

July 28, 2000

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

SUBJECT: POINT BEACH NUCLEAR POWER PLANT - NRC INSPECTION  
REPORT 50-266/2000007(DRP); 50-301/2000007(DRP)

Dear Mr. Reddemann:

On June 30, 2000, the NRC completed a baseline inspection at your Point Beach Nuclear Plant. The results of this inspection were discussed on July 5, 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, human performance, 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, observations of activities, and interviews with personnel. Temporary Instruction 2515/142, "Draindown During Shutdown and Common-Mode Failure (NRC Generic Letter 98-02)," was also completed by a regional project engineer during this inspection.

Based on the results of this inspection, one issue of very low safety significance (Green) involving the extended unavailability of Unit 1 turbine-driven auxiliary feedwater pump was identified. That 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.

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Sincerely,

Original signed by  
Roger Lanksbury, Chief

Roger Lanksbury, Chief  
Reactor Projects Branch 5

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

Enclosure: Inspection Report 50-266/2000007(DRP);  
50-301/2000007(DRP)

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  
Bureau of Field Operations  
J. Mettner, Chairman, Wisconsin  
Public Service Commission  
S. Jenkins, Electric Division  
Wisconsin Public Service Commission  
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M. Reddemann

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Sincerely,

/s/Roger Lanksbury

Roger Lanksbury, Chief  
Reactor Projects Branch 5

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

Enclosure: Inspection Report 50-266/2000007(DRP);  
50-301/2000007(DRP)

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cc w/encl: R. Grigg, President and Chief  
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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: 50-266/2000007(DRP); 50-301/2000007(DRP)

Licensee: Wisconsin Electric Power Company

Facility: Point Beach Nuclear Plant, Units 1 & 2

Location: 6610 Nuclear Road  
Two Rivers, WI 54241

Dates: May 6 through June 30, 2000

Inspectors: F. Brown, Senior Resident Inspector  
R. Powell, Resident Inspector  
M. Kunowski, Project Engineer

Approved by: Roger 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**

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness

### **Radiation Safety**

- Occupational
- Public

### **Safeguards**

- 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 05000266-00-07; 05000301-00-07; 05/06-06/30/2000; Wisconsin Electric Power Company; Point Beach Nuclear Plant; Units 1 & 2, Maintenance Risk Assessment, and Emergent Work Evaluation.

The inspection was conducted by resident inspectors and a regional projects inspector. This inspection identified one Green issue. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process.

### **Cornerstone: Mitigating Systems**

- GREEN. The inspectors identified that inadequate planning and control of Unit 1 turbine-driven auxiliary feed pump, 1P-29, work performed June 28-30, 2000, resulted in the pump being out-of-service for approximately 43 hours when the work was scheduled to take 18 hours. This resulted in the licensee being in a risk significant condition, which was 3.5 times the baseline risk, for an extended period of time.

The finding was considered to be of very low risk significance (Green) because only one auxiliary feedwater train was affected and it was out-of-service for a shorter time than allowed by Technical Specifications. The finding was assigned to Unit 1. (Section 1R13.3)

## Report Details

Summary of Plant Status: The two units operated at 100 percent power throughout most of the inspection period. Unit 1 power was reduced to 90 percent power on May 12 due, in part, to storm damage to offsite Line 111 and was returned to 100 percent power on May 22. Unit 1 power was reduced to 59 percent power on June 24 to allow cleaning of the condenser water boxes and was returned to full power on June 25. Unit 2 entered the period off-line for a mid-cycle outage; the unit was returned to 100 percent power on May 10, 2000.

### **1. REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

#### 1R01 Adverse Weather

##### a. Inspection Scope

The inspectors reviewed licensee Abnormal Operating Procedure 13C, "Severe Weather," Revision 7, and discussed severe weather preparations and response with operations personnel. The inspectors also reviewed the licensee's response to the severe weather condition of May 12, 2000, during which offsite Line 111 was lost due to storm damage. The inspectors verified that Abnormal Operating Procedure 13C was entered, that plant announcements were made to warn plant personnel, and that site supervision was appropriately notified as required by the procedure. The inspectors also verified that problems identified during the severe weather event response, specifically the failure of G-05 Gas Turbine to start when requested by the System Control Supervisor, were entered into the licensee's corrective action system.

##### b. Issues and Findings

There were no findings identified.

#### 1R04 Equipment Alignment

##### a. Inspection Scope

The inspectors performed a partial system walkdown inspection of the Service Water (SW) system prior to and following a special chemical treatment that was performed to prevent zebra mussel infestation of system internals. The walkdown was performed to verify that the system was aligned properly in accordance with operational procedures and no indications of fouling. This system was selected based upon its high risk significance, its status as both an initiator and a mitigator of accidents, and because of past problems with chemical treatments. The inspectors used the following documents:



- Operating Instruction (OI) 70, "SW System Operation," Revision 26
- OI 155, "Chemical Treatment of SW for Zebra Mussels," Revision 0
- Point Beach Form 2033, "Unit 2 Turbine Hall Shift Log," Revision 36

b. Issues and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

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

- D04 - 125 Volts Direct Current (vdc) Electrical Equipment Room, Fire Zone 226
- D03 - 125 vdc Electrical Equipment Room, Fire Zone 227
- G01 - A Train Diesel Generator Room, Fire Zone 308
- G02 - B Train Diesel Generator Room, Fire Zone 309

The inspectors also reviewed fire barrier penetration inspection and installation records associated with the areas. Area conditions/configurations were evaluated based on information provided in "Fire Protection Evaluation Report," August 1999.

b. Issues and Findings

There were no findings identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed the licensed operator requalification simulator examination scenario for Cycle 4. The inspectors verified that simulator fidelity issues were addressed prior to the exercise. The inspectors observed the performance of the licensed operators to determine whether plant operating procedures and standards were implemented during the scenario. The inspectors observed the post-scenario critique to determine whether performance issues were accurately identified and addressed. The inspectors verified that emergency plan requirements were recognized and addressed during the scenario. Non-safety significant observations were provided to the Operations Department management representative at the end of the exercise.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the maintenance rule requirements for all or parts of the following systems:

- Emergency Diesel Generators (EDGs)
- Service Water

These systems were selected because of their high risk significance, their status as a(1) within the Maintenance Rule, and because of ongoing maintenance and testing activities during the inspection period. The inspection consisted of a review of current activities on these systems to ensure that Maintenance Rule requirements and programs were being implemented in accordance with plant procedures.

b. Issues and Findings

There were no findings identified.

1R13 Maintenance Risk Assessment and Emergent Work

.1 Planned Maintenance

a. Inspection Scope

The inspectors monitored plant equipment status and attended licensee meetings to identify potentially risk significant maintenance activities, including those involving emergent work. For the specific work activities identified below, the inspectors verified that the licensee utilized a risk monitoring tool ("safety monitor" software) in the planning and scheduling process, that unnecessary risk was avoided, and that emergent work was assessed for risk impacts. The following specific work activities were reviewed based upon the potential that they represented unusually high risk situations under the plant conditions in effect at the time:

- Work Order (WO) 9926721, "K-4C [EDG Air Start Compressor for G-03] Total Closure Belt Guard," and WO 9927136, "G-04 EDG Voltage Regulator"
- WO 9926768, "HX-038B3 Control room air conditioning unit" and WO 9927107, "HX-038B4 Control room air conditioning unit"
- OI 155, "Chemical Treatment of SW for Zebra Mussels," Revision 0
- WO 9608343, "P-32D SW Pump discharge expansion joint"

b. Issues and Findings

There were no findings identified.

.2 Battery Room Ventilation Testing

a. Inspection Scope

The inspectors reviewed the licensee's maintenance risk assessment for a special test on a safety-related room ventilation system. The test involved turning off the shared ventilation for two safety-related battery rooms and two rooms containing safety-related 125 vdc buses and 120 volts alternating current power supplies (inverters). The purpose of the test was to determine how quickly room temperatures increased with the ventilation turned off. The inspectors selected this test for review because the ventilation system is a required support system for the safety significant equipment in the four rooms. To illustrate the significance of this equipment, the failure of the two 125 vdc buses would result in an increase in instantaneous core damage frequency of approximately 67 times the baseline risk (from 6E-5 to 4E-3). The inspectors reviewed the proposed test, and the supporting safety evaluations, to ensure that the increased risk of heat induced failure of the supported safety-related equipment was accurately characterized and assessed.

- Safety Evaluation 2000-0062, "PAB [Primary Auxiliary Building] Electrical Equipment Room Loss of Ventilation Test," No Revision
- Operations Written WO 2000-45, "PAB Electrical Equipment Rooms Ventilation Test," No Revision
- Calculation 13754.16-E(N)-2, "Hydrogen Generation - New Battery Rooms," Revisions 0 and 1
- OI 97, "Battery Room Ventilation Systems," Revision 2
- Design Basis Document 29, "Auxiliary Building and Control Building HVAC [Heating, Ventilation, and Air Conditioning]," Revision 0

b. Issues and Findings

The inspectors identified that the safety evaluation for the activity did not appear to be adequate. Most significantly, the test was specifically structured to allow the white and yellow inverter room temperatures to increase to 110 degrees Fahrenheit (°F), but the station blackout (SBO) evaluation assumed initial inverter room temperatures of 85 °F. With the 85 °F initial condition, the SBO evaluation showed only 2 °F of margin between the final room temperature and the operability limits for the inverters. This margin appeared to be inadequate to accommodate the 25 °F increase in initial conditions possible if an SBO occurred near the conclusion of the proposed test. This could be an unreviewed safety question in that the probability of a malfunction of equipment

important to safety appeared to increase during the period of the proposed test<sup>1</sup>. The inspectors also identified three other examples where the potential for an unreviewed safety question was either not addressed or was not accurately addressed in the safety evaluation. The inspectors also identified one example where the safety evaluation's basis for concluding that an unreviewed safety question did not exist (securing test equipment so that it would not affect safety-related equipment during a seismic event) was not captured in the accompanying procedure. The inspectors discussed their concerns with plant management following Manager's Supervisory Staff (plant onsite review committee) review of the safety evaluation. The System Engineering group was assigned to review the inspectors' concerns. In addition to the inspectors' concerns, the system engineers identified approximately 20 additional issues with the safety evaluation and supporting procedure. At the conclusion of the inspection, the proposed test was under an engineering hold pending resolution of the inspector and System Engineering concerns. The inspectors will track review and licensee resolution of the concerns with performance of the special ventilation system test as an Unresolved Item (URI) (50-266/2000007-01(DRP); 50-301/2000007-01(DRP)).

### .3 Unit 1 Turbine-Driven Auxiliary Feedwater (AFW) Pump (1P-29) Maintenance

#### a. Inspection Scope

The inspectors observed the control and performance of preventive maintenance and motor-operated valve testing associated with the 1P-29 turbine-driven AFW pump conducted June 28-30, 2000, to verify unnecessary risk was avoided. The inspectors selected the activity for detailed review due to the elevated risk configuration (Unit 1 core damage frequency increased approximately 3.5 times baseline as measured by the licensee's on-line risk monitoring tool) when 1P-29 was out-of-service. Additionally, the inspectors reviewed the following documents:

- Point Beach Test Procedure (PBTP) 102, "Operation of Auxiliary Feedwater System for 1MS-2020 and 1AF-4000 Differential Pressure Test," Revision 0
- WO 9920074, "1MS-2020 DP Test/Stem Thrust"
- WO 9920076, "1AF-4000 DP Test/Stem Thrust"
- WO 9925501, "1P-29 Replace Leaking Outboard Oil Sightglass"
- Inservice Test (IT)-08A, "Cold Start of Turbine-Driven Auxiliary Feed Pump and Valve Test Unit 1," Revision 21

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<sup>1</sup> A member of the Manager's Supervisory Staff reviewing the safety evaluation had asked the Design Department engineer responsible for the safety evaluation whether the increased temperatures in the inverter and battery rooms affected any licensing basis calculation initial conditions. The Design Department engineer specifically answered that there were no applicable calculations for room heat-up during accident conditions. The inspectors subsequently identified to the licensee that the Design Basis Document clearly identified SBO calculations with the assumptions described above.

- Nuclear Power Business Unit (NP) 10.1.1, "Tech Spec LCO Entry and Tracking," Revision 12

b. Issues and Findings

The inspectors identified that inadequate planning and control of Unit 1 turbine-driven AFW pump 1P-29 work resulted in the pump being out-of-service for approximately 43 hours when the work was scheduled to take 18 hours. The inspectors observed four specific examples of inadequate preparation, planning, and coordination during the 1P-29 unavailability:

- The work plans (WO 9920074 and WO9920076) for the motor-operated valve differential pressure tests were revised on June 27, 2000, to use license Procedure PBTP 102 to provide direction for operation of 1P-29. PBTP 102, Revision 0, was issued on June 26. The inspectors observed the Infrequently Performed Test or Evolution briefing for PBTP 102, conducted on June 28, and observed that the operating crew had not previously reviewed the procedure. Work was delayed while the operating crew appropriately reviewed the procedure and obtained clarification of several issues with the procedure's steps. The inspectors concluded that PBTP 102 not being available for operator review until the day it was to be performed unnecessarily extended the 1P-29 out-of-service time by approximately 5 hours.
- After 1P-29 had been removed from service, maintenance technicians identified that adequate locking devices for the 125-vdc distribution panel D-27 were not available. The operating permit for the installation of motor-operated valve test equipment required installation of padlocks on switches on D-27. Available padlocks did not fit the local switch blocking fixture. After attempts to fabricate a blocking device that could be used in conjunction with padlocks failed, operators removed the operating permit and issued danger tags for the installation of the test equipment. The unavailability of padlocks for the D-27 switches unnecessarily extended the 1P-29 out-of-service time by approximately 2 hours.
- During maintenance work on valve 1MS-2020, steam supply to 1P-29, the steam generator blowdown on Unit 1 was unexpectedly lost due to the closure of the blowdown isolation valves. The cause of the isolation was determined to be the actuation of 1MS-2020 limit switches during valve stroking. The failure of maintenance procedures to address the loss of blowdown when stroking the valve presented an unnecessary challenge for the operating crew and extended the 1P-29 outage.
- Operator errors during the performance of IT-08A delayed the return to service of 1P-29 following completion of maintenance activities. The inspectors observed that the operators missed monitoring valve stroke times twice during the performance of the test. The inspectors determined that, in both instances, failure to properly anticipate system response caused the test data to be missed. In both instances, the operator self-identified that the data was missed, notified Operations Department management, obtained approval to reperform the appropriate procedure steps, and documented the reperformance. The

inspectors concluded, however, that the operator errors extended the 1P-29 out-of-service time by approximately one hour.

Additionally, the licensee identified, and documented in Condition Report (CR) 00-1994, additional issues with the 1P-29 maintenance, including inadequate work week schedule detail, inadequate planning for maintenance personnel coverage, and not have assigned a Voluntary Limiting Condition for Operations Project Manager as listed in NP 10.1.1, "Tech Spec LCO Entry and Tracking," Revision 12.

The inspectors performed a risk significance screening of the unnecessary out-of-service time in accordance with NRC Inspection Manual Chapter 0609, "Significance Determination Process." Because the 1P-29 turbine-driven AFW pump outage affected only a single train of a multiple train mitigating system and the train was inoperable for a shorter period of time than the allowed outage time of the Technical Specification, the issue screened out from further review and was determined to be of very low risk significance and within the licensee's response band (Green). The finding was assigned to the mitigation cornerstone for Unit 1.

.4 Emergent Work

a. Inspection Scope

The inspectors reviewed emergent work activity WO 9926754, "2RE-229 Stuck Check Source," associated with the failure of 2RE-229, Unit 2 SW overboard monitor, on May 19, 2000. The inspectors verified that the licensee performed on-line risk assessment for both units with a risk monitoring tool ("safety monitor" software), that the work was appropriately prioritized, and that unnecessary risk was avoided consistent with plant procedures. The inspectors selected the activity for review based upon the elevated risk level created by the isolation of the Unit 2 SW overboard path.

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

.1 Instrument Air (IA) to Containment

a. Inspection Scope

The inspectors reviewed the licensee's operability determination (evaluation) associated with CR 00-1759. The inspectors verified that the operability determination addressed the applicable current licensing basis requirements and commitments. This CR documented that improperly sized electrical lugs had been used in the wiring for the two Unit 1 IA system containment isolation valves. The inspectors selected this operability determination for review because it addressed a potential common mode failure mechanism on components in a system with both barrier integrity and accident mitigation functions. The following documents were reviewed:

- Point Beach Final Safety Analysis Report (FSAR), Chapter 14.2.4, "Steam Generator Tube Rupture," dated June 1999
- Wisconsin Electric Letter from Mr. S. Burstein to Mr. H. R. Denton, "Implementation of NUREG-0578," dated December 31, 1979
- Wisconsin Electric Letter from Mr. C. W. Fay to Mr. H. R. Denton, "Implementation of NUREG-0578," dated March 14, 1980
- Emergency Operation Procedure 3, Unit 1, "Steam Generator Tube Rupture," Revision 28

b. Issues and Findings

There were no findings identified.

.2 Residual Heat Removal Pump Suction Head Available

a. Inspection Scope

A member of the licensee staff questioned the calculations that demonstrated the residual heat removal pumps had sufficient net positive suction head available. The inspectors verified that the operability determination addressed the applicable current licensing basis requirements and commitments. The inspectors reviewed the following documentation while independently assessing the concern:

- CR 00-1599, "Residual Heat Removal Pump Suction"
- FSAR, Section 6.2, "Safety Injection System," June 1999
- Calculation N92-086, "ECCS [Emergency Core Cooling System] Pump NPSH [Net Positive Suction Head]," Revision 1

b. Issues and Findings

There were no findings identified.

.3 SW System Strainer Pressure Drops

a. Inspection Scope

In conjunction with a SW system walkdown, the inspectors evaluated whether compensatory actions taken to address a previously identified concern with the pressure drop across SW system strainers continued to be effective. The inspectors utilized the licensee's design criteria in verifying that the licensing compensatory actions were effective. The inspectors reviewed:

- Operability Determination for CR 99-2241, "SW system Strainer Pressures"
- OI 70, "SW System Operation," Revision 26
- Point Beach Form 2033, "Unit 2 Turbine Hall Shift Log," Revision 36

b. Issues and Findings

There were no findings identified.

1R16 Operator Workarounds (OWAs)

a. Inspection Scope

The inspectors reviewed OWAs to identify any potential effect on the function of mitigating systems, or the operators' ability to respond to an event and implement abnormal and emergency operating procedures. The inspectors interviewed plant operators and operations supervisors and evaluated the following OWAs:

- OWA 2-98R-002 HV, "Heating Steam Moisture Separator Alarm"
- OWA 0-99R-001 RPI, "Rod Position Indication (RPI) System Continues to Cause Problems During Startup and Normal Operations"

b. Issues and Findings

There were no findings identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed a modification to the containment isolation valves on the IA system to ensure that the modification was consistent with the current licensing basis. The reasons for selecting this modification for review are discussed in Section 1R15.1 of the report. The modification number was 99-005\*G, "IA Containment Isolation Valve Logic Change," No Revision.

b. Issues and Findings

There were no findings identified.



## 1R19 Post-Maintenance Testing

### .1 IA Valve Testing

#### a. Inspection Scope

Section 1R15.1 of this report discusses a condition identified during the performance of modification work on the containment isolation valve (1IA-3048) for one of the two IA system supplies to containment. The inspectors reviewed the return-to-service testing of the 1IA-3048 valve. This review consisted of an identification of the scope of work, a review of the test procedure to ensure that it contained adequate testing for all work performed, and observation of the test evolution in the control room. The inspectors verified that the post-maintenance testing demonstrated operability of the containment isolation valve consistent with the current licensing basis. The following documents were reviewed:

- WO Work Plan 9924591, "U1C [Unit 1 Containment] IA Header Inlet Control," dated April 19, 2000
- Plant Modification 99-005\*G, "IA Containment Isolation Valve Logic Change," No Revision
- Safety Evaluation 99-075-02 for Modification 99-005

#### b. Issues and Findings

There were no findings identified.

### .2 Other Post-Maintenance Testing

#### a. Inspection Scope

The inspectors reviewed and observed the following post-maintenance testing activities involving risk significant system equipment listed below to ensure that the tests met the design bases and licensing basis commitments, that the testing demonstrated the equipment was capable of performing its design basis function, and that the acceptance criteria were met.

- Instrument Air Compressor K-2B testing performed in accordance with WO 9924674, "K-2B Replace Total Closure Valve"
- Turbine-Driven AFW Pump 1P-29 testing, comprised of IT 08A, "Cold Start of Turbine-Driven Auxiliary Feed Pump and Valve Test Unit 1," Revision 21, performed in accordance with WO 9920074, "1MS2020 DP Test/Stem Thrust" and WO 9920076, "1AF-4000 DP Test/Stem Thrust"
- Motor-Driven AFW Pump P-38B testing performed in accordance with WO 9926374, "Perform Weld Repair to Inlet Weld, AF-0040"

- G-01 EDG Coolant Heat Exchangers HX-055A-1 and HX-055A-2 post OI 155, "Chemical Treatment of SW for Zebra Mussels," Revision 0, inspection performed in accordance with WO 9927122, "HX-55A-1 Open/Close Endbell" and WO 9927123, HX-55A-2 Open/Close Endbell"

b. Issues and Findings

Inspector concerns with the performance of IT 08A, "Cold Start of Turbine-Driven Auxiliary Feed Pump and Valve Test Unit 1," Revision 21, are documented in Section 1R13.3 of this report. There were no other findings identified.

1R22 Surveillance Testing

a. Inspection Scope

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

- Technical Specification Test 82, "EDG G-02 Monthly," Revision 55
- Instrumentation & Control Procedure 1ICP 02.003B-1, "Reactor Protection System Logic Train B Monthly Surveillance Test," Revision 12
- IT 06, "Containment Spray Pumps and Valves (Quarterly) Unit 2," Revision 46
- IT 07A, "P-32A SW Pump (Quarterly)," Revision 4
- Routine Maintenance Procedure 9071-2, "A06 4160/480 Degraded and Loss of Voltage Relay Monthly Surveillance," Revision 9
- OI 55, "Primary Leak Rate Calculation," Revision 14

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.

b. Issues and Findings

There were no findings identified.

#### 4. OTHER ACTIVITIES

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

###### .1 Safety System Unavailability PIs - AFW System

###### a. Inspection Scope

The inspectors verified the accuracy and completeness of data for the AFW Safety System Unavailability PI reported by the licensee for January 2000 through March 2000 for Unit 1 and Unit 2. This was accomplished, in part, through evaluation of station logs, routine review of plant status performed in accordance with Manual Chapter 2515, Appendix D, and discussions with licensee personnel.

###### b. Issues and Findings

There were no findings identified.

###### .2 (Closed) URI 50-266/00004-02; 50-301/00004-02: Performance indicator data errors. The inspectors had identified that the licensee generated and submitted AFW system unavailability data that was not accurate. Specifically, the licensee had under-reported unavailability time associated with testing of the AFW system. During this assessment period, the inspectors reviewed the corrected data and determined that the inaccuracy had not been significant enough to cause a PI color to change. On this basis, the submission of inaccurate data is of minor safety significance and is not subject to enforcement action.

###### .3 Safety System Unavailability PIs - Emergency Power

###### a. Inspection Scope

The inspectors verified the accuracy and completeness of data for the Emergency Power PI reported by the licensee for January 2000 through March 2000 for Unit 1 and Unit 2. This was accomplished, in part, through evaluation of station logs, routine review of plant status performed in accordance with Manual Chapter 2515, Appendix D, and discussions with licensee personnel. The inspector utilized guidance contained in Nuclear Energy Institute (NEI) 99-02, Revision 0, "Regulating Assessment Performance Indicator Guideline."

###### b. Issues and Findings

The inspectors identified two issues that could not be resolved during the inspection period. The first issue dealt with the manner in which the licensee addressed an unusual design configuration (non-unitized EDGs) in the PI. The licensee submitted the first quarter 2000 data in a train format that was reported to be consistent with the historic data reporting made to the Institute of Nuclear Power Operations (INPO). The NRC guidance for PIs allowed using data gathered for INPO for the periods before 2000, but did not address converting the train format from INPO standards to NRC-endorsed Nuclear Energy Institute standards. At the end of the inspection period,

the licensee and the inspectors were pursuing resolution of the appropriate train format for use in reporting the NRC PIs. The second issue dealt with the licensee's reported EDG unavailability data for the period prior to 2000. Specifically, the inspectors had previously been provided an estimate of INPO data that reflected significantly more unavailable time than that identified in the licensee's submittal to the NRC. The difference in unavailability time would have caused a color threshold to be crossed. The inspectors had obtained copies of the licensee's records for review at the conclusion of the inspection period, but had not completed this review. Inspector review of the EDG unavailability PI will be tracked as URI 50-266/2000007-02(DRP); 50-301/2000007-02(DRP)).

.4 Reactor Coolant System Leakage PI

a. Inspection Scope

The inspectors reviewed the data submitted by the licensee through March of 2000 to verify the accuracy and completeness of data. The inspectors compared the data submitted to licensee records and logs. Recorded values were compared to the values observed by the inspectors during their daily plant status tours of the control room. The inspectors observed performance of primary leakage calculations, and verified that the data gathered and recorded was consistent with the intent of the PI and the plant's Technical Specifications.

b. Issues and Findings

There were no findings identified.

4OA5 Other

.1 Draindown During Shutdown and Common-Mode Failure (Temporary Instruction 2515/142)

a. Inspection Scope

The inspectors reviewed the licensee's actions taken in response to Generic Letter 98-02, "Loss of Reactor Coolant Inventory and Associated Potential for Loss of Emergency Mitigation Functions While in a Shutdown Condition," to verify that the intent of the Generic Letter was met. The review included discussions with operations, training, and engineering personnel, system walkdowns, and an evaluation of the following documents:

- Wisconsin Electric Power Company letter to NRC, November 24, 1998, response to Generic Letter 98-02
- NP 1.1.4, "Use and Adherence of Procedures and Work Plans," Revision 5
- NP 1.9.15, "Tagging Procedure," Revision 12
- NP 10.2.1, "Outage Planning, Scheduling and Management," Revision 10

- NP 10.2.4, "WO Processing," Revision 3
- Operating Procedure (OP) 3C, "Hot Shutdown to Cold Shutdown," Revision 79
- OP 4D Part 3, "Draining the Reactor Cavity and Reactor Coolant System," Revision 9
- OP 7A, "Placing Residual Heat Removal System in Operation," Revision 38
- OP 7B, "Removing Residual Heat Removal System From Operation," Revision 31

b. Issues and Findings

There were no findings identified.

4OA6 Meetings, including Exit

Exit Meeting Summary

On July 5, 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

#### Wisconsin Electric Power Company

M. E. Reddemann, Site Vice President  
R. G. Mende, Plant Manager  
B. J. O'Grady, Operations Manager  
V. M. Kaminskis, 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

50-266/2000007-01 50-301/2000007-01	URI	Potentially Inadequate Safety Evaluation (1R13.2)
50-266/2000007-02 50-301/2000007-02	URI	Emergency Power - Safety system unavailability performance indicators (4OA2.3)

### Closed

50-266/2000004-02 50-301/2000004-02	URI	Performance indicator data errors (4OA2.2)
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### Discussed

None

## LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater
CFR	Code of Federal Regulations
CR	Condition Report
°F	Degrees Fahrenheit
DRP	Division of Reactor Projects
EDG	Emergency Diesel Generator
FSAR	Final Safety Analysis Report
IA	Instrument Air
INPO	Institute of Nuclear Power Operations
IT	Inservice Test
NEI	Nuclear Energy Institute
NP	Nuclear Power Business Unit
NRC	Nuclear Regulatory Commission
OI	Operating Instruction
OP	Operating Procedure
OWA	Operator Workaround
PAB	Primary Auxiliary Building
PBTP	Point Beach Test Procedure
PI	Performance Indicator
SBO	Station Blackout
SW	Service Water
URI	Unresolved Item
vdc	Volt(s) Direct Current
WO	Work Order