrated that certain components in other plant water systems, such as service water, were susceptible to lake grass fouling.

The inspectors reviewed the CAP evaluation which concluded the following: "The current design of the fire protection 'Y-strainer' and associated piping is not practical for the following reasons: 1. The mesh size of the fire protection strainer is the same size as the downstream strainer in the service water cooling supply. The fire protection system ties into the service water bearing cooling line upstream of these strainers. Therefore, the bearing cooling water piping contains two strainers in series with equivalent mesh within an approximate 10 foot run of pipe; and 2. The fire protection piping has no means to bypass the strainer in the event of fouling. The installed flush line on the strainer may not remove all of the debris causing the fouling and using it could reduce cooling water flow to the bearings." The condition evaluation suggested four potential solutions which involved engineering analysis or design modifications to the system to correct these issues. In October 2003, engineering personnel developed a corrective action to create and present potential design changes to the Plant Health Committee by August 20, 2004.

On August 17, 2004, the Plant Health Committee determined that, "this item does not meet the current modification criteria, and therefore was rejected." The corrective action was then closed on August 20, 2004, with no additional actions taken. The closing documentation stated, in part, that the licensee did not need to consider a dual unit station blackout, therefore service water would remain available for bearing cooling to the affected unit. The inspectors also determined through discussions with plant staff and review of the Unit 1 and Unit 2 alarm response and abnormal operating procedures that no procedure actions were developed to address this condition adverse to quality.

The inspectors determined after review of the FSAR and discussions with plant staff; that there was a 1-hour coping assessment time established for licensee compliance with the Station Blackout rule, which would require the fire protection system to supply bearing cooling to either unit's turbine-driven auxiliary feedwater pump. The inspectors also noted that the fire protection system lines were added to the turbine-driven auxiliary feedwater pumps, as a response to the NRC staff's concerns during the auxiliary feedwater system evaluation (Item II.E.1.1) of NUREG-0737, "Clarification of Three Mile Island Action Plan Requirements." Specifically, docketed correspondence and the April 21, 1982, Supplement to the Safety Evaluation Report for NUREG-0737, Item II.E.1.1, contained NRC staff concerns that the auxiliary feedwater trains for a single unit at Point Beach did not meet the diversity requirements set forth in Standard Review Plan 10.4.9 and Branch Technical Position ASB 10-1

Analysis: The inspectors determined that the failure to promptly correct conditions adverse to quality was a licensee performance deficiency warranting a significance evaluation. This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the Mitigating Systems cornerstone attribute of equipment performance for availability and reliability of the turbine-driven auxiliary feedwater pumps. The finding also affected the mitigating

systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences.

The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. The primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, and nonconformances, be promptly identified and corrected. Contrary to this requirement, the licensee failed to promptly correct issues associated with the potential fouling of the strainer in the portion of the fire protection system that provided emergency cooling to the turbine-driven auxiliary feedwater pump and the turbine bearings. Specifically, this issue was initially identified in October 2003 in CAP050483, which was closed in August 2004 with no corrective actions taken to address this condition adverse to quality. Therefore, the inspectors determined this finding was a violation of 10 CFR Part 50, Appendix B, Criterion XVI. Because this violation was of very low significance, non-willful, non-repetitive, and documented in the licensee's corrective action program as Condition Report CAP060341, this finding is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A. of the NRC Enforcement Policy. (NCV 05000266/2004012-02; NCV 05000301/2004012-02)

At the end of the inspection, the licensee took corrective actions to ensure that as a minimum, the appropriate procedural guidance existed if the strainer became clogged during use.

- .2 Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59
- a. Inspection Scope

The inspectors reviewed the operability evaluation associated with CAP031711, which documented the failure of four of six operations crews to meet a critical task for a crew evaluation scenario. The inspectors reviewed design basis information, the FSAR, TS requirements, and licensee procedures to assess the technical adequacy of the operability evaluation. In addition, the inspectors assessed whether compensatory measures were implemented, as required. The inspectors determined if system operability was properly justified and that the system remained available, such that no unrecognized increase in risk occurred. The inspectors also reviewed the corrective actions associated with this CAP. This review of the operability evaluation constituted one inspection procedure sample.

b. Finding

Introduction: The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for changes made to the FSAR. Specifically, the licensee 'screened out' a change to the FSAR which modified operator response times for the Steam Generator Tube Rupture (SGTR) Chapter 14 Accident Analysis contained in the FSAR. This finding was determined to be of very low safety significance.

Description: In March of 2002, Operability Determination OPR000050 was written to evaluate a non-conformance identified in CAP031711. The CAP identified that four of six crews failed to meet the 44-minute operator response time contained in the FSAR and one crew overfilled the steam generator (SG) during the scenario. The licensee's nonconformance evaluation concluded that as long as the operator response time was less than 50 minutes, the offsite doses were acceptable for the SGTR license basis.

The licensee processed FSAR Change FCR 03-040 to address the nonconformance and close the CAP. The FSAR change deleted the FSAR time requirements for operator response within 44 minutes. In addition, the FSAR change also modified an additional statement in the FSAR which stated, in part, that isolation of the affected SG could be achieved within 10 minutes. This second FSAR modification was changed to state that isolation of the affected SG could be achieved within 30 minutes. The FSAR change was processed and approved for use through 10 CFR 50.59 Screening SCR 2003-0313 which "screened out" this FSAR change on November 2, 2003, concluding no safety evaluation was required.

The inspectors noted that the FSAR change indicated the 44 minutes was deleted since this was based on a methodology that was not part of the Point Beach licensing basis and was not appropriate for inclusion in the FSAR. The licensee removed the time to equalize pressure based on information contained in the FSAR change which stated that; "terminating primary to secondary break flow is an analytical convenience that enforces the 30 minute termination of environmental releases while preventing re-initiation, but it is not a limiting criterion for calculation of radiological consequences".

The inspectors noted that guidance contained in Section 4.2.1 of Nuclear Energy Institute Standard NEI 96-07, "Guidelines for 10 CFR 50.59 Evaluations," Revision 1, which the NRC endorsed in Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," and 10 CFR 50.59, both stated, in part, that potential adverse changes to operator response times required evaluation as changes to procedures as described in the FSAR.

The inspectors concluded and the licensee subsequently concurred that these FSAR changes required a safety evaluation.

Analysis: The inspectors determined that the licensee's failure to identify that these changes to operator response times in the FSAR required a 50.59 evaluation was a licensee performance deficiency warranting a significance evaluation.

Because violations of 10 CFR 50.59 are considered to be violations that potentially impede or impact the regulatory process, these violations are dispositioned using the traditional enforcement process instead of the SDP. Typically, the Severity Level would be assigned after consideration of appropriate factors for the particular regulatory process violation in accordance with the NRC Enforcement Policy. However, the SDP is used, if applicable, in order to consider the associated risk significance of the results of the finding prior to assigning a Severity Level. In this case, the licensee failed to perform a safety evaluation for changes made to the FSAR concerning operator response times for utilizing mitigating systems which respond to initiating events to prevent undesirable consequences.

This finding was determined to be more than minor because the inspectors could not reasonably determine that the change would not ultimately require NRC approval. The inspectors determined that even though the change was not adequately evaluated in accordance with 10 CFR 50.59, this violation was of very low safety significance, because the design basis safety-related functions of mitigating systems to respond to this initiating event scenario were not adversely affected. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Enforcement: 10 CFR 50.59(d)(1) states, in part, that the licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment. Contrary to the above, the licensee failed to perform a written safety evaluation for changes to the facility as described in the FSAR for FSAR Change Request FCR03-040 on November 2, 2003. In addition, 10 CFR 50.59 Screening SCR 2003-0313, did not provide a written evaluation that determined that the change, test, or experiment did not require a license amendment. The results of this violation were determined to be of very low safety significance; therefore, this violation was classified as a Severity Level IV Violation of 10 CFR 50.59. Because this violation was of very low significance, non-willful, non-repetitive, and documented in the licensee's corrective action program as CAP31711 and CAP030326, this finding is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A. of the NRC Enforcement Policy. (NCV 05000266/2004012-02; NCV 05000301/2004012-02)

At the end of the inspection period, the licensee established the following corrective actions to address this issue: initiated a corrective action to revise the Final Safety Analysis Report discussion on Steam Generator Tube Rupture Accident scenarios with respect to steam generator overfill; and initiated a corrective action to perform a safety evaluation in accordance with 10 CFR Part 50.59 for the November 29, 2003, Final Safety Analysis Report Change.

.3 Additional Operability Evaluations Reviewed

a. Inspection Scope

The inspectors reviewed selected operability evaluations associated with issues entered into the licensee's corrective action system. The inspectors reviewed design basis information, the FSAR, TS requirements, and licensee procedures to determine the technical adequacy of the operability evaluations. In addition, the inspectors determined if compensatory measures were implemented, as required. The inspectors assessed whether system operability was properly justified and that the system remained available, such that no unrecognized increase in risk occurred. The reviews of the following operability evaluations constituted three inspection procedure samples:

- Steam Generator Atmospheric Steam Dump Valve Operability;
- Difference in Unit 2 'A' Safety Injection Accumulator Level Indications; and
- Unit 2 'A' Residual Heat Removal System Pump Motor Circuit Evaluation Testing Results.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

.1 Cumulative Effect of Operator Workarounds

a. Inspection Scope

The inspectors assessed the cumulative effect of operator workarounds on plant operations. The inspectors also reviewed outstanding operator workarounds to determine the overall complexity and aggregate effects on operator performance. The inspectors also reviewed selected control room WO deficiency tags and operator workaround meeting minutes to determine if the licensee conducted periodic reviews and considered the total impact of outstanding WOs on risk and plant operations. The review of the cumulative effect of operator workarounds constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

The inspectors conducted a review of a modification which installed and activated the Units 1 and 2 main electrical generator voltage regulator power system stabilizers. The inspectors assessed whether the initial conditions for testing were in place, observed portions of the power system stabilizer testing and the main generator response, and

reviewed the licensee response to unexpected conditions during testing. The review of this permanent plant modification constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

.1 Failure to Establish Test Procedures for the Testing of Safety-Related Switches

a. Inspection Scope

The inspectors reviewed the post maintenance testing associated with the replacement of the Unit 2 CCW (2P-11) pump control switch. The inspectors reviewed the initial WO, the addendum to the WO, and the initial bench testing data for the control switch. The inspectors also assessed the adequacy of the bench testing and documentation used in conjunction with the WO for the performance of the post-maintenance test. The review of this post-maintenance test constituted one quarterly inspection procedure sample.

b. Findings

Introduction: A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to establish and perform testing required to demonstrate that components will perform satisfactorily in service with written test procedures which incorporate applicable requirements and acceptance limits. The licensee performed post-maintenance testing of a CCW pump control switch, a safety-related component, without the use of a written test procedure which incorporated the applicable requirements and acceptance limits for testing to demonstrate that the component would perform satisfactorily in service.

Description: The inspectors reviewed the return to service testing of CCW pump control switch. On October 22, 2004, maintenance personnel replaced the 2P-11A control switch because the existing switch had failed. Operators determined during a review of the testing, that the terminal continuity check performed by the maintenance personnel did not test all of the switch terminals. The WO was rewritten, additional terminals were tested and the new control switch was placed in service.

The inspectors reviewed the WO following installation of the switch and noted that the bench test was for the terminal connection continuity only. The inspector also noted that not all of the contacts inside the switch were tested. The inspectors interviewed maintenance personnel and reviewed the WO documentation and determined that the switch testing was not performed with a work document that included acceptance criteria for the test. The inspectors further determined that the process the licensee used to verify this component would perform satisfactorily in service did not establish test prerequisites and adequate test instrumentation. The licensee subsequently evaluated and determined through an operability determination that the safety-related switch was operable.

The licensee initiated a condition report and performed a condition evaluation along with an extent of condition evaluation. The licensee extent of condition evaluation revealed that similar issues potentially existed for 11 additional work orders which dealt with bench testing safety-related components without established applicable requirements and acceptance criteria. At the end of the inspection period, the licensee established the following corrective actions to address this issue: performed an extent of condition review for similar bench testing activities; held a briefing with maintenance work planners and craft to discuss this issue and the requirements of Appendix B; developed corrective actions to correct the identified issues associated with bench testing; and developed plans to conduct a training needs analysis on this issue.

Analysis. The inspectors determined that the failure to have appropriate test procedures which incorporate applicable requirements and acceptance limits, including prerequisites for safety-related switches which were bench tested was considered a licensee performance deficiency warranting a significance evaluation. This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating system cornerstone attribute of procedure quality, specifically maintenance and testing (pre-event) procedures, and the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences.

The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Enforcement. 10 CFR Part 50 Appendix B Criteria XI, "Test Program," requires, in part, that the licensee shall establish written test procedures which incorporate the applicable requirements and acceptance limits to demonstrate that components will perform satisfactorily in service. Test procedures shall also include prerequisites and ensure adequate test instrumentation is utilized. Contrary to the above, the licensee had not established written test procedures which incorporated the applicable requirements and acceptance limits for the bench testing of safety-related switches which demonstrated that the components would perform satisfactorily in service. Therefore, the inspectors determined this finding was a violation of 10 CFR Part 50, Appendix B, Criterion XI. Because this violation was of very low safety significance (Green) and was documented in the licensee's corrective action program as Condition Report CAP060231, this finding is being treated as a Non-Cited Violation, consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000266/2004012-03; NCV 05000301/2004012-03)

At the end of the inspection period the licensee developed corrective actions to correct the identified deficiencies and to ensure licensee personnel were aware of the requirements to utilize test procedures for the testing of safety-related components.

.2 Selected Post-Maintenance Test Reviews

a. Inspection Scope

During completion of the post-maintenance test inspection procedure samples, the inspectors observed in-plant activities, and reviewed procedures and associated records to determine if:

- Testing activities satisfied the test procedure acceptance criteria;
- Effects of the testing were adequately addressed prior to the commencement of the testing;
- Measuring and test equipment calibration was current;
- Test equipment was within the required range and accuracy;
- Applicable prerequisites described in the test procedures were satisfied;
- Affected systems or components were removed from service in accordance with approved procedures;
- Testing activities were performed in accordance with the test procedures and other applicable procedures;
- Jumpers and lifted leads were controlled and restored where used;
- Test data and results were accurate, complete, and valid;
- Test equipment was removed after testing;
- Equipment was returned to a position or status required to support the operability of the system in accordance with approved procedures; and
- All problems identified during the testing were appropriately entered into the corrective action program.

During this inspection period, the inspectors completed the following inspection procedure samples, which constituted five quarterly inspection procedure samples:

- Unit 1 Turbine-Driven AFW Pump following replacement of a terry turbine governor valve stem set screw on October 20, 2004;
- Unit 1 'B' CCW Pump on November 13, 2004;
- Unit 2 'A' Residual Heat Removal Pump on October 8, 2004;
- Emergency Diesel Generator G-03 on December 14, 2004; and
- Unit 2 'A' Accumulator Level Transmitter 2LT-0939 on December 23, 2004.

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities (71111.20)

.1 Unit 2 Forced Outage Due to Steam Leak Inside Primary Containment

a. Inspection Scope

The inspectors observed the licensee's performance during a 5-day, Unit 2, forced outage conducted between November 19 and November 24, 2004. The forced outage activities constituted one forced outage inspection procedure sample.

This inspection consisted of a review of the licensee's outage schedule, shutdown safety assessment, administrative procedures governing the outage, periodic observations of equipment alignment, and plant and control room outage activities. Specifically, the inspectors determined whether the licensee effectively managed elements of shutdown risk pertaining to reactivity control, decay heat removal, inventory control, electrical power control, and containment integrity. The inspectors also determined whether main steam system repairs were conducted in accordance with the applicable American Society of Mechanical Engineers Code requirements.

The inspectors conducted in-plant observations of the following forced outage activities:

- Attended outage management turnover meetings to assess if the current shutdown risk status was accurate, well understood, and adequately communicated;
- Performed walkdowns of the main control room to observe the alignment of systems important to shutdown risk;
- Observed the operability of reactor coolant system instrumentation and compared channels and trains against one another; and
- Performed in-plant walkdowns to observe ongoing work activities.

Additionally, the inspectors performed in-plant observations of the following specific activities:

- Observed the control room staff perform the Unit 2 shutdown and initial cooldown;
- Evaluated reactor coolant system cooldown rates for compliance with TS limits;
- Performed a Unit 2 containment inspection to assess any evidence of reactor coolant system leakage and boric acid residue. As part of this inspection, the inspectors also determined if all discrepancies noted during the walkdown were recorded and corrected;
- Observed and inspected the steam leak on the upstream side of main steam system flow transmitter 2FT-465 Isolation Valve 2MS-465D to determine if the leak location represented a compromise to the main steam system, as a closed loop inside containment for the containment isolation purposes;
- Observed the approach to criticality and synchronization to the grid;
- Observed portions of Unit 2 power ascension;
- Reviewed containment inspection checklists to determine if the licensee had identified and verified primary and process system leakage; and
- Reviewed mode change checklists to determine if selected requirements were met while transitioning from the Mode 5 to full power operations.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

During completion of the inspection procedure samples, the inspectors observed in-plant activities and reviewed procedures and associated records to determine if:

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

During this inspection period, the inspectors completed the following inspection procedure samples, which constituted eight quarterly inspection procedure samples:

- Unit 1 Safeguards Logic Testing, Train A, on October 7, 2004;
- Unit 1 Reactor Protection Logic Testing, Train A, on October 7, 2004;
- Unit 2, 4160-Volt and 480-Volt Degraded and Loss of Voltage Monthly Testing, Train B, on October 19, 2004;

- Unit 1 AFW pump test on November 12, 2004;
- Unit 2 safeguards systems valve and lock checklist on November 17, 2004;
- Units 1 and 2 TS Channel Check Surveillance Requirements 3.3.1.1 and 3.3.2.1 on November 20, 2004;
- Unit 1 Primary Leak Rate Calculation on December 14, 2004; and
- Unit 2 Primary Leak Rate Calculation on December 14, 2004.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

.1 Temporary Modifications

a. Inspection Scope

The inspectors conducted in-plant observations of physical changes to the plant and equipment, and performed in-office reviews of documentation to assess the leak repair clamp for the heater drain pump 2FD-151 discharge pipe. The inspectors reviewed design basis documents and safety evaluation screenings to determine if the modifications were consistent with applicable documents, drawings, and procedures. The inspectors also reviewed the post-installation results to confirm that any impacts of the temporary modifications on permanent and interfacing systems were adequately verified. The review of the temporary modifications constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

.1 Emergency Plan Procedure Training Drills

a. Inspection Scope

The inspectors reviewed the October 19, 2004, practice exercise which involved the licensee, county, and state organizations. The inspectors reviewed classifications, notifications, facility activations, and facility critiques. The review included the Control Room Simulator, Technical Support Center, and Emergency Operations Facility documentation. This review of the practice exercise constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 Plant Walkdowns and Radiation Work Permit Reviews

a. Inspection Scope

The inspectors reviewed the licensee's physical and programmatic controls for highly activated and contaminated materials (non-fuel) stored within the spent fuel pool, to determine if controls for such items were appropriate to prevent the inadvertent creation of high and very high radiation areas. The review constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

.2 Problem Identification and Resolution

a. Inspection Scope

The inspectors reviewed the licensee's self-assessments, audits, Licensee Event Reports, and Special Reports (as available) related to the access control program to determine if identified problems were entered into the corrective action program for resolution.

The inspectors reviewed the licensee's process for problem identification, characterization, prioritization, to determine that problems relative to the access control program were entered into the corrective action program and resolved. For repetitive deficiencies and significant individual deficiencies in problem identification and resolution, the inspectors assessed whether the licensee's self-assessment activities were capable of identifying and addressing these deficiencies. These reviews constituted two inspection procedure samples.

b. Findings

No findings of significance were identified.

.3 High Risk Significant, High Dose Rate-High Radiation Area and Very High Radiation Area Controls

a. Inspection Scope

The inspectors held discussions with the Radiation Protection Manager concerning high dose rate-high radiation area and very high radiation area controls and procedures, including procedural changes that had occurred since the last inspection, in order to determine if any procedure modifications substantially reduced the effectiveness and level of worker protection.

The inspectors reviewed, with radiation protection supervisors, the controls that were in place for special areas that had the potential to become very high radiation areas during certain plant operations. The inspectors determined if for certain plant operations, communications occurred beforehand with the radiation protection group to ensure that timely actions were taken to properly post and control the radiation hazards.

The inspectors conducted plant walkdowns to determine if the entrances to reasonably accessible high dose-rate high radiation areas and very high radiation areas were posted and locked. These reviews constituted three inspection procedure samples.

b. Findings

No findings of significance were identified.

2OS2 As Low As Is Reasonably Achievable (ALARA) Planning And Controls (71121.02)

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed plant collective exposure history, current exposure trends, ongoing and planned activities to assess current performance and exposure challenges. This included determining the plant's current 3-year rolling average for collective exposure, in order to help establish resource allocations and to provide a perspective of significance for any resulting inspection finding assessment. Utilizing 2001 through 2003 exposure data, the licensee's 3-year rolling average for collective exposure was determined to be 66 person-rem per unit. These reviews constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

.2 Radiological Work Planning.

a. Inspection Scope

The inspectors compared the results achieved, including dose rate reductions and person-rem used with the intended dose established in the licensee's ALARA planning for three work activities conducted during the Spring 2004 Unit 1 refueling outage. These work activities included: Reactor Vessel Head Repairs; Reactor Vessel Bottom Mounted Instrumentation Inspection and Insulation Installation; and SG Sludge Lancing and Foreign Object Search and Retrieval Activities. The inspectors assessed the reasons for inconsistencies between intended and actual work activity doses for each of the activities. These reviews constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

.3 Source-Term Reduction and Control

a. Inspection Scope

The inspectors reviewed licensee records to determine the historical trends and current status of tracked plant source terms. The inspectors also determined whether the licensee made allowances and developed contingency plans for expected changes in the source term due to changes in plant fuel performance or primary system chemistry. These reviews constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

.4 Declared Pregnant Workers

a. Inspection Scope

The inspectors reviewed licensee procedures and policies, and dose records of declared pregnant workers for the current assessment period to determine if the exposure results and monitoring controls employed by the licensee complied with the requirements of 10 CFR 20.1208. This review constituted one inspection procedure sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

Cornerstones: Reactor Safety and Mitigating Systems

.1 Reactor Safety Strategic Area

a. Inspection Scope

The inspectors reviewed the licensee's recent Performance Indicator (PI) submittal. The inspectors used PI definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2, to assess the accuracy of the PI data. The inspectors reviewed selected applicable conditions and data from logs, Licensee Event Reports, and corrective action program documents from July 2002 through July 2004. The inspectors independently re-performed calculations where applicable. The inspectors then validated the information required for each PI definition in the guideline, to determine if the licensee reported the data accurately. The following reviewed PIs constituted eight inspection procedure samples:

Unit 1

- Unplanned Power Changes;
- Reactor Coolant System Activity;
- Safety System Functional Failures; and
- Reactor Coolant System Leakage.

Unit 2

- Unplanned Power Changes;
- Reactor Coolant System Activity;
- Safety System Functional Failures; and
- Reactor Coolant System Leakage.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Resident Inspector Review of Identification and Resolution of Problems

a. Inspection Scope

As discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to determine if issues were entered into the licensee's corrective action system at an appropriate threshold, that

adequate attention was given to timely corrective actions, and that adverse trends were identified and addressed. The inspectors also reviewed all CAPs written by licensee personnel during the inspection quarter. Minor issues entered into the licensee's corrective action system as a result of inspectors' observations are included in the list of documents in the Attachment to this report.

b. Findings

No findings of significance were identified.

.2 Resident Inspector Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a semi-annual review of licensee trending activities to determine if emerging adverse trends which might indicate the existence of a more significant safety issue were adequately identified. The inspectors also determined whether the trends were entered into the licensee's corrective action system at an appropriate threshold, and timely corrective actions were planned or implemented by the licensee. The effectiveness of licensee trending activities was assessed by comparing trends identified by the licensee with those trends identified by the NRC during the daily reviews of CAPs, as discussed in Section 4OA2.1 of this report.

The inspector's review considered the 6-month period of July 2004 through December 2004, although some examples expanded beyond those dates when the scope of the trend warranted. The inspector's review was focused on operations and engineering human performance errors, but also considered the results of daily inspector corrective action program item screening, licensee trending efforts, and licensee human performance results. This inspection effort constituted one semi-annual trending inspection procedure sample.

b. Assessment and Observations

There were no findings of significance identified.

The inspectors assessed the licensee trending methodology and compared the licensee's process outcomes with the results of the inspectors' daily screening. The inspectors did not identify any discrepancies or potential trends in the licensee's corrective action program data that the licensee failed to identify.

The notable trends for the Operations area included:

- Improvement in the evolution planning, review, and preparation of documentation associated with human performance clock resets;
- Improvement in place keeping during the performance of procedures; and
- A declining trend in the area of training exam failures.

Trends identified in the Engineering area included:

- Improvement in the number of mechanical and electrical backlog issues;
- Continuing inadequate documentation of activities;
- Continuing configuration control process issues specifically in design drawings; and
- Improvement in the number of corrective action program actions being rejected.

The inspectors determined that these trends were captured in the corrective action system. Finally, the inspectors noted that although the licensee continued efforts to improve scheduling, planning and scheduling milestones had been missed for the next Unit 2 refueling outage.

.3 Problem Identification and Resolution Annual Inspection Procedure Sample

Spray Line Isolation Valve (RC 431A) Bellows Failure and Boric Acid Control Program

Introduction

During the forced outage on Unit 2 the inspectors noted a November 21, 2004, CAP060731 was written to document a potential bellows failure for the spray line isolation valve (RC-431A). Corrective maintenance for this issue was evaluated and the licensee determined this item would not be worked during the forced outage. The inspectors reviewed the CAP for an annual sample review of the licensee's problem identification and resolution program. The annual review constituted one inspection procedure sample.

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed CAP060731 and previous containment inspection documentation, which evaluated the condition of the valve to determine if the licensee's identification of problems were complete, accurate, timely. The inspectors also assessed whether the licensee considered an extent of condition review, potential generic implications, common causes, and previous occurrences to ensure this issue was adequately addressed.

(2) Issues

The inspectors noted that the licensee missed several opportunities to identify this issue. During review of containment walkdowns conducted under the containment quarterly at-power inspection checklist, PC-24, the inspectors determined that operators had identified that the gauge used to determine if the bellows was intact on valve RC-431A could not be read due to boric acid residue on the gauge. This condition adverse to quality was documented as a note in the completed PC- 24 checklists for the March 10, 2004, June 10, 2004, and August 27, 2004, containment walkdowns. No CAP or work request was written until the issue was again identified during the Unit 2 forced outage.

Consequently, no required boric acid evaluation was completed for RC-431A until the forced shutdown in November 2004. In addition, the inspectors noted that management reviews of the completed Unit 2 PC-24 checklists were not performed for Unit 2 dating back to December 2003. The inspectors noted the two deficiencies for this issue were the lack of processing of a WO or CAP for a material condition deficiency, and the lack of timely review by management of containment quarterly tours. The licensee subsequently determined that the failure of the bellows did not affect operability of the valve. The inspectors determined that, for this instance, the failure to identify this particular issue in the corrective action program was minor.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed CAP060731 and Apparent Cause Evaluation ACE001831. The inspectors considered the licensee's evaluation and disposition of performance issues, evaluation and disposition of operability issues, and risk insights for prioritization of issues.

(2) Findings

No findings of significance were identified.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed Condition Report CAP060731, Apparent Cause Evaluation ACE001831, and the associated planned corrective actions. The inspectors considered the adequacy of the licensee's timeliness and schedule completion time, as well as, the planned program enhancements for the Boric Acid program.

(2) Findings

No findings of significance were identified.

4OA4 Cross-Cutting Aspects of Findings

- .1 A finding described in Section 1R15.1 of this report had, as the primary cause, a problem identification and resolution deficiency, in that, the licensee failed to take corrective actions for a condition adverse to quality.

4OA6 Meetings

.1 Exit Meeting

On January 5, 2005, the resident inspectors presented the inspection results to Mr. D. Koehl and members of his staff, who acknowledged the findings. The licensee

did not identify any information, provided to or reviewed by the inspectors, as proprietary in nature.

.2 Interim Exit Meetings

Interim exits were conducted for:

- Radiation Protection (Access Control and ALARA) inspection with Mr. D. Koehl on October 22, 2004; and
- Annual NRC Licensed Operator Requalification examination with Mr. P. Smith, Licensed Operator Requalification Training Group Lead, on January 3, 2005, via telephone.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D. Koehl, Site Vice President
J. McCarthy, Director of Site Operations
J. Shaw, Plant Manager
A. Capristo, Acting Regulatory Affairs Manager
N. Stuart, Acting Maintenance Manager
G. Casadonte, Fire Protection Coordinator
G. Corell, Chemistry Manager
J. Schweitzer, Site Engineering Director
R. Milner, Business Planning Manager
G. Packard, Nuclear Oversight Manager
G. Sherwood, Engineering Programs Manager
B. Cole, Internal Assessment Supervisor
C. Jilek, Maintenance Rule Coordinator
T. Kendall, Engineering Senior Technical Advisor
B. Kopetsky, Security Coordinator
F. Flentje, Senior Regulatory Compliance Engineer
R. Ladd, Fire Protection Engineer
B. Dungan, Operations Manager
M. Ray, Emergency Planning Manager
L. Peterson, Design Engineer Manager
C. Sizemore, Training Manager
R. Davenport, Production Planning Manager
C. Hill, Assistant Operations Manager
P. Smith, Licensed Operator Requalification Training Group Lead
J. Strharsky, Planning and Scheduling Manager
W. Smith, Site Assessment Manager
D. Schuelke, Acting Radiation Protection Manager

Nuclear Regulatory Commission

H. Chernoff, Point Beach Project Manager, NRR
P. Loudon, Chief, Reactor Projects, Branch 5

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000266/2004012-01 05000301/2004012-01	NCV	10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Failure to Take Corrective Actions for a Condition Adverse to Quality. (Section 1R15.1)
05000266/2004012-02 05000301/2004012-02	NCV	Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59, "Changes, Tests and Experiments." (Section 1R15.2)
05000266/2004012-03 05000301/2004012-03	NCV	10 CFR 50, Appendix B, Criterion XI, "Test Control." Failure to Have Adequate Test Procedures for the Testing of Safety-Related Switches. (Section 1R19.1)

Closed

05000266/2004012-01 05000301/2004012-01	NCV	10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Failure to Take Corrective Actions for a Condition Adverse to Quality. (Section 1R15.1)
05000266/2004012-02 05000301/2004012-02	NCV	Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59, "Changes, Tests and Experiments." (Section 1R15.2)
05000266/2004012-03 05000301/2004012-03	NCV	10 CFR 50, Appendix B, Criterion XI, "Test Control." Failure to Have Adequate Test Procedures for the Testing of Safety-Related Switches. (Section 1R19.1)

Discussed

None.

LIST OF DOCUMENTS REVIEWED

1R01 Adverse Weather

Point Beach Letter NPC-27752; Response to IE Bulletin 79-24, Point Beach Nuclear Plant, Units 1 and 2; dated October 29, 1979

1R04 Equipment Alignment

1-CL-CC-001; Component Cooling Unit 1 Operations Checklist; Revision 10
2-CL-CC-001; Component Cooling Unit 2 Operations Checklist; Revision 10
CAP060447; 2CC-693 and 2CC-697 Were Found Locked Shut. 2-CL-CC-001 Requires Them Shut; dated November 11, 2004 [NRC-Identified]
CAP060463; SW Valve Found Out of Position; dated November 10, 2004 [NRC- Identified]
Check List 10B; SW Safeguards Lineup; Revision 55
Check List 10J; Safeguards SW System Checklist Unit 1; Revision 23
Check List 10J; Safeguards SW System Checklist Unit 2; Revision 22
Training Handbook (TRHB) 10.16; Primary Systems Descriptions: Engineered Safeguards Systems; Revision 5
TRHB 11.8; Secondary Systems Descriptions: SW System; Revision 10
Bechtel Drawing 6118 —207 Sheet 3; P&ID SW Unit 1; Revision 59
CAP060370; SOMS Log Entry Report May Not Provide Accurate Data; dated November 15, 2004 [NRC-Identified]
Boric Acid Indications (active monitoring) dated October 24, 2004
PC 24 Containment Inspection Checklist completed forms for March 10, 2004, June 10, 2004, August 27, 2004, November 19, 2004
Nuclear Procedure (NP) NP 7.4.14; Boric Acid Leakage and Corrosion Monitoring; Revision 1, dated July 21, 2004
CAP061099; Boric Acid Indication Recording in PC-24, Containment Inspection Checklist

1R05 Fire Protection

Fire Hazard Analysis Report Fire Area FZ 237; FZ 238; FZ 245
CAP06113; Wooden equip Storage Crates Located in FZ 238
CAP060204; Wood Boxes located in Spent Fuel operating/laydown area
Fire Hazards Analysis Report, Revision 1
Point Beach Nuclear Plant - Fire Area Analysis Summary Report, January 2003

1R06 Flood Protection Measures

NP 8.4.17; Point Beach Nuclear Plant Flooding Barrier Control; Revision 2
Design Basis Document (DBD) DBD 11; Safety Injection and Containment Spray System; Revision 4

DBD T-41 Module A; Hazards - Internal and External Flooding (Module A); Revision 2
SPEED 97-045; Replacement of Micro Switch Assembly Requires Substitution of
Actuator Lever; dated June 20, 1997
Point Beach Nuclear Plant FSAR Section 2.9; Seismology; dated June 1998
Routine Maintenance Procedure (RMP) 9314; Routine Maintenance
Procedure 1(2)SI-850A/B Maintenance, Static Test, and Adjustment; Revision 4
EQCK-HONEYW-001; Checklist for Environmental Qualification Assessment of
Honeywell Micro Switch 1LS10 and 11LS1 Valve Position Indicating Limit Switch;
Revision 0
Point Beach Nuclear Plant FSAR Appendix A.5; Seismic Design Analysis; dated
August 2004
Bechtel Drawing 6118 —223 Sheet 3; Drainage and Sanitary Waste Systems, Point
Beach Nuclear Plant Unit 1; Revision E
Bechtel Drawing 6118 C2108; Base Slab Outline and Plan Point Beach Nuclear Plant
Unit 2; Revision 1
Bechtel Drawing 6118 C2109; Base Slab Reinforcing Plan and Section Point Beach
Nuclear Plant Unit 2; Revision 2
Bechtel Drawing 6118 C109; Base Slab Reinforcing Plan and Section Point Beach
Nuclear Plant Unit 1; Revision 4
Bechtel Drawing 6118 C22; Architectural Floor Plan Elevation 8'0"; Revision 0
Bechtel Drawing 6118 —168; Containment Building Floor and Equipment Drainage Area
No. 7 - Plan at Elevation 6'-6"; Revision 4
Bechtel Drawing 6118 C100; Plant Foundation Plan and Sub-Drainage System;
Revision 16
Bechtel Drawing 6118 C108; Base Slab Outline Plan and Sections Point Beach Nuclear
Plant Unit 1; Revision 5
Stearns and Rogers Drawing 54-6-J-81056-B Sheet 1; Upper and Lower Bodies and
Test Cap; Revision 1
Stearns and Rogers Drawing 54-6-J-81056-B Sheet 2; Containment Isolation Valve
General Assembly and Parts List; Revision 3
Point Beach Letter NEPB-87-250; Evaluation of SOER 85-5, Internal Flooding of Power
Plant Buildings; dated April 16, 1987
Supplement to Point Beach Record NEPB-85-213; Correct Statement Made in Page 4,
Reactor Containment Facade Area; October 26, 2004
Point Beach Calculation CMED-60312; Environmental Qualification of Honeywell
Position Switches Model 1LS10, 11LS10 and 11LS1; Revision 1
CAP054025; Water Found in Second Off Junction Box of 1SI-850A; dated February 19,
2004
ACE001620; Water Found in Second Off Junction Box of 1SI-850A; dated February 24,
2004
WO 0407312; 1POS-850A Megger Cable/Drill Holes; dated September 21, 2004
WO 0407313; 1POS-850B Drill Weep Holes in Junction Box; dated September 21, 2004
WO 0407314; 2POS-850A Drill Weep Holes in Junction Box; dated May 10, 2004
WO 0407315; 2POS-850B Drill Weep Holes in Junction Box; dated May 10, 2004

1R07 Heat Sink Performance

Point Beach Form 7061; Bio/Silt Fouling Inspection Form, Heat Exchanger Condition
Assessment Program, Unit 1, HX-012A; dated November 15, 2004

Point Beach Form 7060; Visual inspection of Heat Exchanger Condition, Unit 1, HX-012A; dated November 18, 2004
1HX-12A CCW Heat Exchanger Eddy Current Inspection Results; Comparison of September 2001 and November 2004 Testing Results; dated November 18, 2004
Point Beach Nuclear Plant Program Document GL 89-13; Generic Letter 89-13 Program; Revision 4

1R11 Licensed Operator Qualifications

LOR Operational Requal Exam, SES 122R; Licensed Operator Requalification Training Simulator Exam Scenario 122R; dated October 20, 2004, Revision 0
Training Instruction 8.0; Conduct of Simulator Training and Simulator Evaluation, Attachment 2, Crew Simulator Evaluation Summary; dated August 31, 2004
NP 2.1.1; Conduct of Operations; Revision 1

1R12 Maintenance Effectiveness

Documentation of Maintenance Rule Performance Criteria for Vital Instrument Bus 120 VAC; dated November 22, 2004
Maintenance Rule System Action Plant Check List and Approval for Vital 120 VAC (Y); dated October 15, 2004
Documentation of Maintenance Rule Performance Criteria for the 120 VAC System; dated August 2, 2000
CE014708; G-05 Fuel Oil Pump Suction Pressure Switch Failed; dated October 1, 2004
CAP059608; P-503 (Fuel Oil Pump) Mis-wiring Preventing It to Run in Hand; dated September 30, 2004
Documentation of Maintenance Rule Performance Criteria for the Fuel Oil System; dated December 13, 2001
Documentation of Maintenance Rule Performance Criteria for the Fuel Oil System; dated August 25, 2004
CAP032330; Develop a(1) Action Plan - CS System Declared a(1) for Maintenance Rule; dated July 28, 2003
Function List For CS Condensate and Feedwater; dated November 29, 2004
PBF-7029; Documentation of Maintenance Rule Performance Criteria, Condensate and Feedwater System; dated January 14, 2002
PBF-7030; Review of Maintenance Rule Performance, Condensate and Feedwater System; dated June 23, 2004
PBF-7031; Maintenance Rule (a)(1) System Action Plan Checklist and Approval, Condensate and Feedwater System; dated February 18, 2004
System Health report; Condensate and Feedwater System; Revision 1, dated July 30, 2003
System Health report; Condensate and Feedwater System; Revision 6, dated October 27, 2004
CAP033892; CS System Declared a(1) for Maintenance Rule; dated July 2, 2003
Performance Criteria Assessments for CS Since October 1, 2002; dated November 29, 2004

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

E+1 Report; Work Week Schedule for Week of October 3, 2004
E+1 Report; Work Week Schedule for Week of October 10, 2004
E+1 Report; Work Week Schedule for Week of October 17, 2004
E+1 Report; Work Week Schedule for Week of October 24, 2004
E+1 Report; Work Week Schedule for Week of November 1, 2004
E+1 Report; Work Week Schedule for Week of November 7, 2004
E+ 2 Report; Work Week Schedule for Week of December 5, 2004
NP 10.3.6; Outage Safety Review and Safety Assessment; Revision 11
NP 10.3.7; On-Line Safety Assessment; Revision 8

1R15 Operability Evaluations

PBNP DBD-07; Main Steam and Steam Dump; Revision 4
Copes-Vulcan Control Valve Specification Sheet; C-V Valve Sizing Program -
Revision 6.2; Revision 1A
CVULC 0003-1; Valves and Actuators Specifications Book 1; Revision 62
Copes-Vulcan Dwg. No. D-350250; Series D Valve Assembly With Model 1000-160 RA
Actuator 6" Class 600; Revision 2
CAP059981; Split on Unit 2 SI Accumulator Level Indicators; dated October 19, 2004
Point Beach Calculation PBNP IC-27; Safety Injection Accumulator Level Instrument
Uncertainty/Setpoint Calculation; dated June 2, 1997
Point Beach Calculation PBNP IC-27-01-A; Safety Injection Accumulator Level
Instrument Uncertainty/Setpoint Calculation; dated March 15, 2004
NUREG-1366; Improvements to TSs Surveillance Requirements, Section 7.4; dated
May 1992
NRC inspection Report; IR 97019, 98301,99015
Westinghouse WCAP 10750-A (non-proprietary)
PBNP FCR 99-042 dated 4/13/99
PBNP SE 99-043 dated 4/22/99
NEI 96-07, Revision 1, Nuclear Energy Institute "Guidelines for 10CFR50.59
Implementation"
OPR000050 (CAP031711); Simulator SGTR Scenario Timing Exceeded Times
Assumed in FSAR
OPR000077 (CAP 049808); Deficiencies in FSAR Assumptions in Post Accident
Cooldown via SG ADV
PBNP 2003-0313; 10 CFR 50.59/72.48 Screening New Rule; dated November 2003
FCR 03-040; PBNP Final Safety Analysis Report Change Request
PBNP FSAR Chapter 14.2.4 Steam Generator Tube Rupture; as updated August 2004
NRC Standard Review Plan 0800 15.6.3; Radiological Consequences of Steam
Generator Tube Rupture Failure.
NRC Information Notice 97-78; Crediting of Operator Times in Place of Automatic
Actions and Modifications of Operator Actions, Including Response Times
CAP060370; SOMS Log Entry Report may Not Provide Accurate Data; dated
November 5, 2004 (NRC-identified)
RMP 9387; AC [Alternating Current] Induction Motor MCE [Motor Circuit Evaluation]
Testing procedure; Revision 2

10 CFR 50.59 Pre-Screening Review; AC Induction Motor MCE Testing Procedure; dated October 25, 2004
IEEE 43-2000; Recommended Practice for Testing Insulation Resistance of rotating machinery; dated March 6, 2000
PdMA Corporation Calibration Data Sheet; Serial Number 00819; dated October 19, 2004
CAP059401; 2W-001B1-M Motor MCE Results Suspect; dated September 22, 2004
WO0308924; Residual Heat Removal Pump Motor; dated September 2, 2004
Plant Health Committee "Subcommittee" Meeting Minutes; August 17, 2004
DBD-01; Auxiliary Feedwater System Design Basis Document; Revision 10; dated November 3, 2004
Check list (CL) 19; Fire Protection System Valves; Revision 33; dated October 21, 2004
AOP-2C Unit 1; Abnormal Operating Procedure; Revision 1
Alarm Response Procedure ARP 1C04 1C 4-8; Revision 0
CAP058817; FSAR Documentation on AFW May Be Inaccurate
CAP061109; Procedural Guidance Needed to Comply with TMI Commitment
CAP050483; FP Supply to 1/2P-29 (TDAFP) Bearing Coolers During SBO
Standard Review Plan: 10.4.9 Auxiliary Feedwater System (PWR)
Correspondence from NRC to Wisconsin Electric Power Company; NUREG-0737, Item II.E.1.1, Auxiliary Feedwater System Evaluation for Point Beach Nuclear Plant Units 1 and 2

1R16 Operator Workarounds

Operator Work Around Meeting Minutes; January through August 2004
Operations Department List of Operator Workarounds; dated October 21, 2004

1R17 Permanent Plant Modifications

PBTP 129; Unit 1 Voltage Regulator Power System Stabilizer Checkout and Testing; Revision 1
PBTP 130; Unit 2 Voltage Regulator Power System Stabilizer Checkout and Testing; Revision 1
Operational Decision-Making Issue Evaluation Document; Unit 2 Power System Stabilizer, Unexpected Conditions Required the Procedure to be Aborted and the Work to Stop; dated December 1, 2004

1R19 Post-Maintenance Testing

CAP059779; Potential Unscrewing of Terry Turbine (1P-29) Governor Valve Stem; dated October 8, 2004
WO 0415781; 1P-29 AFW Turbine-Driven Pump Governor; dated October 20, 2004
WEST 499B466 Sh. 336; Elementary Wiring Diagram CCW Pump 2P-011A; Unit 2 Revision 16
CAP060231; Bench Test Method for Replacement Safety-Related "W2" Switched NOT IAW 10CFR50; dated October 29, 2004
CE014877; Bench Test Method for Replacement Safety-Related "W2" Switched NOT IAW 10CFR50; dated November 2, 2004

A343Alaa; Drawing number 787A861G01, Type W2 Switch Sheet 1 of 1; Revision B
WO0310343; 2P-11A CCW Pump Control Switch; Unit 2 dated October 22, 2004
CAP060077; Inadequate Post Maintenance Test Identified for WO0310343 2P-11A
CCW pump C/S Replacement; dated October 22, 2004; (NRC Identified)
WO0414830; P-011B CCW Pump Bearing Replacement; Unit 1 dated November 9,
2004
RMP 9006-2; CCW Pump Mechanical Seal Overhaul; Revision 12, dated November 9,
2004
WO0310789; P-11B CCW Pump Bearing Flush; Unit 1 dated November 9, 2004
WO0310788; P-11B CCW Pump Bearing Lubrication; Unit 1, dated November 9, 2004
0-SOP-G03-001; Maintenance Operation for EDG G03; Revision 4, dated December 6,
2004
RMP- 3437; Post Maintenance Procedure on EDG G03
WO04168677; T-34A SI Accumulator Level Transmitter; Unit 2, dated December 22,
2004
2LT-939 Complex Troubleshooting; dated December 21, 2004
2LT-938 and 2LT-939 Channel Indication Comparison
CAP059981; Split on Unit 2 SI Accumulator Level Indicators; dated October 19, 2004
RMP 9201; Control And Documentation For Troubleshooting And Repair Activities;
Revision 2, dated December 20, 2004
Operational Decision-Making Issue Evaluation; Level Indicator 2LT-0939 Failed Low; for
CAP061156, dated December 12, 2004
CAP061156; 2LT-939 'A' SI Accumulator Indicator Failed Low, dated December 20,
2004

1R20 Outage

CL-2F; Mode 2 to Mode 1 Checklist; Revision 6, dated November 21, 2004
CL-2E; Mode 3 to Mode 2 Checklist; Revision 7, dated November 21, 2004
CL-2C; Mode 5 to Mode 4 Checklist; Revision 6, dated November 21, 2004
CL-2D; Mode 4 to Mode 3 checklist; Revision 5, dated November 21, 2004
WO0416556; HX-1A SG [Steam Generator] FT-465 Steam Flow Low Side Root; dated
November 20, 2004
Unit 2 Forced Outage Shutdown Safety Assessment; Key Safety Functions; dated
November 21, 2004
CL-4D Appendix A; In-Loop Inspection (Forced Outage) Checklist Unit 2; Revision 8
Bechtel Drawing 6118 M02201 Sheet 1; P&ID Main and Reheat Steam System;
Revision E

1R22 Surveillance Testing

1 Instrument and Control Procedure 02.003A; Reactor Protection System Logic Train A
31 Day Surveillance Test; Revision 7
1ICP 02.005A; Engineered Safety Features System Logic Train A 31 Day Staggered
Actuation Logic Test; Revision 5
PBNP FSAR Section 7.2 ; Reactor Protection System; dated June 2000
PBNP FSAR Section 7.3; Engineered Safety Features Actuation System; dated
June 2000

2RMP 9071-2; A-06 4160/480 Degraded and Loss of Voltage Monthly Surveillance;
Revision 13
2RMP 9071-1; A-05 4160/480 Degraded and Loss of Voltage Monthly Surveillance;
Revision 14
CAP059978; Bus Undervoltage Relay Scheme Contact Indicates High Resistance;
dated October 19, 2004
WO 0415990; 2A-06 Bus Degraded Voltage Auxiliary Relay; October 21, 2004
NP 10.2.4; Work Order Processing; Revision 16
Westinghouse Drawing 499B466, Sheet 225A; Schematic Diagram Undervoltage and
Differential Lock Out Relay Schemes 4160 Switchgear Bus 1-A06 (2-A06); Revision D
Westinghouse Drawing 499B466, Sheet 225; Schematic Diagram 4160 Switchgear Bus
1A-06 (2-A06) Undervoltage and Differential Lock Out Relay Schemes Sheet 1 of 2;
Revision D
CAP060519; Motor Driven Auxiliary Feed Pump Testing Requires Excessive Time at
Reduced Power; dated November 12, 2004
IT 10C; AF-4009, P-38A Motor Driven AFW Pump Suction From SW Motor-Operated
Valve Exercise Test; Revision 2, dated November 12, 2004
IT 10D; AF-4016P-38B Motor Driven AFW Pump Suction From SW Motor-Operated
Valve Exercise Test; Revision 2, dated November 12, 2004
O-PT-AF-2; P-38B AFW Pump Backup Nitrogen System Pressure Decay Test;
Revision 1, dated November 12, 2004
O-PT-AF-1; P-38A AFW Pump Backup Nitrogen System Pressure Decay Test;
Revision 1, dated November 12, 2004
IT-09B; Turbine-Driven AFW Pump Suction From SW Motor-Operated Valve Exercise
Test; Revision 5, dated November 13, 2004
IT-09A; Cold Start of Turbine-Driven AFW Pump and Valve Test (Q) Unit 2; Revision 36,
dated November 14, 2004
2-TS-ECCS-001; Unit 2 Safeguards Systems Valve and Lock Checklist (Monthly) Unit 2,
Revision 4, dated November 17, 2004
Point Beach Form 2034; Unit 1 Control Operator Logs, Sequences 238 and 242;
Revision 61
Point Beach Form 2035; Unit 2 Control Operator Logs, Sequences 238 and 242;
Revision 61
Design and Installation Guidelines Manual (DG-I) 01; Instrument Setpoint Methodology;
Revision 3
Point Beach Letter Nuclear Plant Memorandum (NPM) 2001-0303; Channel Check
Tolerances; dated April 11, 2001
Point Beach Calculation PBNP IC-40; Steam Flow/Feedwater Flow Mismatch Instrument
Loop Uncertainty/Setpoint Calculation; dated September 28, 1998
CAP060851; Channel Check Tolerance Values Need Review and Clarification,
Correction; dated December 2, 2004
Operating Instruction (OI) 55; Primary Leak Rate Calculation, Unit 1; dated
December 14, 2004
OI 55; Primary Leak Rate Calculation, Unit 2; dated December 14, 2004

1R23 Temporary Plant Modifications

Temporary Modification 2004-012; Leak Repair Clamp for Heater Drain Discharge (2FD-151)

1EP6 Drill Evaluation

NPM 2004-0771; Point Beach Nuclear Plant Pre-Exercise Report; dated November 1, 2004

2OS1 Access Control to Radiologically Significant Areas

CAP053255; Individual Dose Goals Not Established For Jobs; dated January 27, 2004
CAP053297; ALARA and Undervessel Insulation Work; dated January 28, 2004
CAP053318; Dose Assessments Not Completed In a Timely Manner; dated January 29, 2004
CAP055054; Violation of Locked and Very High Radiation Area Key Control Procedure; dated March 23, 2004
CAP059988; Portable Radiation Survey Instrument Calibration Due Date Incorrect; dated October 20, 2004 [NRC-Identified Issue]
HP 2.6; Locked and Very High Radiation Area Key Control; Revision 25
HP 2.15; Control of Personnel Exposure to High Level Contamination, Hot Particles, and Activated or Fission Product Debris; Revision 4
HP 2.17; Very High Radiation Area Personnel Access; Revision 5
HP 3.2; Radiological Labeling, Posting And Barricading Requirements; Revision 39
HP 3.2.8; Posting Requirements for Areas Affected by Fuel Movements; Revision 12
Nuclear Oversight Observation Report 2004-002-3-037; Removal of Relief Valve RC-434 from Unit-1 Containment; dated April 28, 2004
Nuclear Oversight Observation Report 2004-002-3-041; Repair of 1CV-296, 1HX-2 Regen HX to Auxiliary Spray; dated May 7, 2004
Nuclear Oversight Observation Report 2004-002-3-060; Conoseal Installation During U1R28 Refueling Outage; dated June 14, 2004
PBF-4018; Inspection of High Radiation Area Entryways (Outside Containment); Revision 5
Radiation Work Permit (RWP) RWP 04-014; Work in SFP [Spent Fuel Pool] Area (Maintenance and Construction Engineering); Revision 0

2OS2 As Low As Is Reasonably Achievable Planning And Controls (ALARA)

AM 2-2; Fetal Protection; Revision 1
HP 3.2.9; Hot Spot/Hot Line Tracking, Trending, and Mitigation; Revision 7
Pre-Job and In-Progress ALARA Review/Assessments for RWP 2004-0010 (Reactor Head Penetration Repair and Follow-Up Inspection); dated May 6, 12, and 21, 2004
Pre-Job and In-Progress ALARA Review/Assessments for RWP 2004-0019 (Steam Generator Sludge Lancing and Foreign Object Search and Retrieval Activities); dated April 26, 2004

Pre-Job and In-Progress ALARA Review/Assessments for RWP 2004-0012 (Reactor Vessel Bottom Mounted Instrumentation Inspection and Insulation Installation); dated January 18 and April 6, 2004
NP 4.2.15; Fetal Protection Policy Implementation; Revision 3
NP 4.2.29; Source Term Reduction Program; Revision 4
NPM 2004-0188; Summary of Primary Chemistry During Unit 2 Refueling Outage 26; dated March 18, 2004

40A1 PI Verification

Attachment C; PI Data Calculation, Review and Approval Form, Safety System Functional Failures; dated 3rd Quarter 2002 through 3rd Quarter 2004
LER 2003-001-00; Unit 2 'D' Containment Fan Cooler Not Capable of Performing Its Safety-Related Function
LER 2003-002-00; Unit 2 Control Bank 'C' and 'D' Bank Sequence Count Difference Greater Than 125 Steps
Attachment C; PI Data Calculation, Review and Approval Form, Unplanned Power Changes; dated 3rd Quarter 2002 through 3rd Quarter 2004
Attachment C; PI Data Calculation, Review and Approval Form, Reactor Coolant System (RCS) Identified Leak Rate; dated 3rd Quarter 2002 through 3rd Quarter 2004
CAMP 410; Determination of Radioactive Iodine and Iodine 131 Equivalents in Reactor Coolant; Revision 6
CAMP 600.3; Primary Side Sampling Procedures: Hot Leg Liquid Sampling - Depressurized Liquid; Revision 3
CAP 059997/CA 060103; Discrepancy Found in Radioiodine 131 Dose Equivalent Conversion Factors; dated October 20, 2004 [NRC-Identified Issue]
NP 3.2.2; Primary Water Chemistry Monitoring Program; Revision 12
NP 5.2.16; NRC Performance Indicators - Attachment C, RCS Activity; dated March 3, 2003 through July 2, 2004

40A2 Identification and Resolution of Problems

NPM 2004-0507; Second Quarter 2004 CAP Trend Report
Assessment Number 2004-003-3; Nuclear Oversight 3rd Quarter 2004 Assessment Report for Point Beach
3rd Quarter 2004 DRUM Summary Report
CAP057331; 2004 CAP Self-Assessment Areas for Improvement; dated June 10, 2004
3rd Quarter 2004 Engineering Corrective Action Program Trend Report
September 2004 Operations Department Roll-Up Meeting Results
2nd Quarter Chemistry Effectiveness Review Report; dated September 14, 2004
2nd Quarter 2004 Engineering Quarterly Effectiveness Review Report
1st and 2nd Maintenance Group Quarterly Effectiveness Report
2nd Quarter 2004 Nuclear Oversight Quarterly Effectiveness Report
1st and 2nd Quarter 2004 Production Planning Quarterly Effectiveness Review Report
2nd Quarter Radiation Protection Quarterly Effectiveness Review Report
CAP060681; RC-431A Bellows Leakage and Bellow Gauge Fitting leakage; dated November 21, 2004

LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater
ALARA	As-Low-As-Is-Reasonably-Achievable
CAP	Corrective Action Program Document
CCW	Component Cooling Water
CFR	Code of Federal Regulations
DBD	Design Basis Document
FSAR	Final Safety Analysis Report
IMC	Inspection Manual Chapter
NCV	Non-Cited Violation
NP	Nuclear Plant Procedures Manual
NPM	Nuclear Plant Memorandum
NRC	Nuclear Regulatory Commission
PI	Performance Indicator
RCS	Reactor Coolant System
RMP	Routine Maintenance Procedure
RWP	Radiation Work Permit
SDP	Significance Determination Process
SG	Steam Generator
SGTR	Steam Generator Tube Rupture
SW	Service Water
TS	Technical Specification
WO	Work Order