

# Pilgrim 1

## 4Q/2005 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Problem Resolution of an Internal Flood Control Deficiency**

The inspector identified an NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Entergy did not take timely corrective action, for a condition adverse to quality identified in August 2004, regarding the missing seals required by plant design drawings to be installed around the A residual heat removal (RHR) quadrant floor plugs to minimize potential water intrusion into the RHR quadrant below. Entergy entered the issue into the corrective action program and plans to reschedule the required repairs.

The finding was determined to be of very low safety significance per the Phase 1 worksheet in Appendix A of MC-0609, Significance Determination Process. The finding was not a design issue, did not result in a loss of a safety function of a mitigating system, and did not screen potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding is more than minor because it adversely impacted the Reactor Safety Mitigating System Cornerstone attribute Protection Against External Factors (i.e., flood hazard) and the cornerstone objective to ensure the reliability and availability of mitigating systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). A cross-cutting aspect of the finding related to problem identification and resolution, in that completion of corrective actions for a condition adverse to quality was not prioritized commensurate with the potential significance of the condition. As a result, timely corrective action was not taken to restore the A RHR quadrant floor plugs to their required design configuration. (1R06)

Inspection Report# : [2005005\(pdf\)](#)

**Significance:**  Dec 31, 2005

Identified By: NRC

Item Type: FIN Finding

#### **Lack of Effective Maintenance for the Emergency Lighting System**

The inspector identified that Entergy failed to implement effective maintenance on the emergency lighting system in a manner necessary to prevent repeated functional failures from causes which were within the licensee's capability to foresee and prevent. As a result of failures predominately due to low battery electrolyte levels and the improper adjustment of the battery charger output voltage, the emergency lighting system experienced 20 functional failures in a 36-month period and failed to meet the reliability performance criteria in four of the last five years. No violations of regulatory requirements were identified. Entergy placed the emergency lighting system in a(1) status and developed an action plan that addressed the lighting deficiencies necessary to restore system reliability and return the system to a(2) status.

The finding was determined to be of very low safety significance per the Phase 1 worksheet in Appendix A of MC-0609, Safety Determination Process. The finding was not a design deficiency, did not represent an actual loss of safety function of a mitigating system, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding is more than minor because it affected the reliability objective of the Equipment Performance attribute under the Mitigating System Cornerstone. Portions of the emergency lighting system were not available to perform their intended function of supporting operator actions to mitigate the consequences of fires upon loss of all other lighting. A cross-cutting aspect of the finding related to problem identification and resolution, in that effective corrective action was not taken for the failed emergency lights due to deferral of corrective maintenance and improper maintenance instructions. (1R12)

Inspection Report# : [2005005\(pdf\)](#)

**Significance:**  Aug 02, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to maintain and observe controls to prevent injection of cold gaseous or liquid nitrogen into containment.**

A finding of very low safety significance which constituted a non-cited violation (NCV) of NRC requirements was identified by the inspector. Entergy personnel did not ensure that the temperature of nitrogen gas added (makeup) to the drywell/torus was not less than 70 degrees Fahrenheit, as required by procedure 8.A.1. The finding is more than minor because it could be reasonably viewed as a precursor to a significant event and if left uncorrected the finding could become a more significant safety concern. The finding impacted both the reactor safety mitigating system and barrier integrity cornerstones and adversely effects the cornerstones' attributes of human performance, procedure

quality, and design control. The finding, evaluated using the Significance Determination Process (MC-0609), was determined to be of very low safety significance based on engineering judgement that the torus and/or drywell structure was not degraded or in a failed condition. Causes contributing to the finding relate to the cross-cutting areas of human performance and problem identification and resolution. Specifically, personnel did not follow procedure requirements to ensure nitrogen temperature was at least 70 F nor did personnel identify procedure deficiencies via the corrective action process.

Inspection Report# : [2005004\(pdf\)](#)

**G**

**Significance:** Mar 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Instructions provided to maintain the SBODG operable after a loss of power to its auxiliary equipment were not adequate**

A self-revealing finding of very low safety significance, that constitutes a non-cited violation of Technical Specification 5.4.1, was identified because Entergy did not develop adequate instructions for the operation of the station blackout diesel generator following a loss of power to auxiliary equipment. On January 23, 2005, during an actual loss of power to auxiliary equipment, when operators followed the instructions to manually start the station blackout diesel generator to ensure the availability of the station blackout diesel generator, the station blackout diesel generator did not start.

The finding is more than minor because it is associated with the procedure quality attribute of the Mitigating System Cornerstone. The finding affects the cornerstone objective to ensure the availability and reliability of systems used to respond to initiating events to prevent undesirable consequences because the Station Blackout Diesel Generator (SBODG) was not available to provide electrical power to its buses when it failed to start. The finding is of very low safety significance because the station blackout diesel generator was unavailable for less than twenty-four hours and both emergency diesel generators and one off-site power supply remained available throughout the event. This finding has been entered into Entergy's corrective action program

A contributing cause of the finding relates to corrective action subcategory of the cross-cutting area of problem identification and resolution. Specifically, the procedure changes made as a part of the licensee's corrective actions to address a failure of the station blackout diesel generator to start following a loss of power to auxiliary equipment in 1997, did not address the underlying cause identified, that being the failure of the shaft driven lube oil pump to re-pressurize the lube oil header to the required pressure within the required time. (IRO1)

Inspection Report# : [2005002\(pdf\)](#)

**G**

**Significance:** Mar 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Entergy did not implement procedure for a disabled annunciator for the SBODG**

A self revealing finding of very low safety significance, that constituted a non-cited violation of Technical Specification 5.4.1, was identified because Entergy did not implement the requirements of procedure 2.3.1, "General Action For Alarm Response and Annunciator Control." In September 2004, Entergy did not implement compensatory measures as required by procedure 2.3.1 for a disabled annunciator associated with the SBODG lockout relay. The lack of a compensatory measure for the disabled annunciator contributed to the operations staff not resetting the lockout relay following a trip of the SBODG on January 23, 2005, and led to the subsequent failure to start during a post maintenance test on January 24, 2005, unnecessarily increasing the unavailability of the SBODG.

The finding is more than minor because it is associated with the configuration control attribute of the Mitigating System cornerstone and affects the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because the SBODG, a non-technical specification system was unavailable for less than 24 hours. Additionally both emergency diesel generators and one means of off-site power remained available. This finding has been entered into Entergy's corrective action program.

A contributing cause of the finding relates to organizational subcategory of the cross-cutting area of human performance. Entergy neither performed the work to correct the failed annunciator nor established a means to compensate for the failed annunciator until it could be repaired. (Section 1R16)

Inspection Report# : [2005002\(pdf\)](#)

**G**

**Significance:** Mar 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Plant Operators Did Not Adequately Perform a Prerequisite in a EDG Surveillance Procedure**

A self-revealing finding of very low safety significance, that constituted a non-cited violation (NCV) of Technical Specification 5.4.1, was identified because operations personnel did not adequately implement surveillance procedure 8.9.1 during testing of the B emergency diesel generator. Operations personnel did not adequately perform a prerequisite step in the procedure to verify that no tag outs were in place which would prohibit performance of the surveillance. As a result, on January 29, 2005, a tag out in place on a portion of the air start system resulted in the trip of the B emergency diesel generator during the surveillance.

The finding is more than minor because it is associated with the human performance attribute - human error pre-event and affects the Mitigating System cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because the emergency diesel generator was not inoperable for more than half the allowed outage time.

A contributing cause of the finding relates to the personnel subcategory of the cross cutting area of human performance. Operators did not adequately verify procedure prerequisite 7.(9) prior to commencing the surveillance test. (Section 1R19)

Inspection Report# : [2005002\(pdf\)](#)

**G**

**Significance:** Mar 03, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Untimely Corrective Action for Bussmann Fuses**

Entergy's corrective actions were untimely, in that faulty Bussmann fuses which had caused an inoperable condition on HPCI in February 2004 were not replaced and caused another unplanned HPCI inoperable condition in February 2005. Entergy did not take timely action to establish the extent of affected fuses, determine priorities for replacement, and replace the faulty fuses. The team determined that this represented a self-revealing non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI of very low safety significance (Green).

This finding was more than minor, because it is associated with the equipment performance attribute of the Mitigating System Cornerstone and adversely affected the cornerstone objective of assuring the availability and reliability of systems that respond to initiating events. The finding was determined to be of very low safety significance based on a Phase 3 SDP determination.

This finding was associated with the cross-cutting area of problem identification and resolution (PI&R).

Inspection Report# : [2005006\(pdf\)](#)

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## **Barrier Integrity**

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## **Emergency Preparedness**

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## **Occupational Radiation Safety**

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## **Public Radiation Safety**

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## **Physical Protection**

[Physical Protection](#) information not publicly available.

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## **Miscellaneous**

**Significance:** SL-III Jul 14, 2005

Identified By: NRC

Item Type: VIO Violation

**Inattentive Control Room Supervisor with Wilfull Inappropriate Response by Other Control Room Licensed Staff .**

In a letter dated July 14, 2005, the NRC issued a Severity Level III Notice of Violation and Proposed Imposition of Civil Penalty to Entergy in the base amount of \$60,000 associated with a Severity Level III problem. The Severity Level III problem involved four violations of NRC requirements related to Technical Specification 5.4.1, 10 CFR Part 50 Appendix B, and 10 CFR Part 26. The specific violations involved: (1) a Pilgrim control room supervisor sleeping for approximately four minutes in the control room and therefore being neither alert or attentive to his duties; (2) a reactor operator observing the sleeping control room supervisor, but deliberately not taking immediate actions to awaken the control room supervisor, inform appropriate site personnel and initiate a condition report; (3) a Shift Manager, in careless disregard of requirements, although taking some actions, not informing appropriate site personnel and initiating a condition report; and (4) the sleeping control room supervisor not being relieved of duty and for-cause Fitness-for-Duty tested. There were no actual safety consequences resulting from this event because there were no plant conditions that warranted immediate action.

Inspection Report# : [2005003\(pdf\)](#)

Inspection Report# : [2005005\(pdf\)](#)

**Significance:** N/A Mar 03, 2005

Identified By: NRC

Item Type: FIN Finding

#### **2005 PI&R Overall Corrective Action Program Summary**

The team determined that Entergy was generally effective at identifying problems and placing them in the corrective action program (CAP). Once entered into the system, these items were screened and prioritized in a timely manner using established criteria, and they were properly evaluated commensurate with their safety significance. Overall, the evaluations reasonably identified the causes of the problem, assessed the extent of condition, and developed appropriate corrective actions. Corrective actions were typically implemented in a timely manner, but the team found that in one case, corrective actions were not timely and did not prevent recurrence; this resulted in a finding. The team found that Entergy's self-assessments and audits were self-critical and consistent with the team's observations.

Inspection Report# : [2005006\(pdf\)](#)

Last modified : March 03, 2006