

May 12, 2000

Mr. M. Reddemann  
Site Vice President  
Point Beach Nuclear Plant  
Wisconsin Electric Power Company  
6610 Nuclear Road  
Two Rivers, WI 54241

SUBJECT: POINT BEACH INSPECTION REPORT 50-266/2000004(DRP);  
50-301/2000004(DRP)

Dear Mr. Reddemann:

On May 5, 2000, the NRC completed a baseline inspection at your Point Beach Nuclear Plant. The results of this inspection were discussed on May 4, 2000, with you and members of your staff. The enclosed report presents the results of that inspection.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Electronic Reading Room (PERR) link at the NRC homepage, <http://www.nrc.gov/NRC/ADAMS/index.html>.

Sincerely,

*/RA/*

Roger D. Lanksbury, Chief  
Reactor Projects Branch 5

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

Enclosure: Inspection Report 50-266/2000004(DRP);  
50-301/2000004(DRP)

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cc w/encl: R. Grigg, President and Chief  
Operating Officer, WEPCo  
M. Sellman, Senior Vice President,  
Chief Nuclear Officer  
R. Mende, Plant Manager  
J. O'Neill, Jr., Shaw, Pittman,  
Potts & Trowbridge  
K. Duveneck, Town Chairman  
Town of Two Creeks  
B. Burks, P.E., Director  
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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: 50-266/2000004(DRP); 50-301/2000004(DRP)

Licensee: Wisconsin Electric Power Company

Facility: Point Beach Nuclear Plant, Units 1 & 2

Location: 6610 Nuclear Road  
Two Rivers, WI 54241

Dates: April 2 through May 5, 2000

Inspectors: Fred Brown, Senior Resident Inspector  
Ray Powell, Resident Inspector

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

## SUMMARY OF FINDINGS

Point Beach Nuclear Plant, Units 1 & 2  
NRC Inspection Report 50-266/2000004(DRP); 50-301/2000004(DRP)

The report covers a 5-week period of resident inspection. The significance of issues (if any) is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609.

There were no safety significant findings during this inspection period.

## Report Details

Summary of Plant Status: The two units operated at 100 percent power throughout most of the inspection period. Unit 2 was taken off-line for a planned mid-cycle outage on May 4, 2000.

### 1. **REACTOR SAFETY**

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

#### 1R04 Equipment Alignments

##### a. Inspection Scope

The inspectors performed a partial walkdown of Unit 1 and Unit 2 residual heat removal systems to ensure that system valves were in the proper position to perform their associated safeguards function. The walkdowns were performed using the applicable portions of licensee procedures PC 9, Part 2, "Safeguard Systems Valve and Lock Checklist (Monthly) Unit 1," Revision 11 and PC 9, Part 3, "Safeguard Systems Valve and Lock Checklist (Monthly) Unit 2," Revision 15.

The inspectors performed a partial walkdown of the Unit 2 turbine-driven auxiliary feedwater (AFW) pump before and following its removal from service for maintenance.

##### b. Observations and Findings

There were no findings identified and documented during these inspections.

#### 1R05 Fire Protection

##### a. Inspection Scope

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

- Containment Spray and Safety Injection Pump Room, Fire Zone 151;
- D-05 and D-06 125-volts direct current Battery Rooms, Fire Zones 306 and 307, respectively; and
- D-305 Swing Battery and Switchboard Rooms, Fire Zones 321 and 323, respectively.

Area conditions/configurations were evaluated based on information provided in "Fire Protection Evaluation Report," August 1999.

##### b. Observations and Findings

There were no findings identified and documented during this inspection.



## 1R12 Maintenance Rule Implementation

### a. Inspection Scope

The inspectors reviewed the licensee's implementation of the Maintenance Rule requirements. The structures, systems, components, or performance problems evaluated were:

- AFW pump Maintenance Rule performance monitoring and current performance status;
- Failure of a time delay relay on the Unit 1 turbine-driven AFW pump minimum flow recirculation line controller (Condition Report (CR) 00-1145); and
- Failure of a Reactor Protection System channel device following a routine surveillance (CR 00-1327).

### b. Observations and Findings

The inspectors determined that the licensee was not appropriately calculating AFW unavailability during Technical Specification required testing of the motor driven and turbine-driven AFW pumps. The licensee informed the inspectors that the surveillance testing was not counted as unavailability time because the test procedures contained steps to recover from the procedure in the event of an AFW initiation. The guidance for counting unavailability time during surveillance testing allowed licensees to consider the AFW system available if a few simple steps contained in the procedure and performed by a dedicated operator would return the system to service in the event the system was required to operate. The inspectors reviewed the test procedures and concluded that multiple, complex, or diagnostic actions were required to return the AFW pumps to an operable status during some portions of the surveillance tests. Additionally, the surveillance test procedures did not specify that a dedicated operator be available to perform recovery steps. As such, the inspectors concluded that the licensee was not monitoring unavailability time consistent with the guidance for implementation of the Maintenance Rule. Because the AFW system was currently classified as (a)(1) under the Maintenance Rule, there was no immediate impact of this improper unavailability time monitoring. The licensee acknowledged the inspectors' conclusions, and stated that they had been tracking unavailability time using a previous revision of the applicable guidance. The licensee's regulatory services staff stated that future unavailability times would be tracked using the current guidance document. The licensee has entered this issue into their corrective action program as CR 00-1305.

The inspectors did not identify any findings with respect to the other Maintenance Rule activities.

1R13 Maintenance Work Prioritization

a. Inspection Scope

The inspectors reviewed the scheduling of a planned maintenance outage on the 13.8 kilovolt connection between the Unit 1 and Unit 2 offsite power sources. This maintenance outage corresponded with the removal from service of the station black out gas turbine generator (G-05).

b. Observations and Findings

There were no findings identified and documented during this inspection.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the licensee's operability evaluations for the issues described below.

- Leakage through the first-off check valve on the AFW supply to the Unit 2 steam generator (2AF-100) was causing elevated temperatures. This risk significant system condition was described in Revision 2 of the Operability Determination (OD) for CR 99-1102.
- The effects of post-accident temperatures on power supplies to two of the four instrument buses was questioned by plant staff. This condition was described in CR 00-1333, and Revision 2 of the OD for CR 99-2532.

b. Observations and Findings

The inspectors concluded that there was reasonable basis for considering the 2AF-100 valve to be operable. However, the inspectors had several concerns with the content and conclusions of the OD for the instrument bus power supplies. Specifically, the OD stated that the cooling to the power supplies could be re-established in 90 minutes. The inspectors had previously been provided documentation (Reference Memorandum NPM 94-0075 and Design Basis Document 29) that stated that the power supplies needed to remain operable for a period of 120 minutes without area cooling. The OD did not address this apparent change in requirements, and the licensee could not immediately explain to the inspectors the basis for the change. The OD also appeared to state that formal calculations were not required to support the conclusions of the OD because the probability of a loss-of-coolant accident coincident with a loss of offsite power was very low. While the probability of such an occurrence may be very low, it is the design basis accident for the plant, and 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires controlled calculations to support conclusions on the operability of safety-related equipment under design basis accident conditions. The inspectors discussed their concerns with the licensee, who indicated that plant staff had independently concluded that Revision 2 of the OD for CR 99-2532 was not correct. The licensee initiated CR 00-1403 to document the incorrect OD. The licensee was developing a new OD at the

conclusion of the inspection period. The inspectors did not have any immediate operability concerns pending the review of the revised OD. The inspectors considered this issue to be an unresolved item (URI) (URI 50-266/00004-01; 50-301/00004-01) pending the inspectors review of the revised OD.

1R19 Post Maintenance Testing (PMT)

a. Inspection Scope

The inspectors reviewed the PMT associated with the sub-panel modification for one of the "A" train emergency diesel generators. Documents reviewed were Installation Work Plan 91-116\*AI2, "Emergency Diesel Generator G-01 Sub-Panel PMT," Revision 0, and Technical Specification Test 81, "Emergency Diesel Generator G-01 (Monthly)," Revision 57.

b. Observations and Findings

There were no findings identified and documented during this inspection.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the temporary modification package, safety evaluation, and installation work orders associated with Temporary Modification 00-012, "480 volts alternating current Power Supply for B-07, B-08/B-09 During H-01 Outage." This modification provided 480-volts alternating current power to the North Service Building Load Center, B-07, and Alternate Shutdown Load Center B-08/B-09 via a temporary diesel generator set.

b. Observations and Findings

There were no findings identified and documented during this inspection.

1EP1 Drill, Exercise, and Actual Events

a. Inspection Scope

The inspectors observed the control room simulator during the emergency planning drill on April 20, 2000. The inspectors verified that Emergency Plan Implementing Procedure 1.2, "Emergency Classification," Revision 33, was implemented appropriately.

b. Observations and Findings

There were no findings identified and documented during this inspection.

#### 4. OTHER ACTIVITIES

##### 4OA2 Performance Indicator (PI) Verification

###### a. Inspection Scope

The inspectors reviewed the licensee's PI data for safety system unavailability, with particular emphasis on the AFW system. The inspectors compared periods of logged out-of-service time with the data compiled by the licensee for PIs through the first quarter of 2000. The inspectors utilized the guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0, to determine the appropriateness of the licensee's unavailability data.

###### b. Observations and Findings

The inspectors identified that the AFW system pumps had been removed from service for surveillance testing at the Technical Specification required frequency, but that this out-of-service time had not been included in the PI data submitted to the NRC. As discussed in Section 1R12 of this report, the inspectors concluded that at least some of the surveillance testing unavailability time should have been against both the Maintenance Rule and the PI availability criteria. The licensee acknowledged the inspectors' finding and was evaluating the impact of this error on the PIs submitted to the NRC. This issue will be tracked as an unresolved item (URI 50-266/00004-02; 50-301/00004-02) pending inspector review of the licensee's recalculated PIs for safety system availability.

##### 4OA5 Management Meeting

###### Exit Meeting Summary

The inspectors presented the inspection results to Mr. M. Reddemann and other members of licensee management on May 4, 2000. 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 Manger  
V. M. Kaminskas, Maintenance Manager  
R. P. Farrell, Radiation Protection Manger  
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

50-266/00004-01 50-301/00004-01	URI	Cooling of instrument bus inverters (1R15)
50-266/00004-02 50-301/00004-02	URI	Performance indicator data errors (4OA2)

### Closed

None

### Discussed

None

## LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater
CFR	Code of Federal Regulations
CR	Condition Report
DRP	Division of Reactor Projects
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OD	Operability Determination
PI	Performance Indicator
PMT	Post-Maintenance Testing
URI	Unresolved Item

## NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) 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 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:

<b>Reactor Safety</b>	<b>Radiation Safety</b>	<b>Safeguards</b>
! Initiating Events	! Occupational	! Physical Protection
! Mitigating Systems	! Public	
! Barrier Integrity		
! Emergency Preparedness		

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 little effect on safety. WHITE findings indicate issues with some increased importance to safety, which may require additional NRC inspections. YELLOW findings are more serious issues with an even higher potential to affect safety and would require the NRC to take additional actions. RED findings represent an unacceptable loss of safety margin and would result in the NRC taking significant actions that could include ordering the plant shut down.

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 incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. The color for an indicator corresponds to levels of performance that may result in increased NRC oversight (WHITE), performance that results in definitive, required action by the NRC (YELLOW), and performance that is unacceptable but still provides adequate protection to public health and safety (RED). GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections.

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. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, as described in the matrix. 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.

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