November 26, 2004

CAL 3-04-001

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 TEAM INSPECTION REPORT 05000266/2004008;
05000301/2004008

Dear Mr. Koehl:

On September 22, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed a baseline team inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on November 3, 2004, with you and members of your staff.

The inspection examined activities conducted under your license as they relate to the identification and resolution of problems, your compliance with the Commission's rules and regulations and with the conditions of your operating licenses. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

In the Annual Assessment Letter for 2002 (dated March 4, 2003), we notified the Nuclear Management Company (NMC) that the staff identified a substantive cross-cutting issue in the area of Problem Identification and Resolution. The basis for the decision was the identification of several Green findings involving corrective action program deficiencies and two White findings which also contained corrective action program performance deficiencies.

In the Annual Assessment Follow-up Letter dated May 9, 2003, we informed you that final significance determination for a Red finding associated with the common mode failure of the Auxiliary Feedwater pumps placed Point Beach in the Multiple/Repetitive Degraded Cornerstone Column (Column IV) of the NRC Action Matrix.

In view of the Red finding and the corrective action program substantive cross-cutting issue, we conducted a focused review of the corrective action program during the Inspection Procedure (IP) 95003 inspection conducted in mid-2003 in response to the two Red AFW findings (one for each Unit). This inspection identified weaknesses in your corrective action program. Actions to address these weaknesses and other corrective action program problems identified by our resident inspectors and by the NMC in self-assessments were developed and incorporated in the station's Excellence Plan.

In our Annual Assessment Letter for 2003 (dated March 4, 2004), we notified the NMC that even though efforts had been taken to address the corrective action program deficiencies, those efforts had not been effective in precluding recurrence. We subsequently documented the NMC's commitments to make sustained improvements in the corrective action program in the Confirmatory Action Letter issued on April 21, 2004. While the NMC implemented Excellence Plan action plans to improve the program, findings continued to be identified by the NRC. Consequently, in our 2004 Mid-Cycle Performance Review letter (dated August 30, 2004), we determined that the substantive cross-cutting issue continued to apply. Because of this, we increased the size of this biannual baseline problem identification and resolution inspection from three to seven inspectors to determine if program improvements to date have been adequate.

Based on the samples selected for review, the inspectors identified five NRC-identified findings of very low safety significance, all of which involved a violation of NRC requirements. However, because the violations were of very low safety significance and because the issues were entered into your corrective action program, the NRC is treating these violations as Non-Cited Violations (NCVs) consistent with Section VI.A of the NRC Enforcement Policy.

Based on the results of this inspection, we determined that your corrective action program is performing at approximately the same level that it was during our last programmatic review in August 2003. We recognize that very recent improvement initiatives have been focused on improving the program and that progress has been made.

Our conclusion is based on the corrective action program effectiveness over the last year. Following the corrective action program portion of the IP 95003 inspection, the corrective action program experienced a decline as corrective actions were not effectively implemented for identified deficiencies with the Emergency Action Level schemes as part of the site's Emergency Preparedness program. This failure to take prompt corrective actions led to the issuance of a Severity Level III violation with a Civil Penalty of $60,000. During the spring 2004 Unit 1 refueling outage, events occurred that illustrated weaknesses in the effective implementation of corrective actions. These problems during the Unit 1 refueling outage indicated that corrective action program improvements had not been made since the decline following the IP 95003 inspection. After the completion of the Unit 1 refueling outage, you took concerted efforts to establish lasting programmatic improvements of the corrective action program. As mentioned earlier we have observed improvement in the corrective action program since those actions have been implemented and the state of the program has recovered from the decline over the last year.

In addition, eight Action Plan steps of your Excellence Plan were reviewed during the inspection. The reviews were assessments of steps that you had considered closed. We concluded that seven of the eight steps were closed appropriately. The eighth step, pertaining to your Operating Experience program, was closed prematurely, as discussed in the enclosed inspection report. During the week of November 29, 2004, we will conduct a special inspection to further review your progress on completing the Excellence Plan action steps committed to in the Confirmatory Action Letter.

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

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and any response you provide 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, Acting Director
Division of Reactor Projects

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

Enclosure: Inspection Report 05000266/2004008; 05000301/2004008
w/Attachment: Supplemental Information

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REGION III

Docket Nos:	50-266; 50-301
License Nos:	DPR-24; DPR-27
Report No:	05000266/2004008; 05000301/2004008
Licensee:	Nuclear Management Company, LLC
Facility:	Point Beach Nuclear Plant, Units 1 and 2
Location:	6610 Nuclear Road Two Rivers, WI 54241
Dates:	August 30 through November 3, 2004
Inspectors:	Michael Kunowski, Project Engineer (Team Leader) Zelig Falevits, Senior Reactor Engineer Steven Vias, Senior Reactor Engineer, Region II Carey Brown, Resident Inspector, Clinton Doug Eskins, Resident Inspector, LaSalle John Giessner, Reactor Engineer Audrey Klett, Reactor Engineerl
Approved by:	P. Louden, Chief Branch 5 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000266/2004008, 05000301/2004008; Nuclear Management Company; on 8/30/2004 - 11/03/2004; Point Beach Nuclear Plant, Units 1 & 2; biannual baseline inspection of the identification and resolution of problems. Five violations were identified in the areas of adequacy of procedures, test control, and timely correction of problems.

This report covers a 3-week, expanded-size baseline inspection of problem identification and resolution (Inspection Procedure (IP) 71152). The inspection was conducted by seven inspectors: two resident inspectors, a project engineer, two senior reactor engineers, and two reactor engineers. Five Green findings that were also Non-Cited Violations (NCVs) of NRC requirements were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

Identification and Resolution of Problems

The inspectors identified that the licensee was effective at identifying problems and putting them into the corrective action program. With a few exceptions, the licensee appropriately prioritized and evaluated the problems entered into the program. Exceptions were noted with the untimely evaluation of significant testing information from a vendor, untimely corrective action for a 10 CFR Part 21 notification, a lack of a testing program for molded-case circuit breakers, and the failure to evaluate why an overfilled safety injection accumulator was not returned to proper level for 1½ months. Four Non-Cited Violations of very low safety significance were identified for these exceptions. In addition, problems were identified with the prioritization of procedure change issues. In the area of effectiveness of corrective actions, the actions taken by the licensee for problems entered into the corrective action program were effective. One Non-Cited Violation of very low safety significance was identified for an inadequate procedure.

On the basis of interviews and record reviews, the inspectors concluded that workers at Point Beach felt free to input nuclear safety findings into the corrective action program. However, recent actions regarding several employees by management for purported human performance issues have strained the trust between various plant staff and the station senior management, who are relatively new to the station. Some individuals, while stating that they have no reluctance to raising nuclear safety issues through the station's corrective action program, expressed resignation that the issues would not be appropriately prioritized or effectively corrected.

A. Inspector-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee did not evaluate a Technical Bulletin issued by Westinghouse in March 2004 regarding safety-related breakers and incorporate the testing instructions specified in the Bulletin into the applicable station procedures.

  The finding was greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low significance as it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of corrective actions, the licensee evaluated the Technical Bulletin and incorporated the testing instructions into applicable station procedures. (Section 4OA2.b.(2))

- Green. The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to promptly evaluate and resolve a 10 CFR Part 21 issue from 2001 involving the governors on all four emergency diesel generators (EDGs). The Part 21 issue pertained to the service life of electrolytic capacitors in the governor control system of all four safety-related EDGs. The capacitors in the four EDGS were beyond the service life specified by the vendor in the Part 21 and, in three of four EDGs, the capacitors were beyond the industry's slightly longer replacement interval.

  The finding is greater than minor because it was associated with the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the EDGs) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and evaluated a recent industry study that indicated a slightly greater service life of the capacitors. In addition, the licensee has made plans to replace the capacitors on an accelerated schedule. (Section 4OA2.b.(2))

- Green. The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to implement a program to assure that the installed molded-case circuit breakers (MCCBs) will perform satisfactorily in service.

  The finding was greater than minor because it was associated with the Reactor Safety Mitigating Systems cornerstone attribute of equipment performance and affected the

cornerstone objective of ensuring the availability, reliability, capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Molded-case circuit breakers provide for breaker coordination, over-current protection, fire prevention, and multiple other safety-related functions. The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of its corrective actions, the licensee planned to institute an exercising and testing program for safety-related MCCBs. (Section 4OA2.b.(2))

- 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." The licensee had indications in mid-February 2004 that the water level in a Unit 2 safety injection accumulator was high offscale, a significant condition adverse to quality, but the indications were not verified until about 1½ months later. In addition, the licensee did not evaluate why the issue took 1½ months to resolve.

  The finding is greater than minor because it was associated with the human performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the safety injection system) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. As corrective action, the licensee implemented a procedure to ensure that decision-making for future significant equipment problems was conducted in a systematic, well-thought out manner. (Section 4OA2.b.(2))

- Green. The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance. Specifically, the licensee failed to incorporate the vendor's torque requirements for breaker arc chute fasteners into station procedures.

  The finding is greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating System cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and revised the procedure to include the vendor's torque requirements. (Section 4OA2.c.(2))

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

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. EFFECTIVENESS OF PROBLEM IDENTIFICATION

(1) Inspection Scope

The inspectors reviewed selected NRC-identified, licensee-identified, and self-revealed problems to determine if they were appropriately characterized and entered into the licensee's corrective action program for evaluation and resolution. An individual problem entered into the program is called a CAP (formerly known as a condition report. The inspectors reviewed program documents, including Nuclear Plant Procedures Manual (NP) 5.3.1, "Action Request Process," Revision 3, which is the NMC fleet procedure for documenting and resolving problems. The inspectors also reviewed the most recent previous revision of NP 5.3.1, which was a Point Beach specific procedure, "Condition Reporting System," Revision 18.

The inspectors conducted numerous database searches to identify the threshold at which issues were identified and documented in the corrective action program and at which equipment problems were entered into the separate work order (WO) computer system. The review was performed to determine if the licensee's threshold for identification and documentation of problems was consistent with procedural guidance and licensee management expectations.

The inspectors reviewed a comprehensive list of WOs for previously identified deficiencies noted in field walkdowns to determine if equipment problems were being entered into the corrective action program. In particular, the inspectors reviewed WOs for, and other problem identification and resolution aspects of, the licensee's metal-clad and molded-case circuit breakers (MCCBs).

The inspectors reviewed plant equipment issues associated with maintenance rule 10 CFR 50.65(a)(1) items, functional failures, maintenance preventable functional failures (MPFFs), and repetitive MPFFs to determine if maintenance rule equipment deficiencies were being appropriately entered into the corrective action program.

The inspectors toured the plant, including portions of the turbine building, the auxiliary building, and the G-03/G-04 emergency diesel generator (EDG) building to determine if equipment and material condition problems were being identified. The inspectors also observed replacement of breakers in the plant and the conduct of preventive maintenance on breakers in the electrical maintenance shop.

The inspectors attended numerous sessions of the licensee's Action Request Screening Team Meetings to determine the level of management attention that problems received and to gauge the effectiveness of the screening process in ensuring that problems were

properly documented in CAPs. The inspectors also had discussions with plant personnel and the NRC resident inspectors to determine if problems were being properly identified.

Finally, the inspectors reviewed the May 2004 Point Beach Corrective Action Program Self-Assessment Report, and the 4th quarter 2003, 1st quarter 2004, and 2nd quarter 2004 Nuclear Oversight (NOS-Quality Assurance) reports. The inspectors evaluated the effectiveness of the assessments in identifying problems in the corrective action program and reviewed whether improvement areas were properly captured in the corrective action program.

(2) Assessment

In general, problems were properly identified, characterized, and entered into the corrective action program for evaluation and resolution. In the past several years, the station senior manager positions have been filled with people new to Point Beach. The managers in these positions have continued the strong emphasis to plant staff on the low threshold for documenting problems in the corrective action program that was noted during the previous problem identification and resolution inspection in 2002 (Inspection Report 50-266/02-03(DRP); 50-301/02-03(DRP). In 2002, 4802 CAPS were written; in 2003, 7551 CAPs were written; and in 2004 (as of October 15), 7298 CAPs had been written.

Procedure NP. 5.3.1 paragraph 2.1 stated that the corrective action program portion of the AR process works in tandem with the WO process to identify and resolve problems. However, the computer program for the WO process does not allow for trending, so it was up to system engineers to review WOs for trend although the system engineers were not the designated trend person. Plant engineers assigned to one of several "component maintenance programs" (CMPs), also review WOs for trends, but they utilize various CMP procedures and what specifically was tracked and trended varied among the engineers. Physical properties and problems were being trended but not causal codes for root causes of problems. This did not allow a connection to the corrective action program trending capability or to the ACEMAN attributes (ACEMAN was a recently instituted framework for plant personnel at all levels to assess day-to-day performance). One aspect that was missing was the roll-up ability for the "soft" issues from the NMC Corrective Action Program Trend Code Manual, revision 2, for site-level issues (human error codes). There appeared to be a disconnect between management expectations of initiating a CAP after a WO on degraded equipment and what the line staff believed were the thresholds. The staff indicated that if they wrote a WO for a piece of degraded equipment they did not need to write a CAP. The staff added that writing a CAP in addition to a WO would be unnecessary extra work in view of the already high work load, such as responding to the Confirmatory Action Letter items. Discussions with plant staff further indicated that if they wanted an equipment deficiency to be fixed, a WO needed to be written because a CAP could be too easily closed without the deficiency being addressed. The inspectors identified no equipment issues in the WO system that should have been also entered into the corrective action program, which was better designed for trending and the assignment of formal cause analyses. The inspectors identified no maintenance rule concerns. Two equipment issues identified by the inspectors during tours were entered into the corrective action

program. Neither had been previously identified by plant staff in the WO system or the corrective action program. The inspectors' observations of breaker maintenance activities are discussed later in the report (Section c, Effectiveness of Corrective Action).

Problems documented in CAPs were discussed at the daily Action Request (CAP) screening meeting by the designated personnel (usually supervisors and managers) in attendance. Although WOs were occasionally discussed at the CAP screening meeting, the focus of the meeting was issues in the corrective action program not the WO system. The inspectors observed good participation by screening meeting attendees.

The assessments reviewed by the inspectors were of good quality. Notably, for the three quarters reviewed by NOS, the performance of the site corrective action program was evaluated as below expectations, with timeliness and effectiveness of the corrective actions continuing to challenge the station. Corrective actions to address these observations were recently put in place and could not be evaluated by the inspectors for effectiveness. For the 2nd quarter of 2004, NOS concluded the following:

> The overall effectiveness of the implementation of the Quality Assurance (QA) program at Point Beach was determined to be "Performance Below Expectations," with four of the assessment topics below expectations for excellence in the quarter. This is the second consecutive quarter for the plant to be evaluated as "Performance Below Expectations," the third consecutive quarter for corrective actions to be evaluated as "Performance Below Expectations," and the sixth consecutive quarter that station performance has not been improving. The station's overall implementation of the Quality Assurance Program continued to decline through the second quarter.

b. PRIORITIZATION AND EVALUATION OF ISSUES

(1) Inspection Scope

To determine if the licensee appropriately characterized problems and entered them into the corrective action program for evaluation and resolution, the inspectors reviewed a sample of corrective action program documents: CAPs, OTH—other (usually program enhancements), CAs–corrective actions, CATPRs–corrective actions to prevent recurrence, CEs–condition evaluations, ACEs–apparent cause evaluations, RCEs–root cause evaluations, MREs–maintenance rule evaluations, and OPRs–operability requests. For level A (the most significant on an A to D scale) and level B CAPs written from January 1, 2003, to August 30, 2004, the inspectors reviewed the brief condition descriptions and selected a few CAPs, including any associated ACEs or RCEs, for a more in-depth evaluation. The significant conditions adverse to quality documented in these CAPs were reviewed to determine if the condition was promptly identified and corrected, the cause or causes of the condition were determined, and corrective actions taken to preclude repetition. In addition, the inspectors also reviewed CAPs from a list of the oldest open CAPs. For the in-depth evaluations, the inspectors assessed the adequacy of the CAP by considering the following factors: clarity of problem statement, immediate action, classification, operability and reportability, was a CE, ACE, or RCE performed, extent of condition, corrective action quality, and timeliness. For level C and

D CAPs written from January 1 to August 30, 2004, the inspectors reviewed the CAPs for potential trends and to assess the licensee's threshold for categorization. In addition to the review of the prioritization and evaluation of issues in general, the inspectors also reviewed the licensee's prioritization and evaluation of issues related to metal-clad and molded-case circuit breakers.

The inspectors also attended plant information meetings, CAP screening meetings, operating experience (OE) screening meetings, and a Corrective Action Review Board (CARB) meeting to assess prioritization and evaluation of issues. The OE program was reviewed to determine if the licensee adequately identified, evaluated, and developed corrective actions for industry OE that could potentially impact the plant. Problems with the licensee's prioritization of corrective actions from applicable OE was the root cause of a catastrophic failure of a safety injection (SI) pump (Inspection Report 50-266/02-12(DRP); 50-301/02-12(DRP), dated September 20, 2002) and efforts to improve the OE program were formalized in an Excellence Plan Action Plan that was committed to as part of the Confirmatory Action Letter, issued April 21, 2004.

(2) Assessment

The inspectors determined that the licensee was generally effective in appropriately categorizing and prioritizing issues and that the subsequent evaluations were also appropriate. With few exceptions, the licensee's problem evaluations considered extent of condition and generic implications where appropriate. Also with few exceptions, operability and reportability of issues were appropriately evaluated and resolved. At the various meetings that the inspectors attended, specific issues identified in CAPs received a level of discussion commensurate with their safety significance.

For the metal-clad circuit breakers, the inspectors reviewed the trending analysis reports for the 480-volt (V), 4.16-kiloVolt (kV) and 13.8-kV circuit breakers for 2001, 2002, and 2003. At the time of this inspection, the 2004 trending analysis report was being drafted. For these reports, a plant engineer evaluated CAPs, preventive and corrective WOs, and previously completed trending analyses results to determine if any previously unidentified adverse trends exist. No adverse trends were identified by the engineer, although the inspectors noted that he did not have a formal definition of an adverse trend. The inspectors noted that the trending analysis of the metal-clad circuit breakers was not governed by a procedure and was done on the initiative of the engineer, who formerly was a component engineer for the breakers. The inspectors identified that similar trending of MCCBs was not being conducted and, in fact, routine exercising and testing of MCCBs was not being conducted. This issue is discussed further below.

While, in general, the licensee's prioritization and evaluation of issues was adequate, the inspectors identified problems in several areas:

- operating experience
- molded-case circuit breakers
- procedure change request process
- cause analyses

Non-Cited Violations of very low significance were identified for problems in three of the areas and a weakness was identified in the fourth area. Details are provided below.

Operating Experience (OE)

Overall, certain areas of the OE program have shown some improvement since the 95003 inspection in 2003 (NRC Inspection Report 05000266/2003007; 05000301/2003007). OE-related instructions were improved and re-issued and the dissemination of OE via routine meetings and plant communications has been enhanced. However, despite some efforts to communicate these new procedures and requirements, the licensee continues to have issues with the implementation of the OE program and its effective incorporation into plant processes.

The inspectors noted an over-reliance on procedures alone to address problems and close out corrective actions, and a dependance on the OE coordinator, vice an effective station-wide system, to gather inputs into the OE program. A similar weakness was identified by NRC inspectors during the 95003 inspection. Other specific problems with the OE program identified by the inspectors are discussed below.

Narrow Evaluation of OE

The inspectors noted a continuing potential for OE to be dispositioned narrowly. This weakness had been previously identified by the licensee in its root cause evaluation of problems with the Unit 1 rod drive motor-generator sets (RCE000208, "Unit 1 Reactor Trip Due to 1G06 Rod Drive Motor Gen Voltage Regulator Problem," July 2003). This RCE also noted that the station's evaluation of industry and station OE for RCE000044 (for the catastrophic failure of Unit 2 SI pump in 2002) had been narrow. However, from a review of RCE000208 and the approved corrective actions, the inspectors concluded that the corrective action credited with addressing the potential narrowness of OE evaluations did not. The action was to add a note to the OE fleet procedure to ensure that initial corrective actions were taken for high risk, high consequence OE events where the report was preliminary or the causal information was unknown and to reevaluate those actions after more information was received. The licensee wrote CAP059276 (on September 16, 2004) in response to the inspectors' observations.

Procedure Effectiveness

The inspectors noted via field interviews that several engineers and maintenance planners who were tasked with OE responsibilities per the OE program were, in general, unfamiliar with OE procedures and were, in most cases, unable to obtain tangible results when following a written procedure for conducting computer-based OE searches. The licensee wrote CAP059250 to document this problem. These computer programs and procedures had been credited by the licensee to closeout several corrective actions per the licensee's OE Improvement Plan. An interim effectiveness review of the improvements to the OE program had been conducted by the licensee and concluded that the improvements had not been effective; however, actions to address this conclusion were not taken or were themselves ineffective. This issue is discussed further in the "Effectiveness of Corrective Action" section of this report.

Processing of Westinghouse Technical Bulletins

Introduction: The inspectors reviewed selected CAPs and OE documents associated with circuit breakers. During this review, the inspectors identified that a Technical Bulletin issued by Westinghouse on March 11, 2004, regarding a breaker that had failed at another nuclear plant had been received at Point Beach Nuclear Plant (PBNP) shortly after issuance but had not been evaluated as of the start of the current inspection. The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance (Green) for this problem.

Description: OE17045 (and CAP051722) documented an occurrence at another nuclear plant on September 15, 2003, where a Westinghouse 480-V type DB50 switchgear breaker for an RHR pump failed to close on demand. PBNP engineering review of this issue concluded on November 12 that this OE was applicable to several safety-related components at Point Beach and that the plant had the same direct trip actuator (DTA) style number as the one that failed. However, further action was deferred pending the review of additional information from the January 2004 Westinghouse Circuit Breaker Users Group Meeting. At this meeting, information was presented that Westinghouse would be issuing a Technical Bulletin specifying the necessary testing of the DTAs. Subsequently, on May 20, 2004, OE17045 was closed to CA054769, dated January 8, 2004, and OTH057067, dated April 14, 2004, which were issued to track Westinghouse's issuance of the bulletin with its recommendations and instructions on performing the testing. However, Westinghouse had already issued the bulletin on March 11, 2004 (Technical Bulletin, No. TB-04-6, "DTA (9026A05G01) Test Procedure"). The inspectors reviewed the Technical Bulletin and noted that it contained specific instructions for testing the DTAs to determine which ones needed to be replaced. The bulletin stated that as a means of detecting potentially marginal DTAs, licensees should perform certain tests during breaker maintenance. The inspectors noted that this testing was not included in Point Beach procedures and was not being performed.

On September 1, 2004, the inspectors questioned licensee personnel as to the corrective action taken to address the concern noted in the Technical Bulletin. Engineers stated that they had not yet received the bulletin from Westinghouse. As a followup to the inspectors' questions, the engineers contacted Westinghouse and were informed (on September 2) that the Technical Bulletin had been issued on March 11. The engineers also determined that the bulletin had been received at Point Beach on March 17, 2004, but could not be located.

On September 2, 2004, in response to the missing bulletin, the licensee initiated CAP058951, "Westinghouse Technical Bulletin Not Processed by OE Program." The bulletin was eventually located and entered into the OE database for evaluation.

Analysis: The inspectors determined that a performance deficiency existed because the licensee failed to evaluate the Technical Bulletin and incorporate the testing instructions into the appropriate station procedures. The inspectors concluded that the finding was more than minor in accordance with Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," dated June 20,

2003, in that the finding was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage).

The inspectors completed a significance determination of this issue using IMC 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated September 10, 2004, and determined that the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event; therefore, the finding was considered to be of very low safety significance (Green). Based on the initial licensee's evaluation, which included past failures of these breakers due to problematic DTAs, the inspectors had reasonable assurance that affected components were operable.

Enforcement: The Westinghouse Technical Bulletin specified certain tests during breaker maintenance as a means of detecting potentially marginal DTAs. Because the bulletin had not been reviewed by the licensee, the acceptance criteria of this testing had not been included in Point Beach procedures and the testing was not being performed. This failure was contrary to Criterion V, "Instructions, Procedures, and Drawings," of 10 CFR Part 50, Appendix B, which states, in part, that activities affecting quality shall be prescribed by and accomplished in accordance with documented instructions, procedures, or drawings, and that instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Because of the very low safety significance (Green) of the finding and because the licensee has entered this issue into its corrective action program as CAP058951, the failure of the licensee to incorporate pertinent information from the Technical Bulletin into station procedures is considered a Non-Cited Violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000266/2004008-01; 05000301/2004008-01). As part of the corrective actions, the licensee evaluated the Technical Bulletin and incorporated the testing instructions into the applicable station procedures.

The inspectors also noted that the failure to evaluate the Technical Bulletin promptly was not consistent with NP 7.2.13, "Processing of Vendor Technical Information (VTI)," Revision 2. This procedure required that vendor technical information be reviewed for urgency and forwarded to the OE coordinator, and if the VTI involved an operability issue, it be enter into the corrective action program immediately per NP 5.3.1, "Action Request Process." It further stated that if the VTI was new or involved technical changes, it would be reviewed within 60 days. The inspectors also noted that Procedure OEG 007, "External Operating Experience Program Guidance," Revision 3, Section 4.4, stated, in part, that external OE documents should be screened within 30 days of receipt, and NP 5.3.2, "External Operating Experience," stated that OE should be reviewed within 30 days of receipt.

Following up on the Technical Bulletin, in response to questions from the inspectors, the licensee identified additional examples of Westinghouse Technical Bulletins issued in

2004 that were either not screened for applicability to PBNP or not evaluated by the licensee in a timely manner. The licensee documented these additional examples in CAP059495.

Part 21 Issue

Introduction: During a review of recent CAPs, the inspectors noted a relatively high number associated with the G-02 EDG. One of these CAPs related to a 10 CFR Part 21 notification (Part 21) from 2001 pertaining to the service life of electrolytic capacitors in the governor control system of all four safety-related EDGs (G-01, G-02, G-03, and G-04). Further review and discussions with licensee representative indicated that the capacitors in all four EDGS were beyond the service life specified by the vendor in the Part 21 and that capacitors in three of the four EDGs were beyond the industry's slightly longer replacement interval. A Green, Non-Cited Violation was identified by the inspectors for a failure to promptly evaluate and correct this condition, a condition adverse to quality.

Description: On June 19, 2001, ESI (Energy Systems Inc), the current vendor for the governors used on the Point Beach EDGs, submitted a Part 21 notification to alert users that certain electrolytic capacitors in the governor control systems should be replaced every 5-7 years. This recommendation was based on actual failures in the industry (subsequently, the Electric Power Research Institute (EPRI) recommended replacement in 8-10 years). Within a month of receiving the Part 21, Point Beach engineers evaluated the information and determined that the 2301A governors of all four EDGs were affected, as well as the DRUs (speed reference units) of G-01 and G-02. The evaluation stated that the controls should be replaced at the next practical opportunity; however, the inspectors identified that, as of the current inspection, no replacements had occurred and replacements for only two of EDGs had been proposed (but not funded). In addition, there was nothing in the corrective action program to trigger a periodic re-evaluation of the capacitor service life after the initial evaluation in 2001.

As of the current inspection, the capacitors in G-01 had been inservice for 7½ years, in G-02 for 13½ years, and in G-03 and G-04 for 12½ years. In response to questions from the inspectors regarding this issue, the licensee wrote CAP058933 and performed an operability determination (OPR -112) to assess EDG operability. The determination concluded that the EDGs were operable, based on a much more liberal change out frequency recommendation from another diesel vendor (Cooper-Bessemer), whose EDGs had the same type of governor control systems. This vendor's study showed reasonable assurance for a 15-year service life under normal environmental conditions. The inspectors concluded that the licensee's operability evaluation was adequate, but had not been conducted until the inspectors questioned the adequacy of the original evaluation of the Part 21 conducted in 2001.

Analysis: The inspectors determined that the licensee had not followed the replacement frequency of its EDG vendor in a Part 21 notification regarding electrolytic capacitors in the governor control systems of its four safety-related EDGs. The inspectors concluded that the finding was more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," dated June 20, 2003, in that the finding was associated with the equipment performance attribute of the Reactor

Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage).

The inspectors completed a significance determination of this issue using IMC 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated September 10, 2004, and determined that the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event, therefore, the finding was considered to be of very low safety significance (Green).

Enforcement: 10 CFR Part 50, Appendix B, Criteria XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality, such as deficiencies and defective material and equipment, are promptly identified and corrected. Contrary to this, since 2001, the licensee operated the reactors with EDGs that had capacitors that were beyond the failure-based service life of the vendor, a condition adverse to quality, and did not promptly correct the condition. Because this finding is of very low safety significance (Green) and has been entered into the corrective action program (as CAP058933), this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000266/2004008-02; 05000301/2004008-02). As part of its corrective actions, the licensee has made plans to replace the capacitors on an accelerated schedule.

Molded-Case Circuit Breaker Exercising and Testing

Introduction: The inspectors identified a Green Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," for the licensee's failure to establish and perform, in accordance with written test procedures, a program to assure that the installed molded-case circuit breakers (MCCBs) would perform satisfactorily in service.

Description: As part of the review of the problem identification and resolution aspects of the breaker program, the inspectors reviewed the licensee's resolution of CAP057508, "MCCB Inactivated Callups," from June 22, 2004, which detailed a breaker that failed to reset when the licensee attempted to return the P-206A fuel oil transfer pump back to service after scheduled maintenance on EDG G-01. The CAP resolution focused primarily on the inactivated callups (recurrent, periodic activities) for MCCBs and whether the breaker was in the testing population, not on the extent of condition. Further inquiry by the inspectors revealed that the licensee had established an MCCB testing and exercising program in 1999 but had been put on administrative hold on February 23, 2001.

Of the 7100 MCCBs installed at Point Beach, the licensee had previously identified 658 as in the testing population. Of this population, the inspectors were informed that 486 were overdue for testing, many of which had never been tested since initial plant construction and 255 that had not been cycled or tested for 20 years or more. The inspectors also identified that the licensee did not have a trending program for MCCB performance, a method to track MCCB location, a program to replace MCCBs at the end of the manufacturer's recommended lifetime (20 years), or any pre-established method

to note that a returned MCCB was tracked as an older unit vice a new unit when reissued for installation in the plant.

The testing and exercising program on hold was described in component maintenance program (CMP) 3.1, "Molded Case Circuit Breakers," Revision 4, dated January 13, 2000. The inspectors concluded that CMP 3.1 was very thorough and comprehensive. The procedure incorporated all of the NRC and industry guidance on MCCBs up to the issue date, including recommendations for instituting a program of regularly exercising the installed MCCBs. The procedure called for periodically replacing installed MCCBs with different breakers and sending removed breakers to a vendor facility for as-found testing, inspection, and cleaning, and as-left testing before being returned to the licensee. The licensee was to inspect the tested MCCBs upon receipt and stock them as if they were new breakers. The only problem noted by the inspectors with CMP 3.1 was that the testing frequency was every 10 years, a periodicity greater than the latest manufacturer's guidance of every four fuel cycles (6 to 8 years). When questioned about regular in-place exercising, licensee staff informed the inspectors that there was no program to accomplish this except for a preventive maintenance activity scheduled to occur 5 years after periodic testing. The licensee added that the MCCB testing program was essentially 2 years behind schedule and that the MCCBs most recently removed for testing had not been sent to the vendor. The licensee initiated CAP058949, "Functional Testing of Molded Case Circuit Breakers," on September 2, 2004, in response to the inspectors' questions about the current status of MCCB testing.

Of the testing that had been performed, the inspectors observed that licensee procedure RMP 9374-1, "Molded Case Circuit Breaker and Drawout Unit Maintenance," Revision 9, had a note in Step 5.6 that to avoid preconditioning, the breakers should not be manually exercised during performance of the procedure. The procedure used by the vendor for the testing directed performance of mechanical operation tests of the breakers before over-current testing, a provision that constituted preconditioning of the breakers. Additionally, after the inspectors questioned the validity of the testing, the licensee spoke with the vendor, but the vendor provided no information that the MCCBs had been properly tested without preconditioning. As discussed in NRC Information Notice 96-24, "Preconditioning of Molded-Case Circuit Breakers Before Surveillance Testing":

> Periodic inspection and testing of circuit breakers in their as-found condition is an appropriate way of demonstrating the functional operability of the breaker and of detecting any degradation. However, the practice of preconditioning before testing (e.g., lubricating pivot points and manually cycling the breaker) defeats the purpose of the periodic test.

Regular mechanically exercising of installed MCCBs ensures that grease does not harden or dry out in the breakers and cause unreliable operation, particularly to ensure that breaker coordination and fire prevention functions occur as designed. Moving the grease around in a MCCB was a sound preventive maintenance action; however, not before as-found testing. Since the PBNP breakers were preconditioned, the vendor test results could indicate fewer failures than would have occurred had there been no pre-conditioning and could have led to erroneous conclusions about the functionality of the

MCCBs installed at PBNP. The licensee had reviewed the vendor test procedure before the testing and had specified that the vendor not precondition the MCCBs, but had not reviewed the test results or monitored the actual testing to ensure compliance with the intended testing sequence. The licensee documented these issues in CAP059062, "Potential Pre-conditioning of MCCBs Prior to Functional Testing," on September 8, 2004.

In response to the inspectors' concerns about the status of the installed MCCBs, the licensee initiated CAP059003, "MCCB Maintenance Not In Accordance With Industry Standards," on September 3, 2004, and completed an operability determination, Operability Recommendation Form OPR000113, on September 12. The inspectors reviewed the determination and found it to be inaccurate and lacked sufficient technical rigor. The licensee had noted only one MCCB failure at PBNP and had concluded that the MCCBs were operable based on the lack of MCCB failures. However, the inspectors noted that the licensee had not included vendor testing failures (about 19), or previous MCCB failures documented in licensee event report (LER) 05000301/1993005. In particular, LER 93-005 documented that when 10 of 80 MCCBs removed from PBNP were tested in an effort to return them to stock, all 10 failed the instantaneous trip test and 5 failed a coordination test with other breakers. All of the breakers had failed due to grease solidification. Based on those test results, all of the 80 MCCBs that had been removed would have been considered inoperable.

The licensee subsequently issued Revision 1 to OPR000113 on September 15, 2004, which the inspectors found to contain accurate information and more technically sound justifications for operability after discussions with the licensee to resolve several questions that had been considered but not documented in the revision.

Analysis: The inspectors concluded that failing to have a MCCB exercising and testing program was a programmatic breakdown and a performance deficiency warranting a significance evaluation. The inspectors determined that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued June 20, 2003, because the finding was associated with the Reactor Safety Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Molded-case circuit breakers provide for breaker coordination, over-current protection, fire prevention, and multiple other safety-related functions.

The inspectors completed a significance determination of this finding using IMC 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated September 10, 2004, and determined that the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event; therefore, the finding was considered to be of very low safety significance (Green).

Enforcement: 10 CFR 50, Appendix B, Criterion XI, "Test Control," states, in part, that a test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified

and performed in accordance with written test procedures. The results shall be documented and evaluated to assure that test requirements have been satisfied. Contrary to this, the licensee failed to establish and maintain a testing program for MCCBs. Additionally, documented test results were not evaluated to assure that test requirements were satisfied. By not evaluating the test results, the licensee failed to determine an adequate extent of condition and appropriate corrective actions for operability concerns for the installed MCCBs, a condition affecting risk and safety significant systems.

Because the finding has been captured by the licensee's corrective action program (CAP059058), this violation is being treated as a Non-Cited Violation (NCV 05000266/2004008-03; 05000301/2004008-03) consistent with Section VI.A.1 of the NRC Enforcement Policy. As part of its corrective actions for this finding, the licensee planned to re-institute an exercising and testing program for safety-related MCCBs.

Procedure Change Request Process

During separate reviews of electrical circuit breakers and the root cause evaluation of a problem establishing a reactor coolant system hot leg vent, the inspectors identified several examples where (licensee-identified) procedure problems were not dispositioned appropriately. Procedure problems were typically addressed in the procedure change request process, unless they were significant, in which case they would be documented in the corrective action program where trending and cause analysis could be done. The inspectors also reviewed 20 of the latest (July-September 2004) procedure feedback forms submitted in Operations. Of the change requests reviewed, the inspectors noted that some requests for relatively important procedure changes were not given the appropriate priority for resolution in the procedure change request process or were not elevated to the corrective action program. For some requests that had been elevated to the corrective action program, they were closed out without a thorough evaluation. The licensee wrote CAP058992, on September 3, 2004, to document the inspectors' concerns regarding the procedure change request process. Several of the procedure change issues identified by the inspectors are discussed below.

Breakers

The inspectors reviewed RMP-9374-1, "Molded Case Circuit Breaker and Drawout Unit Maintenance," Revisions 7, 8, and 9, and its associated open procedure change requests. These open change requests included vendor recommendations, acceptance criteria for breaker maintenance activities, and corrections of procedure errors. Several of these change requests, dated November 2003, were marked as needing to be incorporated into the next procedure revision; however, the procedure was revised and reissued several times since then without incorporating those requests but incorporating more recent, but less significant requests. The licensee initiated CAP058959, on September 2, 2004, to document and evaluate this issue.

Appendix R Procedure

During a review of the latest procedure change requests, the inspectors questioned (on September 15, 2004) the adequacy of the disposition of procedure feedback request OPS-2004-01454. The subsequent review by the licensee identified a previously missed issue where, during a postulated fire, one of the instrument buses would be without a battery charger lined up to it. The licensee corrected this problem with a temporary change to the procedure. The CAP (CAP059262) that had been written when the issue was first identified was closed to the temporary change by station managers at the CAP screening meeting on September 17. However, further review of this issue by the resident inspectors identified items that the licensee should have considered before closing the CAP but had not. This matter is discussed further as an Unresolved Item (URI 05000266/2004006-02; 05000301/2004006-02) in Section 4OA2.1 of Inspection Report 05000266/2004006; 05000301/2004006.

Hot Leg Vent Procedure

During a review of a problem from the Unit 1 refueling outage in April 2004 with establishing a hot leg vent with reduced reactor coolant system inventory, the inspectors noted that a procedure change request had been submitted in mid-March for a procedure that had steps pertaining to establishment of a hot leg vent. The licensee's RCE (RCE000254, "Potential for No Hot Leg Vent Path During Unit 1 SG Nozzle Dam Installation") of the hot leg vent issue had not ascribed much significance to that request and the fact that the requested change had not been made prior to the use of the procedure by licensed operators during the outage. From a review of the procedure and the request and discussions with licensee personnel, however, the inspectors concluded that had the procedure been changed per the request, the problem with the establishment of the hot leg vent would likely have been prevented.

On March 14, 2004, a licensee representative submitted a procedure change request for Operating Procedure OP 4F, "Reactor Coolant System Reduced Inventory Requirements," to include explicit instructions on establishing a hot leg vent before installing RCS loop nozzle dams. However, this request was not addressed by the licensee before the procedure was used on April 9 by several senior reactor operators to incorrectly determine the hot leg vent requirements for the installation of nozzle dams. Further details of this issue, which was determined by the NRC to be a finding of very low safety significance (FIN 05000266/2004003-04), are provided in Section 4OA2.5 of Inspection Report 05000266/2004003; 05000301/2004003.

Cause Analyses

Equipment Failure Analyses

During the 95003 inspection, the inspectors noted that the corrective action program did not require a formal causal analysis (ACE or RCE) for any CAP lower than significance A. This could allow equipment failures that did not result in a significant plant event to not be assessed for corrective actions to prevent recurrence or extent of condition. During the current inspection, the inspectors noted that, in general,

equipment failure analysis was not formal and did not use a formal cause analysis unless an RCE was assigned to be done.

In one example, the inspectors noted from a review of recent CAPs that the DYOD inverter had failed five times in the past year. For three of the failures, a maintenance rule evaluation (MRE) was completed and during the most recent failure, significant troubleshooting and testing was conducted to ensure the inverter could perform its design function. Yet, no consolidated fault analysis had been conducted, in contrast to standard industry practice, and a cause of the five failures had not been established. The licensee wrote CAP058943 to document and evaluate the two MREs that had not been not performed. In another example, for the failure of the EDG fuel oil transfer pump breaker in June 2004 (discussed earlier in this report), a cause analysis and an extent of condition of the failure was not performed.

Root Cause Analyses

RCE000252, "Organizational Response to Unit 2 SI Accumulator Level Transmitter Issue," April 8, 2004.

Introduction: The inspectors identified that a significant condition adverse to quality--water level in a Unit 2 SI accumulator exceeded the Technical Specification upper limit for approximately 1½ months after the first indication of high level--was not promptly identified and corrected and the cause or causes of the condition were not determined. This failure constituted a finding of very low safety significance (Green) and a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

Description: As discussed in Section 4OA3.1 of Inspection Report 05000266/2004003; 05000301/2004003 (and LER 50-301/2004-001-00), an error by a technician during the fall 2003 Unit 2 refueling outage resulted in the introduction of a bias to the two level transmitters of the Unit 2 "A" safety injection accumulator such that indicated level was lower than actual level and the accumulator was overfilled. On February 14, 2004, the level indicated by one of the two transmitters began to drift lower and the licensee began troubleshooting. The transmitter was returned to service and then read high offscale. Believing the transmitter was somehow malfunctioning, station management directed the installation of a replacement transmitter on three subsequent occasions. All of the replacements also indicated high. Finally, on March 30, ultrasonic testing of the accumulator was conducted and verified that accumulator level was high.

On March 31, 2004, the licensee initiated RCE000251 ("Troubleshooting Reveals 2T34A SI Accumulator Level Out of Specification High"), to evaluate the problem. In addition, several CAPs had been written by station personnel who were concerned about the length of time it took to resolve the accumulator level issue. On April 7, the licensee decided to limit the scope of RCE000251 to an evaluation of the technical issues from the fall 2003 outage, when the transmitters were worked on, until mid-February 2004, when the indication became suspect. For the time period from mid-February until proper accumulator level was restored at the end of March 2004, the licensee initiated RCE000252, "Organizational Response to Unit 2 SI Accumulator Level Transmitter Issue." However, in late April, RCE000252 was closed with no action and the evaluation of the organizational issues was assigned to a safety culture assessment that station

management decided to conduct (as documented in CAP056175, April 28, 2004). This assessment was conducted from May 17 through June 11, 2004 (and the report issued on July 13), but organizational issues of the accumulator level event were not assessed. In August 2004, the licensee had a vendor conduct a common factors assessment of seven recently performed RCEs. Although the common organizational and management performance issues of these RCEs were identified and evaluated as part of the assessment, the specific organizational and management performance issues of the mid-February to late-March accumulator level issue were not evaluated individually as a separate case.

Analysis: Although an adequate root cause evaluation of the introduction of the bias by the technician was conducted by the licensee, the licensee did not evaluate why accumulator level was not finally determined until 1½ months after the apparent problem with the transmitter first manifested itself. Discussions and interviews with plant staff and management and a review of records indicated that the use of ultrasonic testing and possibly other techniques to determine the water level in the accumulator was dismissed by plant management early in the mid-February troubleshooting period. Instead, station management assumed that the transmitter that indicated acceptable accumulator level was accurate and that station efforts would focus on finding a replacement for the "faulty" transmitter. These efforts persisted despite concerns voiced by individuals in various plant departments (and through various channels, including in-person to station management and through the corrective action program) that the transmitter indicating high level was accurate. While at one time, the licensee had planned to conduct a root cause evaluation of the possible organizational and managerial issues that resulted in the protracted determination of accumulator water level, an RCE was never conducted. An ACE was conducted, but did not address the decision to not use ultrasound or other methods to determine accumulator level in mid-February. Two assessments conducted in May-August 2004 did not evaluate the specific organizational and managerial issues associated with the delay in determining accumulator level.

The safety significance of the licensee exceeding the Technical Specification water upper limit was addressed in Section 4OA3.1 of the previously issued Inspection Report 05000266/2004003; 05000301/2004003. The significance was determined to be of very low safety significance (Green). During the current inspection, the inspectors determined that early dismissal of the use of ultrasonic testing or other techniques to determine the level of water in the accumulator was a performance deficiency warranting a significance evaluation in accordance with Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated June 20, 2003. The inspectors determined that the finding was more than minor because it involved the human performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems (that is, the safety injection system) that respond to initiating events to prevent undesirable consequences.

The inspectors determined that the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process." However, given the determination of very low safety significance (Green) made by the NRC in the previously issued Inspection Report 05000266/2004003; 05000301/2004003 for the

accumulator level being in excess of the Technical Specification limit from fall 2003 to March 30, 2004, the finding for the failure to promptly identify and correct the high level is also of very low safety significance (Green).

Enforcement: As discussed in Inspection Report 05000266/2004003; 05000301/2004003, a Non-Cited Violation was identified for the water level in the Unit 2 'A" accumulator being in excess of the Technical Specification limit from October 2003 to March 30, 2004 (NCV 05000301/2004003-05). The failure in mid-February and March 2004 to promptly identify, through ultrasonic testing or other techniques, and correct the high level in the accumulator, a significant condition adverse to quality, is considered a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." Although the licensee did not conduct an RCE of this issue to determine the specific organizational and managerial performance problems, to assess the extent of condition, and to establish corrective actions to prevent recurrence, the licensee was addressing in the corrective action program the results of its common factors assessment of seven other recent RCEs, had developed corrective action for another recently completed RCE (RCE000263, "OR-2.1, Lack of Organizational Alignment/Priorities," July 12, 2004), and has implemented procedure NP 1.1.12, "Operational Decision-Making Issue Evaluation Process," on August 18, 2004. Effective implementation of corrective actions identified for the issues from the common factors assessment and RCE000263 should address the problems from the accumulator level issue. And, proper use of NP 1.1.12 should preclude a similar delay in addressing future potentially significant plant equipment discrepancies. Consequently, this violation is being treated as a Non-Cited Violation (NCV 05000301/2004008-04) consistent with Section VI.A.1 of the NRC Enforcement Policy.

RCE000254, "Potential Loss of Hot Leg Vent Path During Nozzle Dam Installation," July 23, 2004.

The root cause was identified as inadequate response to, and identification, tracking and maintenance of actions taken (commitments made) in response to Generic Letter 88-17, "Loss of Decay Heat Removal." The inspectors concluded that while this was a root cause of the hot leg vent issue, the procedure used by the senior reactor operators (SROs) who decided on the hot leg vent pathway needs and the organization and programmatic aspects of outage preparation were also significant contributors, if not additional root causes. The inspectors did note that the licensee's initial barrier analysis review of the event ("NMC Incident Response Team For Issues Encountered During Unit 1 Reduced Inventory and Nozzle Dam Installation at PBNP"; April 30, 2004) discussed these factors, but this discussion was not rolled into the subsequent RCE.

The inspectors also noted that on August 19, 2004, a licensee staff person wrote CAP058591, questioning the designation in RCE000254 of two corrective actions as CATPRs (Corrective Actions to Prevent Recurrence). This CAP appropriately noted that these CATPRs, which specified the sampling of commitments, would not necessarily prevent anything. Similarly, as discussed in the 95003 inspection report, the inspectors identified CATPRs associated with the RCEs of two AFW Red findings that were not really corrective actions that would prevent recurrence of the root causes of those problems. CAP058591 also appropriately indicated that the organizational and

programmatic issues of management support of the commitment process and a process to ensure commitments were included were not addressed. The licensee evaluation of this CAP had not been completed at the time of the current inspection.

c. EFFECTIVENESS OF CORRECTIVE ACTIONS

(1) Inspection Scope

The inspectors reviewed completed corrective actions for several issues in the corrective action program from a 1998 NRC special inspection of low- and medium-voltage circuit breakers (Inspection Report 50-266/98013(DRS); 50-301/98013(DRS) and from the Inspection Procedure 95003 Supplemental Inspection conducted in 2003 (Inspection Report 05000266/2003007; 05000301/2003007). The inspectors also reviewed several completed Excellence Plan Action Plan action steps associated with the April 21, 2004, Confirmatory Action Letter. The completed corrective actions and action steps were assessed for their appropriateness and focus and, if possible, their effectiveness.

(2) Assessment

The inspectors concluded that, overall, corrective actions taken by the licensee were appropriate and focused and were effective in correcting identified problems and in preventing recurrence. On NCV of very low safety significance was identified for the failure to incorporate vendor torque values in a procedure. After a long delay, specific training of engineers and operators on AFW and other systems, part of the corrective actions for the instrument air/AFW Red finding from 2002 (and previously reviewed during the IP 95003 inspection), has been initiated. However, operations department management stated that operators would receive training only on AFW, not the other systems. Of eight completed Excellence Plan Action Plan action steps reviewed by the inspectors, seven were adequate and one was prematurely designated as complete by the licensee.

1998 Breaker Inspection

The inspection (Inspection Report 50-266/98013(DRS); 50-301/98013(DRS)) identified a number of problems in the electrical circuit breaker maintenance program that contributed to the poor material condition of installed low- and medium-voltage breakers (the inspection did not review MCCBs). The inspectors cited three violations of NRC requirements. The first violation involved the failure to establish adequate design control measures to ensure that adequate control voltage was available for the close and trip coils of all safety-related electrical breakers in the plant. Further, these coils were not tested to verify operation at the lower voltages. The second violation involved the failure to establish adequate measures to ensure that only approved and authorized cleaning compounds and lubricants were used to clean and lubricate electrical breaker components. Consequently, unapproved cleaning compounds and lubricants were used to clean and lubricate the breakers. The third violation involved the failure to accomplish

activities affecting quality during performance of routine maintenance in that significant portions of the safety-related breaker preventive maintenance procedure requirements were inappropriately marked N/A (not applicable) and were not performed.

During the current inspection, the inspectors determined that the licensee's corrective actions for these violations and other issues identified during the 1998 inspection remained effective. Several minor issues regarding lubricants and procedural attention-to-detail were identified by the inspectors during observations of PM activities on several 480-V breakers. These issues were appropriately entered into the licensee's corrective action program for evaluation (CAP058942, CAP059216, and CAP059226). More significantly, the inspectors identified a breaker maintenance procedure that lacked arc chute fastener torque values.

Introduction: The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance (Green). Specifically, the inspectors identified that the vendor-specified torque values for the fasteners for the breaker arc chutes were not incorporated in the preventive maintenance (PM) procedure being used for maintenance on a breaker. After this was identified by the inspectors, the licensee wrote a CAP and initiated a procedure change request to add the torque values into the next procedure revision. For arc chute fasteners that are tightened less than the vendor recommended values, the fasteners could come loose and fall down into the breaker closing mechanism or, for overly tightened fasteners, the arc chutes could be cracked and pieces of the arc chutes fall down into the closing mechanism.

Description: On September 3, 2004, the inspectors observed an ongoing PM activity performed by the maintenance electricians in accordance with routine maintenance procedure (RMP) 9307-1, "ABB KDON-800S & K-DON-1600S Breaker Routine Maintenance", Revision 1. The inspectors noted that Sections 5.2 and 5.11 of the procedure specified the requirements for removal, inspection, and reinstallation of the breaker arc chutes; however, the procedure did not include the torque values for the bolts used for reinstallation of the arc chutes.

The inspectors reviewed the vendor's (Asea Brown Boveri--ABB) Installation/Maintenance Instructions IB 6.1.12.1-1A, "Low Voltage Air-Magnetic Power Circuit Breakers (K-Line 225A through 2000A)" to determine the required torquing values. The instructions for inspection of arc chutes stated that "...the chutes are secured with screw and poly-glass retainer as mounted between the poles, check the tightness of these retainers at the recommended intervals and tighten screws to a maximum of 20 lb-in for the 225, 600 and 800 frame size breakers." The inspectors questioned the electricians regarding the missing torque values. The electricians promptly contacted the responsible plant engineer who informed them that the required torque values would be added to the procedure. The appropriate torque values were used for the reinstallation of the arc chute. In response to this issue, the licensee initiated CAP059216, on September 14, 2004. The inspectors also reviewed previous WOs and the corrective action program database. Several WOs were identified in which the maintenance personnel had observed loose arc chute fasteners or had to replace cracked arc chutes.

Analysis: The failure to include the required arc chute torque values in a safety-related procedure was a performance deficiency. The inspectors concluded that the finding was more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," dated June 20, 2003, in that the finding was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage).

The inspectors completed a significance determination of this issue using IMC 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated September 10, 2004, and determined that the finding did not involve a design qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event, therefore, the finding was considered to be of very low safety significance (Green).

Enforcement: Criterion V, "Instructions, Procedures, and Drawings," of 10 CFR Part 50, Appendix B, states, in part, that instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished. Contrary to this, the licensee failed to include in the PM procedures vendor-specified torque requirements to ensure that important breaker maintenance activities were satisfactorily accomplished. Specifically, the licensee failed to specify the arc chute torque requirement to be used during reinstallation. Consequently, the breakers arc chutes could have cracked or loosened if not torqued properly, resulting in potential breaker problems. After the identification of this issue by the inspectors, the licensee entered this finding into its corrective action program as CAP059216 and incorporated the vendor's torquing requirements into the procedure.

Because of the very low safety significance (Green) of the finding and because the licensee has entered this issue into its corrective action program, the failure of the licensee to include the appropriate torque values in the PM procedure is considered a Non-Cited Violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000266/2004008-05; 050000301/2004008-05).

2003 Inspection Procedure 95003 Inspection

In Section 2.1.b.2 of the Inspection Procedure 95003 inspection report, the inspectors discussed corrective actions that they considered among the most important to prevent recurrence of the Red finding associated with the instrument air/auxiliary feedwater issue of November 2001. These actions (from RCE202, "Potential AFW Pump Damage Due to Low Flow That Results in Increased Core Damage Frequency") were to train operators and engineers on the interrelationships between system design and current licensing basis for AFW and other risk-significant systems. As of the 95003 inspection in August 2003, licensee efforts to ensure that the training was conducted were less than aggressive, for example, the training for operators had been extended until July 2004. During the current inspection, the inspectors noted that an engineering staff person had written CAP058579 on August 18, 2004, and CAP058579 on

September 13, 2004, regarding timeliness and closure of corrective actions from RCE202, including the training. The inspectors also noted that training of operators finally began on September 16 (2¾ years after the original instrument air/AFW issue was identified), and only addressed the AFW system. Operations department management stated that there was no intention to do similar training on other systems. The inspectors attended the training and concluded that it was well conducted and of good quality. Training of engineers on AFW and other systems (with a focus on events, such as station blackout and fire) was conducted in a more timely fashion.

Confirmatory Action Letter Items

Action Plan	Title	Step
OR-01-004	Individual Behavior Excellence	10

This step, related to the Human Performance Area of Regulatory Concern from the April 21, 2004, Confirmatory Action Letter (CAL), consisted of implementing D-15 meetings: routine, small group, daily meetings intended to improve plant staff awareness of current plant performance, align plant staff with respect to current priorities, and improve communications. The inspectors attended D-15 meetings in at least 10 groups from various plant departments, with group size ranging from 6 to about 70 (most were less than 15).

Implementation of Action Plan Step

The licensee completed the Action Plan step as committed in the March 22, 2004, letter (and as incorporated in CAL). The inspectors noted, not unexpectedly, that smaller groups usually had better participation and a higher level of interest from attendees and that meetings at which the supervisors leading the meetings directed questions at specific attendees tended to greater participation/interest than meetings where the meeting leaders were not as interactive. The inspectors did not identify any problems with actions taken to complete this step.

Action Plan	Title	Step
OR-01-004	Individual Behavioral Excellence	28

This step, related to the Human Performance Area of Regulatory Concern from the CAL, consisted of Nuclear Oversight (quality assurance) conducting assessments of ACEMAN implementation.

Implementation of Action Plan Step

ACEMAN was the station's individual and group performance improvement method. NOS conducted its review from April 3 to June 21, 2004, and concluded that implementation of ACEMAN for the entire Point Beach organization was mixed, which was considered below expectation by NOS. Positive examples of use were observed as well as examples where supervisors, craft, and some middle managers not all fully

embracing the ACEMAN principles. NOS scheduled another assessment (CA058238) for the 3rd quarter of 2004 to review ACEMAN implementation. The licensee completed the Action Plan step as committed in the March 22, 2004, letter (and as incorporated in the CAL). The inspectors did not identify any problems with actions taken to complete this step. During the current inspection, the inspectors noted strong efforts by station upper management to encourage workers to use ACEMAN and, not unexpectedly, varied participation by workers at the D-15 group meetings where ACEMAN was discussed (OR-01-004, Step10, discussed above).

Action Plan	Title	Step
OR-08-005	Improve Human Performance (HU) in Engineering	13, 17

These steps, related to the Human Performance Area of Regulatory Concern from the CAL, consisted of developing and giving training to engineers on reducing errors and eliciting feedback from the engineers on the training.

Implementation of Action Plan Step

The inspectors reviewed training course records, course outline, and critiques. Also reviewed were the records for Engineering Human Performance Improvement Team. The inspectors also attended a team meeting and discussed engineering human performance with senior managers, human performance program owners and frontline employees. The licensee completed the Action Plan steps as committed in the March 22, 2004, letter (and as incorporated in the CAL). The inspectors did not identify any problems with actions taken to complete these steps.

Action Plan	Title	Step
OP-10-006	Effective Root Cause Evaluations	16

This step, related to the Corrective Action Program Area of Regulatory Concern from the CAL, consisted of the licensee verifying during its 2004 self-assessment of the corrective action program that multi-disciplinary teams were being used for RCEs where appropriate.

Implementation of Action Plan Step

Through a review of the 2004 self-assessment and discussions with licensee personnel, the inspectors determined that the licensee did review during the assessment the team make-up of several RCES and verified that with two exceptions multi-disciplinary teams were being used for RCEs. The licensee completed the Action Plan step as committed in the March 22, 2004, letter (and as incorporated in the CAL). The inspectors did not identify any problems with actions taken to complete this step.

Action Plan	Title	Step
OP-10-010	Operating Experience (OE) Improvement Program	19

This step, related to the Corrective Action Program Regulatory Area of Concern from the CAL, consisted of the conduct of an interim effectiveness review of changes made to the OE program, to date.

Implementation of Action Plan Step

The effectiveness review concluded that program improvements taken to date had not been effective to resolve problems and prevent reoccurrence. The inspectors noted that the effectiveness review did not address all causal factors nor evaluate all objectives needed to resolve the causal factors. Further, the licensee had closed this action plan step as completed yet the corrective actions proposed for the problems identified by effectiveness review did not address all of those problems. A final effectiveness review (action step 23) is due the end of the 1st quarter of 2005.

Action Plan	Title	Step
OP-14-001	Improve the Configuration Management Program	12

This step, related to the Corrective Action Program Area of Regulatory Concern from the CAL, consisted of conducting an interim effectiveness review of the changes made to-date in improving the program.

Implementation of Action Plan Step

The inspectors reviewed the interim effectiveness review and attended a Design Review Board, a Quality Review Team and reviewed several engineering products which were reviewed by those panels (this included setpoint changes, changes to safety classifications, 50.59s and calculations). In addition, the inspectors reviewed two recently completed Design Change packages with a focus on interfaces to other organization (Operations and Maintenance). Finally, the inspectors interviewed some key program owners in the area of configuration management.

Configuration management is on a positive trend. The leaders and supervisors demonstrated good ownership of the issues. The inspectors found the products and interfaces reasonable. The Design Review Board and Quality Review Team were sufficiently challenging. In the effectiveness review, the only key performance metric was modification backlog. Additional benefit would be gained from backlog indicators for other engineering products, such as drawings, setpoints, calculations, and Q-list. The licensee completed the Action Plan step as committed in the March 22, 2004, letter (and as incorporated in the CAL). The inspectors did not identify any problems with actions taken to complete this step.

Action Plan	Title	Step
EQ-15-015	Auxiliary Feedwater Electrical Modifications	5

The step, related to the Engineering Design Control Regulatory Area of Concern from the CAL, consisted of installation of modification MR 03-007 to repower motor-operated valve (MOV) 1AF-4006, the service water (SW) supply to the 1P-29 AFW pump. The modification repowered the MOV so that two of four SW MOVs supplying the four AFW pumps were now powered from A-train buses and two from B-train buses. Previously, three of the four SW valves had a single AC electrical bus dependency during certain plant configurations. This problem was identified by the licensee in response to NRC questions during a special inspection that identified the Red finding associated with the AFW recirculation orifice plugging issue (Inspection Report 50-266/02-15(DRP); 50-301/02-15(DRP).

Implementation of Action Plan Step

The licensee completed the Action Plan step as committed in the March 22, 2004, letter (and as incorporated in the CAL). The inspectors did not identify any problems with actions taken to complete this step.

d. ASSESSMENT OF SAFETY-CONSCIOUS WORK ENVIRONMENT

(1) Inspection Scope

The inspectors questioned over 40 workers from various departments (25 from the operations department) about their willingness to raise nuclear safety issues, spoke with the site Employee Concerns Program manager, and reviewed selected program records to assess safety-conscious work environment.

(2) Assessment

No one interviewed expressed a hesitancy in raising nuclear safety issues through their management or through the corrective action program and only one person stated that he would not raise a safety issue through the station Employee Concerns Program. Two workers stated that while they had no reluctance to raise nuclear safety issues, they had doubts as to whether or not upper station management would adequately resolve the issue.

The review by the inspectors of program records and statistics and the interview of the Employee Concerns Program manager indicated that the program was well utilized and has appropriately resolved nuclear safety issues raised by employees. The manager was a conscientious, knowledgeable, relatively long-time plant employee.

Regarding upper station management adequately resolving issues raised via CAPs, the inspectors during this inspection concluded that given the large number of CAPs initiated at the site, the complexity of some of the CAP issues, and the other items that the station must deal with, the station was doing an adequate job of resolving issues.

Several issues that had not been adequately resolved were discussed earlier in this inspection report.

Notwithstanding the willingness of plant personnel to raise nuclear safety issues, the interviews of the operations staff revealed that the resignation of four operations supervisors involved in the hot leg vent issue in April 2004 had a significant impact on department morale, in general. Although several operations personnel provided little or no perspective on the resignations, sentiments expressed by the other operations personnel included a strong distrust of the relatively new station and NMC upper managers and a strong feeling that if the operations personnel individually make a mistake while exercising their judgement, they would be fired. This feeling had resulted in several auxiliary operators and reactor operators, particularly those on the crews of two of the SROs who resigned, requesting peer checks and/or additional direction from operations management on activities that in the past were conducted without such checks or direction. In addition, several SROs expressed the belief that the new station senior managers expected that they be involved in decision making that in previous years would have been made by the onshift SRO shift manager.

Similar to the inspectors' observation, a recent consultant-led, licensee assessment of the safety culture at the plant, in which 72 workers were interviewed, concluded that "vertical trust is significantly strained at PBNP." In this assessment, the perceived circumstances of the resignation of the four SROs was given as one of the main examples of why workers do not trust station upper management. The assessment also stated that the trust issue "may represent a leading indicator of future reluctance to raise important concerns to supervisors or through CAP [corrective action program]."

In response to the findings of the safety culture assessment and the findings of a consultant's common cause analysis of seven recent RCEs, the licensee was developing corrective actions. In a letter to the NRC dated October 4, 2004, the licensee committed to develop an action plan by November 15, 2004, to enhance operational decision-making, increase engagement with the workforce, and improve communications. This plan and its implementation will be reviewed by the NRC as part of its followup to the CAL issued to the licensee on April 21, 2004.

4OA6 Meetings

.1 Exit Meeting

On September 22, 2004, the inspectors presented the prelimiary inspection results to Messrs. Douglas Cooper and Dennis Koehl and members of Mr. Koehl's staff, who acknowledged the findings. The licensee did not identify any information, provided to or reviewed by the inspectors and likely to be included in the inspection report, as proprietary.

On November 3, 2004, the inspectors presented the final inspection results to Mr. Koehl and members of his staff.

4OA7 Licensee-Identified Violation

None.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee
J. Brander, Maintenance Manager
J. Connolly, Regulatory Affairs Manager
B. Dungan, Operations Manager
C. Hill, Assistant Operations Manager
M. Holzmann, Nuclear Oversight Manager
R. Hopkins, Internal Assessment Supervisor
C. Jilek, Maintenance Rule Coordinator
T. Kendall, Program Engineering
D. Koehl, Site Vice-President
R. Ladd, Fire Protection Engineer
K. Locke, Regulatory Specialist
J. McCarthy, Site Director of Operations
R. Milner, Business Planning Manager
L. Peterson, Design Engineer Manager
C. Richardson, Design Engineer
W. Smith, Site Assessment Manager
J. Schroeder, Service Water System Engineer
J. Schweitzer, Site Engineering Director
J. Shaw, Plant Manager
G. Sherwood, Engineering Programs Manager
C. Sizemore, Training Manager
J. Strharsky, Planning and Scheduling Manager

Nuclear Regulatory Commission
H. Chernoff, Point Beach Project Manager, NRR
P. Louden, Chief, Reactor Projects, Branch 5

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000266/2004008-01; 05000301/2004008-01	NCV	Vendor Breaker Testing Requirements Not Incorporated in Procedure (Section 4OA2.b.(2))
05000266/2004008-02; 05000301/2004008-02	NCV	Corrective Actions for a Part 21 Notification on Diesel Governors Were Not Timely (Section 4OA2.b.(2))
05000266/2004008-03; 05000301/200400803	NCV	Failure to Implement a Molded-Case Circuit Breaker Test Program (Section 4OA2.b.(2))
05000301/2004008-04	NCV	Untimely Identification of Overfilled Safety Injection Accumulator (Section 4OA2.b.(2))
05000301/2004008-05; 05000301/2004008-05	NCV	Vendor Torque Values Not Listed in Procedure (Section 4OA2.c.(2))

Closed

05000266/2004008-01; 05000301/2004008-01	NCV	Vendor Breaker Testing Requirements Not Incorporated in Procedure (Section 4OA2.b.(2))
05000266/2004008-02; 05000301/2004008-02	NCV	Corrective Actions for a Part 21 Notification on Diesel Governors Were Not Timely (Section 4OA2.b.(2))
05000266/2004008-03; 05000301/2004008-03	NCV	Failure to Implement a Molded-Case Circuit Breaker Test Program (Section 4OA2.b.(2))
05000301/2004008-04	NCV	Untimely Identification of Overfilled Safety Injection Accumulator (Section 4OA2.b.(2))
05000301/2004008-05; 05000301/2004008-05	NCV	Vendor Torque Values Not Listed in Procedure (Section 4OA2.c.(2))

Discussed

05000266/2004006-02	URI	Resident Inspector Review of a Safe Shutdown Procedure That Directed Alignment of Instrumentation to a Direct Current Bus Without a Battery Charger (Section 4OA2.b.(2))
05000266/2004003-04	FIN	Potential Loss of Hot Leg Vent Path During Nozzle Dam Installation (Section 4OA2.b.(2))
05000301/2004003-05	NCV	Safety Injection System Accumulator Operated With Fluid Level Above Technical Specification Surveillance Requirement Limits (Section 4OA2.b.(2))

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire documents, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

Calculations

CKP-98-0095-01-A; Minimum DC Control Voltage Available at the Coils Associated with Closing and Tripping Circuit Breaker Associated with 2A-05; November 16, 1998
Calculation N-92-004-03-B; MCC 1B-32 Coordination Plot; March 3, 2003

CAPs Generated During the Inspection

CAP058942; Lubrication for ABB K-Line Type Breakers Not Specified in Lube Manual; September 2, 2004
CAP058943; Failure to Complete MREs Following DY-0D Inverter Failures; September 2, 2004
CAP058947; Laptop With Only Copy of ThermaCAM Reporter 2000 Failed to Boot; September 2, 2004
CAP058949; Functional Testing of Molded Case Circuit Breakers; September 2, 2004
CAP058951; Westinghouse Technical Bulletin Not Processed by OE Program; September 2, 2004
CAP058959; Concerns Raised Regarding the Adequacy of the Procedure Change Process; September 2, 2004
CAP058992; NRC Questions the Threshold Level for Writing CAPs; September 3, 2004
CAP059003; MCCB Maintenance Not In Accordance With Industry Standards; September 3, 2004
CAP059058; Functional Testing Anomalies Associated With Molded Case Circuit Breakers; September 8, 2004
CAP059061; 208Y System Should Be Evaluated for Maintenance Rule Scope (10CFR50.65); September 8, 2004
CAP059062; Potential Pre-conditioning of MCCBs Prior to Functional Testing; September 8, 2004
CAP059140; Y System Performance Criteria Need Revision; September 10, 2004
CAP059195; CE014224 Did Not Properly Evaluate the Failure of 1B52-302D; September 14, 2004
CAP059203; Boric Acid Recirc Pump Leak; September 14, 2004
CAP059206; No Guidance/Training on Use of EDG Backup Governors; September 14, 2004
CAP059208; MCCBs Are Not Adequately Tracked by Testing Program; September 14, 2004
CAP059216; Vendor Guidance Not Contained in Procedure RMP 9307-1; September 14, 2004
CAP059219; Area for Improvement Associated With Breaker PM Procedures; September 14, 2004
CAP059222; Completed SCTs [Simulator Certification Test Guides] Not Transmitted to Records Appropriately; September 15, 2004

CAP059226; Documentation Problem Found During Review of Procedure RMP 9026-3; September 15, 2004
CAP059233; Non-Qualified Lubricant ('Q') Stored in Q-Rated Lubricant Storage Locker; September 15, 2004
CAP059237; Crack in CW Expansion Joint Rubber; September 15, 2004
CAP059243; Failure to Include EDG Frequency Variation in Hydraulic Analyses; September 15, 2004
CAP059246; Incorrect Step in Procedure RMP 9026.3; September 15, 2004
CAP059250; NP 5.3.11 Procedural Weakness; September 15, 2004
CAP059262; Question PI&R Question re Ops Procedure Feedback; September 16, 2004
CAP059276; Corrective Action from RCE000208 Regarding OE May Not Have Been Adequate; September 16, 2004
CAP059277; Scope of Issue Addressed by ACE000780 Was Too Narrow; September 16, 2004
CAP059282; Implementation Issues with OEG 007 and NP 1.1.11 - Issue Managers; September 16, 2004
CAP059284; Pre-Job Brief OE DB Implementation May Negate Previously Implemented Action; September 16, 2004
CAP059285; Training on Interrelationship Between System Design & Licensing Basis; September 16, 2004
CAP059292; Close Out of CAP 058109 Questioned; September 17, 2004
CAP059437; Traceability of Ongoing Training Actions Does Not Exist; September 23, 2004

CAPs

CAP001040; SOER 98-02 Requires Further Actions; September 26, 2001
CAP002410; DC Master Calculations Require Update for Recently Completed Modifications; March 5, 2002
CAP014161; Emergency Diesel Generator EDG Governor Control Part 21 Issue; June 29, 2001
CAP017200; Installed Thermal Overload Heaters Not In Accordance With Calculation; February 3, 1998
CAP017844; 10 CFR Part 21 On Molded Case Circuit Breakers; August 22, 1997
CAP026071; Installed Thermal Overload Heaters Not In Accordance With Calculation; August 27, 1996
CAP028247; SOER 98-01 Concerns, Status Control Issues; December 8, 1998
CAP028360; G-02 Failure During the Performance of TS-82 Extended Run; June 1, 2002
CAP028420; G02 Ran at Full KW Loading and Above Full Load KVAR on Two Separate Occasions; June 8, 2002
CAP033426; Commitment Excellence Plan - Bolted Fault; June 9, 2003
CAP033714; Unit 1 "B" RCP Low Flow Alarm Module failure; June 23, 2003
CAP034016; Breaker B52-DB50-078 (WO 0205515) Did Not Close Per RMP 9303, Step 5.1.4.g; July 11, 2003
CAP034032; Procedure Documentation Attention to Detail; July 12, 2003
CAP034175; Unsatisfactory Testing Results During DB-50 Breaker Routine Maintenance; July 18, 2003
CAP034577; Breaker Procedure RMP 9303 R/15 Step 5.4.3.c Lacks Adequate Guidance; August 5, 2003
CAP034604; Component Failure (B52-DB50-049); August 6, 2003

CAP034680; RMP 9374-1 Contact Resistance Acceptance Criteria, Questionable Basis; August 8, 2003
CAP034772; Aging / Obsolescence Issues of Many Non Safety Related MCCBs; August 12, 2003
CAP035078; Plant QA Storage Area Not Per Upper Tier Documents; August 22, 2003
CAP050758; GO2 Load Control Not As Expected During ORT-3A; October 6, 2003
CAP050807; Westinghouse Technical Bulletin W-TB-99-05 Rev 1; October 8, 2003
CAP051664; WO Documentation Unclear; November 7, 2003
CAP051722; OE17045 - Residual Heat Removal Pump Breaker Failed to Close When Attempting to Line Up for Recirculation; November 11, 2003
CAP051747; B52-DB75-005 Experienced Multiple Problems When Installed in Cubicle 1B52-16C; November 12, 2003
CAP052278; Fire Barrier Penetration Seal M-7-5-8-N14; December 12, 2003
CAP052415; Weaknesses Identified in Operating Experience Evaluations; December 17, 2003
CAP052429; Unable to Find External OE Items During OE Assessment; December 18, 2003
CAP052432; External OE Activity Posting, Screening & Action Creation Timeliness; December 18, 2003
CAP052580; 480 VAC Circuit Breaker Contact Problem; December 30, 2003
CAP053109; Lack of Clear Guidance on 1AF-4000, -4001, 2AF-4000; January 23, 2004
CAP053130; Suspected Fault on Heater Caused Loss of Power to Non-Vital Portion of 1B-40; January 23, 2004
CAP053425; CAP 053130 Closeout in Question; February 1, 2004
CAP053696; K-5B G-02 Air Compressor Tripped on Overload; February 10, 2004
CAP054330; Ineffective CAP Process; February 29, 2004
CAP054534; Unanalyzed Load Discovered on G03/G04 Emergency Diesel Generators; March 5, 2004
CAP054610; Lack of Operational Focus; March 9, 2004
CAP054785; Regulatory Analysis of NRC Inspection Report IR 2003-007; March 14, 2004
CAP054894; Regulatory Commitment Requires Update; March 17, 2004
CAP055055; 2LT-938 (Accumulator Level) Needs to [be] Verified That It is Reading Accurately; March 23, 2004
CAP055204; Troubleshooting Reveals 2T34A SI Accumulator Level Out of Specification High; March 30, 2004
CAP055230; 2LT-938 (Safety Related) Found Out of Tolerance; March 31, 2004
CAP055327; A52-DHVR - 34 Power Supply to 1P28A Breaker Failed to Close Electrically in Test; April 4, 2004
CAP055349; Breaker 1A52-77 Failed to Close During ORT 3B Testing; April 2, 2004
CAP055391; Multiple Breaker Issue Delay Outage Scheduled Activities; April 6, 2004
CAP055114; DY-0D Yellow Swing Inverter Failure; March 26, 2004
CAP055415; Organizational Response to Unit 2 SI Accumulator Level Transmitter Issues; April 7, 2004
CAP055547; Procedure Controls for Nozzle Dam Installation Are Weak; April 10, 2004
CAP055606; Indication Not Available in Control to Determine Closing Ability of 1A52-77; April 12, 2004
CAP056043; OI-35 Procedure Inadequacies; April 24, 2004
CAP056175; Nuclear Safety Culture Assessment Required; April 28, 2004
CAP056641; 4.16 KV System Classified Maintenance Rule a(1); May 12, 2004
CAP056815; Breaker 1B52-423C Failed to Close; May 19, 2004

CAP056893; Excellence Team Re-review of Past Closed Action Steps Now CAL Commitments; May 21, 2004
CAP057273; ACE 1631 Contains Nonfactual Information; June 8, 2004
CAP057508; MCCB Inactivated Callups; June 22, 2004
CAP057625; Senior Management's Vitiation of the Corrective Actions Program; June 27, 2004
CAP057931; MCCB Testing Deficiency; July 15, 2004
CAP057989; Technical Bulletin TB-04-13 Replacement Solutions for Classic MCCBs, UL Testing Issues, Breaker Design Life and Trip Band Adjustments; July 19, 2004
CAP058109; PP-48 Main Breaker Tripped; July 25, 2004
CAP058171; OE18734, MCCB Failures Identified During Testing; July 28, 2004
CAP058404; Some SOER 98-02 Issues Are Unresolved; August 9, 2004
CAP058483; Significant Events Since Early March 2004; August 13, 2004
CAP058528; AFIs [Areas For Improvement] From the Nuclear Safety Culture Assessment; August 16, 2004
CAP058576; NRC Identified Issues May Not be Closed With Right Level of Rigor or Urgency; August 18, 2004
CAP058579; Implementation Weaknesses For RCE000202 Training-related CATPRs; August 18, 2004
CAP058598; Enhancement Opportunity for PB Team Track Implementation; August 19, 2004
CAP058699; Additional Information and Concerns in Regards to Steam Generator Nozzle Dams; August 24, 2004
CAP058901; Independent Review of CAL Commitment OP-10-004.12 - Items 1-4; August 31, 2004
CAP058921; Some Actions in tTrack Incorrectly Tagged as CATPR Y; September 1, 2004
CAP058923; Existence of OEG-007 Not Well Communicated; September 1, 2004
CAP059088; Inadequate CAP Close Out; September 9, 2004
CAP059093; Lack of Adequate Documentation and Creation of Actions From Trend Report; September 9, 2004
CAP059167; CAPs That Reference Work Orders; September 13, 2004
CAP05183; Recommendation From CAP058579 Not Addressed; September 13, 2004

Other Corrective Action Program Documents

ACE001631; 2-SI-LT-939 Troubleshooting and Repair; March 1, 2004
ACE001662; DY-0D Yellow Swing Inverter Failure; March 26, 2004
ACE001715; Unit 2 T-34B SI Accumulator Levels Calibrated With Wrong Tolerance M&TE; April 21, 2004
ACE001720; 2T-34B SI Accumulator Level Transmitters 2LT-934 and 2LT-935 Out of Tolerance; April 27, 2004
CA017199; Installed Thermal Overload Heaters Not In Accordance With Calculation; August 28, 1996
CA017201; Installed Thermal Overload Heaters Not In Accordance With Calculation; October 7, 1998
CA021073; G03 EDG Low Oil Pump Pressure Alarm; January 7, 1998
CA029832; RCE000202 - AFW - CATPR Train Individuals on the Interrelationship Between Systems; May 15, 2003
CA029833; RCE000202 - AFW - CATPR Train Individuals on the Interrelationship Between Systems; May 15, 2003

CA053725; RCE000202 - AFW - CATPR Train Individuals on the Interrelationship Between Systems; November 7, 2003
CA053726; RCE000202 - AFW - CATPR Train Individuals on the Interrelationship Between Systems; November 7, 2003
CA053727; RCE000202 - AFW - CATPR Train Individuals on the Interrelationship Between Systems; November 7, 2003
CA054769; Request an OE Evaluation of OE17045 - RHR Pump Breaker Failed; January 8, 2004
CA054799; Commitment Excellence Plan - Individual Behavioral Excellence; D-15 Methodology; January 8, 2004
CA056778; Submit OE - Troubleshooting Reveals 2T34A SI Accumulator Level Out of Spec High; March 31, 2004
CA055782; Nuclear Safety Significance of A SI Accumulator Level Out of Specification High; March 31, 2004
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LIST OF ACRONYMS USED

ABB	Asea Brown Boveri
AC	Alternating Current
ACE	Apparent Cause Evaluation
ADAMS	Agency Wide Access Management System
AFW	Auxiliary Feedwater
AOP	Abnormal Operating Procedure
ARB	Alarm Response Book
ASME	American Society of Mechanical Engineers
CA	Corrective Action
CAP	Corrective Action Program Document
CARB	Corrective Action Review Board
CATPR	Corrective Action to Prevent Recurrence
CCW	Component Cooling Water
CE	Condition Evaluation
CFR	Code of Federal Regulations
CL	Checklist
DTA	Direct Trip Actuator
DBD	Design Basis Document
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
EOP	Emergency Operating Procedure
EPRI	Electric Power Research Institute
FSAR	Final Safety Analysis Report
GL	Generic Letter
IMC	Inspection Manual Chapter
IP	Inspection Procedure
kV	Kilo-Volt
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
LOOP	Loss of Offsite Power
MCCB	Molded-Case Circuit Breaker
MOV	Motor-Operated Valve
MRE	Maintenance Rule Evaluation
MPFF	Maintenance Preventable Functional Failure
NCV	Non-Cited Violation
NMC	Nuclear Management Company
NOS	Nuclear Oversight (Quality Assurance)
NP	Nuclear Plant Procedures Manual
NRC	Nuclear Regulatory Commission
OE	Operating Experience
OI	Operating Instruction
OM	Operations Manual
OP	Operating Procedure
OPR	Operability Recommendation

OTH	Other (Corrective Action Program Document)
PBF	Point Beach Form
PBNP	Point Beach Nuclear Plant
PMT	Post-Maintenance Testing
PWR	Pressurized Water Reactor
RCE	Root Cause Evaluation
RHR	Residual Heat Removal
RMP	Routine Maintenance Procedure
SDP	Significance Determination Process
SI	Safety Injection
SR	Surveillance Requirement
SRO	Senior Reactor Operator
SW	Service Water
TI	Temporary Instruction
TS	Technical Specification
URI	Unresolved item
V	Volt
VTI	Vendor Technical Information
WO	Work Order