

September 13, 2000

Mr. M. Reddemann
Site Vice President
Kewaunee and Point Beach Nuclear Plants
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT - NRC INSPECTION REPORT
50-266-00-09(DRP); 50-301-00-09(DRP)

Dear Mr. Reddemann:

On August 22, 2000, the NRC completed a baseline inspection at your Point Beach Nuclear Plant. The results of this inspection were discussed on August 21, 2000, with you and other members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination by the resident inspectors of activities conducted under your license as they relate to reactor safety, verification of performance indicators, event followup, and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observation of activities, and interviews with personnel. The Emergency Preparedness element of Temporary Instruction 2514/144, "Performance Indicator Data Collecting and Reporting Process Review," was also completed by a regional inspector during this inspection.

Based on the results of this inspection, one issue of very low safety significance (Green) was identified. The issue has been entered into your corrective action program and is discussed in the summary of findings and in the body of the enclosed report. The issue was determined to involve a violation of NRC requirements, but because of its very low safety significance, the violation was not cited. In addition, the NRC evaluated several issues in the area of equipment alignment dealing with implementation of locked valve procedures. The issues have been entered into your corrective action program and are discussed in the summary of findings and in the body of the enclosed report. The locked valve issues were considered a finding with no risk significance attached.

If you contest the 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 Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Point Beach facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you provide one, 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Roger Lanksbury, Chief
Reactor Projects Branch 5

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

Enclosures: Inspection Report 50-266-00-09(DRP);
50-301-00-09(DRP)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-266-00-09(DRP); 50-301-00-09(DRP)

Licensee: Nuclear Management Company, LLC

Facility: Point Beach Nuclear Plant, Units 1 & 2

Location: 6610 Nuclear Road
Two Rivers, WI 54241

Dates: July 1 through August 22, 2000

Inspectors: F. Brown, Senior Resident Inspector
R. Powell, Resident Inspector
T. Ploski, Emergency Preparedness Inspector
D. Funk, Emergency Preparedness Inspector

Approved by: R. Lanksbury, Chief
Reactor Projects Branch 5
Division of Reactor Projects

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness	<ul style="list-style-type: none">● Occupational● Public	<ul style="list-style-type: none">● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW, or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

SUMMARY OF FINDINGS

IR 50-266-00-09, IR 50-301-00-09, on 07/01 - 08/22/2000; Nuclear Management Company, LLC; Point Beach Nuclear Plant; Units 1 & 2; Equipment Alignments, Event Follow-up.

The inspection was conducted by the resident inspectors and regional emergency preparedness inspectors. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process.

Cornerstone: Mitigating Systems

- **NO COLOR.** The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. The finding was assigned to Unit 2. (Section 1R04.2)

Cornerstone: Barrier Integrity

- **GREEN.** The licensee identified that the Unit 1 containment personnel air lock door interlock mechanism was inoperable without the required actions being taken within the times specified by Technical Specifications. The licensee attributed this status control problem to human performance. One Non-Cited Violation was identified.

The violation is considered to be of very low risk significance (Green) because, although not locked as required by Technical Specification 15.3.6.A.1.d.(2), the inner door vent valve was shut and containment integrity was satisfied. The Non-Cited Violation was assigned to Unit 1. (Section 4OA3)

Report Details

Summary of Plant Status: The plant was operated at 100 percent power throughout the inspection period except for short periods during routine testing.

1. REACTOR SAFETY

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

1R04 Equipment Alignments

.1 Component Cooling Water System

a. Inspection Scope

The inspectors performed a partial walkdown of the component cooling water system to verify that valves were in the proper position to perform their safety-related function. The inspectors also verified system parameters were within appropriate parameters by direct observation of installed plant instrumentation and evaluated other conditions such as component material condition, adequacy of housekeeping, and proper component labeling. This system was selected based upon its high risk significance and its status as both an initiator and a mitigator of accidents. The inspectors used the following documents to accomplish the review:

- Periodic Check 8, Part 5, "Component Cooling Valve and Lock Checklist, Unit 2," Revision 3
- Point Beach Form 2031, "Auxiliary Building Shift Log," Revision 45

b. Issues and Findings

There were no findings identified.

.2 Safety Injection (SI) System

a. Inspection Scope

The inspectors performed a partial walkdown of the SI system to verify that valves were in the proper position to perform their safety-related function. Instrumentation valve configurations and appropriate meter indications were also observed. The inspectors also evaluated other conditions such as component material condition, adequacy of housekeeping, and proper component labeling. This system was selected based upon its high risk significance and a previously identified inspector concern, Condition Report (CR) 00-1548, involving status control of SI system valves. The inspectors reviewed Operations Checklist 7A, "Safety Injection System Checklist Unit 2," Revision 14, as part of the inspection.

b. Issues and Findings

The inspectors identified that 24 valves were not locked as required by Operations Checklist 7A. The inspectors observations were entered into the licensee's corrective action system as CR 00-2466. The CR was the fourth dealing with the use and control of locked valves written since May 2000 (CRs 00-1548, 00-1573, and 00-2050).

The inspectors discussed the use and control of locks with the operations manager and plant manager. The operations manager informed the inspectors that the locked valve program was being revised and acknowledged that instances existed where plant procedures, drawings, and checklists were not in agreement.

The inspectors noted that actions taken as a result of previous CRs had not been effective in maintaining the status control of valves in safety-related systems. Specifically, the inspectors reviewed licensee corrective actions and determined that they were focused on long term programmatic enhancements (reduction in the use of locks) and failed to correct known examples of incorrect system status control. This explained why the inspectors and plant staff continued to identify these conditions. Specific corrective actions to address the known examples of incorrect system status control in the field were implemented and completed within two weeks of the inspectors discussing this issue with plant management.

The inspectors performed a risk significance screening of the failure to lock valves in accordance with NRC Inspection Manual Chapter 0609, "Significance Determination Process." Because the failure to lock the valves did not affect the operability, availability, or reliability of the SI system, the issue was not evaluated using the Significance Determination Process. Due to the extent of the status control errors and the repetitive nature of locked valve problems, the inspectors determined that extenuating circumstances existed and constituted a "no color" mitigating systems finding. The finding was assigned to the mitigation cornerstone for Unit 2.

1R05 Fire Protection

a. Inspection Scope

The inspectors walked down the following risk significant areas looking for any fire protection degradations:

- 1P10A Residual Heat Removal Pump (RHR) Room, Fire Zone 104
- 1P10B RHR Pump Room, Fire Zone 105
- 2P10A RHR Pump Room, Fire Zone 108
- 2P10B RHR Pump Room, Fire Zone 109
- Valve Pit/Sump Pump Room, Fire Zone 101

Emphasis was placed on the 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 by the inspectors based on information provided in the licensee's "Fire Protection Evaluation Report," dated August 1999.

The inspectors verified that fire hoses and portable fire extinguishers were installed at their designated locations, were in satisfactory physical condition, and were unobstructed. The inspectors also verified the physical location and condition of fire detection devices. Additionally, passive features such as fire doors, fire dampers, and mechanical and electrical penetration seals were verified to be located per Fire Protection Evaluation Report requirements and to be in good physical condition.

Additionally, the inspectors reviewed the following procedures for incorporation of inventory and installation instructions of dedicated spare RHR pump power cables:

- Abnormal Operating Procedure 10B, Unit 1, "Safe to Cold Shutdown in Local Control," Revision 1
- Periodic Check 6, Part 1, "Monthly Operations Inventory Report," Revision 37
- Routine Maintenance Procedure 262, "Emergency Replacement of Power Supply Cables to RHR and Component Cooling Water Pump Motors," Revision 1

The inspectors also verified the physical availability of spare electric cables. The cables were a condition of the December 31, 1986, NRC exemption from the requirements of 10 CFR Part 50, Appendix R, for automatic fire suppression in the RHR equipment fire zones on the -19 foot elevation of the auxiliary building.

b. Issues and Findings

There were no findings identified.

1R06 Flood Protection Measures

a. Inspection Scope

The inspectors reviewed the licensee's analysis and procedures for protection of equipment during both internal and external flooding conditions. The following documents were reviewed:

- Point Beach Nuclear Plant Individual Plant Examination Summary Report, June 30, 1993
- Nuclear Power Business Unit Procedures Manual (NP) 8.4.17, "PBNP Flooding Barrier Control," Revision 0
- Design Basis Document T-41, "Hazards - Internal and External Flooding [Module A]," Revision 0

- Abnormal Operating Procedure 9A, "Service Water System Malfunction," Revision 11
- Periodic Check 80 Part 7, "Lake Water Level Determination," Revision 0
- Inservice Test 45, "Safety Injection Valves (Quarterly) Unit 2," Revision 37
- CR 00-0126, "HVAC [Heating, Ventilation, and Air Conditioning] Room Flooding Mitigation Features"
- CR 00-1901, "Underground Cable Runs Between Circ Water Pump House and Plant"
- Engineering Work Request 99-043, "HVAC Room Modifications"

In addition, the inspectors conducted a walkdown of the internal flood protection features of the following flood zones:

- Vital Switchgear / Battery Room flood zone
- Emergency Diesel Generator / Air Compressor Room flood zone
- Auxiliary Feedwater Pump Area flood zone
- Control Room flood zone
- Heating, Ventilation, and Air Conditioning Room / Computer Room flood zone
- Auxiliary Building flood zone

The inspectors verified that all direct and indirect sources of flooding were identified in the licensee's current licensing basis and that the design provisions to prevent/mitigate flooding had been installed as specified. Where exceptions were identified, the inspectors verified that compensatory measures were in place and that the exceptions were entered into the licensee's corrective action program. The inspectors also verified that the credited operator actions were proceduralized.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule Implementation

.1 Containment Hydrogen Monitor Calibration Gas

a. Inspection Scope

The inspectors assessed the effectiveness of the licensee's implementation of Maintenance Rule requirements on the Unit 2 containment hydrogen monitors. The inspectors reviewed the following documents:

- Work Order (WO) 9912958, "Perform ICP [Instrumentation and Control Procedure] 13.002, Units 1 and 2"
- WO 9912918, "High Calibration Gas Bottle Empty - Unit 2"
- WO 9912920, "Low Calibration Gas Bottle Empty - Unit 2"
- ICP 13.002, "Containment Hydrogen Monitor Quarterly Gas Calibration," Revision 0
- ICP 10.26, "Hydrogen Monitor Test Gas Refill," Revision 4
- CR 00-2326, "Hydrogen Fill Pressure not Consistent with Procedure"

The inspectors reviewed performance problems (inability to calibrate multiple hydrogen monitors) experienced during the inspection period. The inspectors verified that the hydrogen monitors' maintenance rule classification was consistent with the "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," NUMARC [Nuclear Management and Resources Council] 93-01, that performance problems were documented in the licensee's corrective action program, and that corrective actions were being established.

b. Issues and Findings

There were no findings identified.

.2 Service Water (SW) Pump P-32A Maintenance

a. Inspection Scope

The inspectors assessed the effectiveness of the licensee's implementation of Maintenance Rule requirements on SW Pump P-32A. The inspectors reviewed the following documents:

- WO Work Plan 9929783, "SW Pump Motor," dated August 3, 2000

- Component Instruction Manual 00098, "Service Water Pumps," Revisions 21, 22, and 23
- CR 00-2407, "SW Manual not Updated"

The inspectors reviewed an equipment problem (failure of the upper motor bearing) experienced during the inspection period. The inspectors verified that the SW pump maintenance rule classification was consistent with the "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," NUMARC 93-01, that the equipment problem was documented in the licensee's corrective action program, and that corrective actions were being established.

b. Issues and Findings

There were no findings identified.

.3 Battery and Inverter Room Ventilation

a. Inspection Scope

The inspectors assessed the effectiveness of the licensee's implementation of Maintenance Rule requirements on the Battery and Inverter Room Fan, W-86. The inspectors reviewed the following documents:

- WO Work Plan 9927606, "W-86-M, Noise, Excessive Heat," dated July 14, 2000
- Component Instruction Manual 00439, "Battery Room Air Handling Units W-85 and W-86"
- CR 00-2488, "SPEED not used for Bearing Replacement"

The inspectors reviewed an equipment problem (motor bearing failure) experienced during the inspection period. The inspectors verified that the Battery and Inverter Room Ventilation System maintenance rule classification was consistent with the "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," NUMARC 93-01, that the equipment problem was documented in the licensee's corrective action program, and that corrective actions were being established.

b. Issues and Findings

There were no findings identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

.1 Unit 1 SI Pump 1P-15B Maintenance

a. Inspection Scope

The inspectors observed the July 24, 2000, performance of planned maintenance associated with the 1P-15B SI pump to verify that unnecessary risk was avoided. The inspectors selected the activity for detailed review due to the elevated risk configuration when 1P-15B was out-of-service. Additionally, the inspectors reviewed the following documents:

- NP 10.2.2, "Scheduling, Planning, and Implementing On-Line Work," Revision 4
- NP 10.3.7, "On-Line Safety Assessment," Revision 2
- WO 9925364, "1P-15B Adjust Inboard Oiler Level"
- WO 9926299, "1P-15B Casing Bolts 25 & 37 Leaking"
- WO 9925881, "MCE® Analyze Motor"

The inspectors also verified that problems identified with planning and execution of the maintenance activity were entered into the licensee's corrective action program as CR 00-2250.

b. Issues and Findings

There were no findings identified.

.2 Unit 2 "B" Train RHR Maintenance

a. Inspection Scope

The inspectors reviewed the licensee's planning for maintenance work scheduled for August 10, 2000. Work associated with the Unit 2 "B" train of RHR was selected because it increased normal plant risk by greater than 2.1 times the baseline (a "Yellow" condition in the licensee's program). The planning and work control processes for the following maintenance activities were reviewed:

- WO 9913719, "RHR Shell Side Inlet Operator"
- WO 9919484, "Analyze Motor Operator"

The inspectors verified that the licensee properly implemented its risk management procedures, NP 10.2.2 and NP 10.3.7, for the observed maintenance planning activities. The inspectors also performed an assessment of the licensee's maintenance scheduling and management for the reviewed activities to verify that risk was "minimized" during the planning and performance of work.

b. Issues and Findings

There were no findings identified.

.3 Unit 2 Containment Sump Valve

a. Inspection Scope

The inspectors observed the performance of maintenance on the Unit 2 Containment Sump Valve 2SI-850A. The scope of the observed work was to remove boric acid from the valve actuator and tighten valve packing, as required. The inspectors selected this activity for review because valve packing leakage would be potentially safety significant during accident conditions. Specifically, it would constitute a direct, non-filtered, fluid leak path from the containment sump to the environment. The inspectors reviewed the following documents:

- WO 9925075, "RHR Pump Sump B Suction"
- Tag Series "2 SI SI-851A Rev 0-1"

The inspectors verified that the equipment isolation tagging and the performance of actual work were adequately controlled such that the opposite train of post-accident sump recirculation was not effected.

As in Section 1R13.2, the inspectors verified that licensee procedures for managing risk were properly implemented. The inspectors also assessed maintenance scheduling and management to verify the risk of these work activities was "minimized."

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors verified that the subject operability evaluations addressed the applicable current licensing basis requirements and commitments, and provided an adequate basis for justifying operability. In those cases where an adequate written basis for justifying operability was not provided, the inspectors performed an independent review of the condition to assess whether a reasonable presumption of operability existed. Independent reviews included a discussion with licensee personnel and reviews of design and licensing basis documentation. The inspectors reviewed the following five operability evaluations:

- CR 99-2180, "SW Model," Operability Evaluation, Revision 6
- CR 00-2276, "Lost Maintenance and Test Equipment," Operability Evaluation, Revision 0

- CR 00-2433, "Loose Conductor on Safety-Related Breaker," Operability Evaluation, Revision 0
- CR 00-2484, "1/2RE-215 Air Ejector Monitors," Operability Evaluation, Revision 0
- CR 99-2241, "SW Rotating Strainer Differential Pressure," Operability Evaluation, Revision 4

b. Issues and Findings

There were no findings identified for the first four operability evaluations. The fifth operability evaluation pertained to a condition described in a previous inspection report. Specifically, Non-Cited Violation (NCV) 50-266/99016-02; 50-301/99016-02 documented that the main in-line SW system strainers were analyzed for 60 percent blockage within the controlling SW system flow calculations. However, the differential pressure associated with this level of blockage at normal flow rates had not been translated into the applicable controlled specifications, drawings, instructions and procedures. Additionally, the installed pressure indicator, alarm set points, and procedural controls were inadequate to ensure that blockage of greater than 60 percent would be recognized and corrected prior to a design basis accident. When this condition was identified in 1999, the licensee had initiated prompt compensatory measures under Revision 0 of the operability evaluation for CR 99-2241. These measures included maintaining the strainers in continuous blowdown (limited strainer plugging) and installation of temporary differential pressure indicator that provided accurate indication of the pressure drop across the strainers at normal flow rate with 60 percent blockage.

During this inspection period, the licensee completed a review of the licensing basis and concluded that there was no regulatory requirement to be able to accurately detect SW in-line strainer plugging at normal system flow rates. The licensee's rationale for this determination was provided in the referenced operability evaluation. The Engineering Advisory Committee meeting minutes dated August 10, 2000, documented the senior plant staff's concurrence with this conclusion. The Corrective Action Program representative's notes for the August 21, 2000, Plant Manager's staff review of the operability evaluation, indicated that engineering was to proceed with the recommendation contained therein (which included removal of the temporary indicators). At the exit meeting for this inspection report, the licensee stated that there had not been a firm decision made to remove the temporary pressure indicators. In reviewing the licensee's operability evaluation, the inspectors considered the following issues, all of which affected the basis for the licensee's operability evaluation:

- The operability evaluation stated that it was not credible that the SW strainers would plug to the 60 percent value during normal operation (due to periodic use of a nonsafety-related and non-Technical Specification (TS) blowdown system). However, the inspectors determined that there were no accurate historic records of strainer differential pressure in the range of concern (1 pound per square inch (psi) differential) when the strainers were not in continuous blowdown mode. The installed pressure indicators (one on either side of strainer) were 0-160 psi

gauges with 2 psi increments and a tolerance of plus or minus 1 psi¹. The inspectors noted that the operators determined compliance with the 3 psi differential pressure acceptance criteria for the strainers by subtracting the downstream gauge indication from the upstream gauge indication. If the acceptance criteria was exceeded, operators manually initiated the strainer blowdown. The strainers had been maintained in continuous blowdown during the period that accurate indication had been installed, with the exception of one 3 day period.

- The operability evaluation documented that the absence of accurate differential pressure indication in the range of concern was within the licensing basis. However, the licensee did not identify, nor could the inspectors find, any record indicating that the NRC had been specifically advised of, had reviewed, or had approved for incorporation into the licensing basis, the accuracy limitations associated with the installed pressure indication and alarms for the in-line SW strainers.
- The operability evaluation documented that engineers and operators had not observed any excessive fouling of the SW strainers. However, the inspectors had previously identified cases where foreign material (aquatic grass, sand, etc.) was observed inside safety-related SW strainers and heat exchangers, but the presence of the material was not documented in the corrective action program or addressed in any specific programmatic fashion. A SW system engineer stated to the inspectors that the licensee's Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment," program requirement to document such material had not been implemented consistently.
- The operability evaluation documented that there were other system alarms that would have provided indication of strainer fouling. However, the engineering supervisor who prepared Revision 4 of the operability evaluation for CR 99-2241 stated to the inspectors that the other SW system control room alarms, including low system pressure, were not established to address, nor did the alarms bound, strainer plugging at pre-accident flow rates.

The inspectors opened Unresolved Item (URI) (50-266-00-09-01(DRP); 50-301-00-09-01(DRP)) to track further NRC review of the facility's licensing basis requirements for monitoring strainer plugging in the safety-related, high plant risk, SW system and to evaluate the licensee's final corrective actions.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed the following post maintenance testing activity, involving risk significant system equipment, to ensure that testing met the design bases and licensing

¹ The inspectors determined, based upon a review of maintenance records, that the installed pressure gauges had not been calibrated from approximately 1985 to 1997.

basis commitments, demonstrated the equipment was capable of performing its design basis function, and acceptance criteria were met:

- Routine Maintenance Procedure 9216-3, "SW Pump Vibration Testing and Balancing for Post Maintenance Testing," Revision 3

b. Issues and Findings

There were no findings identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed the performance of the following surveillance tests on risk significant equipment:

- 1ICP 02.016WH-1, "Reactor Protection and Engineered Safety Features White Channel Analog Quarterly Surveillance Test," Revision 10
- 2ICP 03.016, "Independent Overspeed Protection System Analog and Train A and B Logic Monthly Test," Revision 0
- Inservice Test 05, "Containment Spray Pumps and Valves (Quarterly) Unit 1," Revision 40, Temporary Change No. 2000-0339
- Inservice Test 07A, "P-32A SW Pump (Quarterly)," Revision 5
- Technical Specification Test 70, "Monthly Diesel Engine-Driven Fire Pump Functional Test," Revision 30

For each surveillance test, the inspectors reviewed the test procedures for appropriateness, observed all or significant parts of the performance of the test, and verified that work practices and procedure adherence were consistent with regulatory requirements and standards. The inspectors also verified that the impact of the testing had been properly characterized during the pre-job briefing; that all testing prerequisites were satisfied; and that test data were complete and appropriately verified. Following completion of the test, the inspectors verified that the test equipment was removed and that the equipment was returned to a condition in which it could perform its safety-related function.

b. Issues and Findings

There were no findings identified.

Emergency Preparedness

1EP1 Exercise Evaluation

a. Inspection Scope

The inspectors observed the control room simulator and technical support center during the emergency preparedness drill conducted on August 3, 2000. The inspection focused on the ability of the licensee to appropriately classify emergency events, perform timely notifications, and implement appropriate protective action recommendations in accordance with approved procedures.

b. Issues and Findings

There were no findings identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

The inspectors reviewed Revisions 15 and 18 to the Point Beach Nuclear Plant Emergency Plan which were submitted by licensee letter, dated April 27, 2000, to verify that the changes did not decrease the effectiveness of the plan. The emergency plan revisions were submitted in accordance with 10 CFR 50.54(q).

b. Observation and Findings

There were no findings identified and documented during this inspection.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

.1 Temporary Instruction 2515/144, "Performance Indicator Data Collecting and Reporting Process Review"

a. Inspection Scope

The inspectors reviewed the licensee's data collecting and reporting process for the Emergency Response Organization Drill and Exercise Participation PI. The review included relevant portions of Nuclear Energy Institute 99-02, "Regulatory Assessment, Performance Indicator Guidelines," Section 5, Appendix A of the licensee's Emergency Plan, and the licensee's cross-reference chart, "Key Emergency Response Organization Positions." The inspectors verified that the licensee's PI for Emergency Response Organization participation was developed in a manner consistent with the industry guidelines.

b. Issues and Findings

There were no findings identified.

.2 Initiating Events

a. Inspection Scope

The inspectors reviewed the following second quarter 2000 PIs for Unit 1 and Unit 2 utilizing the PI definitions and guidance contained in Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0:

- Unplanned Scrams Per 7000 Critical Hours
- Scrams With A Loss of Normal Heat Removal

The inspectors reviewed Licensee Event Reports (LERs) and station logs to determine the number of unplanned scrams and number of critical hours during the previous four quarters. The inspectors also reviewed the licensee's basis for crediting normal heat removal capability for planned and unplanned scrams. The inspectors verified performance indicator values by independent calculation.

b. Issues and Findings

There were no findings identified.

4OA3 Event Follow-up

(Closed) LER 50-266/2000-007-00: Containment Upper Hatch Inner Door Vent Valve Found Unlocked. This LER described a licensee-identified failure to lock the upper hatch inner door vent valve following an air lock entry for maintenance on the outer door interlock mechanism on July 7, 2000. Plant staff identified that the vent valve was unlocked during a subsequent air lock entry for post maintenance testing on July 7. The upper hatch outer door interlock mechanism had been declared inoperable on June 30. Technical Specification 15.3.6.A.1.d.(2) required that the licensee lock an operable door in the affected air lock within 24 hours, if the containment air lock door interlock mechanism is inoperable. Although the inner door vent valve and latch mechanism were initially locked within 24 hours, the failure to maintain the vent valve locked shut was a condition prohibited by TS. The failure to maintain the inner door vent valve locked shut as required by TS 15.3.6.A.1.d.(2) is being treated as a Non-Cited Violation (NCV) (NCV 50-266-00-09-02(DRP)), consistent with Section VI.A.1 of the NRC Enforcement Policy. The LER documented the licensee's corrective actions. The corrective actions were being tracked in the licensee's corrective action program.

The inspectors performed a risk significance screening of the TS violation in accordance with NRC Inspection Manual Chapter 0609, "Significance Determination Process." Because the failure to lock the inner door vent valve did not represent an actual open pathway in the physical integrity of reactor containment, the issue was determined to be

of very low risk significance and within the licensee's response band (Green). The finding was assigned to the barrier integrity cornerstone for Unit 1.

4OA5 Other

- .1 (Closed) URI 50-266/2000007-01; 50-301/2000007-1: Potentially inadequate safety evaluation. After several discussions with plant engineers and review of a revised safety evaluation for the proposed test on the Battery and Inverter Room ventilation system, the inspectors concluded that the test did not represent an unreviewed safety question. Specifically, the licensee stated that conservative assumptions in the existing analysis for temperature rises in the battery and inverter room had been identified. When these conservatisms were removed, the analysis supported the conclusion that the proposed test would not increase the probability of the failure of equipment important to safety.
- .2 (Closed) URI 50-266/2000004-01; 50-301/2000004-1: Cooling of instrument bus inverters. The licensee's corrective actions addressed the inspectors' concerns with the bases for considering the safety-related inverters operable. Specifically, the licensee performed a simulator evaluation to demonstrate that operators could restore cooling to the cable spreading room within the time specified in the operability evaluation, and the licensee committed to perform appropriately controlled engineering calculations to support the conclusions of the operability evaluation.

4OA6 Meetings, including Exit

Exit Meeting Summary

On August 21, 2000, the inspectors presented the inspection results to Mr. M. Reddemann and other members of licensee management. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. E. Reddemann, Site Vice President
R. G. Mende, Plant Manager
B. J. O'Grady, Operations Manager
V. M. Kaminskas, Maintenance Manager
R. P. Farrell, Radiation Protection Manager
A. J. Cayia, Regulatory Services and Licensing Manager
C. R. Peterson, Director of Engineering
D. D. Schoon, System Engineering Manager

NRC

B. A. Wetzel, Point Beach Project Manager, NRR

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-266-00-09-01 50-301-00-09-01	URI	Facility's licensing basis requirements for monitoring strainer plugging (Section 1R15)
50-266-00-09-02	NCV	The failure to maintain the inner door vent valve locked shut was a condition prohibited by TS (Section 4OA3)

Closed

50-266/2000-007-00	LER	Containment upper hatch inner door vent valve found unlocked (Section 4OA3)
50-266-00-09-02	NCV	The failure to maintain the inner door vent valve locked shut was a condition prohibited by TS (Section 4OA3)
50-266/2000007-01 50-301/2000007-01	URI	Potentially inadequate safety evaluation (Section 4OA5)
50-266/2000004-01 50-301/2000004-01	URI	Cooling of Instrument Bus Inverters (Section 4OA5)

Discussed

50-266/99016-02
50-301/99016-02

NCV Blockage of service water strainers (Section 1R15)

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CR	Condition Report
DRP	Division of Reactor Projects
ICP	Instrumentation and Control Procedure
LER	Licensee Event Report
NCV	Non-Cited Violation
NP	Nuclear Power Business Unit Procedures Manual
NRC	Nuclear Regulatory Commission
NUMARC	Nuclear Management and Resources Council
PI	Performance Indicator
psi	Pounds Per Square Inch
RHR	Residual Heat Removal
SI	Safety Injection
SW	Service Water
TS	Technical Specification
URI	Unresolved Item
WO	Work Order