

Point Beach 2

1Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate and Untimely Corrective Actions For Flooding of Manholes Containing Cables

One finding of very low risk significance was identified by the inspectors for the licensee's failure to establish timely and adequate corrective actions to address the flooding of manholes which contained both safety and non-safety related systems, structures, and components. The inspectors identified that the licensee had not implemented effective corrective actions to address long-standing problems with flooding in manholes and had deferred the implementation of corrective actions with insufficient basis. The finding was more than minor because, if left uncorrected, it would become a more significant concern since the lack of effective corrective actions to inspect and pump out water in manholes could affect safety-related cables routed through manholes such as those for service water pumps.

Additionally, some of the cables routed in manholes provide power to safety-related buses from the licensee's offsite power systems. Hence, the loss of such power, due to cable failures, could result in momentary loss of power to the bus and the inability to re-energize the affected buses from the normal power source. This issue was categorized as a finding of very low risk significance since the identified water intrusion conditions had not caused any safety-related equipment failures at this time. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Insufficient Preparation for Cold Weather Conditions

A finding of very low significance was identified for not sufficiently coordinating and being adequately prepared for the onset of cold weather prior to November 1, 2002, a point at which the Point Beach Nuclear Plant had experienced 30 hours of below freezing temperatures over 6 nights. The primary cause of this finding was related to the cross-cutting area of human performance. Despite beginning freeze protection activities at an appropriate time, lack of coordination between licensee departments resulted in incomplete preparations prior to the onset of freezing temperatures. The inspectors determined that the issue was more than minor because it increased the likelihood of those events that upset plant stability during power operations and would, if left uncorrected, become a more significant safety concern in subsequent years if more safety-related systems were to be affected. The finding was of very low safety significance because no safety-related functions or mitigating systems were rendered inoperable. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Mitigating Systems

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Safety-Related Protective Relay Calibration Procedure Inadequacies

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for inadequate emergency diesel generator (EDG) safety-related protective relay calibration procedures which contained quantitative acceptance criteria limits that did not correspond to vendor recommended values. The primary cause of this finding was related to the cross-cutting area of human performance. Despite multiple opportunities for procedure writers, technical reviewers, relay technicians, maintenance work planners, electrical maintenance first-line supervisors, and operations personnel to have identified these errors, each of the four procedures used to calibrate the EDG safety-related protective relays were found to contain similar quantitative acceptance criteria errors. This finding was more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) if left uncorrected, would become a more significant safety concern in subsequent years if out-of-specification EDG safety-related protective relay settings affecting equipment operability and electrical distribution system coordination were left in service and not corrected. The finding was determined to be of very low risk significance since the inadequate procedures did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

G-05 Gas Turbine Generator Return-To-Service Prior to Completion of Troubleshooting and Maintenance Activities

The inspectors identified a finding of very low risk significance finding concerning the return to service of the G-05 gas turbine (GT) generator prior to completion of troubleshooting efforts involving starting diesel oil samples and certain maintenance activities. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of interdepartmental communications and coordination caused the GT to be inappropriately returned to service on March 3, 2003, despite starting diesel analyses that indicated advanced oil degradation and the onset of bearing damage and no return-to-service testing requirements having been defined in the maintenance department troubleshooting plan. The inspectors determined that the issue was more than minor because it affected the availability, reliability, and capability of the G-05 GT, a mitigating system. The finding was of very low safety significance since the inappropriate return-to-service did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events. No violation of NRC requirements occurred.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Reoccurring Facade Freeze Protection System Deficiencies

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified through a self-revealing event on February 11, 2003, when one of the main control board indications associated with Unit 1 'B' main steam line pressure began reading higher than the other two. The higher pressure indicated the formation of an ice plug associated with pressure transmitter IPT-483, a transmitter providing input to the engineering safeguards system. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of facade freeze protection system coordination and training in the areas of lagging deficiencies and facade freeze system

operations resulted in the removal of one of the three main steam line pressure inputs to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident. The inspectors determined that the facade freeze protection issues were more than minor because: 1) they had affected the availability, reliability, and capability of an input to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident; and 2) if left uncorrected, they would become a more significant concern in subsequent years if freezing of sensing lines resulted in the inability to mitigate the consequences of an accident. The finding was determined to be of very low risk significance since the facade freeze protection issues did not result in a design or qualification deficiency, an actual loss of the safety function, or meet any of the internal or external event screening criteria.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: FIN Finding

Conduct of a Partial G02 EDG Safety Injection Test Based on an Inadequate Assessment

The inspectors identified a finding of very low safety significance (Green) concerning the conduct of a partial G02 emergency diesel generator safety injection test while in Mode 1 based on an incomplete and inadequate assessment required by Technical Specification surveillance requirement 3.8.1.5. The finding was determined not to involve a violation of regulatory requirements due to the simplicity of the test and the quality of the pre-job briefing, which effectively met the Technical Specification requirements. The finding was determined to be of very low risk significance since the inadequate assessment did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Development and Approval of (a) (1) Action Plan for Gas Turbine, G05

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(1) concerning the failure to set (a)(1) goals and monitor against the established goals for the G05 gas turbine (GT), a risk significant maintenance rule component relied upon to meet station blackout and certain Appendix R requirements. The issue of failing to set G05 GT (a)(1) goals and monitor against the established goals was more than minor since actual G05 GT equipment problems occurred. However, since the G05 equipment problems were not attributable to a 10 CFR 50.65(a)(1) violation, rather, a maintenance rule violation occurred as a consequence of the G05 GT problems, the performance deficiency could not be processed through the Manual Chapter 0609, "Significance Determination Process." Therefore, in accordance with Appendix B to Inspection Manual Chapter 0612, this maintenance rule violation was considered to be of very low safety significance.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Use of Steam Generator Narrow Range Level Detector During Cold Shutdown Plant Conditions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for an inadequate shutdown emergency procedure which failed to account for the impact of varying water density differences on the steam generator narrow range level detector variable leg when transitioning from hot to cold plant conditions. Specifically, safety-related shutdown emergency procedures contained operator

instructions that could have caused the top of the steam generator U-tubes to become uncovered, thereby affecting the ability of the steam generators to function as a heat sink for removing reactor decay heat. The finding was of very low risk significance since NRC senior risk analysts determined that the discrepancy associated with the steam generator narrow range level indication would not have appreciably impacted steam generator heat removal capabilities.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Operating Procedures Incorrectly Translated From Design Basis of the Safety Injection System

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Several specific emergency operating procedure (EOP) deficiencies were identified during the inspection. The finding was considered to be greater than minor because the failure of licensee personnel to take appropriate actions under post-accident conditions could have resulted in system operating modes that had not been analyzed, and could have affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)

Significance:  Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions Were Inadequate to Ensure Accurate Calculations For RWST Water Level

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action") where the licensee failed to take adequate corrective actions to resolve previously identified problems with the plant's engineering calculations concerning refueling water storage tank (RWST) water levels. The finding was considered to be greater than minor because licensee personnel failed to correct repetitive RWST calculation errors, which resulted in the propagation of erroneous RWST elevation vs. level data into inputs to other calculations. Inaccurate level indications were provided to the control room operators during performance of emergency operating procedures (EOPs). The failure to provide the operator with accurate RWST level indications during the performance of EOPs during a potential loss of coolant accident could have adversely affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)

Significance:  Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance

and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002. Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Barrier Integrity

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Pressurizer Safety Valve Failed to Lift at Test Pressure

The inspectors identified a Non-Cited Violation of Technical Specification 3.4.10 for the operation of Unit 2 from December 2000 to April 2002 with one inoperable pressurizer safety valve. The primary cause of this finding was related to the cross-cutting area of human performance, in that, inattention to the job-at-hand resulted in a vendor reassembling the valve such that it would not have lifted at the required setpoint. The inspectors determined that the issue was more than minor because it affected the functionality of the reactor coolant system pressure boundary, a physical barrier designed to protect the public from radionuclide releases caused by accidents or events. However, the finding was of very low risk significance since the change in core damage frequency as a result of having operated with the inoperable safety valve was determined to be less than 1E-6/year.

Inspection Report# : [2002013\(pdf\)](#)

Emergency Preparedness

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Emergency Notification System Power Failure

The inspectors identified one finding of very low risk significance for not having adequate configuration control and not providing sufficient drawings and instructions to maintenance and operations personnel during an emergency notification telephone system battery charger failure and subsequent replacement activities. The primary cause of this finding was related to the cross-cutting area of human performance in that a lack of understanding of the basic system configuration and the absence of associated drawings and operating instructions resulted in unnecessary periods of system unavailability. The inspectors determined that the issue was more than minor because: 1) it affected the emergency preparedness cornerstone equipment and communications system attribute, and 2) if left uncorrected, would become a more significant safety concern if emergency response facility communication system modifications were made without the licensee's knowledge such that a reduction in emergency planning effectiveness occurred. Based on the answers to the Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," screening questions, the inspectors determined that the issue was of very low safety

significance. No violation of regulatory requirements occurred

Inspection Report# : [2003002\(pdf\)](#)



Significance: Apr 01, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate Critique of Two Exercise Performance Issues

Two exercise performance issues, which are associated with emergency preparedness planning standard 10 CFR 50.47 (b)(10), were inadequately critiqued by licensee staff. The first issue was associated with the licensee's critique of the initial offsite Protective Action Recommendation (PAR) that its exercise participants communicated to offsite officials. The NRC identified issues that contradicted the licensee's critique conclusion that the initial PAR was a successful performance indicator opportunity with respect to its content. The second issue was the licensee's critique of its participants decision making process on the simulated removal from the site of non-essential personnel, who were not members of the current shift of emergency responders, once all onsite personnel were accounted for. Using the Emergency Preparedness Significance Determination Process, the NRC has made a preliminary determination that the finding was of low to moderate risk significance (White). In accordance with NRC's Enforcement Policy, as published in NUREG 1600, it was determined that there is no apparent violation of NRC requirements since the critique issues were related to an exercise, rather than to an actual emergency. On September 12, 2002, the NRC provided the licensee with a letter detailing the final results of the NRC's significance determination of the February 2002 Exercise critique finding. Based on the information obtained during the inspection, including the feedback obtained from the licensee during the April 2002 exit interview, and the additional information contained in the licensee's June 27, 2002 submittal, the NRC concluded that the inspection finding is appropriately characterized as a White finding.

Inspection Report# : [2002004\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

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