July 28, 2003

Mr. Alfred J. Cayia
Site-Vice President
Point Beach Nuclear Plant
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241-9516

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2
NRC INTEGRATED INSPECTION REPORT 50-266/03-03; 50-301/03-03

Dear Mr. Cayia:

On June 30, 2003, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed integrated inspection report documents the inspection findings, which were discussed on July 1, 2003, with you and members of your staff.

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

This report documents three NRC-identified findings of very low safety significance (Green), each of which was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these issues as Non-Cited Violations consistent with Section VI.A of the NRC Enforcement Policy. Additionally, licensee-identified violations which were determined to be of very low safety significance are listed in this report.

If you contest the subject or severity of a Non-Cited Violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 801 Warrenville Road, Lisle, IL 60532-4351; 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 addition to the routine NRC inspection and assessment activities, Point Beach performance is being evaluated quarterly as described in the May 9, 2003, Annual Assessment Follow-Up Letter - Point Beach Nuclear Plant. Consistent with Inspection Manual Chapter (IMC) 0305, plants in the multiple/repetitive degraded cornerstone column of the Action Matrix are given consideration at each quarterly performance assessment review for (1) declaring plant performance to be unacceptable in accordance with the guidance in IMC 0305; (2) transferring

to the IMC 0350 “Oversight of Operating Reactor Facilities in a Shutdown Condition with Performance Problems” process; and (3) taking additional regulatory actions, as appropriate. On May 22 and July 22, 2003, the NRC reviewed Point Beach operational performance, inspection findings, and performance indicators for the first and second quarters of 2003, respectively. During the July 22nd review of Point Beach performance, we also reviewed recent 3rd quarter events, including the Unit 2 automatic trip due to a main feed pump failure on July 10, the manual safety injection signal and reactor trip on July 11, and the Unit 1 automatic trip on July 15 due to failure of a control rod drive power supply voltage regulator. From our review of these recent operational challenges and their apparent causes, we concluded that Point Beach performance, while not good, did not represent either significant degradation or unsafe operations. We determined that the plant continues to be operated in a safe manner and that no additional regulatory actions are currently warranted. The NRC will continue to closely monitor Point Beach performance consistent with the guidance in IMC 0305.

Since the terrorist attacks on September 11, 2001, NRC has issued five Orders and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over access authorization. In addition to applicable baseline inspections, the NRC issued Temporary Instruction 2515/148, "Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures," and its subsequent revision, to audit and inspect licensee implementation of the interim compensatory measures required by order. Phase 1 of TI 2515/148 was completed at all commercial nuclear power plants during calender year 2002 and the remaining inspection activities for Point Beach Nuclear Plant are scheduled for completion in August 2003. The NRC will continue to monitor overall safeguards and security controls at the Point Beach Nuclear Plant.

In accordance with 10 CFR 2.790 of the NRC’s “Rules of Practice,” a copy of this letter, its enclosure, and any response you choose to submit will be made 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 /

Geoffrey Grant, Director
Division of Reactor Projects

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

Enclosure: Inspection Report 50-266/03-03; 50-301/03-03
w/Attachment: Supplemental Information

See Attached Distribution

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML032110177.wpd

To receive a copy of this document, indicate in the box:"C" = Copy without enclosure "**E**"= Copy with enclosure"**N**"= No copy

OFFICE	RIII	E	RIII	E	RIII			
NAME	MKunowski/trn		AVegel		GGrant			
DATE	07/25/03		07/25/03		07/28/03			

OFFICIAL RECORD COPY

cc w/encl: R. Grigg, President and Chief
Operating Officer, WEPCo
J. Cowan, Chief Nuclear Officer
Licensing Manager
D. Weaver, Nuclear Asset Manager
J. Jensen, Plant Manager
G. Arent, Manager, Regulatory Affairs
J. Rogoff, Esquire General Counsel
M. Nazar, Senior Vice President
J. O'Neill, Jr., Shaw, Pittman,
Potts & Trowbridge
K. Duveneck, Town Chairman
Town of Two Creeks
D. Graham, Director
Bureau of Field Operations
A. Bie, Chairperson, Wisconsin
Public Service Commission
S. Jenkins, Electric Division
Wisconsin Public Service Commission
State Liaison Officer

ADAMS Distribution:
WDR
DFT
DWS
RidsNrrDipmIipb
GEG
HBC
PGK1
C. Ariano (hard copy)
DRPIII
DRSIII
PLB1
JRK1

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-266, 50-301
License Nos:	DPR-24; DPR-27
Report No:	50-266/03-03; 50-301/03-03
Licensee:	Nuclear Management Company, LLC
Facility:	Point Beach Nuclear Plant, Units 1 and 2
Location:	6610 Nuclear Road Two Rivers, WI 54241
Dates:	April 1 through June 30, 2003
Inspectors:	P. Krohn, Senior Resident Inspector M. Morris, Resident Inspector M. Kunowski, Project Engineer M. Holmberg, Reactor Inspector T. Madeda, Physical Security Inspector T. Ploski, Senior Emergency Preparedness Inspector R. Schmitt, Radiation Specialist D. Schrum, Reactor Inspector R. Winter, Reactor Inspector A. Klett, Nuclear Safety Intern F. Ramirez, Nuclear Safety Intern
Approved by:	Anton Vegel, Chief Branch 7 Division of Reactor Projects

TABLE OF CONTENTS

Enclosure

Enclosure

SUMMARY OF FINDINGS

IR 05000266/2003-003, 05000301/2003-003; Nuclear Management Company, LLC; 04/01/03 - 06/30/03; Point Beach Nuclear Plant, Units 1 and 2; Maintenance Risk Assessment and Emergent Work Evaluation, Temporary Modifications, Radiological Environmental Monitoring and Radioactive Material Control Programs.

The report covered a 3-month period of inspection by resident inspectors, and announced baseline inspections by regional health physics, emergency preparedness, reactor, and physical security inspectors. Three Green Non-Cited Violations (NCVs) 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.

A. Inspector-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. Units 1 and 2. The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(4) for failure to implement required risk management actions during calibration of volume control tank level transmitters during September 2002 and January 2003. The primary cause of this finding was related to the cross-cutting area of human performance in that probabilistic risk assessment, production planning, and on-shift personnel had not utilized the full capabilities of the risk assessment tool to recognize the unavailability of components associated with pre-planned work activities.

  The finding is greater than minor because, if left uncorrected, it would become a more significant safety concern if risk assessments that had not considered the impact of equipment and components rendered unavailable by pre-planned activities resulted in high risk levels without compensatory risk management analyses in place. The finding is of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events. (Section 1R13.1)

Cornerstone: Barrier Integrity

- Green. Unit 2. The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, during thermal performance testing activities on March 20, 2003. The primary cause of this finding was related to the cross-cutting area of human performance. Despite the involvement of the test coordinator, control room operating supervisor, and system engineer, incomplete communications and coordination resulted in damper parts on the

cooling fan plenum floor not being fully identified as components affecting operation of the safety-related damper. The condition adverse to quality was identified 13 days later when, on April 2, 2003, a mechanic passing through a radiologically controlled machine shop, identified the damper counterweight amongst other controlled material.

The finding was more than minor because: 1) it affected the reactor safety barrier integrity cornerstone objective of maintaining the functionality of primary containment, in that the reliability and availability of the Unit 2, 'D' containment cooling fan, a risk significant large-early-release component, was affected, and 2) if left uncorrected, would become a more significant safety concern if components relied upon to perform safety-related functions were returned to service prior to fully assessing and correcting degraded conditions. The finding was determined to be of very low risk significance since the degraded backdraft damper did not represent a degradation of the radiological barrier function of the control room, auxiliary building, or spent fuel pool; did not represent degradation of the barrier function of the control room against smoke or a toxic atmosphere; and did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment. (Section 1R23.1)

Cornerstone: Radiation Safety

Green. The licensee identified a self-revealing violation of 10 CFR 20.1802, involving the failure to maintain control and constant surveillance of licensed radioactive material in an unrestricted area (an instrument and calibration training laboratory) that was not in storage. The material was an unaccounted for, 1.0 microcurie strontium-90/yttrium-90 check source, installed in an area radiation monitor.

The finding was more than minor because it was associated with the "Program and Process" attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain. This was a legacy issue, for which the apparent cause occurred prior to implementation of an effective radioactive material source control program in 1998. However, this finding was of very low safety significance in that public radiation exposure was not greater than 0.005 rem and the licensee did not have more than five radioactive material control occurrences (in the previous eight quarters). Thus, this finding will be documented as a Non-Cited Violation of 10 CFR 20.1802, for the licensee's failure to maintain control of licensed radioactive material in an unrestricted area that was not in storage. (Section 2PS3).

B. Licensee-Identified Violations

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at full power and remained there except for brief periods when power was reduced for routine testing. On June 25, 2003, power was reduced to 95 percent due to a minor fish intrusion. The Unit was returned to full power later that evening and remained there until June 30, when power was lowered to 95 percent due to a second minor fish intrusion.

Unit 2 began the inspection period at full power and remained there until April 5, when power was reduced to 53 percent due to a stuck open condensate pump discharge check valve that resulted in low condenser vacuum. Initially, the main turbine was manually tripped while maintaining the reactor critical. However, as a result of control rod bank overlap limits not being met, operators initiated a Technical Specification-required shutdown later the same day. Unit 2 was made critical on April 8, and returned to full power operations on April 10. The Unit remained at full power until May 2, when power was reduced to 85 percent as a condenser fouling contingency action, during starting of the Unit's second circulating water pump. Unit 2 returned to full power operations on May 3, and remained there until May 23, when power was reduced to 52 percent for 2P-28A main feedwater pump repairs. The Unit returned to full power operations on May 27, and remained there for most of the remainder of the reporting period. On June 30, power was reduced to 90 percent because of a minor fish intrusion. At the end of the reporting period, reactor power was at 90 percent.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection

.1 High Wind/Tornado Preparations

a. Inspection Scope

During the week of April 26, 2003, the inspectors reviewed the facility design and the licensee's procedures to evaluate the facility's susceptibility to high winds and tornado conditions. Additionally, the inspectors walked down selected areas to evaluate plant buildings, switchyard, and equipment susceptible to high winds and tornados. The inspectors also reviewed Abnormal Operating Procedure, AOP-136, "Severe Weather Conditions," dated February 27, 2003, which prescribed station actions for severe weather conditions and several corrective action program documents (CAPs) associated with recent high wind conditions.

b. Findings

No findings of significance were identified.

.2 Hot Weather Preparations

a. Inspection Scope

During the week of June 28, 2003, the inspectors reviewed the facility design and the licensee's procedures to evaluate preparations for summertime high temperatures. Additionally, the inspectors walked down selected areas to evaluate plant equipment susceptible to high temperatures. The inspectors discussed with licensee personnel the changes that were being made to the methodology used to perform hot weather preparations as compared to the changes being made from the lessons learned during cold weather preparations.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Instrument Air System

a. Inspection Scope

During the week of April 19, 2003, the inspectors walked down the instrument air system to verify a proper return to service following the replacement of both after filters in response to the identification of desiccant fines in air filters. The inspectors observed the in-line filters for the condenser steam dumps and verified the valve lineup. The inspectors reviewed the engineering evaluations for the failure of the after filters for the instrument air dryer.

b. Findings

No findings of significance were identified.

.2 Control Room and Cable Spreading Room Ventilation

a. Inspection Scope

During the week of June 20, 2003, the inspectors walked down the control room and cable spreading room ventilation and air conditioning system to ensure proper lineup and operation following control room envelope modifications. The inspectors reviewed the design bases, system drawings, and testing procedures. The inspectors discussed with licensee personnel the effects of cable pulls that disrupted the control room envelope and the compensatory measures taken during the modification.

b. Findings

No findings of significance were identified.

.3 Water Treatment System

a. Inspection Scope

During the week of June 20, 2003, the inspectors walked down the water treatment system to ensure proper lineup and operations following discussions of use of the water treatment system to supply the condensate storage tank during accident conditions. The inspectors walked down the system with the system engineer and discussed modifications that the licensee plans to implement during the next refueling outage, and reviewed the design basis, system drawings, and testing procedures. The inspectors reviewed the means of providing water to the auxiliary feedwater (AFW) system during an emergency.

b. Findings

No findings of significance were identified.

.4 Emergency Diesel Generator (EDG) Ventilation Systems

a. Inspection Scope

During the week of June 28, 2003, the inspectors walked down the ventilation systems for the EDGs to verify the adequacy of cooling capabilities for hot weather. The inspectors interviewed engineering staff regarding the effects on the motor starting currents of the backwards rotation of the fans for emergency diesels G03 and G04. The licensee generated CAP033706, "Potential for G-03/4 Radiator Fans to Trip Breaker When Freewheeling Backwards," and Operability Determination OPR000066, "Potential for G-03/4 Radiator Fans to Trip Breaker When Freewheeling Backwards."

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Walkdown of Selected Fire Zones

a. Inspection Scope

The inspectors walked down the following areas to assess the overall readiness of fire protection equipment and barriers:

- Fire Zone 140, Area A01-A, Valve Gallery - Unit 1;
- Fire Zone 155, Area A08, Valve Gallery - Pipeway 1;
- Fire Zone 246, Area A01-E, Electrical Equipment Room - Unit 2;
- Fire Zone 304, Area A23, AFW Pump Room Area Over the Tunnel;

- Fire Zone 308, Area A27, Diesel Room - G01;
- Fire Zone 309, Area A28, Diesel Room - G02;
- Fire Zone 700, Area A52, North Service Building; and
- Fire Zone 773, Area A71, G03 Switchgear Room.

The inspectors verified the adequacy of control of transient combustibles and ignition sources, the material condition of fire protection equipment, and the material condition and operational status of fire barriers used to prevent fire damage or propagation. Area conditions/configurations were evaluated based on information provided in the licensee's "Fire Hazards Analysis Report," August 2001. The inspectors also walked down the listed areas to verify that fire hoses, sprinklers, and portable fire extinguishers were installed at their designated locations, were in satisfactory physical condition, and were unobstructed. The inspectors also verified that the physical location and condition of fire detection devices were in accordance with the Fire Hazards Analysis Report. Additionally, the inspectors reviewed passive features such as fire doors, fire dampers, and mechanical and electrical penetration seals to verify that they were located in accordance with Fire Hazards Analysis Report requirements and were in satisfactory physical condition.

b. Findings

No findings of significance were identified.

.2 Annual Resident Inspector Observation of Unannounced Fire Drill

a. Inspection Scope

The inspectors observed an unannounced drill associated with Unit 2 circulating water pump, 2P30B, on May 6, 2003, to evaluate the readiness of licensee personnel to respond to and fight fires. The inspectors observed licensee performance in donning protective clothing/turnout gear and self-contained breathing apparatus, deploying firefighting equipment and fire hoses to the scene of the fire, entering the fire area in a deliberate and controlled manner, maintaining clear and concise communications, checking for fire victims and propagation of fire and smoke into other plant areas, removing smoke, and using pre-planned firefighting strategies to evaluate the effectiveness of the firefighting brigade. The inspectors also reviewed post-drill critique comments to evaluate the licensee's candor in self-critiquing firefighting performance and make recommendations for future improvement. Finally, the inspectors reviewed licensee monitoring and trending of the firefighting deficiencies and crew challenges to evaluate the rigor with which the licensee was attempting to identify and correct potential weaknesses.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

.1 External Food Protection

a. Inspection Scope

During the week of April 26, 2003, the inspectors reviewed external flooding design bases documents, flooding mitigation equipment, and risk analyses to determine whether existing configurations and mitigation plans were consistent with design requirements and risk analysis assumptions. The inspectors walked down the following areas to assess the overall readiness of flood protection equipment and barriers.

- Circulating Water Pump House Wave Barrier Locations;
- Diesel Generator 3 & 4 Building;
- Cable Manholes 1, 2, 3, 10, 14, 16, and 19;
- Gas Turbine (GT) Generator Building;
- Switchyard; and
- Main Transformer Area.

The inspectors focused on the material condition of flood protection equipment, and the material condition and operational status of flood barriers used to mitigate flood damage or propagation. Flood protection features such as flood doors and door gaps, subsoil drains, and flood zone penetration seals were also inspected to verify that they were in satisfactory physical condition, unobstructed, and capable of providing an adequate flood barrier. The inspectors reviewed the licensee's normal and abnormal operating procedures associated with flood identification and mitigation. Also, the inspectors reviewed annunciator response procedures associated with high sump level alarms and the associated lack of equipment calibration.

The inspectors reviewed several CAPs, including an action request (AR) identified during the inspectors' plant walkdowns for the manholes. In addition, several other CAPs were also reviewed to determine the adequacy of the implemented and pending corrective actions.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11Q)

a. Inspection Scope

On May 27, 2003, the resident inspectors observed the simulator portion of operator requalification examinations to evaluate the adequacy and proficiency of licensed operator performance. The inspectors evaluated crew performance for clarity and formality of communication; the ability to take timely action in the safe direction; the prioritization, interpretation, and verification of alarms; the correct use and implementation of procedures, including alarm response procedures; timely control board operation and manipulation, including high-risk operator actions; and group dynamics for simulator examination Scenario 099. Finally, the inspectors observed the

post-examination critique, evaluated crew involvement in the discussions, and reviewed CAP033108, "During LOR [Licensed Operator Requalification] Training Notification to Offsite Was Not Met in 15 Minutes," to assess the rigor of the licensee's self-critique process.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule (MR) Implementation (71111.12)

.1 Routine Resident Inspector Review of Selected Systems

a. Inspection Scope

The inspectors reviewed the implementation of the MR to verify that component and equipment failures were identified, entered, and scoped within the MR and that selected systems, structures, and components were properly categorized and classified as (a)(1) or (a)(2) in accordance with 10 CFR 50.65. The inspectors reviewed station logs, maintenance work orders (WOs), ARs, (a)(1) corrective action plans, functional failures, unavailability records, selected surveillance test procedures, and a sample of CAPs to verify that the licensee was identifying issues related to the MR at an appropriate threshold and that corrective actions were appropriate. The inspectors also walked down portions of systems to examine material condition, ensure the proper implementation of action plans, and to verify past functional failures had been corrected. Additionally, the inspectors reviewed the licensee's performance criteria to verify that the criteria adequately reflected equipment performance needs and to verify that licensee changes to performance criteria were reflected in the licensee's probabilistic risk assessment. Specific components and systems reviewed were:

- Reactor Coolant System (RCS) during the week of April 19, 2003;
- Reactor Protection System during the week of May 24, 2003; and
- EDG Ventilation System during the week of May 24, 2003.

b. Findings

No findings of significance were identified.

.2 Periodic Evaluation

a. Inspection Scope

The objective of the inspection was to:

- Verify that the licensee completed the periodic evaluation within the time constraints defined in 10 CFR 50.65, (i.e., once per refueling cycle, not to exceed 2 years); ensuring that the licensee reviewed its goals, monitoring, preventive maintenance activities, and industry operating experience; and made appropriate adjustments as a result of those reviews;

- Verify that the licensee balanced reliability and unavailability during the previous refueling cycle, including a review of safety significant structures, systems, and components (SSCs);

- Verify that the licensee met the (a)(1) goals, that corrective actions were appropriate to correct defective conditions, the use of industry operating experience, and that (a)(1) activities and related goals were adjusted as needed; and

- Verify that the licensee has established (a)(2) performance criteria, examined any SSCs that failed to meet their performance criteria, or reviewed any SSCs that have suffered repeated maintenance preventable functional failures (MPFF) including a verification that failed SSCs were considered for (a)(1).

The inspectors examined the last two periodic evaluation reports for 2001 and 2002. To evaluate the effectiveness of (a)(1) and (a)(2) activities, the inspectors examined (a)(1) action plans, justifications for returning SSCs from (a)(1) to (a)(2), and a number of CAPs (contained in the list of documents at the end of this report). In addition, the inspectors reviewed the CAPs to verify that the threshold for identification of problems was at an appropriate level and the associated corrective actions were appropriate. The inspectors focused the inspection on the following systems:

- Chemical and Volume Control (CV);
- Gas Turbine Generator (GT);
- Residual Heat Removal (RHR); and
- Safety Injection (SI).

The inspectors also reviewed two self-assessments that addressed MR implementation at Point Beach Nuclear Plant.

b. Findings

No findings of significance were identified.

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

.1 Review of Equipment and Components Missed in Licensee Risk Assessments

a. Inspection Scope

During the weeks of June 2 and 9, 2003, the inspectors reviewed seven NRC-identified examples of risk assessments (RAs) for which the licensee had not considered components and equipment made unavailable during pre-planned work activities to evaluate the adequacy of the licensee's risk assessment process. For each of the examples, the inspectors reviewed whether the appropriate risk categories had been entered, whether the licensee had implemented normal work controls or risk management actions (RMAs) in accordance with nuclear plant procedure (NP) 10.3.7, "On-Line Safety Assessment," and whether key safety functions had been preserved.

b. Findings

Introduction. The inspectors identified a Green Non-Cited Violation of 10 CFR 50.65(a)(4) for failure to implement required RMAs during calibration of volume control tank (VCT) level transmitters during September 2002 and January 2003.

Description. On March 17, 2003, the inspectors identified that calibration of the Unit 1 VCT level transmitters,1LT-112 and 1LT-141, in accordance with licensee instrumentation and calibration procedure (ICP) 1ICP 13.010 on January 2-3, 2003, had rendered the transmitters unavailable to perform their intended function. The inspectors evaluated the risk impact of the transmitter unavailability and identified an increase in the instantaneous core damage frequency (CDF) from 1.4E-4 per year to 3.5E-4 per year, an increase from 4.1 to 10.3 times the average-maintenance CDF that had been unnoticed by the licensee, but which had remained in the licensee-defined Yellow risk category.

Similarly, the inspectors reviewed calibration of the Unit 2 VCT level transmitters. The calibrations, performed on September 9-10, 2002, resulted in an instantaneous CDF increase of 1.76E-4 per year. This event increased risk from the licensee-defined Green to Yellow category.

Licensee procedure NP 10.3.7, Step 4.2.2, defined the Yellow risk category and specified RMAs that were required to ensure that the assumptions in the probabilistic risk assessment model for equipment availability were not exceeded. As defined in Steps 4.2.2.b and 4.2.2.c, these RMAs included Shift Manager approval for pre-planned entries into the Yellow risk category; monitoring and shortening the duration of the activity; eliminating the overlap of two or more activities that compounded the risk impact; ensuring that personnel associated with the work activity had a heightened awareness of the risk impact; ensuring that work which challenged the availability of redundant operable equipment was avoided; and posting redundant equipment as “protected.” Both VCT level transmitter calibration activities were pre-planned and had been included in the list of scheduled activities for the applicable work week. Since the licensee’s risk assessments had not recognized the unavailability of the level transmitters as a result of performing the calibrations, appropriate RMAs as specified in NP 10.3.7, Steps 4.2.2.b and 4.2.2.c, for the Yellow risk category were not implemented as required.

Other inspector-identified examples involving risk assessments that either did not consider the risk impact of equipment and components rendered unavailable by pre-planned work activities or assigned unavailable components to the incorrect Unit included:

- 480-volt safeguards bus undervoltage relay calibrations in accordance with routine maintenance procedures (RMPs) 1(2)RMP 9056-4(5). This observation affected six undervoltage relays associated with Unit 1 and six with Unit 2;
- Testing of Unit 2 instrument air primary containment isolation valves 2IA-3047 and 2IA-3048 in accordance with inservice test (IT) procedure 115. Two additional instrument air containment isolation valves associated with Unit 1 were also affected by this observation;

- 4160-volt safeguards bus undervoltage relay calibrations in accordance with 1(2)RMP 9056-6(7). This observation affected six undervoltage relays associated with Unit 1 and six with Unit 2;

- Assignment of an unavailable condenser steam dump to Unit 1 when the unavailable component actually applied to Unit 2; and

- Monthly testing of the diesel-driven fire pump in accordance with Procedure 0-PT-FP-002. During diesel cooldown, the back-up source of turbine-driven AFW pump bearing cooling was rendered unavailable.

The inspectors determined that the circumstances of each example had resulted in small changes in the CDF such that no additional RMAs had been required. Multiplying the instantaneous change in CDF by the duration of each activity, the inspectors determined that the seven examples collectively had resulted in an incremental core damage probability increase of approximately 7E-7.

Analysis. The inspectors determined that failure to implement required RMAs during VCT level transmitter calibrations was a performance deficiency warranting a significance evaluation in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on February 21, 2003. The inspectors determined that the issue was more than minor because, if left uncorrected, it would become a more significant safety concern if RAs that had not considered the impact of equipment and components rendered unavailable by pre-planned activities resulted in high risk levels without compensatory RMAs in place. The inspectors used IMC 0609, "Significance Determination Process [SDP]," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," regarding mitigating systems and determined that the finding was not a design or qualification deficiency, did not represent an actual loss of the safety function, or involve internal or external initiating events. Therefore, the finding screened as Green, a finding of very low safety significance.

Enforcement. Section 10 CFR 50.65(a)(4) requires, in part, that before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventative maintenance), the licensee assess and manage the increase in risk that may result from the proposed maintenance activities. Contrary to this, on September 9-10, 2002, for Unit 2, and on January 2-3, 2003, for Unit 1, the licensee failed to assess the risk associated with volume control tank level transmitter calibration activities performed in accordance with procedures 1(2)ICP 13.010. This resulted in the entry into higher risk configurations for which the licensee had not implemented additional risk management actions to obtain management approvals; monitor and shorten the calibration duration; eliminate the overlap of activities that could have compounded the risk impact; ensure that work activity personnel had a heightened awareness of the risk impact; and protect redundant equipment. Because of the very low safety significance, this violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy: NCV 50-266/301/03-03-01, Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities. This issue was entered into the licensee's CAP as CAP031681, "Activities Missed in On-Line Risk Evaluations."

.2 Risk Review of Selected Work Week Activities

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk, scheduling, configuration control, and performance of maintenance associated with planned and emergent work activities to verify that scheduled and emergent work activities were adequately managed. In particular, the inspectors reviewed the program for conducting maintenance risk safety assessments to verify that the planning, risk management tools, and the assessment and management of on-line risk were adequate. The inspectors also reviewed actions to address increased on-line risk when equipment was out-of-service for maintenance, such as establishing compensatory actions, minimizing the duration of the activity, obtaining appropriate management approval, and informing appropriate plant staff, to verify that these actions were accomplished when on-line risk was increased due to maintenance on risk-significant systems, structures, and components. The inspectors also reviewed selected procedures to verify that execution did not render risk-modeled components unavailable. The maintenance risk assessments for work planned for the weeks beginning on the dates listed below were reviewed:

- April 6, 2003. This work included G05 GT repairs, recovery from a Unit 2 forced shutdown, 4160-volt safeguards bus relay calibrations, and D-105 battery performance testing;

- April 27, 2003. This work included undervoltage relay checks for B08/B09, SI valve testing, and reactor protection and safeguards logic testing;

- May 4, 2003. This work included 'A' component cooling water (CCW) heat exchanger inspections and cleaning, SI system venting, D-106 station battery testing, and 4160-volt bus undervoltage relay calibrations. In addition, the inspectors reviewed CAP032992, "2A-04 Relay Work Not Included in Workweek X03 Risk Projection"; which was written as a result of this inspection activity, and discussed the licensee's failure to identify that the calibration of 4160-volt nonsafety-related undervoltage relays, associated with offsite power supplies to the safeguards buses, affected plant risk;

- May 11, 2003. This work included D-106 station battery testing, D-108 battery charger maintenance, SI and RHR pump and valve testing, and P-32E service water (SW) pump switch replacement activities. In addition, the inspectors reviewed CAP033074, "Activities Evaluated for On-Line Risk in Work Week X04," which was written as a result of this inspection activity and discussed the licensee's failure to identify that activities associated with 480-volt safety-related undervoltage relay calibrations and primary containment instrument air valve testing affected plant risk;

- June 8, 2003. This work included 1-DY-02 inverter maintenance for the entire week. The inspectors reviewed the equipment associated with 1-DY-02 and the effect on other work during the week on the risk profile. The inspector reviewed midweek changes that affected risk and the effects of errors made in the risk

profile by work week planning staff. These errors were subsequently corrected by the shift technical advisor (STA);

- June 15, 2003. This work included battery charger D-09, CCW train "B", battery charger D-07, and AFW pump and valve testing. The inspectors reviewed the possible combinations of concurrent work that could cause maintenance risk conditions to be categorized as Red, and verified that the licensee did not enter a Red risk situation. The inspectors reviewed the stop and start time for the various work associated with the risk possibilities; and

- June 22, 2003. This week included a review of the changes in the work week schedule due to red (high demand) electrical grid conditions. The inspectors verified that the rescheduling did not change the plant's risk profile to Red. The inspectors reviewed the 1B-04 bus fuse replacement and plant configuration.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-Routine Plant Evolutions and Events (71111.14)

.1 Cross Unit Leakage Caused Dilution on Unit 1

a. Inspection Scope

The inspectors reviewed operator action during an inadvertent Unit 1RCS dilution and reviewed licensee response to and investigation of the event afterwards. During the Unit 2 power reduction to 50 percent (begun at 12:18 a.m., May 24, 2003), operators placed the Unit 2 letdown orifice on line about 2:01 a.m. This increased the pressure in the Unit 2 gas stripper system from 40 to 50 pounds per square inch-gauge. The increase resulted in leakage from the Unit 2 side of the system to the Unit 1 side. The leakage resulted in pure water being added to the Unit 1 VCT, causing positive reactivity addition and VCT level increase indications. At 11:00 a.m. the Unit 1 reactor operator noted that there had not been a dilution planned during his shift and that VCT level had increased. The licensee initiated an investigation of the source of the dilution. At 12:08 p.m., the licensee identified the leak which was determined to be through one of the gas stripper system crossconnect valves. The licensee isolated the leak at 12:54 p.m.

b. Findings

No findings of significance were identified.

.2 Unit 2 Main Feedwater Pump Casing Leak

a. Inspection Scope

During the week of May 23, 2003, the inspectors monitored operator actions for a secondary leak on the Unit 2 'A' main feedwater pump leak from a bolt hole in the upper casing to ensure plant and personnel safety were maintained. At 10:31 a.m., Unit 2 operators entered AOP 24, Secondary Steam Leak procedure, and reduced power. The steam leak began as a small wisp and increased to about 2 to 3 feet in length over the next several hours. The plant power was reduced to approximately 50 percent and the main feedwater pump was isolated and repaired.

b. Findings

No findings of significance were identified.

.3 Both Units Reduce Power Due to Fish Intrusion

a. Inspection Scope

During the week of June 30, 2003, the inspectors observed operators reduce power on both Units to 95 percent because of decreasing condenser vacuum, starting at 2:45 p.m. The vacuum problem was caused by a fish intrusion in the circulating water pump bays. Operators secured a Unit 1 circulating water pump and lined up the swing water box vacuum pump to maintain flow through the condenser. Unit 1 was then stabilized at 95 percent power. Auxiliary operators cleaned the strainers for the Unit 1 condenser water box vacuum priming pump and shifted the swing pump to Unit 2. Operators secured a Unit 2 circulating water pump but vacuum continued to be lost until the swing vacuum priming pump was shifted from Unit 1. The operators reduced power on Unit 2 to 90 percent.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

.1 Multiple Battery Chargers Under Certain Conditions Could Trip

a. Inspection Scope

During the week of June 9, 2003, the inspectors assessed Operability Determination, OPR000063, "Potential Tripping of Battery Chargers." The inspectors examined the effects of a problem with breaker coordination to determine the potential operability. The condition could lead to a trip of feeder breakers for safety-related battery chargers D-09, D-107, D-108, and D-109, and could affect the plant recovery from a loss of

offsite alternating current (AC) voltage with a SI signal, from a loss of AC voltage, or from a station blackout. The inspectors discussed the compensatory measures with operations staff and walked down affected equipment. The inspectors also interviewed selected system and electrical engineering personnel to understand fully the potential implications of the issue.

b. Findings

No findings of significance were identified.

.2 Pump Motor Terminal Equipment Qualification (EQ)

a. Inspection Scope

During the week of May 17, 2003, the inspectors reviewed the Operability Determination OPR 000059, "EQ Pump Motor Splices Not Qualified/No Sound Reasons Documented," for the emergency core cooling system motors that require EQ in accordance with 10 CFR 50.49 to ensure that the connections meet the operability requirements. The inspectors reviewed the regulatory requirements and the basis for the changes in the material that was used for the terminal splices. The inspectors also interviewed the diesel and electrical cable engineers about the splices that had been changed during the life of the plant as to the possible application of the operability determination. The licensee operability determination of the EQ conditions verified that the terminals met the EQ requirements and were operable and the documentation was being corrected.

b. Findings

No findings of significance were identified.

.3 Intermediate and Power Range Instrument Cable Separation

a. Inspection Scope

During the week of May 24, 2003, the inspectors reviewed information regarding separation of the safety-related N-00044 power range instrument cables and the nonsafety-related N-00035 and N-00036 intermediate range cables. The inspectors verified that the plant was meeting the current licensing basis and Institute of Electrical and Electronics Engineers 384. The inspectors reviewed CAP032083, "N44 Power Range Protective Circuit Isolation Compromised by Control Grade Signal," and Operability Determination OPR 00055, "Separation Requirement Violation in 1C-130 and 2C-133; N-00044, N-00035, and N-00036; Unit 0," Revision 0 and Revision 1, to verify that the cables were not separated and discussed the issue with the electrical design and system engineers. The separation of nonsafety-related and safety-related cables of low amperage is covered by The Institute of Electrical and Electronics Engineers Standard 384, Criteria for Independence of Class IE Equipment and Circuits. The safety-related sections of the nuclear instrument cables are separated either in different cable trays or with isolation amplifiers.

b. Findings

No findings of significance were identified.

.4 Incorrect Leak Detection Information in Approved Westinghouse Commercial Atomic Power Report (WCAP)

a. Inspection Scope

During the week of May 24, 2003, the inspectors reviewed Operability Determination OPR000060, "Incorrect Leak Determination Information in Approved WCAP," for impact on the decision by NRC to grant permission for CCW inside containment closed loop determination, power up-rate, and control room envelope changes. On May 13, the licensee's licensing group discovered that WCAP 15065, 15105, and 15107 referred to containment leakage criteria for 1 gpm in 1 hour. This information was considered by the NRC as part of a safety analysis to reclassify the CCW system as a closed system inside containment, but was not used in the final determination to allow the reclassification. The WCAPs should have stated that the leak detection system at Point Beach was required to identify 1 gpm in 4 hours. The licensee contacted Westinghouse and the determination of operability did not change when the 4-hour criteria was applied.

b. Findings

No findings of significance were identified.

.5 Elevated Unit 2 'A' Steam Generator AFW Injection Line Temperatures Due to Check Valve Backleakage

a. Inspection Scope

During the week of May 19, 2003, the inspectors reviewed Operability Determination OPR000061, "Unit 2, Piping EB-10, Increased Temperatures on AFW Piping," to evaluate the impact of elevated injection line temperatures on the ability of the AFW system to provide design basis flows to the steam generators during accident and anticipated operational conditions. The inspectors examined thermography data, past material history, and selected WOs to determine which check valves were leaking. The inspectors considered the effects of localized cavitation causing loss of minimum pipe wall thicknesses and the formation of vapor pockets leading to potential waterhammer and steam binding concerns to verify that the system remained capable of performing the intended safety functions. The inspectors also verified that the licensee's compensatory actions were adequate and sufficiently conservative to prevent American Society of Mechanical Engineers Code allowable stresses on the AFW injection line inside containment from being exceeded during seismic events. Finally, the inspectors reviewed CAP033025, "Issues Encountered During Preparation of Operability Determination OPR 000061, Revision 0," and the licensee's check valve repair plans to ensure that actions were being taken commensurate with the potential safety significance.

b. Findings

No findings of significance were identified.

.6 Instrument Air Rework

a. Inspection Scope

The inspectors reviewed CAP033625, “New ASCO Solenoid Valve Fails Operational Check Following Pre-use Bench Test,” concerning the new solenoid valve on the air compressor that failed twice, but passed the test on the bench and the operability determination for the instrument air system. The inspectors discussed corrective actions and follow-up investigations with the system engineer and learned that the internal valve for the four-way solenoid would not work using system pressure.

b. Findings

No findings of significance were identified.

.7 Failure of Valve 1CV-369A

a. The inspectors reviewed the licensee’s documentation concerning the installation of valve 1CV-369A without proper documentation of a dye penetrant (PT) exam to verify that the valve met American National Standards Institute (ANSI) requirements. The inspectors reviewed CAP0131959, “Vendor did not fulfill requirements of purchase order”; CA02289799, “Assess Adequacy of Installed 1CV-369A Without Documented PT Exam”; Apparent Cause Evaluation (ACE) ACE 001263, “Vendor Did Not Fulfill Requirements of Purchase Order”; NP 9.9.6 (Quality Receipt) form FP-SC-RSI-02, Revision 0; OPR 000064, “Purchase Specification Requirements Not Performed for 1CV-00369A Replacement Valve Operability Determination”; PO 4500429607, “Purchase Order for Edward Vogt Valve Company”; and WO9937802, “Replace CV-00369A,” to verify that the valve met all of the requirements for the function it was to perform. The inspectors verified that the procurement process and quality validation requirements were established in procedures. The inspectors noted that the individual quality control specialist work had been reviewed and no other cases were identified. The equipment met the ANSI standards and had been tested to ensure that it would perform its intended function.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (OWAs) (71111.16)

.1 Remote Indicators for 1/2P-29 Discharge Motor-Operated Valves

a. Inspection Scope

During the week of June 9, 2003, the inspectors reviewed OWA 0-03R-004 AF to verify that the workaround was properly classified and dispositioned in accordance with the criteria of the licensee's procedure. The workaround concerned the inability of the remote level indicators associated with 1/2P-29 [turbine-driven AFW pump] discharge motor-operated valves to stay within the calibration tolerance range of the local indication. The inspectors reviewed the adequacy of licensee actions to address the issue; examined the remote and local indicators to verify that all impacts were understood and evaluated the potential risk impacts to ensure that the workaround did not impact the operators' ability to implement normal, abnormal, and emergency operating procedures.

b. Findings

No findings of significance were identified.

.2 Review of Charging Pump Trips on Return to Service

a. Inspection Scope

During the week of June 9, 2003, the inspectors reviewed OWA 2-02R-005 CV to verify that the workaround was properly classified and dispositioned in accordance with the criteria of the licensee's procedure. The workaround concerned the frequent tripping of the charging pump from overspeed because of the inability to precisely set to optimum setting. The inspectors reviewed the adequacy of licensee actions to address the issue, and examined all impacts on the operators' ability to implement normal, abnormal, and emergency operating procedures.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (PMT) (71111.19)

.1 SW Pump 32F Motor Replacement

a. Inspection Scope

During the week of May 17, 2003, the inspectors reviewed the documentation for the replacement of 32F SW pump motor. The inspectors reviewed the activity to ensure that the PMT was appropriate for the scope of work performed and that the SW pump remained capable of performing the intended safety function. The inspectors reviewed the completed test and WO documentation to determine the adequacy of the procedures used; to verify that the test data were complete, appropriately verified, and

met the requirements of the test procedure; and to ensure the system had been restored to an operable status.

b. Findings

No findings of significance were identified.

.2 Instrument Air Compressor Unloader Solenoid Replacement

a. Inspection Scope

During the week of May 24, 2003, the inspectors reviewed the replacement and return to service of the unloader solenoid for the instrument air compressor K-2B. The inspectors reviewed the activity to ensure that the PMT was appropriate for the scope of work performed. The replacement solenoid was from a different manufacturer. The inspectors reviewed the engineering documentation to ensure that the replacement solenoid was comparable to the original. During the initial PMT, the operators found that the solenoid valve was not repositioning correctly and one of the Swagelok® fittings was leaking. An addendum was developed for the work package and the PMT failed a second time. During the second PMT, the unloader valve did not position correctly. The work package was again returned to maintenance and a second rework was performed.

b. Findings

No findings of significance were identified.

.3 Unit 1 'C' Incore Flux Detector Replacement

a. Inspection Scope

During the week of May 19, 2003, the inspectors reviewed PMT activities associated with replacement of the Unit 1 'C' incore flux detector, 1FM-CH-C. The inspectors reviewed the PMT to ensure that it was appropriate for the scope of work performed and the detector remained capable of monitoring in-core conditions. The inspectors reviewed the completed troubleshooting and WO documentation to determine the adequacy of the procedures used; to verify that troubleshooting data were complete, appropriately verified, and met the requirements of the test procedure; to ensure the detector had been restored to an operable status; and to determine why the first attempt at replacing the detector had been unsuccessful.

b. Findings

No findings of significance were identified.

.4 Unit 2 CCW Pump Rotating Assembly Replacement

a. Inspection Scope

During the week of June 2, 2003, the inspectors reviewed activities associated with the Unit 2, 'A' CCW pump, 2P-11A, to ensure that the PMT was appropriate for the scope of work performed and the pump remained capable of performing the intended safety function. The inspectors also observed portions of the maintenance to examine the material condition of selected pump components. The inspectors reviewed the completed test and WO documentation to determine the adequacy of the procedures used; to verify that the test data were complete, appropriately verified, and met the requirements of the test procedure; and to ensure the system had been restored to an operable status. Finally, the inspectors observed the running pump following PMT activities to verify appropriate gland leakage and reviewed licensee activities to correct excessive oil consumption due to movement of an oil seal.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

.1 Missed Calibration of Degraded Voltage Relays

a. Inspection Scope

During the week of April 7, 2003, the inspectors reviewed the circumstances associated with missed Technical Specification (TS) Surveillance Requirement (SR) 3.3.4.3.b concerning calibration of 4160-volt safeguard bus degraded voltage relays to determine whether TS requirements had been satisfied. The inspectors reviewed compliance with TS SR 3.0.3 and the associated risk evaluation when, due to severe weather, performance of the surveillance was delayed for greater than 24 hours. The inspectors also reviewed routine maintenance and operations refueling test procedures to ensure that all portions of the safeguards circuitry associated with the degraded voltage relays were tested for 2-out-of-3 coincidence logic functions, electrical continuity, and the ability of relay contacts to change state.

b. Findings

No findings of significance were identified.

.2 Primary Leak Rate Calculation

a. Inspection Scope

During the week of April 26, 2003, the inspectors reviewed the RCS leak rate calculation program to determine whether TS requirements had been satisfied. The inspectors reviewed the daily calculations performed by the shift operating crew and the trend program and review performed by engineering. The inspector discussed

alternative methods for identifying RCS leakage with the system engineer and discussed the draft procedures that were being written by the licensee.

b. Findings

No findings of significance were identified.

.3 Diesel Generator G01

a. Inspection Scope

During the week of May 24, 2003, the inspectors reviewed the diesel generator G01 quarterly testing and SW cooler cleaning to determine whether TS requirements had been satisfied. The inspectors reviewed the results of pole drop testing performed during the vibration trend testing and the reviews performed by engineering. The inspector discussed the vibration monitoring program with the system engineer.

b. Findings

No findings of significance were identified.

.4 Control Room Heating and Ventilation

a. Inspection Scope

During the week of June 20, 2003, the inspectors reviewed the control room ventilation quarterly testing to determine whether TS requirements had been satisfied. The inspectors reviewed the flow rate and differential pressure testing information performed during the surveillance testing and the reviews performed by engineering. The inspectors reviewed the WOs associated with past performance problems.

b. Findings

No findings of significance were identified.

.5 Station Battery Tests

a. Inspection Scope

During the week of June 23, 2003, the inspectors reviewed the station battery D-106 Discharge Tests and Equalizing Charge and the Station Battery 92-day and 12-month surveillance tests to determine whether TS requirements had been satisfied. The inspectors reviewed the tests results, minor problems that were noted during testing, and the reviews performed by engineering staff. The inspector discussed the battery and DC system health with the system engineer.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

.1 Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified In a Timely Manner

a. Inspection Scope

During the weeks of April 19 and 26, 2003, the inspectors reviewed the temporary modification package and WOs associated with the Unit 2, 'D' containment cooling fan discharge damper, 2W-1D2-A, to verify that the modification was properly installed, had no effect on the operability of the safety-related equipment, and met design basis requirements. The inspectors interviewed selected maintenance, operations, and engineering personnel to assess the rigor of licensee communications and the opportunities to have identified containment cooling fan inoperability at the earliest opportunity. The inspectors also reviewed documentation associated with Operating Instruction (OI) 131, "Performance Test of 2HX-15D1-D8 Containment Fan Cooler Unit 2," to determine when the 2W-1D2-A discharge damper degraded conditions were first noticed.

b. Findings

Introduction. The inspectors identified a finding of very low significance for not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, during thermal performance testing on March 20, 2003. Despite the involvement of the test coordinator, control room operating supervisor, and system engineer, incomplete communications and coordination resulted in damper parts not being installed in the damper which affected damper operability. The condition adverse to quality was identified on April 2 when maintenance personnel identified the damper counterweight had not been installed in the damper. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified.

Description. Operating Instruction 131 was performed on March 20, 2003, to determine the heat removal capability of the Unit 2 containment fan coolers. During OI-131, Step 5.4.10, "foreign material exclusion closeout activities," the test coordinator noticed and documented that the top louver on the 2W-1D2-A backdraft damper was disconnected from the positioning rod. The test coordinator also noticed that a 4-inch by 4-inch block of metal and two small brackets were lying on the containment cooling fan plenum floor and that while the top louver was shut, the lower louvers were all open. The test coordinator provided his observations to the control room operating supervisor (OS), who was a licensed senior reactor operator, after exiting primary containment. The control room OS recognized that the backdraft damper in question performed the safety-related function of closing to prevent airflow from the containment accident recirculation fan from flowing back through the normal cooling fan during loss-of-coolant or main steam line break design basis events inside containment. The OS contacted the system engineer during the evening of March 20, to inform him of the test coordinator's observations and to gain engineering support for determining containment fan cooler operability prior to returning the fan to service. Based on the discussions with the system engineer and the test coordinator, the OS decided to declare the discharge damper operable and return the containment cooling fan to

service. The OS based his decision on the premise that the top louver was already shut and the lower louvers were free to rotate. The OS reasoned that the top louver was already in the safety-related position and the lower louvers would still be able to shut to perform the intended safety function.

On April 2, 2003, a mechanic noticed a counterweight on a table in a radiologically controlled machine shop in the primary auxiliary building. The mechanic recognized that the counterweight, the same 4-inch by 4-inch block of metal that had been noticed by the test coordinator on March 20, was from a safety-related backdraft damper. The mechanic informed the system engineer who discussed the mechanic's observation with operating crew. The containment accident recirculation fan, 2W-1D1, and the containment cooling fan, 2W-1D2, were declared out-of-service at 2:05 p.m. the same day. Subsequent containment entries confirmed that the counterweight had detached from the 2W-1D2-A discharge damper, several of the louver bearings appeared to have seized resulting in the damper being stuck in the partially open position, the damper linkage was detached from the top louver, the top louver was closed with the remaining louvers being partially open, and that some force was required to close the damper. Temporary Modification 03-012, "2W-001D2-A Damper Closure," was subsequently prepared and installed by the morning of April 3, to secure the damper in the closed, safety-related position, thereby returning the containment fan cooler to an operable condition.

During document reviews and interviews with the test coordinator, OS, system engineer, and the mechanic who identified the counterweight lying in the machine shop, the inspectors found that, despite the communications that occurred,

- The system engineer was not aware that loose parts had been found on the cooling fan plenum floor during the test coordinator's foreign material closeout activities. The system engineer stated that he had recommended returning the cooling fan to service based on the premise that the upper louver was already in the safety-related position and the lower louvers were free to rotate;

- Neither the test coordinator, OS, or system engineer recognized that the 4-inch by 4-inch block of metal found on the containment cooling fan plenum floor on March 20, 2003, was a counterweight associated with the discharge damper, 2W-1D2-A. When the counterweight became detached from the discharge damper the configuration of the safety-related component changed. Thus, a formal operability evaluation should have been completed prior to returning the containment fan cooler to service in the existing condition;

- Additional expertise, beyond the system engineer and test coordinator, was not obtained on the evening of March 20. Organizationally, the licensee did not require a system engineer to physically inspect the discharge damper or the parts found on the plenum floor or request mechanical maintenance personnel to inspect the same. Had system engineering or mechanical maintenance inspections occurred, the inspectors considered it likely that the degraded damper condition would have been identified and an operability evaluation performed prior to returning the containment cooling fan to service;

- The OI-131 post-maintenance test was not written to verify that the safety-related function of the 2W-1D2-A discharge damper could be met. Specifically, Steps 5.4.14 and 5.4.20 started both the containment accident recirculation fan and the containment cooling fan to check for normal air flow rates. None of the OI-131 PMT steps ran the containment accident recirculation fan alone such that closure of the 2W-1D2-A discharge damper could be verified;

- Neither the OS or test coordinator checked to see if the lower louvers were difficult to rotate on March 20. Inspections on April 2, revealed that the lower louvers could only be closed when some force was applied and that bearing damage had occurred; and

- The test coordinator did not have specific containment fan cooling system knowledge and did not identify the 4-inch by 4-inch block of metal as the 2W-1D2-A discharge damper counterweight.

Analysis. The inspectors determined that not taking appropriate and timely corrective actions to fully assess and correct the degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, on March 20, 2003, was a performance deficiency warranting a significance evaluation in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on February 21, 2003. The inspectors determined that the issue was more than minor because: 1) it affected the reactor safety barrier integrity cornerstone objective of maintaining the functionality of primary containment in that the reliability and availability of the Unit 2, 'D' containment cooling fan, a risk significant large-early-release component, was affected, and 2) if left uncorrected, would become a more significant safety concern in subsequent years if components relied upon to perform safety-related functions were returned to service prior to fully assessing and correcting degraded conditions.

The inspectors used IMC 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," regarding containment barriers and determined that the finding did not represent a degradation of the radiological barrier function of the control room, auxiliary building, or spent fuel pool; did not represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere; did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment. Therefore, the finding screened as Green, a finding of very low safety significance.

Enforcement. Criterion XVI, "Corrective Action," of 10 CFR Part 50, Appendix B, requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected and that corrective actions be taken to preclude repetition. Contrary to this, on March 20, 2003, the licensee failed to fully assess and correct the degraded conditions associated with the Unit 2, 'D' containment cooling fan discharge damper, 2W-1D2-A, despite finding parts of the damper assembly on the containment cooling fan plenum floor and senior reactor operator, test coordinator, and system engineering discussions on the degraded condition having occurred. The degraded condition was not fully assessed until 13 days later when, on

April 2, a licensee mechanic noticed a 2W-1D2-A discharge damper counterweight in a radiologically controlled machine shop in the primary auxiliary building and questioned the origin of the component.

Since the other three Unit 2 containment fan cooling units and two containment spray systems had remained operable between March 20 and April 2, 2003, the ability to provide containment atmosphere cooling to limit post-accident pressures and temperatures to less than design values continued to be met. Accordingly, this violation is being treated as an NCV (NCV 50-301/03-03-03) consistent with Section VI.A. of the NRC Enforcement Policy. This violation was entered into the licensee's Corrective action system as CAP031978, "Backdraft Damper Degraded, 2W-001D2-A."

.2 Temporary Modification 03-014, Installation of Sump Pumps in Manholes #1 and #2

a. Inspection Scope

During the week of June 9, 2003, the inspectors reviewed the temporary modification package associated with Temporary Modification 03-014, Installation of Sump Pumps in Manholes, to determine the potential impact on cable reliability and plant operations. The inspectors reviewed the design document process and work that was performed. The inspectors interviewed plant staff about this process and reviewed the separate processes to ensure that the process did not allow closure without the actions being complete.

b. Findings

No findings of significance were identified.

.3 Temporary Modification 03-15, Cable Manhole Sump Pump Installation

a. Inspection Scope

During the week of June 20, 2003, the inspectors reviewed the temporary modification package associated with Temporary Modification 03-015, Installation of Sump Pumps in Manholes 3, 10, 14, 16, and 19, to determine the potential impact on cable reliability and plant operations. The inspectors reviewed the design document process and work that was performed. The inspectors questioned the plant staff about this process and reviewed the separate processes to ensure that the process did not allow closure without the actions being complete.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspector reviewed Revisions 46 and 47 to Section 5, Revisions 44, 45, and 46 to Section 6, and Revision 45 to Section 7 of the Point Beach Nuclear Plant's Emergency Plan to determine whether changes identified in these revisions reduced the effectiveness of the licensee's emergency planning, pending onsite inspection of the implementation of these changes.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

.1 Resident Inspector Observation of Emergency Preparedness Drill

a. Inspection Scope

On June 5, 2003, the inspectors observed an emergency preparedness drill to evaluate the adequacy of the licensee's drill conduct and critique performance. The inspectors observed the drill from the control room (simulator), technical support center, operations support center, and emergency operations facility to evaluate emergency preparedness performance at multiple locations. The inspectors also attended control room and technical support center critique sessions immediately following the drill termination on June 5, to evaluate the licensee's identification of emergency planning weaknesses and deficiencies. The inspectors reviewed Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2, Section 2.4, "Emergency Preparedness Cornerstone," to aid in determining the adequacy of the licensee's critique process and whether certain NRC Drill/Exercise Performance opportunities were successful.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs (71122.03)

.1 Review of Environmental Monitoring Reports and Data

a. Inspection Scope

The inspectors reviewed the 2002 Annual Environmental Monitoring Report. Sampling location commitments, monitoring and measurement frequencies, land use census, the vendor laboratory's Interlaboratory Comparison Program, and data analysis were assessed. Anomalous results including data, missed samples, and inoperable or lost equipment were evaluated. The inspectors reviewed the Radiological Environmental Monitoring Program (REMP) to verify that the licensee's program was implemented as required by the Radiological Environmental Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM), and associated TSs, and that changes, if any, did not affect the licensee's ability to monitor the impacts of radioactive effluent releases on the environment. The inspectors reviewed the most recent quality assessment of the licensee's REMP vendor to verify that the vendor laboratory performance was consistent with licensee and NRC requirements.

b. Findings

No findings of significance were identified.

.2 Walkdowns of Radiological Environmental Monitoring Stations and Meteorological Tower

a. Inspection Scope

The inspectors conducted a walkdown of selected environmental air, water, vegetation, and soil sampling stations and thermoluminescent dosimeters locations to verify that the locations were consistent with their descriptions in the RETS/ODCM and to evaluate the equipment material condition and operability. The inspectors also conducted a walkdown of the primary meteorological monitoring site to validate that sensors were adequately positioned and operable. The inspectors reviewed the CY 2002 Annual Environmental Monitoring Report to evaluate the onsite meteorological monitoring program's data recovery rates, routine calibration and maintenance activities, and non-scheduled maintenance activities. The inspectors verified that the meteorological instrumentation was operable, and was calibrated and maintained in accordance with licensee procedures. The inspectors also reviewed indications of wind speed, wind direction, and atmospheric stability measurements to verify that the indications were available in the Control Room and that the instrument indications were operable.

b. Findings

No findings of significance were identified.

.3 Review of REMP Sample Collection and Analysis

a. Inspection Scope

The inspectors accompanied the licensee REMP technician to observe the collection and preparation of air particulate filters, iodine sampling cartridges, and lake water samples to verify that representative samples were being collected in accordance with procedures and the RETS/ODCM. The inspectors observed the technician perform air sampler field check maintenance to verify that the air samplers were functioning in accordance with procedures. Selected air sampler calibration and maintenance records for CY 2001 and 2002 were reviewed to verify that the equipment was being maintained as required. The environmental sample collection program was compared with the RETS/ODCM to verify that samples were representative of the licensee's release pathways. Additionally, the inspectors reviewed results of the vendor Interlaboratory Comparison Program to verify that the vendor was capable of performing adequate radiochemical measurements.

b. Findings

No findings of significance were identified.

.4 Unrestricted Release of Material From the Radiologically Controlled Area

a. Inspection Scope

The inspectors evaluated the licensee's controls, procedures, and practices for the unrestricted release of material from radiologically controlled areas and conducted reviews to verify that: (1) radiation monitoring instrumentation used to perform surveys for unrestricted release of materials was appropriate; (2) instrument sensitivities were consistent with NRC guidance contained in Inspection and Enforcement Circular 81-07, Control of Radioactively Contaminated Material, and in NUREG/CR-5569, Health Physics Positions Data Base, for both surface contaminated and volumetrically contaminated materials; (3) criteria for survey and release conformed to NRC requirements; (4) licensee procedures were technically sound and provided clear guidance for survey methodologies; and (5) radiation protection (RP) staff adequately implemented station procedures.

The inspectors reviewed the circumstances of the May 14, 2003, discovery of a previously unaccounted for and installed strontium-90/yttrium-90 RMS area monitor check source found in the instrument and control (I&C) training laboratory. This laboratory was located outside the protected area, but within the owner controlled area. Specifically, the inspectors reviewed the licensee's initial CAP, investigative documents (including worker statements and a timeline of the event), and survey data. The incident was discussed with the RP manager and several other members of the RP staff.

b. Findings

Introduction. A self-revealing Green finding and an associated NCV were identified for the failure to maintain control of licensed radioactive material that was not in storage (i.e., a previously unaccounted for and installed strontium-90/yttrium-90 RMS area monitor check source) which was discovered in an I&C training lab.

Description. On May 14, 2003, during RMS training in the licensee's training building, an I&C instructor handed out several RMS area monitor detectors for hands-on use by trainees. While inspecting the internals of a detector (serial number (S/N) 666), one of the trainees noticed that a radioactive check source (S/N CS-20) containing approximately 1 microcurie strontium-90/yttrium-90, was still installed in the detector and reported this to the instructor. The instructor immediately removed the source from the classroom and put it under control in the I&C lab. The RP group was notified and the source was controlled per the licensee's source control procedure.

The I&C training lab is located in the licensee's training building which is located outside of the protected area, but is within the owner controlled area of the station. Instrument and control staff surmised that the RMS detector and source were part of original plant equipment installed in the 1970s that was replaced in the early 1980s, and were probably stored in the old I&C training lab in the North Service Building until 1999. The RMS detector found with the check source had been moved out to the training building in 1999 along with four other RMS detectors. These detectors had been moved out of the protected area along with a large amount of other I&C training lab equipment through the vehicle access gate. The I&C personnel were not aware at that time that one of the detectors still had a check source installed.

This event was self-revealing when, on May 14, 2003, an RP technician retrieved the source from the training building and placed it into the cleanside source storage room in the protected area. The check source, which is a sealed source and is labeled "Caution, Radioactive Material" with a yellow and magenta sticker is a one-half inch disc electroplated with strontium-90/yttrium-90. Four more RMS detectors that were also being used for training were searched and no additional check sources were found. Radiation protection management was notified of this event. The licensee performed searches of the I&C training classroom, laboratory, and other training areas to determine if any additional equipment that may have had radioactive materials was present. None were found. The licensee performed contamination surveys on the strontium-90/yttrium-90 source, RMS detector S/N 666, and the other four RMS detectors, to verify there was no detectable loose surface contamination present. None was detected. The licensee also performed extensive radiation and contamination surveys of the training building classrooms and associated storage areas to verify there was no additional detectable radioactive material in any of the above mentioned locations.

The licensee determined that it did not possess any historical records (i.e., maintenance logs, manufacturers's purchase/sales information, or source receipts) or other documentation associated with RMS detector S/N 666. The licensee's apparent cause evaluation cited a lack of an effective source control program prior to 1998. Contributing factors cited were inadequate searches of the I&C training lab storage area and the I&C storeroom in the North Service Building during 1997 and 1998. Also cited as a contributing factor was a lack of an effective detector/source control matching methodology (i.e., the numbers of detectors were not

matched with numbers of existing sources) which did not exist at the time of these searches.

Analysis. The inspectors determined that the issue was associated with the "Program and Process" attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective in ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain. Also, the issue involved an occurrence in the licensee's radioactive material control program that is contrary to both NRC regulations and licensee procedures. Therefore, the issue was more than minor and represents a finding which was evaluated using the SDP for the Public Radiation Safety Cornerstone.

The inspectors determined that the licensee failed to prevent the inadvertent release and/or loss of control of licensed radioactive material to an unrestricted area that could cause an actual or credible radiation dose to member of the public. As such, the inspectors determined, utilizing Manual Chapter 0609, Appendix D, "Public Radiation Safety SDP," that the finding involved radioactive material control, but transportation was not involved. The public radiation exposure was not greater than 0.005 rem (5 millirem) and the licensee did not have more than five radioactive material control occurrences (in the previous eight quarters). Consequently, the inspectors concluded that the SDP assessment for this finding was of very low safety significance (Green).

Enforcement. Section 10 CFR 20.1802 requires that the licensee control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. On May 14, 2003, the licensee failed to maintain control of licensed radioactive material (i.e., an uninventoried, internal strontium-90/yttrium-90 RMS area monitor check source) which was discovered in an I&C training lab. This failure constitutes a violation of 10 CFR 20.1802. However, because the licensee documented this issue in its corrective action program (CAP No. 032907) and because the violation is of very low safety significance, it is being treated as an NCV (NCV 50-266/301/03-03-02).

.5 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed CAPs, the results of the licensee's REMP self-assessment performed during the second quarter of 2002, and Nuclear Oversight (quality assurance) observation reports addressing the REMP to determine if problems were being identified and entered into the CAP for timely resolution. The inspectors also reviewed the licensee's pre-inspection readiness evaluation of the REMP, which evaluated the current state of the program and the completion status of the previous self-assessment items. The inspectors also reviewed the licensee's overall management of the REMP, including attention to details of the sampling program and the vendor laboratory, in order to evaluate the effectiveness of the REMP in collection and analysis of samples for the detection of offsite radiological contamination.

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Cornerstone: Physical Protection

3PP2 Access Control (Identification, Authorization and Search of Personnel, Packages, and Vehicles) (71130.04)

a. Inspection Scope

The inspectors reviewed the licensee's protected area access control testing and maintenance procedures. The inspectors observed licensee testing of all protected area access control equipment to determine if testing and maintenance practices were performance based. On two occasions, the inspectors observed in-processing search of personnel, packages, and vehicles to determine whether search practices were conducted in accordance with regulatory requirements.

The inspectors reviewed security-related event reports and safeguard log entries associated with the access control program from April 2002 through June 15, 2003. The inspectors also reviewed the licensee's CAP to determine if security-related issues associated with the access control program were appropriately identified and resolved.

b. Findings

No findings of significance were identified.

3PP3 Response to Contingency Event (71130.03)

a. Inspection Scope

The inspectors walked down the licensee's protected area intrusion alarm system to identify potential vulnerabilities. The inspectors, accompanied by licensee security representatives, observed testing of inspector and licensee selected protected area intrusion alarm zones. Alarm zone detection was evaluated by conducting various testing methods.

The inspectors also reviewed the effectiveness of alarm station personnel to recognize and identify activities in the protected area alarm detection zones on the assessment monitors. The inspectors also reviewed the field of view provided by the assessment aids to ensure compliance with the licensee's security plan.

The inspectors also reviewed a sample of licensee force-on-force drill records, and interviewed security management personnel to determine if the licensee had appropriately identified and resolved issues associated with the contingency response program.

b. Findings

No findings of significance were identified.

3PP4 Security Plan Changes (71130.04)

a. Inspection Scope

The inspectors reviewed revisions dated May 19, 2003, to the Point Beach Plant Security and Safeguard Contingency Plan to verify that changes did not decrease the effectiveness of the submitted document. The referenced revision was submitted in accordance with 10 CFR 50.54(p) by a licensee letter dated May 19, 2003.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

.1 High Pressure Safety Injection System Unavailability

a. Inspection Scope

During the week of June 9, 2003, the inspectors reviewed portions of the Units 1 and 2, 2002 and 2003 data obtained for the High Pressure Safety Injection System Unavailability PIs using the definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2.

The inspectors reviewed station log entries, selected procedures, and system engineer data sheets to verify that planned and unplanned unavailability hours were characterized correctly in determining PI results. The inspectors also performed independent calculations to verify PI data.

b. Findings

No findings of significance were identified.

.2 Unplanned Scrams per 7,000 Critical Hours

a. Inspection Scope

During the week of June 9, 2003, the inspectors reviewed licensee records to verify the Unplanned Scrams per 7,000 Critical Hours PIs for Units 1 and 2 for 2002 and 2003. The inspectors used the definitions and guidance contained in NEI 99-02, Revision 2, for this review.

The inspectors reviewed station log entries, Licensee Event Reports (LERs), and PI coordinator data sheets to verify that all unplanned scrams had been characterized correctly in determining PI results.

b. Findings

No findings of significance were identified.

.3 Scrams With Loss of Normal Heat Removal

a. Inspection Scope

During the week of June 9, 2003, the inspectors reviewed portions of the Units 1 and 2, 2002 and 2003 data for the Scrams With Loss of Normal Heat Removal PIs using the definitions and guidance contained in NEI 99-02, Revision 2.

The inspectors reviewed station log entries, LERs, and PI coordinator data sheets to verify that all scrams with loss of normal heat removal had been characterized correctly in determining PI results.

b. Findings

No findings of significance were identified.

.4 RETS/ODCM Radiological Effluent Occurrence

a. Inspection Scope

The inspector reviewed selected CAPs for 2002 and 2003 and offsite dose calculations (3rd quarter 2002 through 1st quarter 2003) to identify any occurrences that were not identified by the licensee and to verify that the licensee had accurately reported the PI for the public radiation safety cornerstone. The inspector discussed the RETS/ODCM PI data collection and analysis process with the data steward for this indicator, to verify that the program was implemented consistent with industry guidelines provided in NEI 99-02, Revision 2, and licensee procedures.

b. Findings

No findings of significance were identified.

.5 Safeguards Strategic Area

a. Inspection Scope

The inspectors sampled licensee submittals for the PI listed below for the period from April 2002 through May 2003. To verify the accuracy of the PI data requested during that period, PI definition and guidance contained in Revision 2 of NEI 99-02 were used. The following PIs were reviewed:

- Fitness-for-Duty Personnel Reliability;
- Personnel Screening Program; and
- Protected Area Security Equipment.

A sample of plant reports related to security events, security shift activity logs, and fitness-for-duty reports were also reviewed.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Control Room Operator Performance During Plant Evolutions

a. Inspection Scope

During April 5 through April 26, 2003, the inspectors observed operator actions during routine and non-routine evolutions to assess the performance of the operations crews. The inspectors observed the crews during a Unit 2 loss of condenser vacuum event and subsequent startup activities.

b. Findings and Observations

During a Unit 2 plant shutdown due to loss of condenser vacuum, the operators failed to recognize that the TS surveillance related to the P-6 and P-10 interlocks needed to be performed within 4 hours of shutdown. The surveillance was subsequently performed within TS-required time limits.

During the Unit 2 approach to criticality at 3:20 a.m. on April 6, the indicated value for 2F-466 (Loop A Feedwater Flow to Control Flow Indicator) changed from 0 to approximately 0.7×10^6 pounds per hour and an alarm was received. The operators were slow to recognize that the indication had failed. Specifically, the alarm was acknowledged at 3:20 a.m., but the indication failure was not acted upon until 2½ hours later.

While neither event resulted in a finding or violation, they were indicative of a lack of attention to detail and slow evaluations of an abnormal condition.

.2 Apparent Cause Evaluations (ACEs) Associated With Risk Modeling Errors

a. Inspection Scope

During the weeks of June 2 and 9, 2003, the inspectors reviewed four ACEs (1043, 1204, 1208, and 1238) associated with risk modeling errors occurring between November 2002 and May 2003. The ACEs were reviewed to ensure that the full extent of the issue had been identified, an adequate evaluation performed, and appropriate and effective corrective actions had been specified and prioritized. The inspectors evaluated the ACEs against the requirements of the licensee's corrective action program as delineated in NP 5.3.1, "Action Request Process," to determine whether the ACE had been the appropriate mechanism to have evaluated the contributing and root causes associated with the risk modeling errors.

b. Findings and Observations

There were no findings identified with the four ACEs reviewed; however, the inspectors determined that the first three evaluations had not identified an important contributing cause associated with the risk modeling errors. Namely, that probabilistic risk engineering, production planning, or on-shift operations personnel had not reviewed and examined pre-planned work activities to a sufficient level to recognize the unavailability of all components and equipment modeled in the licensee's risk assessment tool, Safety Monitor. The fourth ACE (ACE 1238, initiated on March 19 and completed on May 2) recognized this need and created an appropriate action item that was linked to the site's Excellence Plan.

Finally, the inspectors reviewed the number of CAPs relating to Safety Monitor that had been initiated since the beginning of 2001. Data for the first 6 months of 2003 revealed a 314 percent increase over the number of Safety Monitor CAPs written for all of 2002 and a 162 percent increase for all of 2001. The inspectors considered that the 4 ACEs and the historic CAP data highlighted the need for the licensee to use the Safety Monitor risk assessment tool in a manner consistent with its full capabilities.

4OA3 Event Follow-up (71153)

.1 Unit 2 Rapid Power Reduction Due To Loss Of Condenser Vacuum

a. Inspection Scope

The inspectors observed the response to and reviewed the circumstances associated with a loss of condenser vacuum event on Unit 2 that occurred on April 5, 2003, to evaluate degraded plant conditions and licensee actions taken to mitigate the transient. The inspectors reviewed plant response which included low feedwater suction pressure alarms; a condensate pump auto-start and subsequent trip due to overcurrent conditions; heater drain tank pump trips on low tank levels; steam jet air ejector steam supply isolations and low flow conditions through the steam jet air ejector condensers; and equipment failures associated with the 'A' condensate pump discharge check valve and the condensate pump minimum recirculation flow control valve to determine if equipment had responded as expected. The inspectors also reviewed the operating crew's decision to trip the main generator, shut the main steam isolation valves, and transition RCS temperature control to the steam generator atmospheric steam dumps to evaluate the timeliness of the crew's actions as vacuum conditions continued to deteriorate. The inspectors reviewed a mode transition checklist and the initial root cause evaluation report for the loss of condenser vacuum to determine if equipment

malfunctions had been sufficiently understood and corrected to support plant restart activities on April 8-9, 2003. Finally, the inspectors performed walkdowns of portions of the condensate and feedwater systems during power ascension activities to verify that equipment malfunctions had been properly diagnosed and corrected.

b. Findings

No findings of significance were identified.

.2 Loss of Emergency Plan Sirens

a. Inspection Scope

The inspectors observed the response to, and reviewed the circumstances associated with a loss of emergency plan sirens. At 11:30 a.m. on April 3, 2003 the control room notified the inspectors that 56 percent of the emergency plan sirens were lost due to power outages. Plant staff made a 4 hour notification based on calls to state and county officials, and an 8 hour notification based on loss of greater than 50 percent of the sirens. The power outages were caused by severe ice storms in the area. Sirens became available as power was restored to the affected areas.

b. Findings

No findings of significance were identified.

.3 (Closed) LER 50-301/03-001-00: Containment Accident Backdraft Damper Failure Results in Condition Prohibited by TS 3.6.6.C.

On April 2, 2003, a licensee mechanic identified a backdraft damper counterweight on a table top in a radiologically controlled machine shop. This led to the determination that the backdraft damper associated with Unit 2 W-1D2 containment cooling fan was substantially degraded. The function of the damper was to close when the 2W-1D2 fan was not operating so as to prevent the diversion of air flow through the normal cooling fan when the 2W-1D1 Containment Accident Fan was operating. Based on additional inspections conducted on April 2, the 2W-1D1 Containment Accident Recirculation Fan and the 2W-1D2 Containment Cooling Fan were declared out of service. Limiting Condition for Operation 3.6.6 was declared not met and TS Action Condition 3.6.6.C was entered for one accident fan cooler unit not operable. A temporary modification was completed to secure the damper in the closed position and the containment fan cooler was returned to service.

Further investigation determined that the degraded condition of the backdraft damper should have been identified during performance of a heat exchanger performance test on March 20, 2003. The failure to identify the condition of the damper was due to incomplete communication regarding the detached parts and the failure to recognize other indications of damper degradation. More detail and the regulatory disposition of this LER is provided in Section 1R23.1 of this report. No new findings of significance were identified by the inspectors in reviewing this LER. The licensee documented the failure to identify the degraded condition of the backdraft damper in CAP031978. This LER is closed.

.4 (Closed) LER 50-301/03-002-00: Reactor Shutdown Required Due to Technical Specification TSAC 3.1.6.B.2 Not Met.

On April 5, 2003, operators commenced a planned power reduction of Unit 2 to approximately 52 percent to enable the removal of a single feed water train for the purpose of performing main feedwater pump lube oil cleaning. During the power reduction, problems were encountered with the condensate and feedwater systems requiring a rapid power reduction in an attempt to recover main feed pump suction pressure. After receiving a low condenser vacuum alarm, the shift manager ordered a manual trip of the Unit 2 turbine. The main steam isolation valves were subsequently shut and RCS temperature control was transferred to the steam generator atmospheric steam dumps.

Three hours and 32 minutes after opening the Unit 2 generator output breaker, operators noted that the difference between the Unit 2 control rod bank ‘C’ and control rod bank ‘D’ was 126 steps. Technical Specification LCO 3.1.6, “Control Bank Insertion Limits,” required the control banks to be within the insertion, sequence difference, and overlap limits specified in the Core Operating Limits Report. Figure 3 of the Unit 2 Core Operating Limits Report specified the sequence limit as 125 steps. At the time of discovery, control bank ‘C’ was at 194 steps and bank ‘D’ at 68 steps, a difference of

126 steps. Since the licensee was unable to meet the TS Action Condition 3.1.6.B.2 to restore control bank sequence and overlap to within the limits within 2 hours, TS Action Condition 3.1.6.C was entered requiring the reactor to be in Mode 2 with the reactor subcritical within 6 hours. At 5:30 a.m. on April 6, Unit 2 entered Mode 3 and LCO 3.1.6.C.1 was considered met.

This LER was reviewed by the inspectors and no findings of significance were identified. The licensee documented the forced shutdown in CAP032039. This LER is closed.

.5 (Closed) LER 50-301/03-003-00: Failure to Place Instrument Channel in Trip as Specified by LCO 3.3.1 Required Action D.1.

On April 8, 2003, Unit 2 was in Mode 2 with a reactor startup in progress when a steam generator feedwater flow alarm was received from flow indicator 2FI-466. The feedwater flow instrument had drifted out of calibration due to sensing line flashing causing the alarm. The feedwater flow instrument was required by TS Table 3.3.1-1, Item 14, Steam Generator Water Level Coincident with Steam Flow/Feed Flow Mismatch, to be operable in Modes 1 and 2. The sensing line flashing rendered the feedwater flow instrument incapable of properly indicating flow resulting in LCO 3.3.1 not being met for 2FI-466. The required action for this condition, LCO 3.3.1 Condition D, required placing the channel in trip within 1 hour or placing the reactor in Mode 3 within 7 hours.

Operators did not discern the significance of this condition until about 2½ hours after the receipt of the initial alarm. This was due to the operators' attention being focused on the activities associated with reactor criticality that were ongoing at the time. The operators reasoned that, since the feedwater system was secured, the feedwater flow alarm did not warrant their immediate attention while reactor startup was in progress. The operators failed to recognize that the reactor was in a Mode of operation in which this parameter was required by TSs. Although the channel was not placed in trip within 1 hour of receipt of the initial alarm, it was restored to operable status within the 7 hours allowed by TSs to exit the Mode of applicability. Thus, the requirements of TS 3.3.1 were met and no violation of regulatory requirements occurred. Since the initial operator response to this condition was not appropriate, the licensee decided to voluntarily submit this LER as a condition of generic interest despite the subject condition not meeting the criteria for required reporting.

This LER was reviewed by the inspectors and no findings of significance were identified. The licensee documented the failure of operators to recognize a TS requirement in a timely manner in CAP032070. This LER is closed.

.6 (Closed) LER 50-266, 301/03-001-00: As-Found Condition of Degraded Grid Voltage Relays Not Within TS Limits.

On April 4, 2003, the licensee identified that both Point Beach Units had been operated for an extended period with setpoints for the degraded voltage relays less that the TS setting. The set points were incorrectly set because the surveillance procedures for the relays, 1(2)RMP 9056-1 and 1(2)RMP 9056-2, had been revised to specify a test instrument with an accuracy tolerance greater than the accuracy tolerance of the test

instrument assumed in the setpoint calculation, N-93-098. The cause of this event was that the licensee did not adequately consider and evaluate the differences in accuracy tolerance of the measuring instruments during the procedure revision process. The licensee subsequently performed the surveillance for these relays on April 6, 2003, for Unit 2 and April 7, 2003, for Unit 1. The as-found relay drop-out voltages for all of the 12 degraded grid voltage relays were found to be less than the TS required setting. In addition, 2 of the 12 relays were found to have setpoints that were less than the analytical minimums established by calculation N-93-002. The two relays were both on the 1A-05 bus and potentially impacted an EDG exhaust fan and a standby swing battery charger. The license reasoned that the safety impact of the two relays was minimal since the swing battery charger was not normally in service and the diesel exhaust fan would have been able to start and run since the as-found relay trip point was only slightly lower than industry standard specifications. Finally, a probabilistic risk assessment of the delay in performing the degraded voltage relay surveillance determined that the surveillance delay was not risk significant. Further detail regarding this missed SR is provided in Section 1R22.1. This licensee-identified finding involved a violation of TS SR 3.3.4.3.b. The enforcement aspects of the violation are discussed in Section 4OA7. This LER is closed.

4OA4 Cross-Cutting Findings

.1 A finding described in Section 1R13.1 of this report had, as its primary cause, a human performance deficiency. The deficiency concerned the failure of probabilistic risk assessment, production planning, and on-shift personnel to use the full capabilities of the risk assessment tool to recognize the unavailability and risk impact of components associated with pre-planned work activities.

.2 A finding described in Section 1R23.1 of this report had, as its primary cause, a human performance deficiency. The deficiency concerned incomplete communications and coordination during thermal performance testing activities on March 20, 2003. This resulted in plant staff not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A. The condition adverse to quality was identified 13 days later when, on April 2, 2003, a mechanic identified a 2W-1D2-A damper counterweight amongst other controlled material in a radiologically controlled machine shop.

4OA5 Other

.1 (Closed) URI 50-266/01-08-01; URI 50-301/01-08-01: Ultrasonic Testing (UT) Equipment Essential Variable Tolerances. The inspectors had opened this URI to review the licensee's implementation of the Performance Demonstration Initiative UT examination techniques. Specifically, the inspectors had questioned the licensee's decision to exempt UT equipment of the same make and model as that used during the procedure qualification from essential variable tolerance testing. The inspectors were concerned that a manufacturer may produce UT equipment of the same model that varied beyond the essential variable ranges required by Article VIII-4110, of Appendix VIII of the American Society of Mechanical Engineers Code and which would go undetected due to the lack of confirmatory testing. On March 18, 2003, the Performance Demonstration Steering Committee Chairman sent a letter to the NRC,

which generically endorsed the practice of reliance on the original equipment manufacturers' quality control standards. Since the licensee's practice was consistent with that endorsed by the Performance Demonstration Initiative Steering Committee, it remains under review by the Office of Nuclear Reactor Regulation, and it will be addressed by other NRC processes, the inspectors considered this URI closed.

.2 (Closed) Apparent Violation (AV) 50-266/01-17-01; 50-301/01-17-01: Potential Common Mode Failure of AFW Pumps Due to Inadequate Procedural Guidance. This violation was issued to the licensee in a Notice of Violation attached to a letter dated July 12, 2002. In response letters dated August 12 and September 26, 2002, the licensee described its corrective actions, which included procedure revisions, problem-specific training of operators, the installation of pneumatic backup for the AFW system recirculation line flow control valves, and reclassification of the open function of the flow control valves as safety-related. These actions and others were reviewed by the resident inspectors and as part of a special NRC inspection (Inspection Report 50-266/02-15; 50-301/02-15) and found acceptable to correct the problem.

.3 (Closed) AV 50-266/01-17-02; 50-301/01-17-02: Failure to Identify and Correct Problem Associated With Potential Common Mode Failure of AFW Pumps. This corrective action problem was combined with the procedural inadequacy problem discussed above and issued to the licensee in a Notice of Violation attached to a letter dated July 12, 2002. As discussed above, corrective actions have been taken by the licensee and reviewed, in part, by the NRC.

4OA6 Meetings

.1 Exit Meeting

On July 1, 2003, the resident inspectors presented the inspection results to Mr. A. Cayia and other members of his staff, who acknowledged the findings. The licensee did not identify any information provided to, or reviewed by the inspectors as proprietary in nature.

.2 Interim Exit Meetings

Interim exits were conducted for:

- Safeguards Inspection with Mr. B. Kopetsky on April 16, 2003.
- Maintenance Rule Implementation - Periodic Evaluation with Mr. A. Cayia on May 1, 2003.
- Radiation Protection inspection with Mr. A. Cayia on May 17, 2003. A follow-up telephone discussion was held with the RP manager on June 19 regarding the source found in a radiation detector used for training.
- Safeguards Inspection with Mr. D. Fadel on June 18, 2003.
- Emergency preparedness with Ms. R. Millner on June 20, 2003.

4OA7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCVs.

Cornerstone: Mitigating Systems

- Technical Specification Surveillance Requirement (SR) 3.3.4.3.b requires that the 4160-volt bus degraded voltage relays be calibrated at least once per 18 months. Contrary to the above, the licensee missed this SR in June 2002 for the Unit 2, 4160-volt safeguards buses 2A05 and 2A06 and in August 2002 for the Unit 1, 4160-volt safeguards buses 1A05 and 1A06. Specifically, a test instrument with inadequate calibration tolerances was used such that the ability of the degraded voltage relays to have met TS requirements was not demonstrated at the required frequency. The licensee entered this issue into its corrective action program as CAP032002, "Potential to Exceed Tech Spec Limit of 3937 V at A05 and A06."

- 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that applicable regulatory requirements and design basis are correctly translated into specifications, drawings, procedures, and instructions. Contrary to the above, as of June 9, 2003, the design requirement to manually restore safety-related battery chargers within 1 hour was not correctly translated into specifications, procedures or instructions for the DC system. Specifically, multiple feeder breakers to the battery chargers could trip under initiating event scenarios because the current limiter was set too high. The licensee entered the condition into its corrective action program as CAP033447, "Issues Associated with Battery Charger Current Limit Setpoint."

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

A. Cayia, Site Vice-President
J. Jensen, Plant Manager
J. Anderson, Business Support Manager
G. Arent, Licensing Manager
D. Argall, Kewaunee/Point Beach Security Specialist
J. Boesch, Maintenance Manager
D. Fadel, Director of Engineering
M. Fencl, Kewaunee/Point Beach Security Manager
F. Flentje, Senior Regulatory Compliance Specialist
J. Gerondale, NMC Security Consultant
M. Holzmann, Nuclear Oversight Supervisor
N. Hoefert, Engineering Programs Manager
R. Hopkins, Internal Assessment Supervisor
C. Jilek, Point Beach Maintenance Rule Coordinator
T. Kendall, Program Engineering
B. Kopetsky, Security Coordinator, Point Beach
C. Krause, Regulatory Compliance
K. Locke, Regulatory Compliance
R. Millner, Emergency Preparedness Manager
T. Petrowsky, Design Engineer Manager
D. Schoon, Operations Manager
J. Schweitzer, Production Planning Manager
M. Shug, Assistant Operations Manager
C. Sizemore, Training Supervisor
P. Smith, Operations Training Supervisor
J. Strharsky, Planning and Scheduling Manager
T. Taylor, Site Assessment Manager
S. Thomas, Radiation Protection Manager
R. Turner, Inservice Inspection Coordinator

Nuclear Regulatory Commission

D. Spaulding, Point Beach Project Manager, NRR

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-266/301/03-03-01	NCV	Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities (Section 1R13)
50-266/301/03-03-02	NCV	Failure to Maintain Control of Licensed Radioactive Material in an Unrestricted Area and That was not in Storage (Section 2PS3)
50-301/03-03-03	NCV	Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified In a Timely Manner (Section 1R23.1)

Closed

50-266/301/03-03-01	NCV	Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities (Section 1R13)
50-266/301/03-03-02	NCV	Failure to Maintain Control of Licensed Radioactive Material in an Unrestricted Area and That was not in Storage (Section 2PS3)
50-301/03-03-03	NCV	Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified In a Timely Manner (Section 1R23.1)
50-266/01-08-01; 50-301/01-08-01	URI	Ultrasonic Equipment Essential Variable Tolerances (Section 4OA5.1)
50-301/03-001-00	LER	Containment Accident Backdraft Damper Failure Results in Condition Prohibited by TS 3.6.6.C (Section 4OA3.3)
50-301/03-002-00	LER	Rector Shutdown Required due to Technical Specification TSAC 3.1.6.B.2 not Met (Section 4OA3.4)
50-301/03-003-00	LER	Failure to Place Instrument Channel in Trip as Specified by LCO 3.3.1 Required Action D.1 (Section 4OA3.5)
50-266/301/03-001-00	LER	As-Found Condition of Degraded Grid Voltage Relays not Within TS Limits (Section 4OA3.6)
50-266/01-17-01; 50-301/01-17-01	AV	Potential Common Mode Failure of AFW Pumps Due to Inadequate Procedural Guidance (Section 4OA5.2)

50-266/01-17-02; 50-301/01-17-02	AV	Failure to Identify and Correct Problem Associated With Potential Common Mode Failure of AFW Pumps (Section 4OA5.3)

LIST OF DOCUMENTS REVIEWED

1R01 Adverse Weather Protection

AOP-13C; Severe Weather Conditions; Unit 0, Revision 13

CAP002915; Required CAP per EPIP 1.1 Step 5.20; dated April 18, 2002

CAP031498; Incorrect Revision Referred to in Diesel Generator Building Calculation; dated March 7, 2003

1R04 Equipment Alignment

CAP032068; Instrument Air Dryer Afterfilter Blow-By; dated April 7, 2003

CAP032038; Foreign Material Found in Instrument Air Line Filter on 2MS-2056; dated April 5, 2003

CAP032079; Instrument Air Filters in 7 of 8 Unit 2 Condenser Steam Dumps Found Loose; dated April 8, 2003

CAP032124; Instrument Air Blowdown Results in Unit 1 Low MSIV Pressure Alarm; dated April 9, 2003

CAP032074; Unit 2 Instrument Air Filter Housing for 2MS-2054 Installed Backwards; dated April 8, 2003

BECH 6118 M-209, Sheet 3 - 11; P&ID, Instrument Air Sheet 3 through 11; Microfilm Revisions as of April 14, 2003

OPR000066; Potential for G-03/4 Radiator Fans to Trip Breaker When Freewheeling Backwards; dated June 25, 2003, Revision 0

CAP033706; Potential for G-03/4 Radiator Fans to Trip Breaker When Freewheeling Backwards; dated June 23, 2003

BECH [Bechtel] 6118 M-210 Sheet 1; Plant Make-up Water Treatment System Pretreatment System; dated March 3, 2003, Revision 16

TRHB [Training Handbook] 11.12; Secondary System Descriptions, Water Treatment System, dated May 10, 2002, Revision 3

Design Basis Document DBD-31; Control Room HVAC [Heating, Ventilation, and Air Conditioning] and Habitability; dated October 28, 1999, Revision 1

DBD-16; Emergency Diesel Generator System; dated June 24, 1999, Revision 0

1R05 Fire Protection

Operations Periodic Check PC 74; Conducting and Evaluating Drills; Revision 7

Fire Drill Scenario; PC 74, Circulating Water Pumphouse 2P30B CWP; May 6, 2003

Fire Drill Evaluation Section; PC 74, Circulating Water Pumphouse 2P30B CWP; May 6, 2003

Fire Hazard Analysis Report Fire Zone 553; Circulating Water Pump Room; January 2003

Fire Emergency Plan 4.19; Circulating Water Pumphouse; Revision 5

Fire Hazard Analysis Report Fire Zone 140; Valve Gallery - Unit 1; January 2003

Fire Hazard Analysis Report Fire Zone 155; Valve Gallery - Pipeway 1; January 2003

Fire Hazard Analysis Report Fire Zone 246; Electrical Equipment Room - Unit 2; January 2003

Fire Hazard Analysis Report Fire Zone 308; Diesel Room - G01; January 2003

Fire Hazard Analysis Report Fire Zone 309; Diesel Room - G02; January 2003

Fire Hazard Analysis Report Fire Zone 773; G-03 Switchgear Room; January 2003

1R06 Flood Protection Measures

NP 8.4.17; PBNP Flooding Barrier Control; Unit 0, Revision 1

DBD-T-41; Hazards Module A, Internal and External Flooding; dated April 20, 2000, Revision 0

CAP032485; Switchyard Inspection; dated April 25, 2003

1R11 Licensed Operator Qualifications

CAP033108; During LOR [Licensed Operator Requalification] Training Notification to Offsite Was Not Met in 15 Minutes; May 27, 2003

Simulator Examination Scenario 099; Revision 0

Training Instructions 8.0, Attachment 4; Crew E Simulator Evaluation Summary for Simulator Examination Scenario 099, Revision 0; May 27, 2003

1R12 Maintenance Rule Implementation

WOs for RC Initiated or Completed Between January 1, 2001 and March 14, 2003

Performance Criteria for RC for 2003; dated March 14, 2003; Point Beach Nuclear Plant MR Unavailability Data Sheet, Data between January 1, 2001 and March 1, 2003

Function List for Reactor Coolant Sorted by MR; dated March 14, 2003

NP 7.4.14; Boric Acid Leakage and Corrosion Monitoring; Draft Revision

BALCM Appendix A; RCS Leak Test Boundary Document; Draft Revision

BALCM Appendix B; Boric Acid Examination Guidelines; Draft Revision

BALCM Appendix C; Boric Acid Indication Evaluation; Draft Revision

BALM Program; Boric Acid Leakage and Corrosion Monitoring Program; Draft Revision

Maintenance Rule Unavailability Data Sheet for RPS Train A; Data Between 4/1/2001, and 4/1/2003; Unit 1

Maintenance Rule Unavailability Data Sheet for RPS Train B; Data Between 4/1/2001, and 4/1/2003; Unit 1

Maintenance Rule Unavailability Data Sheet for RPS Analog Channel; Data Between 4/1/2001 and 4/1/2003; Unit 1

PBF-7029; Documentation of MR Performance Criteria for the VNDG System; Unit 0, dated August 9, 2001

POD Issue Update; Vibration Monitoring Currently Not Performed on VNDG Fans, dated April 24, 2003

PBF-7021; Maintenance Rule (a)(1) System Action Plant Checklist and Approval for the VNDG System; dated May 11, 2001

AM 3-4; Implementation of Maintenance Rule; Revision 4

NP 7.7.4; Scope and Risk Significant Determination for the Maintenance Rule; Revision 7

NP 7.7.5; Determining, Monitoring, and Evaluating Performance Criteria for the Maintenance Rule; Revision 8

NP 7.7.6; WO Review and MPFF Determination for the Maintenance Rule; Revision 3

NP 7.7.7; Guideline for Maintenance Rule Periodic Report; Revision 2

NPM 2002-0161; 2001 Annual Report for the Maintenance Rule (Periodic Evaluation); March 28, 2002

NPM 2003-0232; 2002 Annual Report for the Maintenance Rule (Periodic Evaluation); March 31, 2003

Maintenance Rule (a)(1) System Status; dated April 25, 2003

Maintenance Rule Unavailability Data Sheets for January 1, 2001 to January 1, 2003; dated April 25, 2003

List of WOs Initiated or Completed Between January 1, 2001 to January 1, 2003 for CV, GT, RHR and SI; dated April 25, 2003

List of WOs Completed or Initiated Between January 1, 2001 and January 1, 2003 with M or F in MPFF Field; dated April 25, 2003

Work Orders for Emergency Lighting with M, F, or C in MPFF Field Initiated or Completed Between January 1, 2001 and January 1, 2003; dated April 30, 2003

List of Functional Failures (FF) for Maintenance Rule Systems for 2000-2002; dated April 25, 2003

March 2003 System Health Reports for RH, CV, GT, and SI; dated April 25, 2003

List of Maintenance Rule System (a)(1)/(a)(2) Status; dated April 25, 2003

Summaries of Maintenance Rule Evaluations for FF(s) and MPFF(s); dated April 25, 2003

Documentation of Maintenance Rule Performance Criteria; dated April 25, 2003

Maintenance Rule Overview Expert Panel Meeting Minutes for 2002; dated April 30, 2003

List of CAPs for CV, GT, SI, and RH; dated April 25, 2003

CAP030664; Corrective Actions Not Timely for (a)(1) Maintenance Rule Items; dated January 9, 2003

CAP032368; Evaluate Containment Cooling Ventilation (VNCC) System Status Disposition; dated March 21, 2003

CAP032252; Disposition Unit 2 VNCC System From (a)(2) to (a)(1); dated April 15, 2003

CAP032581; Radiation Monitor Failures Not Identified; dated May 1, 2003

Review of Maintenance Rule Performance; 4160v; dated October 31, 2001

Review of Maintenance Rule Performance; 480v; dated October 2, 2002

Review of Maintenance Rule Performance; Auxiliary Feedwater; dated November 1, 2001

Review of Maintenance Rule Performance; Auxiliary Feedwater; dated June 11, 2001

Review of Maintenance Rule Performance; Auxiliary Feedwater; dated January 12, 2002

Review of Maintenance Rule Performance; Condensate and Feedwater; dated September 13, 2002

Review of Maintenance Rule Performance; Instrument Air and Service Air; dated October 16, 2001

Review of Maintenance Rule Performance; VNCC; dated December 9, 2002

Review of Maintenance Rule Performance; Control Room Ventilation; dated December 9, 2002

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Diesel Generator Ventilation; dated May 13, 2001

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Cable Spreading Room Ventilation; dated January 28, 2003

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; VNCC; dated March 27, 2002

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Control Room Ventilation; dated October 29, 2001

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Service Air; dated April 24, 2003

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Service Air; dated September 4, 2002

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; SI; dated January 10, 2003

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; SI; dated June 21, 2002

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; GT; dated September 5, 2002

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; GT; dated October 3, 2002

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Diesel Generator; dated August 23, 2001

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Diesel Generator; dated February 19, 2003

Maintenance Rule (a)(1) System Action Plan Checklist and Approval; Auxiliary Feedwater; dated January 14, 2002

S-A-ENG-01-002; Maintenance Rule Self-Assessment; dated August 27, 2001

A-P-01-018; Maintenance Rule Compliance, Risk Determination; dated August 28, 2001

Observation Report # 2003-001-3-028; Engineering Programs; dated March 31, 2003

WO9922464; Inspect, Test, Clean, and Add Water Emergency Lighting; dated March 16, 2001

WO9922465; Inspect, Test, Clean, and Add Water Emergency Lighting; dated June 1, 2001

WO9930460; Inspect, Test, Clean, and Add Water Emergency Lighting; dated August 24, 2001

WO9930461; Inspect, Test, Clean, and Add Water Emergency Lighting; dated November 21, 2001

WO9935596; Inspect, Test, Clean, and Add Water Emergency Lighting; dated February 21, 2002

WO9935597; Inspect, Test, Clean, and Add Water Emergency Lighting; dated May 16, 2002

WO0203755; Inspect, Test, Clean, and Add Water Emergency Lighting; dated August 5, 2002

WO0203756; Inspect, Test, Clean, and Add Water Emergency Lighting; dated October 18, 2002

WO9922507; Two Year Test of Emergency Lighting Batteries, Group IV; dated July 7, 2001

WO0203760; Two Year Test of Emergency Lighting Batteries, Group III; dated November 27, 2002

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

NP 10.3.7; On-Line Safety Assessment; Revision 7

E-1 Report for W11A2 (Work Week Schedule), April 6, 2003

E-1 Report for X02B1 (Work Week Schedule), April 27, 2003

E-1 Report for X03A2 (Work Week Schedule), May 4, 2003

E-1 Report for X04B2 (Work Week Schedule), May 11, 2003

Daily Update of Core Damage Risk Profile (Safety Monitor), April 6 - April 12, 2003

Daily Update of Core Damage Risk Profile (Safety Monitor), April 27 - May 2, 2003

Daily Update of Core Damage Risk Profile (Safety Monitor), May 4 - May 10, 2003

Daily Update of Core Damage Risk Profile (Safety Monitor), May 11 - May 17, 2003

2-PT-MS-003; Crossover Steam Dump Testing (Quarterly); Revision 6

IT 85; Main Steam Valves (Quarterly) Unit 2; Revision 21

WO0302089; DA-6372A Test Relief Valve; January 17, 2003

MWP 102; B08/B09 Annual Undervoltage Relay Checks, dated July 19, 2000, Revision 1

CAP032992; 2A-04 Relay Work Not Included In Work Week X03 Risk Projection; May 20, 2003

1RMP 9056-6; A-04 Protective Relay Calibration; Revision 4

1RMP 9056-7; A-03 Protective Relay Calibration; Revision 4

2RMP 9056-6; A-04 Protective Relay Calibration; Revision 7

1RMP 9056-7; A-04 Protective Relay Calibration; Revision 7

2RMP 9330-1; 2X-13/A-05 Relay Testing and Calibration; Revision 9

Elementary Wiring Diagram 4160V Switchgear Bus 2A05 Undervoltage & Diff. L. O. Relays, Point Beach N.P. Unit 2, Revision D

2RMP 9056-4; B-04 Safety Related and TS Relay Calibrations; Revision 10

2RMP 9056-5; B-03 Safety Related and TS Relay Calibrations; Revision 10

1RMP 9056-4; B-04 Safety Related and TS Relay Calibrations; Revision 8

1RMP 9056-5; B-03 Safety Related and TS Relay Calibrations; Revision 8

IT 110; Instrument Air Valves (Quarterly) Unit 1; Revision 17

IT 115; Instrument Air Valves (Quarterly) Unit 2; Revision 16

IT 14; Quarterly Inservice Test of Fuel Oil Transfer System Pumps and Valves; Revision 19

0-PT-FP-002; Monthly Diesel Engine-Driven Fire Pump Functional Test; Revision 2

2-TS-ECCS-001; Safeguard Systems Valve and Lock Checklist (Monthly) Unit 2; Revision 3

CAP033074; Activities Evaluated for On-Line Risk in Work Week X04; May 23, 2003

CAP031233; NP 10.3.7 Not Followed, Safety Monitor Unavailability Project Inaccurate; February 20, 2003

CAP031202; Safety Monitor "Planned" Scheduled Activities on the Risk Profile Incorrect; February 19, 2003

CAP031709; Safety Monitor Scheduled Activities for W02 Missing 2P-2A; March 19, 2003

CAP031681; Activities Missed in On-Line Risk Evaluations; March 17, 2003

1R14 Personnel Performance During Non-Routine Plant Evolutions

WE PBM-226; Letdown Gas Strippers; Unit 1&2, Revision 27

CAP033084; Unit1/Unit 2 Gas Stripper Interaction; dated May 24, 2003

1R15 Operability Evaluations

CAP032288; EQ Pump Motor Splices Not Qualified/No Sound Reasons Documented; dated April 17, 2003

OPR000059; Operability Recommendation for EQ Pump Motor Splices Not Qualified/No Sound Reasons Documented; dated April 18, 2003

CA029302; Update CHAMPS History - EQ Pump Motor Splices Not Qualified/No Sound Reasons Documented; dated April 22, 2003

CAP032083; N44 Power Range Protective Circuit Isolation Compromised by Control Grade Signal; dated April 8, 2003

OPR000055; Separation Requirement Violation in 1C-130 and 2C-133; N-00044, N-00035, and N-00036; Unit 0, Revision 1

CAP032832; Incorrect Leak Detection Information in Approved WCAP; dated May 13, 2003

OPR00060; Incorrect Leak Detection Information in Approved WCAP; Unit 0, Revision 0

OPR00061; Unit 2, Piping EB-10, Increased Temperatures on AFW Piping; Revision 0

Selected Thermography Images and Data Associated with Bechtel Drawing 10447 P-242; Emergency Feedwater From Penetration P-6 to Main Feedwater System, 3" - EB-10, Point Beach Nuclear Power Unit #2; Data Acquired on April 17 and 22, 2003, and May 17 and 18, 2003

Wisconsin Electric Calculation 200120, Addendum 'C'; Feedwater and Emergency Feedwater from Steam Generator 2HX-1A to Penetrations P-4 and P-6; November 7, 1997

Wisconsin Electric Calculation 200120, Addendum 'D'; Feedwater and Emergency Feedwater from Steam Generator 2HX-1A to Penetrations P-4 and P-6; October 30, 1998

Wisconsin Electric Calculation 200120, Addendum 'E'; Feedwater and Emergency Feedwater from Steam Generator 2HX-1A to Penetrations P-4 and P-6; May 23, 2003

Operations Written WO 99-100; Installation of TM 99-036, and Pressure Relief of AFW Piping to Seat First-Off Check Valves; November 7, 1999

Operations Written WO 99-151; Pressure Relief of AFW Piping to Seat First-Off Check Valves; December 21, 1999

CAP032430; Increased Temperature on AFW Lines to Unit 2 'A' Steam Generator; April 24, 2003

CAP033025; Issues Encountered During Preparation of OPR 000061 Revision 0; May 21, 2003

DBD 01, Section 4.12; Component Functions, Second-Off AFW Check Valves; Revision 0

Bechtel Drawing 10447 P-242; Emergency Feedwater From Penetration P-6 to Main Feedwater System, 3" - EB-10, Point Beach Nuclear Power Unit #2; Revision E

Bechtel Drawing 61118 M-217 Sheet 1; P&ID Auxiliary Feedwater System Point Beach Nuclear Power Unit #1; Revision E

Chapman Division - Crane Company Drawing PB-137742; 16" 900# Tilting Disc WE Check Valve Point Beach Nuclear Plant; Revision B

CAP033625; New ASCO Solenoid Valve Fails Operational Check Following Pre-use Bench Test; dated June 18,2003

CAP033023; K-002B IA [Instrument Air] Compressor Fails PMT Due to Incorrect Swagelok® Installation; dated May 21, 2003

WO9946172; K-2B IA Compressor Unloader Control Solenoid; dated April 15, 2003

TS 9; Control Room Heating and Ventilation System Monthly Checks; dated March 4, 2002, Revision 24

PBF-7031, VNCSR; Maintenance Rule (a)(1) System Action Plan Checklist and Approval for Control room Ventilation; dated January 1, 2003

OPR-000063; D-07, D-09, D-107, D-108 and D-109 Main Supply Breaker May Potential Trip on Thermal Overload Upon Charger Restoration; Revision 1

OPR-000065; Issues Associated With Battery Charger Current Limiter Setpoint Drift; Revision 0 (See OPR-000063; Revision 1)

CAP033447; Issues Associated With Battery Charger Current Limiter Setpoint; June 9, 2003

CAP033592; Issues Associated With Battery Charger Current Limiter Setpoint Drift; June 16, 2003

1R16 Operator Workarounds

OWA 0-03R-004; Remote Indicators for 1/2P-29 Discharge MOVs Currently All Indicate Less Than 15 Percent Open; dated March 24, 2003

OWA 2-02R-005 CV; Charging Pump Trips on Return to Service; dated July 29, 2002

NP 2.1.4; Operator Workarounds; Revision 1

1R19 Post-Maintenance Testing

WO0207518; for Replacement of the SW Pump Motor; Unit 0, dated October 17, 2002

RMP 9216-1; SW Pump Motor Removal and Installation; Unit 0, Revision 5

RMP 9216-2; SW Pump Removal, Installation and Maintenance; Unit 0, Revision 5

RMP 9216-3; SW Pump Vibration Testing and Balancing for PMT; Unit 0, Revision 7

IT-07F; P-32F SW Pump (Quarterly); Unit 0, Revision 13

WO9946172, Addendum 1; K-2B Instrument Air Compressor Unloader Control Solenoid; dated May 21, 2003

WO9946172; K-2B Instrument Air Compressor Unloader Control Solenoid; dated April 15, 2003

CAP032999; Return to Service for IA-6332B-S Failed PMT; dated May 21, 2003

RMP 9201; Control and Documentation for Troubleshooting and Repairs (Unit 1 'C' Incore Flux Detector); April 22, 2003

WO0303751; Incore Detector 'C' and Associated Equipment; April 18, 2003

ICP 10.14; Replacement of Incore Flux Mapping Detectors, Completed on May 8 and 12; Revision 9

CAP031804; Unit 1 'C' Incore Detector Failed; March 24, 2003

IT 13; Component Cooling Water Pumps and Valves (Quarterly) Unit 2; Revision 30

Temporary Procedure Change 2003-0281; Component Cooling Water Pump Overhaul; June 7, 2003

Temporary Procedure Change 2003-0280; Component Cooling Water Pump Overhaul; June 2, 2003

RMP 9006-5; Component Cooling Water Pump Overhaul; Revision 7

WO0304203; Replace Rotation Assembly Due to High Vibrations. Replace Both Seals; April 7, 2003

WO0305859; for Resolving the Over-Current Limiter Issue Described in CAP 033447; Unit 0, dated June 16, 2003

RMP 9359-7; DC Station Battery Charger D-07, D-08 and D-09 Maintenance Procedure; Unit 0, Revision 1 (performed June 18, 2003)

RMP 9046-1; Station Battery 92 Day and 12 Month Surveillance Tests; Unit 0, Revision 34 (for D-305 swing Station Battery)

Work Order WO0305923; for Resolving the Over-Current Limiter Issue; Unit 0, dated June 17, 2003

RMP 9359-7; DC Station Battery Charger D-07, D-08 and D-09 Maintenance Procedure; Unit 0, Revision 1 (performed June 19, 2003)

RMP 9046-1; Station Battery 92 Day and 12 Month Surveillance Tests; Unit 0, Revision 34 (for D-05 125V DC Station Battery)

Calculation 2003-0046; Battery Chargers Sizing and Current Limit Set Point; Revision 1

1R22 Surveillance Testing

CAP032002; Potential to Exceed Tech Spec Limit of 3937 V at A05 and A06; dated April 4, 2003

CAP032078; Relays Dialed As-Found Dropout Voltage Testing; dated April 8, 2003

CAP032052; Relays Dialed As-Found Dropout Voltage Testing; dated April 7, 2003

Completed Copy, 1RMP 9056-1; Calibration and Testing of Safety Related Protective Relays A-05, Data Sheet 4; Revision 11, dated April 7, 2003

Completed Copy, 1RMP 9056-2; Calibration and Testing of Safety Related Protective Relays A-06, Data Sheet 4; Revision 9, dated April 7, 2003

Completed Copy, 2RMP 9056-1; Calibration and Testing of Safety Related Protective Relays A-05, Data Sheet 4; Revision 9, dated April 6, 2003

Completed Copy, 2RMP 9056-2; Calibration and Testing of Safety Related Protective Relays A-06, Data Sheet 4; Revision 12, dated April 6, 2003

1RMP 9056-1; Calibration and Testing of Safety Related Protective Relays A-05; Revision 11

1RMP 9056-2; Calibration and Testing of Safety Related Protective Relays A-06; Revision 9

2RMP 9056-1; Calibration and Testing of Safety Related Protective Relays A-05; Revision 9

2RMP 9056-2; Calibration and Testing of Safety Related Protective Relays A-06; Revision 12

1RMP 9071-1; A-05 4160/480 Degraded and Loss of Voltage Monthly Surveillance; Revision 14

1RMP 9071-2; A-06 4160/480 Degraded and Loss of Voltage Monthly Surveillance; Revision 11

2RMP 9071-1; A-05 4160/480 Degraded and Loss of Voltage Monthly Surveillance; Revision 13

2RMP 9071-2; A-06 4160/480 Degraded and Loss of Voltage Monthly Surveillance; Revision 12

Evaluation of Delay in Performing 4.16KV Degraded Voltage Relay Surveillance (SR 3.3.4.3); dated April 4, 2003

Point Beach Calculation 2003-015; PRA [Probabilistic Risk Assessment] Evaluation for Missed Surveillance of A05 and A06 Degraded Voltage Relays; April 4, 2003

FSAR Section 8.4; 4.16K VAC Electrical Distribution System (4.16KV); June 2000

DBD-22; 4160 VAC [Volt-Alternating Current] System, Section 3.4; Revision 1

Operations Refueling Test ORT 3A; SI Actuation With Loss of Engineered Safeguards AC (Train A) Unit 1; Revision 36

Westinghouse Drawing 499B466 Sheet 265A; Elementary Wiring Diagram 4160V SWGR 1A-05 - Cubicle 57, Bus Tie Breaker 1A52-57; Revision E

Westinghouse Drawing 499B466 Sheet 266B; Elementary Wiring Diagram 4160V Switchgear Bus 1A-05 Undervoltage & Diff. L.O. Relays, Point Beach Unit 1; Revision D

Bechtel Drawing 6118.E-90 Sheet 7A; Wiring Diagram 4160V Switchgear 1A05 - Cubicle 57, Bus Supply From Bus 1A-03 1A00, Point Beach Unit 1; Revision E

Bechtel Drawing 6118.E-90 Sheet 7B; Wiring Diagram 4160V Switchgear 1A05 - Cubicle 57, Bus Supply From Bus 1A-03 1A00, Point Beach Unit 1; Revision E

PBF-2132; Control Room Miscellaneous Shift Log, Primary Leak Rate Calculation Unit1 and Unit 2, dated June 12, 2002, Revision 3

OI-55, Primary Leak Rate Calculation; dated February 18, 2002, Revision 17

Diesel Generators: Periodic Check PC-12, Part 1 (G01): G-01 3V; Data from December 1993 to April 2003

PC-12 Part 1; Diesel Generator Vibration (Quarterly) G-01; Revision 5

WO0302631; Control Room Recirculation Fan; dated February 27, 2003

Completed Copy; RMP 9200-4; Station Battery D-106 Discharge Tests and Equalizing Charge; Revision 8, dated May 5, 2003

Completed Copy; RMP 9046-1; Station Battery 92 Day and 12 Month Surveillance Tests; Revision 34, dated May 6, 2003 (pre-Test)

Completed Copy; RMP 9046-1; Station Battery 92 Day and 12 Month Surveillance Tests; Revision 34, dated May 6, 2003 (post-Test)

1R23 Temporary Plant Modifications

CAP031978; Backdraft Damper Degraded, 2W-001D2-A; April 3, 2003

OI-131; Performance Test of 2HX-15D1-8 Containment Fan Cooler; March 20, 2003

Temporary Modification 03-012; 2W-001D2-A Damper Closure; April 2, 2003

10 CFR 50.59 Screening 2003-0151; 2W-001D2-A Damper Closure; April 2, 2003

DBD 30, Section 3.20; Component Functions, Containment Cooling Fan Discharge Damper; Revision 2

WO0301987; Performance Test of 2HX-15D1-8 Containment Fan Cooler; February 22, 2003

WO0303731; Containment Cooling Fan Discharge Damper; March 27, 2003

Point Beach Drawing SHW-D-2230; Extra Heavy Duty Automatic Shutter Model No. SHW-D-2230; Revision K

Bechtel Drawing M-2129; Heating and Ventilation Containment; Revision 07

Temporary Modification 03-014; Install Sump Pumps in Manholes #1 and #2 (Z-065A and B); April 30, 2003

CAP031655; 4160V Cables Possibly Beyond End Of Life; March 14, 2003

CAP031417; Water Intrusion In Cable Vaults; March 3, 2003

EP4 Emergency Action Level and Emergency Plan Changes

Section 5 to Point Beach Plant's Emergency Plan; Revisions 45, 46 and 47

Section 6 to Point Beach Plant's Emergency Plan; Revisions 43, 44, 45, and 46

Section 7 to Point Beach Plant's Emergency Plan; Revisions 44 and 45

EP6 Drill Evaluation

Kewaunee/Point Beach Nuclear Power Plant Emergency Preparedness Drill and Exercise Manual; June 5, 2003

4AO1 Performance Indicator Verification

NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 2

NP 5.2.16; NRC Performance Indicators; Revision 7

Selected Reactor Operator Logs; January 1, 2002 to March 31, 2003

Quarterly Train Unavailability HHSI PI Data Summary Report; 2002 and 2003

PI Data Summary Report, Units 1 & 2 Unplanned Scrams per 7,000 Critical Hours; 2002 and 2003

CAP032596; Betterment Suggestion for NRC PI-RETS/ODCM Radiological Effluent Occurrence; dated May 2, 2003

2003-002-3-013; Nuclear Oversight Observation Report, Management Systems for Assessing Accuracy of the Data and Evaluation Methodology Used to Compile the NRC Public Radiation Cornerstone RETS/ODCM Radiological Effluent Occurrences PI

NP 5.2.16; Point Beach Nuclear Plant Procedures Manual, NRC Performance Indicators; Revision 7

NP 5.2.16; Point Beach Nuclear Plant Procedures Manual, NRC PIs, Attachment “C”, PI Data Calculation, Review, and Approval; Revision 7; Monthly and Quarterly Data from Second Quarter CY 2002 to First Quarter CY 2003

NRC PI Data Preparation, Public Radiation Cornerstone: RETS/ODCM Radiological Effluent Occurrence; Summary Guide

Scrams with Loss of Normal Heat Removal PI Coordinator Summary Data Sheets; 2002 and 2003

4A02 Identification and Resolution of Problems

FSAR Chapter 14.1.10; Loss of Feedwater; dated June 2001

CAP032070; Missed Required TSAC Completion for Instrumentation Failure; Unit 2

TS 3.3.1 and TS basis for feedwater flow instrument 2FI-466

AOP 24; Response to Instrument Malfunctions; dated April 14, 2003, Revision 2

CAP032386; Concurrent Procedures Result in Small Amount of Boric Acid to Blender; Unit 1, dated April 22, 2003

Condition Evaluation CE011542; Concurrent Procedures Result in Small Amount of Boric Acid to Blender; Unit 1, dated April 24, 2003

OP-5B; Blender Operation/Dilution/Boration; Unit 0, Revision 21, dated April 25, 2003

NP 5.3.1; Action Request Process; Revision 20

ACE 1043; 0-SOP-IC-001 Not Included In Safety Monitor Risk Profile; November 8, 2002

ACE 1204; Safety Monitor "Planned" Scheduled Activities on Risk Profile Incorrect; February 21, 2003

ACE 1208; NP 10.3.7 Not Followed, Safety Monitor Unavailability Project Inaccurate; February 24, 2003

ACE 1238; Planned Safety Monitor Risk Profile for E-1 W08 Did Not Include IT-03 Train B; March 19, 2003

Corrective Action CA029003; Excellence Plan - Planned Safety Monitor Risk profile for E-1 W08; April 4, 2003

Historical CAP Data; CAPs related to Safety Monitor; January 1, 2001 to June 11, 2003

4A03 Event Follow-up

Unit 2 Lowering Vacuum Investigation; Initial RCE [Root Cause Evaluation] Team Report for Restart, CAP 32041; April 8, 2003

Operations Checklist 2E; Mode 3 to Mode 2 Checklist; Revision 3

CAP032041; Unit 2 Manual Turbine Trip; April 6, 2003

Regulatory Guide 1.23; Onsite Meteorological Programs; February 17, 1972

CAP032593; Met Tower Tolerances Are Not In Accordance With NRC Commitments; May 1, 2003

Point Beach Emergency Plan Manual, Section 7.0; Emergency Facilities and Equipment; Revision 45

CAP031978; Backdraft Damper Degraded, 2W-001D2-A; April 3, 2003

CAP032039; Unit 2 Control Bank 'C' and 'D' Overlap Indicate Not Within COLR [Core Operating Limits Report] Limits; April 6, 2003

CAP032070; Missed Required TSAC Completion for Instrumentation Failure, Unit 2; April 8, 2003

CAP032002; Potential to Exceed Tech Spec Limit of 3937 V at A05 and A06; dated April 4, 2003

2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs

CAP028575; Resolve Hardware (Electrical) Issues Relating to Environmental Air Samplers; dated March 14, 2003

CAP028747; Meteorological Instrumentation Calibration Procedure Confusing, dated July 16, 2002

CAP028906; Environmental air Sampler at Location E-04 Found Not Running; dated July 31, 2002

CAP031410; Detectable Radioactivity Found on Equipment Released from DAEC [Duane Arnold Energy Center]; dated March 2, 2003

CAP031488; Free Release Survey Resulted in Identified Contamination; dated March 7, 2003

CAP031999; All Wind Speed Indication in the Control Room Out of Service (OOS); dated April 4, 2003

CAP032817; Inland Met Tower Went OOS, Limited Instructions Covering the Failure; dated May 12, 2003

CAP032593; Met Tower Tolerances Are Not in Accordance With NRC Commitments; dated May 1, 2003

CAP032859; Environmental Lake Water Sampling Techniques; dated May 14, 2003

CAP032907; RMS Check Source Found Detector in Training Building; dated May 14, 2003

EM; Environmental Manual; Revision 17

Emergency Plan Maintenance Procedure; Post - TMI Meteorological Monitoring Program Design, Operation and Maintenance; Revision 7

Health Physics Calibration Procedure HPCAL 1.33; Maintenance and Calibration of Low Volume Air Samplers; Revision 10

HPCAL 2.15; Small Articles Monitor Type SAM-9/11 Calibration and Efficiency; Revision 9

HPCAL 2.15; Small Articles Monitor Type SAM-9/11 Calibration and Efficiency; Revision 9; Records for Work on SAM 9/11s #1-5 from September 2002 to April 2003

Health Physics Implementing Procedure (HPIP) 8.0; Source Control Program; Revision 4

IAP E3; Internal Assessment Process, Waste Disposal (PCP/ODCM); Revision 12

IAP E7; Internal Assessment Process, REMP; Revision 12

Instrument and Control Procedure (ICP) 06.003; Meteorological and Circulating Water System Calibration; Revision 2

ICP 06.003; Meteorological and Circulating Water System Calibration; Revision 3

ICP 06.003; Meteorological and Circulating Water System Calibration; Revision 2; for work per WO9920921; dated February 4, 2002

ICP 06.003; Meteorological and Circulating Water System Calibration; Revision 3; for work per WO9928; dated February 3, 2003

ICP 7.30; Meteorological Monitoring System; Revision 4

ICP 7.30; Meteorological Monitoring System; Revision 4; for WO949926; dated February 25, 2003

ICP 6.55; Meteorological Instrumentation Calibration; Revision 8

ICP 6.55; Meteorological Instrumentation Calibration for June 24, 2002 work evolution; Revision 8

ICP 6.55; Meteorological Instrumentation Calibration for May 3, 2003 work evolution; Revision 9 (Temporary Change 2003-0241)

NP 4.2.25; Release of Material, Equipment and Personal Items From Radiologically Controlled Areas; Revision 13

NP 11.5.2; Internal Assessments, Attachment A, Point Beach Nuclear Plant QA Audit Requirements; Revision 4

ODCM; Offsite Dose Calculation Manual; Revision 14

PBF-1024; Non-Routine Radiological analysis, Anatech ZETEC Eddy Current Tester, sample number NR-53, Technical Support Center Gamma Spectrum Analysis; dated February 28, 2003

PBF- 4020; Point Beach Nuclear Plant, RAP-1 and RAS-1 Air Sampler Maintenance and Calibration Records (#LVS-54, 55, and 87); dated July 16, 2002

PBF-4021; Point Beach Nuclear Plant, Radiological Survey form, MIZ-43 Box, Component of Eddy Current Test Gear from DAEC [Duane Arnold Energy Center]; dated February 28, 2003

PBF-4141; Nuclear Power Business Unit, Material or Equipment Unconditional Release Record Sheet; dated May 7 to May 14, 2003

PBF 4121e; Point Beach Nuclear Plant, Radiological Environmental Sampling Checklist, week of May 12-16, 2003

RECM; Radiological Effluent Control Manual; Revision 3

QF-0103, Revision 2 (FP-NO-IA-02); Assessment 2002-002-3, Nuclear Oversight 2nd Quarter Assessment for Point Beach

WO No: 0212172; HP LVS Install Waterproof Switches, Scheduled for 07/07/03; dated May 5, 2003

2002-002-3-033; Nuclear Oversight Observation Report, RP, Environmental Monitoring and Radioactive Waste; dated April 1, 2002 to May 24, 2002

CY 2002 Annual Monitoring Report; Nuclear Management Company, LLC, Point Beach Nuclear Plant; dated April 2003

Meteorological Tower Instrumentation, Preventive Maintenance Activities, via WOs; dated October 2001 to February 2003

Counting Instrument Performance Statistics for Counter Model MS-2, #7745, Source Tc-99; dated April 16, 2003

Source Check QC Sheet, Calibration Record for Counter Model MS-2, #7745, Source Tc-99; dated October 18, 2002

Daily Background Record for Counter Model MS-2, #7745, Source Tc-99; dated October 18, 2002 to April 16, 2003

Daily Background Control Chart Graphic for Counter Model MS-2, #7745; dated October 18, 2002 to April 11, 2003

Daily Source Check Quality Control Chart Graphic for Counter Model MS-2, #7745; dated October 18, 2002 to April 11, 2003

Counting Instrument Performance Statistics for Counter Model SAC-4, #7172, Source Pu-239; dated April 16, 2003

Source Check QC Sheet, Calibration Record for Counter Model SAC-4, #7172, Source Pu-239; dated October 21, 2002

Daily Background Record for Counter Model SAC-4, #7172, Source Pu- 239; dated October 21, 2002 to April 16, 2003

Daily Background Control Chart Graphic for Counter Model SAC-4, #7172, Source Pu-239; dated October 21, 2002 to April 14, 2003

Daily Source Check Quality Control Chart Graphic for Counter Model SAC-4, #7172, Source Pu-239; dated October 18, 2002 to April 15, 2003

Energy Calibration Reports, Detector(s) #1-6, Point Beach Chemistry Lab; dated July 20, 1999

Wisconsin Electric Power Company letter from C. W. Fay, Assistant Vice President, to J. G. Keppler, NRC Regional Administrator, Emergency Preparedness Confirmation of Action, Point Beach Nuclear Plant, Units 1 and 2; dated February 18, 1982

3PP4 Physical Protection - Security Plan Change

Point Beach Nuclear Plant Security and Contingency Plant; March 5, 2003

LIST OF ACRONYMS USED

AC	Alternating Current
ACE	Apparent Cause Evaluation
AFW	Auxiliary Feedwater
AOP	Abnormal Operating Procedure
AR	Action Request
CAP	Corrective Action Program Document
CCW	Component Cooling Water
CDF	Core Damage Frequency
CFR	Code of Federal Regulations
CR	Condition Report
CV	Chemical and Volume Control
CY	Calendar Year
DBD	Design Basis Document
DC	Direct Current
EDG	Emergency Diesel Generator
EQ	Equipment Qualification
gpm	gallons per minute
GT	Gas Turbine
HPCAL	Health Physics Calibration Procedure
IA	Instrument Air
I&C	Instrument and Control
ICP	Instrument and Control Procedure
IMC	Inspection Manual Chapter
IT	Inservice Test Procedure
LCO	Limiting Condition for Operation
LER	Licensee Event Report
MPFF	Maintenance Preventable Functional Failure
MR	Maintenance Rule
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NP	Nuclear Plant Procedure
NRC	Nuclear Regulatory Commission
OI	Operating Instruction
OPR	Operability Determination
OR	Operator Requalification
OS	Operating Supervisor
OWA	Operator Workaround
PI	Performance Indicator
PMT	Post-Maintenance Testing
PT	Dye Penetrant
RA	Risk Assessment
RCS	Reactor Coolant System
REMP	Radiological Environmental Monitoring Program
RETS/ODCM	Radiological Environmental Technical Specifications/Offsite Dose Calculation Manual
RG	Regulatory Guide
RHR	Residual Heat Removal
RMA	Risk Management Action

RMP	Routine Maintenance Procedure
RMS	Radiation Monitoring System
RP	Radiation Protection
SDP	Significance Determination Process
SI	Safety Injection
S/N	Serial Number
SR	Surveillance Requirement
SSC	Structures, Systems, and Components
STA	Shift Technical Advisor
SW	Service Water
TS	Technical Specification
URI	Unresolved Item
UT	Ultrasonic Testing
VCT	Volume Control Tank
VNCC	Containment Cooling Ventilation
WCAP	Westinghouse Commercial Atomic Power Report
WO	Work Order