March 13, 2001

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

#### SUBJECT: POINT BEACH NUCLEAR PLANT NRC INSPECTION REPORT 50-266/01-04(DRP)

Dear Mr. Reddemann:

On February 13, 2001, the NRC completed a supplemental inspection at your Point Beach Nuclear Plant. The results of this inspection were discussed on February 13, 2001, with you and other members of your staff. The enclosed report presents the results of that inspection.

In January 2001, your performance indicator submittal reported that recent plant trips with the loss of the normal heat removal path had resulted in exceeding the threshold for the Scrams With Loss of Normal Heat Removal performance indicator, representing a reduction in safety margin characterized by a White performance indicator. The reduced safety margin associated with this performance indicator warranted a supplemental NRC inspection and assessment of your actions to improve performance under the Initiating Events Cornerstone of operational Reactor Safety.

Based on the review of your root cause evaluations for the individual plant trips and cumulative evaluation of all three events, we have concluded that your corrective actions have addressed the underlying root cause and contributing causes for the events. The evaluations were determined to be thorough and followed an established structured approach for performing such reviews. The corrective actions associated with each of the events adequately addressed the identified root cause. However, we observed that the corrective actions with respect to the plant trip due to partial freezing of the intake crib were not being consistently implemented. We understand that your staff has entered this issue into the corrective action program for resolution.

M. Reddemann

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 D. Lanksbury, Chief Projects Branch 5 Division of Reactor Projects

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

- Enclosure: Inspection Report 50-266/01-04
- cc w/encl: R. Grigg, President and Chief Operating Officer, WEPCo
  - M. Wadley, Chief Nuclear Officer, NMC
  - J. Gadzala, Licensing Manager
  - D. Weaver, Nuclear Asset Manager
  - F. Cavia, Plant Manager
  - J. O'Neill, Jr., Shaw, Pittman,
  - Potts & Trowbridge
  - K. Duveneck, Town Chairman Town of Two Creeks
    - Crohom Director
  - D. Graham, Director
  - Bureau of Field Operations A. Bie, Chairperson, Wisconsin
    - Public Service Commission
  - S. Jenkins. Electric Division
  - Wisconsin Public Service Commission
  - State Liaison Officer

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State Liaison Officer

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M. Reddemann

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# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket Nos: License Nos:	50-266 DPR-24
Report No:	50-266/01-04(DRP)
Licensee:	Nuclear Management Company, LLC
Facility:	Point Beach Nuclear Plant, Unit 1
Location:	6610 Nuclear Road Two Rivers, WI 54241
Dates:	February 5 through 12, 2001
Inspectors:	J. Lara, Senior Resident Inspector, Kewaunee
Approved by:	Roger D. Lanksbury, Chief 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

- Initiating Events

Physical Protection

- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational • Public

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 05000266-01-04(DRP), on 02/05 - 02/08/2001; Nuclear Management Company, LLC: Point Beach Nuclear Plant, Unit 1.

#### Cornerstone: Initiating Events

NO COLOR. The licensee's overall evaluation of the White performance indicator (PI) for Scrams with Loss of Normal Heat Removal was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the three trips to identify potential common causes.

The licensee's corrective actions for each of the plant trips contributing to the White PI were determined to correspond with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion.

The effectiveness of the corrective actions for the plant trips involving the ruptured feedwater heater and concern for a diver's safety were determined to be acceptable. However, the corrective actions to prevent recurrence associated with the intake crib freezing event and resultant decrease in forebay level were determined to be inconsistently implemented. Through a review of intake crib temperatures over a 36 hour period, the inspector identified that on February 5, 2001, operators had not taken timely actions to operate the circulating water system in the ice melt mode to direct sufficient heated flow to the crib as specified by operations instructions. The licensee initiated a condition report to document inconsistent ice melt operations.

The licensee's corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions.

Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Scrams with Loss of Normal Heat Removal, the white performance indicator with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

#### Report Details

#### 01 Inspection Scope

This supplemental inspection was performed by the NRC to review the licensee's evaluation associated with the Unit 1 Performance Indicator (PI) for Scrams with Loss of Normal Heat Removal (LONHR) exceeding the licensee response band threshold. This threshold is greater than 2 Scrams with LONHR over the previous 12 quarters. The three Scrams with LONHR are described below:

- Manual reactor trip on May 14, 1999, in response to the failure of a feedwater heater shell. Control room operators initiated the manual reactor trip based upon reports of the ruptured feedwater heater. The main steam isolation valves (MSIVs) were subsequently closed due to decreasing vacuum in the main condenser. The steam supply to the ruptured heater was also isolated. The closure of the MSIVs resulted in LONHR path to the main condenser. Hence, this event counted towards the PI.
- Manual reactor trip on January 21, 2000, due to decreasing circulating water forebay level caused by freezing conditions at the circulating water intake structure. In accordance with the abnormal operations procedures, control room operators stopped the operating Unit 1 circulating water pump and closed the MSIVs. The closure of the MSIVs resulted in LONHR path to the main condenser. Hence, this event counted towards the PI.
- Manual reactor trip on October 27, 2000, due to concerns for diver safety who was
  potentially trapped in the plant circulating water system. Due to concerns for the diver's
  safety, control room operators stopped the operating circulating water pumps. This
  resulted in a decreasing vacuum in the main condenser. Subsequently, operators also
  closed the MSIVs. The closure of the MSIVs resulted in LONHR path to the main
  condenser. Hence, this event counted towards the PI.

The above three Unit 1 trips with LONHR resulted in the PI crossing into the White band in the fourth quarter of 2000. This supplemental inspection was performed in accordance with Inspection Procedure 95001. The following details are organized by the specific inspection requirements of Inspection Procedure 95001 which are noted in italics in each section.

#### 02 Evaluation of Inspection Requirements

#### 02.01 Problem Identification

- a. Determination of who (i.e., licensee, self-revealing, or NRC) identified the issue and under what conditions
- b. Determination of how long the issue existed, and prior opportunities for identification
- c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue

Following each of the three plant trips, the licensee made the required notifications, took actions to place the plant in a safe shutdown condition, documented the circumstances in a condition report (CR), and submitted the appropriate licensee event reports. The circumstances surrounding each of the plant trips were documented in the licensee's corrective action program. The following CRs were initiated following the plant trips:

- CR 99-1340, Unit 1 4B Low Pressure Feedwater Heater Shell Temperature
- CR 00-0213, Unit 1 Manual Trip Due to Decreasing Forebay Level
- CR 00-3349, Unit 1 Trip Due to Diver Safety Concern

Following the third reactor trip, the licensee recognized that the PI Green to White threshold was crossed and initiated a root cause evaluation (RCE) to examine the causes of the trips and identify any common causes or themes associated with the three events. This condition was documented in CR 00-4049, Change In Unit 1 Performance Indicator for Scram with LONHR.

Based on the records reviewed and interviews of licensee personnel, the inspector determined that the licensee had properly identified and documented the circumstances involving each of the three plant trips and recognized that the PI threshold had crossed into the regulatory response band (White). Appropriate reviews and evaluations were performed to fully assess the causes of the three trips to identify any potential common causes.

At the beginning of this inspection, the licensee had not performed an evaluation to ascertain the risk significance of the three individual events or whether the initiating event frequency for scrams with loss of normal heat sink resulted in an increase in core damage frequency. On February 26, 2001, the licensee completed a probabilistic risk assessment evaluation of the change in the PI for Scrams with LONHR. The analysis evaluated the Unit 1 initiating events frequency for two different periods: 1993 through 1998 and 1996 through 2000. Using Bayesian updating methods, the licensee calculated two initiating event frequencies (one for each period). The two initiating event frequencies were then multiplied by the conditional core damage probability for the loss of normal heat sink event. The result was two core damage frequencies, one for each period under review. The difference between these two core damage frequencies was 1.8E-06. Therefore, the increase in the initiating event frequency resulted in an increase in the average annual core damage frequency of approximately 1.8E-06. The licensee's risk analysis was considered to be acceptable.

#### 02.02 Root Cause and Extent of Condition Evaluation

#### a. Evaluation of method(s) used to identify root cause(s) and contributing cause(s)

The licensee performed a formal, structured RCE for each of the three plant trips. Additionally, a RCE was also performed to evaluate the potential common causes for the three events which resulted in the PI crossing the Green to White PI band. The RCEs are listed below.

- RCE 99-078, Unit 1 4B Low Pressure Feedwater Heater Shell Temperature
- RCE 00-007, Unit 1 Manual Trip Due to Decreasing Forebay Level

- RCE 00-093, Unit 1 Trip Due to Diver Safety Concern
- RCE 00-110, Change In Unit 1 Performance Indicator for Scram With Loss of Normal Heat Removal

The first three RCEs used formal, structured RCE methods to evaluate the circumstances and root cause and contributing causes of the events. These methods included failure mode identification, event and casual factors analysis, and change analysis. The licensee used a combination of these root cause analysis techniques to evaluate the trips, in accordance with Operating Experience Guideline 001, "Root Cause Evaluation". The last RCE (00-110) did not incorporate event and causal factor charts since the purpose of the evaluation was to evaluate the three earlier RCEs to identify potential common causes. The documented RCEs adequately described the methods used to identify the root cause.

The inspector concluded that the licensee had used a formal, structured approach to perform the RCEs to identify root and contributing causes.

#### b. Level of detail of the root cause evaluation

The three RCEs were performed in accordance with Operating Experience Guideline 001. The guideline provided sufficient guidance for personnel to follow a structured and methodical approach to evaluating events. The inspector determined that the RCEs associated with the three events were performed with sufficient detail and analysis to support the conclusions reached. The RCEs documented reviews, considered previous operating experience, organizational response, human error, programmatic weakness, procedure and training adequacy, external events, and communications.

Each of the three RCEs adequately incorporated internal and external operating experience into the scope of review. The analysis technique chosen was considered to be appropriate to each particular event and each of the identified failure modes. These failure modes were then used to help identify the root cause and contributing causes.

# c. Consideration of prior occurrences of the problem and knowledge of prior operating experience

Each of the RCEs performed considered past occurrences of similar problems, both from internal or external operating experience. For example, RCE 00-093, regarding the trip due to a diver concern, evaluated past occurrences at the facility of concerns involving diver operations. Previous evaluations of the diver concerns had concluded that the main cause of these type problems was lack of, or less than, adequate management or supervisory oversight. Similarly, RCE 00-093 also concluded that the root cause for the event was lack of oversight for the diving operation by station personnel. A contributing cause was inadequate implementation of corrective actions from previous CRs which also involved weak oversight of diver activities.

The inspector noted that RCE 00-007 was particularly noteworthy in thoroughly evaluating the event for prior occurrences of decreasing forebay level due to freezing at the intake structure. The RCE thoroughly investigated the history of the circulating

water system design and past similar events involving freezing of the intake structure. An observation documented in the RCE was the lack of CRs following previous similar freezing events. This impacted the ability to perform historical trending for internal operating experience involving freezing events. Nonetheless, the RCE was able to evaluate and document significant experience with partial freezing of the intake structure. However, this significant experience was also determined to be one of the causal factors. Over a number of years, the licensee had perceived much success in recovering from similar freezing events. This may have led to sense of overconfidence toward possible consequences that could compromise the intake structure. The root cause of this event was determined to be an organizational unawareness of the susceptibility of the intake structure to significant ice blockage. As a result, the perception had developed that a reduction of intake flow capacity could not occur. The perception was re-enforced by a long history of "successful" ice melt operations.

Overall, all three RCEs properly considered and evaluated internal and external prior operating experience as part of the evaluations.

#### d. Consideration of potential common cause(s) and extent of condition of the problem

Following the Green to White threshold for the Scrams with LONHR PI being crossed, the licensee performed RCE 00-110, Change In Unit 1 Performance Indicator for Scram With Loss of Normal Heat Removal. This RCE was not performed as an evaluation of an event, but rather as a collective evaluation of the events which caused the PI to go White. This RCE evaluated the results of the RCEs for the three plant trips and evaluated the potential for common causes from the these events.

Data analysis for this RCE included documentation reviews for the previous RCEs. comparison of the contributing causes and failure modes for the three trips, and extent of condition reviews. The RCE documented the conclusion that each event was self-revealing. The first plant trip was a result of an equipment problem which necessitated operators to take manual action prior to the loss of the heat sink (main condenser). The second trip involved the operators taking action to manually trip the unit to preserve sufficient net positive suction head to the service water pumps. The third event involved operators manually tripping the unit and securing the circulating water pumps due to concerns about a diver's safety. The RCE documented the conclusion that each event was unique and a common cause was not found. However, some common themes were identified involving the second and third events. These included a lack of awareness by plant personnel of the status of plant equipment and activities; a lack of a strong questioning attitude; a failure to use proper qualification, validation, and verification techniques; inadequate communications between groups causing the use of unverified assumptions; and inadequate supervisory oversight of tasks and plant parameters. Another common contributor was closure of previous corrective actions prior to ensuring that the corrective actions were adequate and would prevent recurrence.

Overall, the inspector concluded that the licensee's RCE adequately evaluated the potential for common cause among all three events.

#### 02.03 Corrective Actions

#### a. Appropriateness of corrective action(s)

The inspector reviewed each of the three RCEs and the associated corrective actions. The corrective actions were clearly described and were entered into the licensee's tracking system. The inspector selected a number of corrective actions in each of the RCEs and verified that they had been completed or were being tracked for resolution and closure. The established corrective actions were determined to be appropriate in that they addressed the root and contributing causes identified within each of the RCEs.

However, the inspector determined that the corrective actions identified in RCE 00-007, "Unit 1 Manual Trip Due to Decreasing Forebay Level," were not being consistently implemented. One of the corrective actions associated with RCE 00-007, was to revise Operating Instruction (OI) OI-38, "Circulating Water System Operation," to provide additional instructions to operators with respect to the operation of the circulating water system to preclude recurrence of the intake crib freezing event. The RCE noted that the intake crib, structure, and associated ice melt components were capable of preventing the icing event which was experienced. However, the components needed to be operated in a preventative mode since once ice formation and blockage had begun there was only limited capability in the system to increase near intake crib water temperatures sufficiently to melt ice.

The following steps were contained within OI-38:

- Step 4.1.3 stated that "When the near crib resistance temperature detectors (RTDs) indicate lake temperature is equal to or less than 32°F, the ice melt valve should be fully opened and the seal well valve throttled closed to establish warming of the intake crib until at least one near crib RTD shows an increase in temperature."
- Step 4.1.8 stated that "When near crib lake temperature RTDs indicate consistently between 32°F and 38°F, then operate the seal well outlet valve AND ice melt valve as necessary for forebay temperature control in the range of 40°F to 45°F, unless more ice melt flow is needed for floating ice or other cold weather conditions."

On February 6, 2001, the inspector requested and reviewed the recorded water temperatures at the intake crib and forebay as indicated on the control room temperature recorder for the previous 36 hours. The temperatures recorded on the morning of February 5, indicated that the intake crib water temperatures were 32°F or below for several hours. The inspector reviewed the operator's log which indicated that although one adjustment to the seal well valve was made early in the morning, no significant efforts were made to operate the ice melt valves to increase recirculation flow to the intake crib and ultimately increase the water temperatures above 32°F as specified in Procedure OI-38. The attachment to this report depicts the intake crib water temperatures based on the near intake crib RTDs. Prior to 1:00 a.m. on the morning of February 5, one of three operable RTDs located near the intake crib indicated 32°F and by two hours later, all three RTDs indicated 32°F. Shortly before 5 a.m., operators

performed a 2 percent adjustment to the seal well valve to recirculate warmer water to the intake crib. This adjustment resulted in a brief increase in the intake crib water temperature as indicated on one RTD which then quickly returned to 32°F. During this time period, the indicated temperature on one of the other RTDs decreased to 31°F. At approximately 7:00 a.m., an NRC inspector questioned the duty shift supervisor as to why more adjustments had not been made to the seal well valves in efforts to increase the intake crib temperatures as required by OI-38. The duty shift supervisor indicated that such operations were about to commence and shortly thereafter such actions were performed. As a result, the near intake crib RTDs began to indicate fluctuating and increasing water temperatures above 32°F, after some expected time delay.

Based on the review of the available data, operator logs, and instructions provided in OI-38, the inspector concluded that additional efforts should have been made earlier on the morning of February 5, in efforts to increase the intake crib water temperatures above 32 degrees as specified in OI-38. The lack of aggressiveness in responding to the lowering intake crib water temperatures was of concern based on the extensive evaluations and conclusions documented in the RCE and the associated corrective actions. As documented in RCE 00-007, ice melt components must be operated in a preventative mode because there is only limited capability in the system to increase near intake crib water temperatures and melt the ice once ice formation and blockage has begun. This was the case during the plant trip which occurred in January 2000 event. Although the weather conditions experienced on February 5, were not as severe as during the January 2000 event, the inspector concluded that operators had not taken timely actions to operate the circulating water system in the ice melt mode in order to direct sufficient heated flow to the intake crib.

In response to the inspector's observations, the licensee initiated CR 01-0440 to document inconsistent ice melt operations. The inspector also noted that the licensee had previously performed an effectiveness review of the adequacy of the corrective actions identified in the CR pertaining to intake crib freezing event. These effectiveness reviews are discussed in Section 02.03.d of this report.

The inspector determined that the corrective actions were adequate and addressed the root and contributing causes discussed in the respective RCEs. However, the corrective actions associated with the intake crib freezing event were being inconsistently implemented.

#### b. Prioritization of corrective actions

The corrective actions developed as part of the RCEs were prioritized in accordance with the license's corrective action program as prescribed in Nuclear Procedure NP 5.3.1, "Condition Reporting System". Prioritization of the corrective actions was not based on risk perspectives or analysis but rather based on a deterministic approach considering the significance level of the CR as established in the licensee's corrective action program.

#### c. Establishment of schedule for implementing and completing the corrective actions

The licensee's corrective action program, as described in Procedure NP 5.3.1 and associated administrative procedures, identified the process for assigning significance levels for condition reports. Subsequently, condition reports were evaluated and corrective actions were identified. These corrective actions were assigned a priority level commensurate with safety significance. These priority levels had corresponding time limits for implementing the corrective actions. The licensee's program relied upon a deterministic approach to establish the priority levels and did not incorporate risk perspectives into determining the priority. As discussed in Section 02.01.c, the licensee had not performed a risk analysis of the three events or calculated the change in initiating frequency until questioned by the inspector. Nonetheless, the licensee had a process in place to track all corrective actions and priority levels. The corrective actions associated with these events and condition reports, were either completed or being tracked for completion.

As discussed in Section 02.03.a of this report, three RTDs were noted to be operable during this inspection. One additional RTD located on the southeast quadrant of the intake crib had been inoperable since August 2000. The replacement of this RTD was being tracked by Work Order (WO) 9928461 with a Priority 3 code. Procedure NP 10.2.4, "Work Order Processing," defined Priority 3 WOs as having increased risk to nuclear or personnel safety or continued operation. Corrective actions were to be scheduled as soon as plant conditions would accommodate the work. The inspector determined that the corrective actions to replace the inoperable RTD could have been performed during the Fall 2000 refueling outage, prior to the severe winter season, rather than October 2001 as was planned. This determination was based on the results of RCE 00-007, assigned priority level, and to maximize instrument redundancy during the 2000 - 2001 winter. Subsequent to this inspection, in March 2001, the licensee replaced the inoperable RTD.

d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence

The licensee's RCE guideline (Operating Experience Guideline 001) contained guidance for performing effectiveness reviews. The effectiveness reviews were performed after corrective actions had been implemented to ensure that the RCE identified and corrected the root cause of the problem. Various methods of effectiveness reviews were available, including field verification or observation, audit or surveillance.

As discussed in Section 02.03.a of this report, the inspector had determined that the corrective actions associated with RCE 00-007 (decreasing forebay level due to ice formation at the intake crib) were being inconsistently implemented. The inspector discussed those observations with licensee operations management and other personnel familiar with the RCE. The licensee informed the inspector that an effectiveness review for RCE 00-007 was in the final stages of approval and the results of those reviews also identified that the corrective actions were not being effectively implemented. The purpose of the effectiveness reviews was to evaluate the effectiveness of the corrective actions associated with RCE 00-007 to determine if they would be effective in preventing a future occurrence of the intake crib freezing event.

From discussions with the responsible personnel drafting the document, the inspector was informed that one of the corrective actions pertained to the Operations department. Specifically, Corrective Action 11 specified the need to perform an organizational assessment follow-up of the intake crib freezing event. However, very limited information was available to determine if the Operations department assessment had been performed and to what extent it probed the effectiveness of the corrective actions. Additionally, Condition Report 00-2948 was initiated to document problems with the implementation of the corrective actions for the intake crib freezing event condition report.

The inspector was also informed that additional engineering reviews were warranted to re-evaluate the adequacy of the installed instrumentation available to operators. The scope of the review needed to consider reliability of lake water temperatures, need for temperature instruments closer to the intake crib, and need for redundant forebay level indication.

The inspector concluded that the licensee had a program for performing effectiveness reviews. One such effectiveness review had identified weaknesses and areas where additional actions were needed to ensure effective corrective actions to prevent recurrence of an event. The inspector concluded that the licencee was adequately performing reviews to ascertain the effectiveness of corrective actions.

#### 03 Management Meetings

On February 13, 2001, the inspector 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

#### <u>Licensee</u>

- M. E. Reddemann, Site Vice President
- F. Cayia, Plant Manager
- B. J. O'Grady, Operations Manager
- J. Strharsky, Assistant Operations Manager
- M. Rinzel, Operations Corrective Actions

#### <u>NRC</u>

- P. Krohn, Senior Resident Inspector, Point Beach
- R. Powell, Resident Inspector, Point Beach

#### LIST OF DOCUMENTS REVIEWED

- RCE 99-078, Unit 1 4B Low Pressure Feedwater Heater Shell Temperature
- RCE 00-007, Unit 1 Manual Trip Due to Decreasing Forebay Level
- RCE 00-093, Unit 1 Trip Due to Diver Safety Concern
- RCE 00-110, Change In Unit 1 Performance Indicator for Scram With Loss of Normal Heat Removal
- Document: Effectiveness Review of RCE 00-007 (Unit 1 Manual Trip Due to Decreasing Forebay Level)
- Document: Risk Assessment for Change in "Scrams with Loss of Normal Heat Sink" Performance Indicator Color from Green to White, dated February 26, 2001

OE 9632

CR 00-03349 CR 00-2948 CR 00-0213 CR 99-1340 CR 00-4149

CR 01-0440 CR 01-0402

Abnormal Operating Procedure AOP-13A, "Circulating Water System Malfunction," Revision 10 Abnormal Operating Procedure AOP-13C, "Severe Weather Conditions," Revision 9 Nuclear Procedure NP 5.2.16, "NRC Performance Indicators," Revision 1 Nuclear Procedure NP 5.3.1, "Condition Reporting System," Revision 17 Nuclear Procedure NP 10.2.4, "Work Order Processing," Revision 5 Operating Instruction OI-38, "Circulating Water System Operation," Revision 22 Operating Experience Guideline 001, "Root Cause Evaluation," Revision 4

# LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CR	Condition Report
DRP	Division of Reactor Projects
LONHR	Loss of Normal Heat Removal
MSIV	Main Steam Isolation Valve
NRC	Nuclear Regulatory Commission
OI	Operations Instruction
PI	Performance Indicator
RCE	Root Cause Evaluation
RTD	Resistance Temperature Detector

Attachment: As Stated

# Intake Crib Temperatures

February 5, 2001

