

October 20, 2004

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

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2
NRC INTEGRATED INSPECTION REPORT 05000266/2004006;
05000301/2004006

Dear Mr. Koehl:

On September 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Point Beach Nuclear Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on October 1, 2004, with Mr. James McCarthy and other members of your staff.

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

Based on the results of this inspection, one finding of very low safety significance was identified. The finding did not involve a violation of NRC requirements.

In addition to the routine NRC inspection and assessment activities, Point Beach performance is being evaluated quarterly as described in the Annual Assessment Letter - Point Beach Nuclear Plant, dated March 4, 2004. Consistent with Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," plants in the multiple/repetitive degraded cornerstone column of the Action Matrix are given consideration at each quarterly performance assessment review for (1) declaring plant performance to be unacceptable in accordance with the guidance in IMC 0305; (2) transferring to the IMC 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition with Performance Problems," process; and (3) taking additional regulatory actions, as appropriate. On July 29, 2004, the NRC reviewed Point Beach operational performance, inspection findings, and performance indicators during the third quarter of 2004. Based on this review, we concluded that Point Beach is operating safely. We determined that no additional regulatory actions, beyond the already increased inspection activities and management oversight, are currently warranted.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Steven A. Reynolds, Acting Director
Division of Reactor Projects

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

Enclosure: Inspection Report 05000266/2004006; 05000301/2004006
w/Attachment: Supplemental Information

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

DOCUMENT NAME: C:\Karen's Documents\ML042960320.wpd

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

OFFICE	RIII	RIII	RIII	
NAME	MKunowski:ntp	PLouden	SReynolds	
DATE	10/13/04	10/13/04	10/20/04	

OFFICIAL RECORD COPY

ADAMS Distribution:

WDR

DFT

HKC

RidsNrrDipmlipb

GEG

HBC

PGK1

CAA1

C. Pederson, DRS (hard copy - IR's only)

DRPIII

DRSIII

PLB1

JRK1

ROPreports@nrc.gov (inspection reports, final SDP letters, any letter with an IR number)

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000266/2004006; 05000301/2004006

Licensee: Nuclear Management Company, LLC

Facility: Point Beach Nuclear Plant, Units 1 and 2

Location: 6610 Nuclear Road
Two Rivers, WI 54241

Dates: July 1 through September 30, 2004

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

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

SUMMARY OF FINDINGS

IR 05000266/2004006, 05000301/2004006; 07/01/2004 - 09/30/2004; Point Beach Nuclear Plant, Units 1 & 2; Operator Workarounds.

This report covers a 3-month period of baseline resident inspection and an announced radiation protection (71122) inspection for the Point Beach Nuclear Plant, Units 1 and 2. The inspections were conducted by five inspectors: a radiation specialist inspector, two resident inspectors, and two reactor engineers assisting the resident inspectors. One Green finding that was not a violation of NRC requirements and one unresolved item (URI) 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." Findings for which the Significance Determination Process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a workaround regarding the operation of the Unit 1 residual heat removal (RHR) system heat exchanger bypass flow control valve in automatic mode during a shutdown loss-of-coolant-accident (LOCA). The primary cause of this finding was related to the cross-cutting area of problem identification and resolution in two respects. First, the initial extent-of-condition review did not consider the impact of the issue on shutdown plant operations. Second, following initial instrumentation and control (I&C) troubleshooting efforts, a corrective action item was not assigned to operations personnel to evaluate the issue as a potential operator workaround (OWA). This contributed to a 3-month delay in completing the evaluation.

The finding is greater than minor because it affected the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. The finding was considered to be of very low safety significance (Green) because it did not degrade short term (safety injection (SI)) decay heat removal capability or reactivity control; result in a design or qualification deficiency or an actual loss of safety function; or involve internal or external initiating events. The finding did not involve a violation of regulatory requirements. The licensee has entered this finding into its corrective action program. In addition, the finding was reviewed by the licensee's Operator Workaround Committee and the Committee classified the problem as an operator challenge in accordance with site procedures. (Section 1R16.1)

- To Be Determined. The inspectors identified an Unresolved Item concerning the effects of supplying power from a 125-volt direct current (VDC) safety-related battery to Units 1 and 2 safe shutdown instrumentation necessary for monitoring reactor decay heat removal without a battery charger being aligned to the associated direct current (DC) bus. The issue was corrected with a procedure revision and did not represent an

immediate safety concern; however, it will be considered a URI pending NRC review of the licensee's extent-of-condition and potential impact evaluations, actions not completed by the end of this inspection period. (Section 4OA2.1)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at full power and remained there until August 12, 2004, when power was reduced to 98 percent because of problems with the feedwater leading edge flow meter (LEFM). Unit 1 returned to full power later the same day and remained there until August 19 when power was reduced to 95 percent for turbine-driven auxiliary feedwater (AFW) pump testing. Unit 1 returned to full power on August 20 and remained there until August 29 when power was reduced to 98 percent for recurring LEFM problems. Unit 1 returned to full power the same day and remained there until September 4 when power was again reduced to 98 percent for LEFM problems. Later on September 4, power was reduced to 67 percent for turbine stop valve testing. Unit 1 power was increased to 98 percent on September 5 and returned to 100 percent on September 10 when the LEFM was repaired. Unit 1 remained at full power through the end of the inspection period.

Unit 2 began the inspection period at full power and remained there until July 24, 2004, when power was reduced to 68 percent for crossover steam dump, turbine stop valve, governor valve, and atmospheric steam dump testing. Unit 2 returned to full power on July 25 and remained there until August 13 when power was reduced to 91 percent for repair of the fifth stage 'B' feedwater heater. Unit 2 returned to full power later the same day and remained there until the end of the inspection period with the exception of brief periods of operation at 98 percent power on August 20 and 27 for AFW pump testing and on September 9 for a turbine-driven AFW pump oil change and subsequent post-maintenance test.

1. REACTOR SAFETY

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

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdowns

b. Inspection Scope

The inspectors performed three partial walkdowns of accessible portions of risk-significant systems to evaluate the operability of the selected systems. The inspectors utilized valve and electrical breaker checklists (CLs), tank level books, plant drawings, and selected operating procedures to determine if the components were properly positioned and supported the systems as needed. The inspectors also examined the material condition of the components and observed operating equipment parameters to determine if there were any obvious deficiencies. The inspectors reviewed completed work orders (WOs) and calibration records associated with the systems to determine if those documents revealed issues that could affect component or train function. The inspectors used the information in the appropriate sections of the Final Safety Analysis Report (FSAR) to determine the functional requirements of the system. Documents reviewed during this inspection are listed in the attachment to this

report. These observations constituted three quarterly inspection samples.

The inspectors verified the alignment of the following systems:

- Unit 1 Condensate and Feedwater System on September 13, 2004;
- Unit 1 and 2 Common Sections of the Chemical and Volume Control (CV) System on September 28, 2004; and
- Units 1 and 2 125-VDC Batteries on September 22, 2004.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Walkdown of Selected Fire Zones

a. Inspection Scope

The inspectors conducted walkdowns focused on availability, accessibility, and the condition of fire fighting equipment, the control of transient combustibles and ignition sources, and on the condition and operating status of installed fire barriers. The inspectors selected 10 fire areas for inspection based on the area's overall fire risk contribution, as documented in the licensee's Individual Plant Examination of External Events, the area's potential to impact equipment which could initiate a plant transient, or the area's impact on the plant's ability to respond to a security event. The inspectors used the documents listed in the attachment to this report to determine if fire hoses and extinguishers were in their designated locations and available for immediate use, fire detectors and sprinklers were unobstructed, transient material loading was within the analyzed limits, and fire doors, dampers, and penetration seals were in satisfactory condition. These observations constituted 10 quarterly inspection samples.

The following areas were inspected by walkdowns:

- Fire Zone 783, G-04 Radiator Room;
- Fire Zone 770, G-03 Diesel Room;
- Fire Zone 773, G-03 Switchgear Room;
- Fire Zone 775, G-04 Diesel Room;
- Fire Zone 777, G-04 Switchgear Room;
- Fire Zone 552, Service Water (SW) Pump Room;
- Fire Zone 553, Circulating Water (CW) Pump Room;
- Fire Zone 554, CW Pump House Corridor;
- Fire Zone 555, CW Pump House Valve Gallery; and
- Fire Zone 691, Warehouse #2.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

.1 External Flood Protection

a. Inspection Scope

During the week of September 20, 2004, the inspectors reviewed external flooding design bases documents, flooding mitigation equipment, risk analyses, and current configurations and strategies to determine the licensee's ability to mitigate external flooding hazards. The inspectors walked down or reviewed documents in the following areas to assess the overall readiness of flood protection barriers and equipment:

- CW Pump House and Wave Barrier Locations;
- Emergency Diesel Generator 3 and 4 Building;
- Gas Turbine and Switchyard grounds;
- Main Transformer areas; and
- Cable Manholes 1-10, 14-20, Z-066A-D, and Z-067A.

The inspectors focused on the material condition of flood protection equipment and flood barriers. The inspectors reviewed alarm response procedures and licensee efforts to determine lake levels and monitor manhole conditions. Procedural actions to mitigate potential flooding were compared to the analysis of record. The inspectors reviewed several corrective action program documents (CAPs) associated with external flooding concerns as well as current and pending corrective actions (CAs) to address submerged cables. This included a review of design changes associated with installing a submersible pump in safety-related manholes 1 and 2. This observation constituted one quarterly inspection sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification (71111.11)

a. Inspection Scope

On August 31, 2004, the inspectors observed the performance of the operating crew during simulator training. The inspectors also reviewed an unexpected simulator response during the scenario and the simulator configuration to determine if simulator modeling was reflective of actual plant conditions. This observation constituted one quarterly inspection sample.

The inspectors evaluated crew performance in the areas of:

- clarity and formality of communications;
- understanding of the interactions and function of the operating crew during an emergency;
- prioritization, interpretation, and verification of actions required for emergency procedure use and interpretation;

- oversight and direction from supervisors; and
- group dynamics.

Crew performance in these areas was compared to licensee management expectations and guidelines as presented in Nuclear Plant Procedures Manual Procedure (NP) 2.1.1, "Conduct of Operations," Revision 1.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors performed an issue/problem-oriented review of the systems listed below, completing two maintenance effectiveness inspection samples. The inspectors reviewed repetitive maintenance activities to assess maintenance effectiveness, including maintenance rule activities, work practices, and common cause issues. Inspection activities included, but were not limited to, the licensee's categorization of specific issues, including evaluation of performance criteria, appropriate work practices, identification of common cause errors, extent of condition, and trending of key parameters. Additionally, the inspectors reviewed implementation of the Maintenance Rule (10 Code of Federal Regulations (CFR) 50.65) requirements, including a review of scoping, goal-setting, performance monitoring, short-term and long-term CAs, functional failure determinations associated with reviewed CAPs, and current equipment performance status.

For the systems reviewed, the inspectors reviewed significant WOs and CAPs to verify that failures were properly identified, classified, and corrected, and that unavailability time had been properly calculated. The inspectors reviewed documents listed in the attachment to this inspection report to determine if minor discrepancies in the licensee's maintenance rule reports were corrected. These observations constituted two quarterly inspection samples.

Specific components and systems reviewed were:

- CV System; and
- Crossover Steam Dump System

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed risk assessments for the following maintenance activities, completing risk assessment and emergent work control inspection samples. These observations constituted seven quarterly inspection samples.

- unavailability of the engineered safeguard systems for planned maintenance and testing during the week of July 18, 2004;
- unavailability of the P-32, SW pumps for planned maintenance and testing during the week of July 25, 2004;
- unavailability of the 1P-29, turbine-driven AFW pump for planned maintenance during the week of August 15, 2004;
- unavailability of the containment recirculation fans for planned maintenance during the week of August 22, 2004;
- unavailability of the White 125-VDC inverter for planned maintenance during the week of August 29, 2004;
- unavailability of 480-volt and 4160-volt switchgear relays for planned testing during the week of September 5, 2004; and
- unavailability of the RHR pump motor transfer switch for planned maintenance during the week of September 12, 2004.

During these reviews, the inspectors compared the licensee's risk management actions to those actions specified in the licensee's procedures for the assessment and management of risk associated with maintenance activities. The inspectors assessed whether evaluation, planning, control, and performance of the work were done in a manner to reduce the risk and minimize the duration where practical, and that contingency plans were in place where appropriate. The inspectors used the licensee's daily configuration risk assessment records, observations of shift turnover meetings, and observations of daily plant status meetings to determine if the equipment configurations had been properly listed, that protected equipment had been identified and was being controlled where appropriate, and that significant aspects of plant risk were communicated to the necessary personnel. Documents reviewed during this inspection are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

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

.1 Unit 2 Power Reduction for Removal of the 5B Feedwater Heater from Service

a. Inspection Scope

On August 13, 2004, the inspectors observed a Unit 2 power reduction to 90 percent for removal of the shell side of the 5B feedwater heater from service. The inspectors observed operator procedure use and adherence, communications, control of

equipment, diagnosis of a drain valve actuator that was not properly connected to the stem, and return to full power operations. This observation constituted one inspection sample.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

.1 Operability Evaluations

a. Inspection Scope

During this inspection period, the inspectors reviewed the following operability evaluations:

- Calculation N-94-042 Used Incorrect Data for SI Pump Motors;
- Auxiliary Feedwater Pump Recirculation Air-Operated Valves Not Set Up In Conformance With Calculations;
- Residual Heat Removal Cut-In Conditions Not Achievable in Assumed Time;
- Inservice Test (IT) 10 Acceptance Criteria Does Not Ensure Adequate Auxiliary Feedwater Without Operator Action;
- Containment Fan Motor 2W-001-B1-M, RHR Motor 1P-010B-M, and Safety Injection Motor 1P-015A-M, No Environmental Qualification; and
- Steam Generator Blowdown Tank Rupture Disk Not Code Stamped.

These observations constituted six quarterly inspection samples.

The inspectors reviewed the technical adequacy of the operability evaluations against Technical Specifications (TSs), FSAR, and other design information; determined whether compensatory measures, if needed, were taken; determined whether the evaluations were consistent with procedure NP 5.3.7, "Operability Determinations"; and determined whether critical design assumptions had been correctly translated into as-built field configurations. The inspectors also reviewed CAPs to determine if licensee personnel identified issues at an appropriate threshold and entered them into the corrective action program in accordance with station procedures. Documents reviewed during this inspection are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (OWAs) (71111.16)

.1 Unit 1 RHR Heat Exchanger Bypass Valve Drifts Open While in Automatic

a. Inspection Scope

During the weeks of September 13 and 20, 2004, the inspectors reviewed the operational effects of the Unit 1 RHR heat exchanger bypass flow control valve, 1RH-626, drifting from 0 to 40 percent open while in the automatic mode of operation. The inspectors interviewed selected operations and I&C personnel; evaluated manual and automatic valve control modes during operating and shutdown plant conditions; and reviewed corrective action program records, the procedure associated with placing the RHR system in operation, and selected emergency and abnormal operating procedures (AOPs) to determine if the licensee had considered all potential operational impacts. Documents reviewed during this inspection are listed in the attachment to this report. This observation constituted one inspection sample.

b. Findings

Introduction. The inspectors identified a finding having very low safety significance (Green) regarding a workaround in the operation of the Unit 1 RHR heat exchanger bypass flow control valve in the automatic mode of operation during a shutdown LOCA. The finding did not involve a violation of regulatory requirements.

Description. During inservice testing in June and July 2004 with Unit 1 at full power, the RHR heat exchanger bypass flow control valve, 1RH-626, drifted from 0 to 40 percent open while in the automatic mode of operation. The licensee reasoned that since the valve had demonstrated controllability in manual during the inservice tests and was maintained in the manual/shut position per SI system CL 7A, it remained operable during power operations. Although I&C personnel initiated troubleshooting efforts following the June failure, a corrective action was not assigned to evaluate the 1RH-626 controller issue as a potential OWA.

In addition, the inspectors determined that the licensee had not considered the possible effects of the controller issue during shutdown modes of plant operation. The inspectors reviewed operating procedure (OP) 7A, "Placing Residual Heat Removal System In Operation," and noted that Step 5.2.14.c allowed operators to place 1RH-626 in the automatic mode of operation, if desired. The inspectors also determined that safety-related shutdown emergency procedure (SEP) 1 Unit 1, "Degraded RHR System Capability," Step 14.c; SEP 2.2 Unit 1, "Shutdown LOCA With RHR Aligned For Decay Heat Removal," Steps 11.e and 13.a; and SEP 2.3 Unit 1, "Cold Shutdown LOCA," Attachment A, Step A7, directed 1RHR-626 to be shut, an action that could be complicated and inhibited with the valve drifting from 0 to 40 percent open while in the automatic mode of operation. The inspectors determined that the drifting of 1RH-626 from 0 to 40 percent open in the automatic mode of operation was an OWA in two respects. First, the issue had the potential to complicate emergency response for a shutdown LOCA in that an operator could encounter difficulty in closing 1RH-626 while in automatic and be forced to take the controller to manual to shut the valve, an additional and unplanned action. Second, the issue had the potential to complicate

normal plant operations in that if adjustments were made to the 'A' or 'B' RHR heat exchanger outlet flow control valves, 1RH-624 and 1RH-625, while operators were controlling reactor coolant system temperature via RHR cooling, additional operator action would be required to adjust 1RH-626 so as to keep total RHR system flow constant as the primary flow rate through the RHR heat exchangers was varied.

Analysis. The inspectors determined that there were two performance deficiencies associated with the RHR heat exchanger bypass flow control valve, 1RH-626, drifting from 0 to 40 percent open while in the automatic mode of operation that warranted a significance evaluation. First, although the licensee assessed the impact of the issue during power operations in June 2004, the licensee did not evaluate potential impacts on shutdown plant operations until questioned by the inspectors in September 2004. Second, although I&C personnel had performed troubleshooting efforts following the initial failure in June 2004, a corrective action item was not assigned to operations personnel to evaluate the 1RH-626 controller issue as a potential OWA.

The inspectors concluded that the finding was more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on June 20, 2003, because it affected the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. The inspectors determined that the issue also affected the cross-cutting area of problem identification and resolution in two respects. First, the initial extent-of-condition review did not consider the impact of the issue on shutdown plant operations. Second, following initial I&C troubleshooting efforts, a corrective action item was not assigned to operations personnel to evaluate the issue as a potential OWA. This contributed to a 3-month delay in completing the evaluation.

The inspectors completed a significance determination of this issue using IMC 0609, "Significance Determination Process," dated March 21, 2003, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated September 10, 2004. The inspectors determined that the finding did not degrade short term decay heat removal capability (SI) or reactivity control; result in a design or qualification deficiency or an actual loss of safety function; or involve internal or external initiating events. Therefore, the finding was considered to be of very low safety significance (Green).

Enforcement. Because the operators always had the ability to maintain positive control of 1RH-626 by switching from the automatic to the manual mode of operation during a shutdown LOCA, the inspectors determined that no violation of regulatory requirements occurred since the intended function of shutting 1RH-626 as described in SEP 1, SEP 2.2, and SEP 2.3 could still be accomplished. This issue was considered a finding of very low safety significance (FIN 05000266/2004006-01). The licensee entered the finding into its corrective action program as CAP057507, "1RH-626, HX-11A/B RHR Bypass Flow Control, Fails to Operate in Auto", and received review by the station Operator Workaround Committee who classified the problem as an operator challenge in accordance with plant procedures.

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

a. Inspection Scope

During this inspection period, the inspectors completed six quarterly inspection samples, composed of the following PMT activities:

- Containment spray pump 1P-14A following oil change on September 15, 2004;
- Containment spray pump 1P-14B following oil change on September 15, 2004;
- Units 1 and 2 Periodic Check (PC) 23 Part 5, charging pump maintenance on August 9, 2004;
- Unit 1 RHR heat exchanger bypass flow control valve, 1RH-626, following valve drifting in the open direction while in automatic on August 20, 2004;
- G-05 gas turbine following annual maintenance on September 29, 2004; and
- Unit 1 turbine cross-under piping manway following Furmanite repair on September 27, 2004.

Documents reviewed during this inspection are listed in the attachment to this report. During completion of the inspection samples, the inspectors observed in-plant activities and reviewed procedures and associated records to determine if:

- testing activities satisfied the test procedure acceptance criteria;
- effects of the testing had been adequately addressed prior to the commencement of the testing;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy;
- applicable prerequisites described in the test procedures were satisfied;
- affected systems or components were removed from service in accordance with approved procedures;
- testing activities were performed in accordance with the test procedures and other applicable procedures;
- jumpers and lifted leads were controlled and restored, where used;
- test data/results were accurate, complete, and valid;
- test equipment was removed after testing;
- equipment was returned to a position or status required to support the operability of the system in accordance with approved procedures; and
- all problems identified during the testing were appropriately documented in the corrective action program.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

During this inspection period, the inspectors completed inspection samples, composed of surveillance testing activities associated with the following plant documents:

- Health Physics Implementing Procedure (HPIP) 11.54 on August 27, 2004;
- Operator logs for use of TSs and parametric values, on August 26, 2004;
- Instrumentation and Control Procedure (ICP) 2ICP 2.013 on August 18, 2004; and
- Routine Maintenance Procedure (RMP) 9307-3, "Power Shield Test Procedure," on September 1, 2004.

Documents reviewed during this inspection are listed in the attachment to this report. These observations constituted four quarterly inspection samples.

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

- preconditioning occurred;
- effects of the testing had been adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- acceptance criteria were clearly stated, demonstrated operational readiness, and were consistent with the system design basis;
- plant equipment calibration was correct, accurate, properly documented, as-left setpoints were within required ranges, and the calibration frequency was in accordance with TSs, FSAR, procedures, and applicable commitments;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy;
- applicable prerequisites described in the test procedures were satisfied;
- test frequency met TS requirements to demonstrate operability and reliability;
- the tests were performed in accordance with the test procedures and other applicable procedures;
- jumpers and lifted leads were controlled and restored, where used;
- test data/results were accurate, complete, within limits, and valid;
- test equipment was removed after testing;
- where applicable, test results not meeting acceptance criteria were addressed with an adequate operability evaluation or the system or component declared inoperable;
- where applicable for safety-related instrument control surveillance tests, reference setting data have been accurately incorporated in the test procedure;
- prior procedure changes had not provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- equipment was returned to a position or status required to support the performance of its safety functions; and
- all problems identified during the testing were appropriately documented and dispositioned in the corrective action program.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors conducted in-plant observations of physical changes to the plant and equipment and performed in-office reviews of documentation to evaluate the temporary modification (TM) detailed below. The inspectors reviewed design basis documents (DBDs) and safety evaluation screenings to ensure that the modifications were consistent with applicable documents, drawings, and procedures. The inspectors also reviewed the post-installation results to confirm that any impacts of the TM on permanent and interfacing systems were adequately verified. This observation constituted one inspection sample.

The inspectors reviewed the following TM:

- Installation of Submersible Sump Pumps in Manholes 1, 2, 3, 10, 14, 16, and 19.

b. Findings

No findings of significance were identified.

Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

.1 Emergency Plan Procedure Training Drills

a. Inspection Scope

During the week of August 4, 2004, the inspectors observed a training drill involving Emergency Action Levels (EALs) and Emergency Plan Implementing Procedures (EPIPs). The inspectors observed classifications, notifications, facility activations, and facility critiques. The inspectors performed observations in the Control Room (simulator), Technical Support Center, and Emergency Operations Facility during the drill. The inspectors also observed the training of new Emergency Response Organization personnel. This observation constituted one inspection sample.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous And Liquid Effluent Treatment And Monitoring Systems
(71122.01)

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed the 2003 Annual Monitoring Report (which included information relative to the station's radiological effluent releases) to determine if the program was implemented as described in Radiological Effluent TSs (RETS)/Offsite Dose Calculation Manual (ODCM) and to determine if ODCM changes were made in accordance with Regulatory Guide 1.109 and NUREG-0133. The inspectors reviewed the Annual Monitoring Report and ODCM to determine if any changes to the design and/or operation of the radioactive waste systems changed the dose consequence to the public. The inspectors also reviewed technical and/or 10 CFR 50.59 evaluations performed, when required, for any such modifications and determined whether radioactive liquid and gaseous effluent radiation monitor setpoint calculation methodology changed since completion of the modifications. The inspectors determined if anomalous results reported in the current Annual Monitoring Report, if any, were adequately resolved.

The inspectors reviewed the RETS/ODCM to identify effluent radiation monitoring systems and flow measurement devices, any effluent radiological occurrence performance indicator (PI) incidents in preparation for onsite follow-up, and the FSAR description of all radioactive waste systems.

These reviews represented one inspection sample.

b. Findings

No findings of significance were identified.

.2 Onsite Inspection - Walkdown of Effluent Control Systems, System/Program Modifications, Air Cleaning System Surveillances, and Instrument Calibrations

a. Inspection Scope

The inspectors walked down the major components of the gaseous and liquid release systems (e.g., radiation and flow monitors, demineralizers and filters, tanks, and vessels) to observe current system configuration with respect to the description in the FSAR, ongoing activities, and to assess equipment material condition.

The inspectors reviewed the licensee's technical justification for any changes made by the licensee to the ODCM, as well as to the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection to determine whether the changes affected the licensee's ability to maintain effluents as-low-as-is-reasonably-achievable and

whether changes made to monitoring instrumentation resulted in non-representative monitoring of effluents. Additionally, the inspectors reviewed the licensee's evaluations related to the abandonment of the waste water retention pond (a former 10 CFR Part 20 liquid release path).

The inspectors reviewed air cleaning system surveillance test results to ensure that the system was operating within the licensee's acceptance criteria. Specifically, the inspectors reviewed the most recent results of the Ventilation Filter Testing Program for the Control Room Emergency Filtration System to verify that test methodology, frequency and test results met TS requirements. The inspectors reviewed and discussed the test results of in-place high efficiency particulate air filter and charcoal adsorber penetration tests, laboratory tests of charcoal adsorber methyl iodide penetration, and in-place combined high efficiency particulate air filter and charcoal adsorber train pressure drop tests for the system with radiation protection and system engineering staff.

The inspectors reviewed records of instrument calibrations performed since the last inspection for each point-of-discharge effluent radiation monitor and flow measurement device, and reviewed any completed system modifications and the current effluent radiation monitor alarm setpoint value for conformance with RETS/ODCM requirements. The inspectors also reviewed calibration records of radiation measurement (i.e., chemistry counting room) instrumentation associated with effluent monitoring and release activities and the quality control records for those instruments.

These reviews represented four inspection samples.

b. Findings

No findings of significance were identified.

.3 Onsite Inspection - Effluent Release Packages, Abnormal Releases, Dose Calculations, and Laboratory Quality Control and Assurance

a. Inspection Scope

As there were no routine radioactive liquid releases conducted during the on-site inspection, the inspectors reviewed several radioactive liquid waste release permits for previous releases, including the projected doses to members of the public, to determine if appropriate treatment equipment was used and radioactive liquid waste was processed and released in accordance with RETS/ODCM and procedure requirements. Additionally, as there were no routine radioactive gaseous releases conducted during the on-site inspection, the inspectors reviewed several radioactive gaseous effluent release permits for previous releases, to determine if appropriate treatment equipment was used and radioactive gaseous effluent was processed and released in accordance with RETS/ODCM and procedure requirements.

The licensee did not identify any abnormal releases or releases made with inoperable effluent radiation monitors, since the last inspection in this area. As such, the inspectors were unable to review the licensee's actions for such releases.

The inspectors reviewed a selection of monthly, quarterly, and annual dose calculations to ensure that the licensee properly calculated the offsite dose from radiological effluent releases and to determine if any annual RETS/ODCM (i.e., Appendix I to 10 CFR Part 50) limits were exceeded.

The inspectors reviewed the results of the interlaboratory comparison program to determine the quality of radioactive effluent sample analyses performed by the licensee. The inspector reviewed the licensee's quality control evaluation of the interlaboratory comparison test and associated corrective actions for any deficiencies identified. The inspector reviewed the licensee's assessment of any identified bias in the sample analysis results and the overall effect on calculated projected doses to members of the public. In addition, the inspectors reviewed the results from the licensee's Quality Assurance audits to determine whether the licensee met the requirements of the RETS/ODCM.

These reviews represented four inspection samples.

b. Findings

No findings of significance were identified.

.4 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed any available licensee self-assessments, audits, and special reports related to the radioactive effluent treatment and monitoring program since the last inspection to determine if identified problems were entered into the corrective action program for resolution. The inspectors also assessed whether the licensee's self-assessment program was capable of identifying repetitive deficiencies or significant individual deficiencies in problem identification and resolution.

The inspectors also reviewed corrective action reports from the radioactive effluent treatment and monitoring program since the previous inspection, interviewed staff, and reviewed documents to determine if the following activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of Non-Cited Violations tracked in the corrective action program; and
- Implementation/consideration of risk significant operational experience feedback.

These reviews represented one inspection sample.

b. Findings

No findings of significance were identified.

4. **OTHER ACTIVITIES**

4OA1 PI Verification (71151)

Cornerstones: Mitigating Systems and Public Radiation Safety

.1 Reactor Safety Strategic Area - Mitigating Systems Cornerstone

a. Inspection Scope

The inspectors reviewed the licensee's recent PI submittal, using PI definitions and guidance contained in Revision 2 of Nuclear Energy Institute document 99-02, "Regulatory Assessment Performance Indicator Guideline," to determine the accuracy of the PI data. The inspectors reviewed selected applicable conditions and data from logs, licensee event reports, and corrective action program documents from July 2002 through June 2004. The inspectors independently re-performed calculations where applicable. The inspectors compared that information to the information required for each PI definition in the guideline, to ensure that the licensee reported the data accurately.

These observations constituted six inspection samples. The following PIs were reviewed:

Unit 1

- Emergency Alternating Current Power System Unavailability
- Heat Removal System Unavailability
- RHR System Unavailability

Unit 2

- Emergency Alternating Current Power System Unavailability
- Heat Removal System Unavailability
- RHR System Unavailability

b. Findings

No findings of significance were identified.

.2 Radiation Protection Strategic Area - Public Radiation Safety

a. Inspection Scope

The inspector sampled the licensee's submittals for the PI and period listed below. The inspector used PI definitions and guidance contained in Revision 2 of Nuclear Energy Institute document 99-02, "Regulatory Assessment Performance Indicator Guideline," to determine the accuracy of the PI data. This observation constituted one inspection sample. The following PI was reviewed:

- RETS/ODCM Radiological Effluent Occurrence

Since no reportable occurrences were identified by the licensee for the 2nd quarter 2003 through the 2nd quarter 2004, the inspector compared the licensee's data and reviewed corrective action program documents generated during the time period to identify any potential occurrences such as unmonitored, uncontrolled or improperly calculated effluent releases that may have impacted offsite dose. Also, the inspector evaluated the licensee's methods for determining offsite dose and selectively verified that liquid and gaseous effluent release data and associated offsite dose calculations performed since this indicator was last reviewed were accurate.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Resident Inspector Review of a Safe Shutdown Procedure That Directed Alignment of Instrumentation to a DC Bus Without a Battery Charger

a. Inspection Scope

During the week of September 20, 2004, the inspectors reviewed the thoroughness and adequacy of licensee actions to correct AOP 10A, "Safe Shutdown - Local Control," which aligned Units 1 and 2 safe shutdown instrumentation to a 125-VDC bus that did not have a battery charger available to support the selected instrumentation. The inspectors also reviewed the initial corrective action program screening committee's assessment of the issue and the safe shutdown strategy for fires in the main control, cable spreading, and 4160-volt switchgear rooms. This observation constituted one resident inspector sample.

b. Findings and Observations

Introduction. The inspectors identified a URI concerning the effects of supplying power from a 125-VDC safety-related battery to Units 1 and 2 safe shutdown instrumentation necessary for monitoring reactor decay heat removal without a battery charger being aligned to the associated DC bus. The issue did not represent an immediate safety concern and is considered a URI pending regulatory review of the licensee's extent-of-

condition and potential impact evaluations, actions not completed by the end of this inspection period.

Description. Based on an inspector question concerning the adequacy of procedure feedback request OPS-2004-01454 on September 15, operations personnel performed a second and more detailed review of AOP 10A, "Safe Shutdown - Local Control," and identified a previously missed issue. Namely, that the normal battery chargers (D107 and D108) for DC buses D03 (white 125-VDC instrument bus) and D04 (yellow 125-VDC instrument bus) would be affected by a postulated fire in the main control, cable spreading, and 4160-volt switchgear rooms such that the normal chargers would not be available. Specifically, when battery chargers would be re-aligned in AOP 10A, Step 48, the one available swing battery charger (D109) would be aligned to D03 leaving no charger available to be aligned to D04. In addition, AOP-10A, Attachment C, Step C8 aligned power selector switch C-207 to the backup position.

Aligning C-207 to the backup position meant that the battery for the yellow 125-VDC instrument bus, D04, would be discharging over time while supplying shutdown instrumentation associated with DY-14, a safe shutdown panel inverter. Eventually, the safe shutdown instrumentation associated with DY-14 would become inoperable as the voltage of the battery supplying D04 decreased and the battery became depleted. Operators could select another safe shutdown inverter, DY-13, associated with D03 and the swing battery charger but AOP-10A did not direct this action.

The licensee initiated CAP059262 to document the alignment of safe shutdown instrumentation to a 125-VDC bus without a battery charger and issued temporary procedure change 2004-0762 on September 16, to correct the procedural error. The inspectors noted that the CAP was assigned a 'B' significance level indicating that the licensee considered the issue a condition adverse to quality typically resulting in moderate impact to the plant or organization. The inspectors reviewed the CAP screening committee's dispositioning of CAP059262 and noted that the CAP was closed to completed actions per the September 17 managers meeting. The inspectors reviewed selected drawings and the safe shutdown analysis report for fire scenarios in the main control, cable spreading, and 4160-volt switchgear rooms and noted that in closing CAP059262 to the temporary procedure change the licensee had failed to identify and assess:

- the specific safe shutdown instrumentation powered from DY-14, instrumentation that had the potential to degrade and become inoperable over time. Specifically, the inspectors determined that DY-14 provided instrument power to the Unit 1 and 2 'B' steam generator wide range level instruments, the 'B' reactor coolant system (RCS) loop wide range T-cold temperature instrument, and the 'B' RCS loop wide range T-hot temperature instrument.
- that the safe shutdown strategy for a fire in the main control, cable spreading, and 4160-volt switchgear rooms was to remove reactor decay heat by using the 'B' reactor coolant loops, the 'B' steam generators, and the unit specific turbine-driven AFW pumps. In closing the CAP, the licensee did not evaluate:
1) whether the D04 battery would deplete to the extent that DY-14 instrumentation would become inaccurate, suspect, or inoperable before RHR

cooling was placed inservice, or 2) whether the local operator would have difficulty controlling, monitoring, and maintaining reactor decay heat removal via the 'B' RCS loop and steam generator.

- the extent-of-condition of the issue in terms of other safe shutdown procedure actions directing operators to perform steps potentially in conflict with safe shutdown strategies.
- the effects on past operability and whether a successful safe shutdown of Units 1 and 2 for a fire in the main control, cable spreading, or 4160-volt switchgear rooms could have been achieved.

On September 17 and 20, the inspectors discussed closure of CAP059262 with a licensee fire protection engineer and the performance improvement manager. Following the inspectors' observations, the CAP was re-screened on September 20 and a condition evaluation to include extent-of-condition was assigned.

Since the licensee had not finished an extent-of-condition review or evaluated the potential impact of powering safe shutdown instrumentation from DC power sources without an associated battery charger by the end of this inspection period, this issue will be considered a URI pending NRC review of the licensee evaluations (URI 05000266/2004006-02; 05000301/2004006-02). A preliminary discussion with licensee representatives indicated that this issue did not represent an immediate safety concern. The licensee entered the issue into its corrective action program as CAP059262, "Question PI&R Question regarding OPS Procedure Feedback."

4OA3 Event Follow-up (71153)

.1 (Closed) Licensee Event Response (LER) 05000301/2004002-00: Concerns With Diver Safety Result in Manual Reactor Trip.

On May 15, 2004, Unit 2 was manually tripped from full power when a diver's tether and air and communication lines became entangled while the diver was inspecting the circulating system (CW) intake structure for winter damage. This event was initially discussed in Section 4OA2.5 of the most recent integrated report, Inspection Report 05000266/2004003; 05000301/2004003.

As discussed in the LER and a root cause evaluation, the licensee determined that the primary causes of this event were unclear and inconsistent communications and inadequate supervisory oversight. Specifically, diving operations had come to be viewed as routine, not all personnel involved with the diving operation understood the scope of the work to be performed, the WO associated with the diving activities lacked specificity concerning the portions of the intake crib to be inspected and the associated precautions, and the pre-job brief for the diving evolution did not emphasize the restricted areas within the intake crib. In addition, the intake crib inspection procedure was considered inadequate due to its general nature, the oversight by the diving liaison was inadequate during the critical time when the diver was entering the north area of the intake crib, and the diving activity communications were inadequate in preventing the diver from entering a hazardous area.

The inspectors determined that this issue affected the cross-cutting area of human performance in that: (1) plant personnel were complacent as shown in the treatment of the diving operation as a routine job, (2) communications were unclear and inconsistent throughout the diving evolution, (3) the procedure directing the intake crib inspection was not followed at all times and was determined to be unclear, (4) management oversight of the diving was insufficient, and (5) there were several instances of excessive slack in the diver's tending lines. The inspectors noted that this event was similar to one in October 2000 when Unit 1 was manually tripped due to concerns for the safety of a diver inspecting the CW forebay. The corrective actions from this were to improve communications and develop a diving control procedure with detailed responsibilities for providing support, communications, and notifications.

This LER was reviewed by the inspectors and no findings of significance were identified. The licensee entered the issue in the corrective action program as CAP056731, "Unit 2 Manual Trip." This LER is closed. This event did not constitute a violation of NRC requirements.

4OA4 Cross-Cutting Aspects of Findings

- .1 A finding described in Section 1R16.1 of this report had, as its primary cause, a problem identification and resolution deficiency in two respects. First, the initial extent-of-condition review did not consider the impact of the issue on shutdown plant operations. Second, following initial I&C troubleshooting efforts, a corrective action item was not assigned to operations personnel to evaluate the issue as a potential OWA. This contributed to a 3-month delay in completing the evaluation.
- .2 A Unit 2 manual reactor trip due to diver safety concerns described in Section 4OA3.1 of this report, had, as primary causes, human performance deficiencies in that: (1) plant personnel were complacent as shown in the treatment of the diving operation as a routine job, (2) communications were unclear and inconsistent throughout the entire diving evolution, (3) the procedure directing the intake crib inspection was not followed at all times and was determined to be unclear, (4) management oversight of the diving was insufficient, and (5) there were several instances of excessive slack in the diver's tending lines.

4OA5 Other Activities

Review of Institute of Nuclear Power Operations Report

The inspectors completed a review of the interim report for the Institute of Nuclear Power Operations, March 2004 Evaluation, dated May 10, 2004.

4OA6 Meetings

.1 Exit Meeting

On October 1, 2004, the resident inspectors presented the inspection results to Mr. Jim McCarthy and other members of the Point Beach staff, who acknowledged the findings. The licensee did not identify any information, provided to or reviewed by the inspectors, as proprietary.

.2 Interim Exit Meeting

An interim exit was conducted for:

- Radiation Protection (RETS/ODCM) inspection with Mr. J. McCarthy on July 30, 2004. A telephonic re-exit was conducted with Messrs. J. McCarthy and S. Thomas on August 20, 2004, to discuss follow-up question results relative to the licensee's ventilation filter testing program.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

J. Brander, Maintenance Manager
B. Carberry, Radiation Protection - ALARA
G. Casadonte, Fire Protection Coordinator
J. Connolly, Regulatory Affairs Manager
G. Correll, Chemistry Department Manager
R. Davenport, Production Planning Manager
B. Dungan, Operations Manager
C. Hill, Assistant Operations Manager
M. Holzmann, Nuclear Oversight Manager
R. Hopkins, Internal Assessment Supervisor
C. Jilek, Maintenance Rule Coordinator
T. Kendall, Program Engineering
D. Koehl, Site Vice-President
B. Kopetsky, Security Coordinator
C. Krause, Senior Regulatory Compliance Engineer
R. Ladd, Fire Protection Engineer
J. McCarthy, Site Director of Operations
R. Milner, Business Planning Manager
T. Petrowsky, Design Engineer Manager
M. Ray, Emergency Preparedness Manager
C. Richardson, Design Engineer
J. Schroeder, Service Water System Engineer
J. Schweitzer, Site Engineering Director
J. Shaw, Plant Manager
G. Sherwood, Engineering Programs Manager
C. Sizemore, Training Manager
P. Smith, Operations Training Supervisor
W. Smith, Site Assessment Manager
J. Strharsky, Planning and Scheduling Manager
S. Thomas, Radiation Protection Manager

Nuclear Regulatory Commission

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

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000301/2004002-00	LER	Concerns With Diver Safety Result in Manual Reactor Trip (Section 4OA3.1)
05000266/2004006-01	FIN	Unit 1 Residual Heat Removal Heat Exchanger Bypass Valve Drifts Open While in Automatic (Section 1R16.1)
05000266/2004006-02; 05000301/2004006-02	URI	Resident Inspector Review of a Safe Shutdown Procedure That Directed Alignment of Instrumentation to a Direct Current Bus Without a Battery Charger (Section 4OA2.1)

Closed

05000301/2004002-00	LER	Concerns With Diver Safety Result in Manual Reactor Trip (Section 4OA3.1)
05000266/2004006-01	FIN	Unit 1 Residual Heat Removal Heat Exchanger Bypass Valve Drifts Open While in Automatic (Section 1R16.1)

Discussed

None.

LIST OF DOCUMENTS REVIEWED

1R04 Equipment Alignment

CL 13; Condensate and Feedwater System Unit 1; Revision 42
Operating Instruction (OI) 164; Preparation of VCT [Volume Control Tank] and HUT [Holdup Tank] For VCT Relief Valve Maintenance (Unit 1); Revision 1, dated April 26, 2004
CAP059507; Battery Cable Drawings Not Consistent With Cables Installed In Field; September 27, 2004 (NRC-identified issue)
CD Batteries Drawing M-7742-1; Rack 2 Step Cat. III With Grounding Connection for 30 LC-21 Batteries; Revision 1
CD Batteries Drawing M-6700; Frame, 2-Step Seismic Rack W/Dual Side Rails, Type L Cells; Revision 1
Wisconsin Electric Drawing Exide #900145; Assembly 60 GN-23 on Three 2 Tier High Seismic Racks 900145 Sheet 1 Point Beach Nuclear Plant Units 1 and 2; Revision E
Wisconsin Electric Drawing Exide #900145; Assembly 60 GN-23 on Three 2 Tier High Seismic Racks 900145 Sheet 2 Point Beach Nuclear Plant Units 1 and 2; Revision E
Wisconsin Electric Drawing Exide MB-94087; Frame - Steel- 2 Tier (MB-94087) Point Beach Nuclear Plant Units 1 and 2; Revision B
Wisconsin Electric Drawing Exide 900869; Wiring Diagram, 60 Cells of GN-23 Battery for Three Two Tier Seismic Racks; Revision B
Wisconsin Electric Drawing Exide 900971; Field Assembly, Two Strings of 60 Cells of GN-23 Battery on Five Two Tier Racks Shock Protected; Revision D
Annual Book of ASTM Standards, Section 1, Volume 01.01; Iron and Steel Products; 1994

1R05 Fire Protection

AOP -10A; Abnormal Operating Procedure Safe Shutdown - Local Control; Revision 38
CAP058873; Emergency Lighting Unit Location Discrepancies in FHAR [Fire Hazards Analysis Report]; August 8, 2004 (NRC-Identified Issue)
CAP059042; Shift Manager Key Ring Has Excessive Keys Which Hinders Access to Locked Areas; September 8, 2004 (NRC-Identified Issue)
CAP059527; FHAR [Fire Hazard Analysis Report] Documentation Issues; September 28, 2004 (NRC-Identified Issue)
Feedback Request RMP 9384-1; Appendix R Emergency Lighting Testing and Maintenance, Revision 4; August 30, 2004
FHAR, Fire Zone 552; SW Pump Room; April 2004
FHAR, Fire Zone 553; Circulating Water Pump Room; April 2004
FHAR, Fire Zone 554; Circulating Water Pump House Corridor; April 2004
FHAR, Fire Zone 555; Circulating Water Pump House Valve Gallery; April 2004
FHAR, Fire Zone 691; Warehouse #2; April 2004
FHAR, Fire Zone 770; G-03 Diesel Room; April 2004
FHAR, Fire Zone 773; G-03 Switchgear Room; April 2004
FHAR, Fire Zone 775; G-04 Diesel Room; April 2004
FHAR, Fire Zone 777; G-04 Switchgear Room; April 2004
FHAR, Fire Zone 783; G-04 Radiator Room; April 2004

FHAR, Fire Zone 784; G-04 Exhaust Fan Room; April 2004
Point Beach Nuclear Plant - Fire Area Analysis Summary Report; January 2003
Point Beach Nuclear Plant FHAR; April 2004
RMP 9384-1; Appendix R Emergency Lighting Testing and Maintenance; Revision 4

1R06 Flood Protection Measures

CAP059575; Weak Design Basis for Use of Concrete Jersey Flood Barrier;
September 30, 2004 (NRC-Identified Issue)
CAP059618; NRC Question of MR 03-044; October 1, 2004 (NRC-Identified Issue)
NP 8.4.17; Point Beach Nuclear Plant Flooding Barrier Control; Revision 3

1R11 Licensed Operator Qualifications

LOR 04-04, SES 119; Licensed Operator Requalification Training Simulator
Scenario 119; July 20, 2004, Revision 0
Training Instruction 8.0; Conduct of Simulator Training and Simulator Evaluation,
Attachment 2, Crew Simulator Evaluation Summary; August 31, 2004
NP 2.1.1; Conduct of Operations; Revision 1

1R12 Maintenance Effectiveness

CA025717; Resolution of CV a(1) Status Unknown; June 28, 2002
CA026090; 2P-2A Discharge Relief Valve Lifting; August 15, 2002
CA026096; Failure of 1P-002A-Z; August 15, 2002
CA028289; Failure of 1P-002A-Z; February 26, 2003
CA054051; 2P-2A Discharge Relief Valve Lifting; January 21, 2003
CAP028609; Resolution of CV a(1) Status Unknown; June 26, 2002
CAP031724I; 2P-002C Charging Pump Exceeds Allowable MTN Rule Unavailability
Time; March 20, 2003
CAP054195; U2 'B' Charging Pump Relief Valve Lifted; February 25, 2004
CAP058227; 1P-002C Charging Pump Unavailability During 2nd Quarter 2004;
July 30, 2004
Function List for CV Chemical and Volume Control; August 25, 2004
Nuclear Plant Memorandum 2004-0217; 2003 Annual Report for the Maintenance Rule;
March 31, 2004
Maintenance Rule (a)(1) System Status; May 10, 2004
Maintenance Rule Evaluation 000083; 2P-2C Charging Pump Trip; January 28, 2003
Maintenance Rule Evaluation 000088; 2P-2C Charging Pump Trip; March 5, 2003
Other OTH056730; Perform Review to Inadvertent Relief Valve Lifting; March 28, 2004
PBF (Point Beach Form) 7029; Documentation of Maintenance Rule Performance
Criteria - System: CV; Revision 2
PBF-7031; Maintenance Rule (a)(1) System Action Plan CL and Approval; Revision 2
Performance Criteria Assessments for CV; July 10, 2002 to July 26, 2004
Performance Criteria Assessments for Crossover Steam Dump System; July 25, 2002 to
July 13, 2004
Documentation of Maintenance Rule Performance Criteria for Crossover Steam Dump
System; June 24, 1998

WOs for the Crossover Steam Dump System with Maintenance Rule Implications;
June 30, 2002 to September 13, 2004
Maintenance Rule (a)(1) System Action Plan CL and Approval for the Crossover Steam
Dump System; January 14, 2004
OTH053853; No Maintenance Rule Criteria for Bleeder Trip Valves; November 13, 2003

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

E-1 Report; Work Week Schedule for Week of July 18, 2004
Work Week Addition and Deletions for Week of July 18, 2004
E-1 Report; Work Week Schedule for Week of July 25, 2004
Work Week Addition and Deletions for Week of July 25, 2004
E-1 Report; Work Week Schedule for Week of August 15, 2004
Work Week Addition and Deletions for Week of August 15, 2004
E-1 Report; Work Week Schedule for Week of August 22, 2004
Work Week Addition and Deletions for Week of August 22, 2004
E-1 Report; Work Week Schedule for Week of August 29, 2004
Work Week Addition and Deletions for Week of August 29, 2004
E-1 Report; Work Week Schedule for Week of September 5, 2004
Work Week Addition and Deletions for Week of September 5, 2004
E-1 Report; Work Week Schedule for Week of September 12, 2004
Work Week Addition and Deletions for Week of September 12, 2004
NP 10.3.7; On-Line Safety Assessment; Revision 8

1R14 Non-Routine Evolutions

OP 2A; Normal Power Operation, Unit 2; July 19, 2004, Revision 51
Unit 2 5B Feedwater Heater Troubleshooting Work Plan; August 12, 2004
OI 36; Procedure for Removing No. 5 Feedwater Heater From Service; Revision 9,
January 16, 2003

1R15 Operability Evaluations

OPR000111; Calculation N-94-042 Uses Incorrect Data for SI Pump, Equipment
1P-15A, 1P-15B, 2P-15A, and 2P-15B; Revision 0
CAP058260; Calculation N-94-042 Uses Incorrect Data for SI Motors; August 2, 2004
Engineering Evaluation 2003-0039; Minimum Required 345 KV System Voltage;
Revision 0
CAP057635; AFW Recirculation AOVs Not Set Up In Accordance With Calculations;
June 28, 2004
CAP057630; Non-Conservative Input in AFW Backup Nitrogen Calculation 2002-0002;
June 28, 2004
CAP057728; Use of Nonconforming Versus Degraded on Operability Determinations;
July 2, 2004
Procedure Change Request (PCR) 053426; Revise CMP 2.5.2.1 to Restrict Settings for
AOVs 1(2) 4002 for Calculation Compliance; October 24, 2003
WO02000355; 1P-29 AFW Pump Mini-Recirc Control; February 28, 2002
WO09950688; P-38A AFW Pump Mini-Recirc Control; January 28, 2002

Plant Modification 01-144; AFW Motor Driven Pump Mini-Recirc Control Valve Modification; January 25, 2002
 Plant Modification 02-001; TDAFP Mini-Recirc Valve 1/2AF-4002) Instrument Air Accumulator Addition; January 2, 2002
 Point Beach Calculation 2001-0056; TDAFP Mini Recirc Valve (1/2AF-4002) Instrument Air Accumulator Sizing; Revision 2
 Point Beach Calculation 2002-0002; Nitrogen Backup System for MDAFP Discharge Valves (AF-4012/4019) and Minimum Recirculation Valves (AF-4007/4014); Revision 0
 DBD-01; AFW System; Revision 7
 IT-08C; TDAFP Mini-Recirc Valve 1AF-4002 Accumulator Check Valve 1AF-173 Pressure Decay Test (Refueling) Unit 1; Revision 2
 CAP059563; Binder of Operability Recommendations (OPR) Not Maintained Current; September 30, 2004 (NRC-Identified Issue)
 OPR00077; Residual Heat Removal Cut-In Conditions Not Achievable in Assumed Time; Revision 0
 OPR000109; IT-10 Acceptance Criteria Does Not Ensure Adequate Auxiliary Feedwater Without Operator Action; Revision 1
 OPR000101; Containment Fan Motor 2W-001-B1-M, RHR Motor 1P-010B-M, and Safety Injection Motor 1P-015A-M, No Environmental Qualification; January 17, 2004
 OPR00099; Steam Generator Blowdown Tank Rupture Disk Not Code Stamped; December 16, 2003

1R16 Operator Workarounds

CAP057507; 1RH-626, HX-11A/B RHR HX Bypass Flow Control, Fails to Operate in Auto; June 22, 2004
 NP 2.1.4; Operator Burdens; Revision 4
 Operating Procedure (OP) 7A; Placing RHR System In Operations; Revision 43
 OP 3C; Hot Standby to Cold Shutdown; Revision 94
 OP 7B; Removing RHR System from Operation; Revision 35
 Emergency Operating Procedure 3.1; Post-Steam Generator Tube Rupture Cooldown Using Backfill; Revision 19
 SEP 1 Unit 1; Degraded RHR System Capability; Revision 4
 SEP 2.2 Unit 1; Shutdown LOCA With RHR Aligned For Decay Heat Removal; Revision 11
 SEP 2.3 Unit 1; Cold Shutdown LOCA; Revision 10
 Critical Safety Procedure P.1 Unit 1 Red; Response to Imminent Pressurized Thermal Shock Condition; Revision 26
 Critical Safety Procedure P.2 Unit 1 Yellow; Response to Anticipated Pressurized Thermal Shock Condition; Revision 16
 DBD-10; RHR System; Revision 1
 CL 7A; SI System CL Unit 1; Revision 20
 Background Document GB SEP-1; Degraded RHR System Capability; Revision 2

1R19 Post-Maintenance Testing

CAP059434; G-05 GT GEN Auxiliary Power Diesel Engine Battery (D-503) Problems; September 23, 2004

WO0308365; Change Oil in 1P-14A Containment Spray Pump; September 15, 2004
 WO0308366; Change Oil in 1P-14B Containment Spray Pump; September 15, 2004
 Inservice Test 05; Containment Spray Pumps and Valves (Quarterly) Unit 1; Revision 46
 Inservice Test 540C; Leakage Reduction and Preventative Maintenance Program Test
 of Containment Spray System When $\geq 350^{\circ}\text{F}$ Unit 1; Revision 6
 Periodic Check PC-23 Part 5; Charging Pump Preventive Maintenance; Revision 9,
 March 1, 2004
 Periodic Check PC-29; Monthly Gas Turbine and Auxiliary Diesel Load Test; Revision
 38, May 12, 2004.
 WO0410827; HX-11A/B RHR HX Bypass Flow Hand Control Station; June 22, 2004
 Wisconsin Electric Power Company Drawing No. PB 31MSIL26900101; Type 7613 - Air
 Operated Metal Seat Valve With Extension; Revision 1
 Foxboro Drawing 10668 CD-15 Sheet 2; Wiring Diagram - Interconnect Reactor Control
 System Rack 1SA (1C109) Top; Revision D

1R22 Surveillance Testing

HPIP 11.54; Control Room F-16 Filter Testing; Revision 7
 Calculation CN-CRA-04-58; Point Beach [LOCA Off-Site and Control Room] Doses;
 Revision 0
 CAP058976; Discrepancy Between CREFS SR 3.7.9.6 and FSAR 14.3.5 Assumption
 for Flow; September 3, 2004
 CAO058933; Intent of TS Surveillance Requirement 3.7.9.6; September 2, 2004
 CAP058900; 10 CFR 50.72 Reporting Requirement Potentially Missed; August 31, 2004
 CAP058936; Variable Sheave Found on W-014B Motor Shaft; September 2, 2004
 CAP058966; HPIP 11.54 Control Room F-16 Filter Testing Scheduling Concerns;
 September 3, 2004
 CAP058973; Review PMT for Control Room Envelope Tightening; September 3, 2004
 CAP058833; F-16 Control Room Filter Flow Low Out of Specification per HP 11.54;
 August 27, 2004
 CAP059191; CREFS Testing Post Job Debrief; September 14, 2004
 CAP058197; Filter Testing In Accordance With TS 5.5.10 May Have Been Done Using
 Wrong ANSI [American National Standards Institute] Standard; July 29, 2004
 CAP058641; Filter Testing Not Listed As Safety Related Procedure; August 20, 2004
 CAP058961; NP 10.1.1 Not Closed When CREFS Was Returned To Service;
 September 2, 2004
 WO0307611; F-16 Control Room Charcoal Filter Fan; September 1, 2004
 Bechtel Drawing 6118 M-144 Sheet 2; Heating and Ventilation Temperature Control
 PI&D Temperature Control Point Beach Nuclear Plant Unit 1 and 2; Revision E
 Safety Screening 2002-0083; Revision to TS Bases 3.7.9 Control Room Emergency
 Filtration System (CREFS); March 5, 2002
 FSAR Section 9.8; Control Room Ventilation System; June 2002
 NRC Safety Evaluation Report for Point Beach TS Amendments Nos. 6 and 8; May 7,
 1978
 DBD 31; Control Room Heating, Ventilation, and Air Conditioning and Habitability;
 Revision 0
 EEN 2001-0032; Engineering Evaluation for Parametric Values; Revision 5,
 November 14, 2002

PBF-2031; Operations Auxiliary Building Daily Log Sheet; Revision 71
PBF-2033; Operations Turbine Building Daily Log Sheet, Unit 2; Revision 60
PBF-2032; Operations Turbine Building Daily Log Sheet, Unit 1; Revision 75
PBF-2034; Operations Control Room Daily Log Sheet, Unit 1; Revision 60
PBF-2035; Operations Control Room Daily Log Sheet, Unit 2; Revision 61
RMP 9307-3; Power Shield Test Procedure; Revision 3
2ICP 02.013; 4.16 KV Undervoltage Matrix Relays 31 Day Surveillance Test; Revision 6
Westinghouse Drawing 617F354 Sheet 12B; Schematic Diagram - Test Circuit Reactor Protection System Train 'B' Point Beach Nuclear Plant Unit 1; Revision E

1R23 Temporary Plant Modifications

Temporary Modification 04-008; Install Sump Pumps in Manholes 3,10,14,16 and 19; July 12, 2004
Temporary Modification 03-014; Sump Pumps for Manholes 1 and 2; May 23, 2003

1EP6 Drill Evaluation

CAP058345; NOS Question on Timeliness of Drill Information On August 4, 2004; August 6, 2004
CAP058323; Command Post; August 5, 2004
CAP058315; Provide Training to Security Personnel; August 5, 2004
CAP058317; Threat Message CL Card; August 5, 2004
CAP058318; No CSA/SAS CL Used; August 5, 2004
Timeline for August 4, 2004 Drill

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Annual Monitoring Report - 2003; April 29, 2004
Chemistry Analytical Methods and Procedure (CAMP) 031; Preparation of Batch Liquid and Gaseous Effluent Permits Using RETSCODE Software; Revision 6
CAMP 103; Continuous and Batch Release Composite Samples; Revision 14
CAMP 106; Interlaboratory Radiological Cross Check Procedure; Revision 10
CAP029919; Permits for Waste Distillate Tank Aborted Due to ALERT Exceeded; October 24, 2002
CAP031008; Effluent Release Rate Limit Without Automatic Trip Function; February 5, 2003
CAP049844; 31 Day Dose Projection Limit Exceeded Admin Report Limits on Permit; September 4, 2003
CAP051467; Discharge Permit Generated Using Incorrect Tank Volume; October 27, 2003
CAP054758; Auxiliary Bldg. Vent Stack Back-up Air Sampler Out of Calibration; March 13, 2004
CAP056137; ISSS Licensing, Design, and Implementation Concerns; April 27, 2004
CAP057335; Mislabelled Component in ODCM Revision; June 10, 2004
CAP057618; Possibility of H-3 Release via Contaminated Trees Shipped Offsite; June 25, 2004

CAP058146; Possibility of Iodine Plating in RMS Pump Tubing Needs to be Evaluated;

July 27, 2004 (NRC-Identified Issue)
 CAP058197; Filter Testing IAW TS 5.5.10 May Have Been Done Using Wrong ANSI Standard; July 29, 2004 (NRC-Identified Issue)
 Construction Closeout Report: Abandonment of the Waste Water Retention Pond; December 2002
 EM; Environmental Manual; Revision 17
 Health Physics Calibration Procedure (HPCAL) 3.1; Liquid Monitor Calibration Procedure: 1RE-229 (Unit 1 SW Discharge); March 19, 2004
 HPCAL 3.1; Liquid Monitor Calibration Procedure: 2RE-229 (Unit 2 SW Discharge); July 23, 2003
 HPCAL 3.1; Liquid Monitor Calibration Procedure: RE-230 (Waste Water Effluent Monitor); May 26, 2004
 HPCAL 3.4; SPING Calibration Procedure: SPING 21 (Unit 1 Containment Purge); March 13, 2003
 HPCAL 3.4; SPING Calibration Procedure: SPING 22 (Unit 2 Containment Purge); December 9, 2003
 HPCAL 3.4; SPING Calibration Procedure: SPING 23 (Auxiliary Building Exhaust Ventilation); August 12, 2003
 HPCAL 3.6; PNG Calibration Procedure: 1RE-211/212 (Unit 1 Containment Purge); May 21, 2004
 HPCAL 3.6; PNG Calibration Procedure: 2RE-211/212 (Unit 2 Containment Purge); February 16, 2004
 HPCAL 3.8; Stack Exhaust Monitor Calibration: RE-221 (Drumming Area Stack); January 14, 2004
 HPCAL 3.8; Stack Exhaust Monitor Calibration: RE-214 (Auxiliary Building Exhaust Ventilation); June 15, 2004
 HPIP 3.52.1; Radiological Sampling for Release Accountability; Revision 21
 HPIP 11.50; Unit 1 Containment Purge F-11 A/B Filter Testing; June 13, 2003
 HPIP 11.54; Control Room F-16 Filter Testing; June 11, 2003
 HPIP 11.54; Control Room F-16 Filter Testing; May 20, 2002
 NP 3.2.1; PBNP Analytical Quality Assurance Program; Revision 8
 Nuclear Oversight Observation Report 2002-002-3-012; Radiological Protection; June 21, 2002
 Nuclear Oversight Observation Report 2004-002-3-064; Radiological Protection; June 29, 2004
 ODCM; Offsite Dose Calculation Manual; Revision 15
 PBNP Final Safety Analysis, Chapter 11; Revisions June 1999 and June 2001
 Permit 02-00128G; Gaseous Waste Discharge Permit, Unit 2 Containment Forced Vent; December 12, 2002
 Permit 02-00132L; Liquid Waste Discharge Permit, 'A' Monitor Tank; November 5, 2002
 Permit 03-00069L; Liquid Waste Discharge Permit, 'A' Monitor Tank; October 5, 2003
 Permit 03-00095G; Gaseous Waste Discharge Permit, Unit 2 Containment Purge; October 27, 2003
 Permit 04-00031L; Liquid Waste Discharge Permit, 'B' Monitor Tank; April 9, 2004

 Permit 04-00051G; Gaseous Waste Discharge Permit, Unit 1 Containment Purge; May 17, 2004
 RAM 3.2; Radioactive Batch Liquid Releases; Revision 13
 RAM 5.1; Radioactive Airborne Effluent Releases; Revision 8

RECM; Radiological Effluent Control Manual; Revision 4
Licensee Report: Remediation of the Surrounding Area of the Retention Pond at the PBNP; November 2002
STPT 13.2; Setpoint Document, Process Monitors, Radiation Monitoring System; Revision 6
STPT 13.3; Setpoint Document, Radiation Monitoring System: Analog Flow Channels; Revision 6
STPT 13.4; Setpoint Document, Radiation Monitoring System: Effluent Monitors; Revision 14

4OA1 Performance Indicator Verification

PBNP Effluent Dose Estimates and Quarterly NRC PI Results (Chemistry Department Spreadsheets); 2nd, 3rd and 4th Quarter 2003 and 1st and 2nd Quarter 2004
NP 5.2.16; NRC PIs Attachment C for Safety Systems Unavailability, RHR System, Unit 1 PI Data Calculation, Review and Approval; Revision 9, March 31, 2004
NP 5.2.16; NRC PIs Attachment C for Safety Systems Unavailability, RHR System, Unit 2 PI Data Calculation, Review and Approval; Revision 9, March 31, 2004
NP 5.2.16; NRC PIs Attachment C for Safety Systems Unavailability, Emergency AC Power System, Unit 1 PI Data Calculation, Review and Approval; Revision 9, March 31, 2004
NP 5.2.16; NRC PIs Attachment C for Safety Systems Unavailability, Emergency AC Power System, Unit 2 PI Data Calculation, Review and Approval; Revision 9, March 31, 2004
NP 5.2.16; NRC PIs Attachment C for Safety Systems Unavailability, Heat Removal System, Unit 1 PI Data Calculation, Review and Approval; Revision 9, March 31, 2004
NP 5.2.16; NRC PIs Attachment C for Safety Systems Unavailability, Heat Removal System, Unit 2 PI Data Calculation, Review and Approval; Revision 9, March 31, 2004
PBF-1650; Mitigating Systems Cornerstone Monthly Unavailability and Verification, RHR System; July 2002 through June 2004
PBF-1650; Mitigating Systems Cornerstone Monthly Unavailability and Verification, Emergency AC Power System; July 2002 through June 2004
PBF-1650; Mitigating Systems Cornerstone Monthly Unavailability and Verification, Heat Removal System; July 2002 through June 2004

4OA2 Identification and Resolution of Problems

Document Feedback Request Form OPS-2004-01454; AOP-10A, Safe Shutdown - Local Control; August 25, 2004
AOP-10A; Safe Shutdown - Local Control; Revision 38
Safe Shutdown Analysis Report, Section 5.3.1.1; Control Room, Cable Spreading Room, 4160V Switchgear Room Scenarios; Revision 2
CAP059262; Question PI&R Question Regarding OPS Procedure Feedback; September 16, 2004 (NRC-Identified Issue)

Condition Evaluation 14635; Question PI&R Question Regarding OPS Procedure Feedback; September 20, 2004
Nuclear Procedure 5.3.1; Action Request Process; Revision 24
Wisconsin Electric Drawing WE PBE-174; Internal Wiring Diagram Local Instrument

Rack C207 PBE-174; Revision E
Point Beach Nuclear Plant Master Data Book Section 3.2.12, Panel D41; DC
Distribution; Revision 10
Point Beach Nuclear Plant Master Data Book Section 3.2.12, Panel D51; DC
Distribution; Revision 6
Temporary Procedure Change 2004-0762; AOP-10A, Safe Shutdown Local Control;
September 16, 2004
Point Beach Calculation 2000-0055; D-106 Capacity for Appendix R Shutdown;
Revision 0

4OA3 Event Follow-up

CAP056731; Unit 2 Manual Trip; May 15, 2004
NMC Incident Response Team For Issues Encountered During Unit 2 Trip Due to Diver
Trapped in Intake Structure at PBNP; May 15-17, 2004
RCE (Root Cause Evaluation) 00-003; Unit 1 Trip Due to Diver Safety Concern;
December 11, 2000

4OA5 Other Activities

Point Beach Nuclear Plant Institute of Nuclear Power Operations Interim Report, March
2004 Evaluation; May 10, 2004

LIST OF ACRONYMS USED

AC	Alternating Current
AFW	Auxiliary Feedwater
AOP	Abnormal Operating Procedure
CA	Corrective Action
CAMP	Chemistry Analytical Methods and Procedure
CAP	Corrective Action Program Document
CL	Checklist
CFR	Code of Federal Regulations
CV	Chemical and Volume Control
CW	Circulating Water
DC	Direct Current
DBD	Design Basis Document
FHAR	Fire Hazard Analysis Report
FIN	Finding
FSAR	Final Safety Analysis Report
HPCAL	Health Physics Calibration Procedure
HPIP	Health Physics Implementing Procedure
I&C	Instrumentation and Control
ICP	Instrument and Control Procedure
IMC	Inspection Manual Chapter
IT	Inservice Test
LEFM	Leading Edge Flow Meter
LOCA	Loss-of-Coolant-Accident
NP	Nuclear Plant Procedures Manual Procedure
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OI	Operating Instruction
OP	Operating Procedure
OPR	Operability Request
OTH	Other
OWA	Operator Workaround
PBF	Point Beach Form
PC	Periodic Check
PI	Performance Indicator
PMT	Post-Maintenance Testing
RCS	Reactor Coolant System
RETS	Radiological Effluent Technical Specifications
RHR	Residual Heat Removal
RMP	Routine Maintenance Procedure
SEP	Shutdown Emergency Procedure
SI	Safety Injection
SW	Service Water
TM	Temporary Modification
TS	Technical Specification
URI	Unresolved Item
VDC	Volt Direct Current
WO	Work Order