

Pilgrim 1

4Q/2004 Plant Inspection Findings

Initiating Events

Significance:  Mar 06, 2004

Identified By: Self Disclosing

Item Type: FIN Finding

Maintenance Workers Did Not Adequately Evaluate Use of an Electrical Insulating Blanket Over Exposed Relays

A self-revealing finding of very low safety significance was identified because maintenance workers conducting trouble shooting did not adequately evaluate the potential consequence of installing an electrical insulating blanket over exposed relays. This led to the inadvertent trip of a motor generator and plant transient on March 6, 2004.

The finding is greater than minor because it is associated with the human performance attribute of the initiating event cornerstone and adversely affects the cornerstone objective; it upset plant stability and caused a plant transient. The finding is of very low safety significance because the finding did not increase the likelihood of a primary or secondary loss of coolant accident, did not contribute to the likelihood of both a reactor trip and loss of mitigating equipment, and did not increase the frequency of a fire or flood. Additionally, the overpower condition remained within the safety analysis and was below the automatic reactor trip setpoint. No violation of regulatory requirements occurred.

A contributing cause of this finding relates to the cross-cutting area of human performance in that maintenance workers during trouble shooting activities did not adequately evaluate the possible consequence of installing an electrical insulating blanket over the exposed relays.

Inspection Report# : [2004002\(pdf\)](#)

Mitigating Systems

Significance:  Dec 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to adequately translate design basis minimum SSW Pump Well Level to Technical Specs.

The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to establish adequate measures to assure that the design basis minimum water level in each salt service water (SSW) system pump well of the intake structure was correctly translated into the Technical Specifications and SSW System Operating Procedures.

This issue was greater than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance and affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems and components that respond to initiating events. Specifically, the lower level specified for ensuring SSW system operability had the potential to affect the capability of the SSW system to perform its safety-related function under worst case design basis loss of coolant accident (DBA-LOCA) conditions. The issue screened as very low safety significance (Green) in Phase I of the SDP, because it was a design deficiency that was not found to result in a loss of function. The team did not identify any examples where the minimum water level in the pump wells of the Intake Structure was less than design basis minimum water level.

The team also identified that a contributing cause of the finding was related to the problem identification and resolution cross-cutting area, in that, although inconsistencies between the Updated Final Safety Analysis Report (UFSAR) and the SSW design basis document (DBD) regarding the SSW pump minimum water levels relative to mean sea level (msl) were identified during the DBD development process and during previous SSW assessments, these issues were not appropriately resolved. (Section 1R21.2)

Inspection Report# : [2004008\(pdf\)](#)

Significance:  Dec 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate program for station battery test control

The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee's station battery test program lacked adequate provisions to assure that all testing prerequisites were met and to assure that the available test equipment was adequately used for three cycles of Technical Specification (TS) required surveillance testing of the 125V A & B station batteries and the 250V station battery.

The finding was greater than minor because it was associated with the Mitigating Systems Cornerstone attribute of Procedure Quality and affected the objective of ensuring availability, reliability, and capability of systems needed to respond to initiating events. Specifically, the lack of procedure quality and detail led to repetitive instances where battery testing was not completed without error. The issue screened as very low safety significance (Green) in Phase I of the SDP, because it was a procedure quality issue that did not result in a loss of function since the capacity margin in the design of the batteries has enabled the licensee to perform engineering evaluations for the incorrectly performed testing and demonstrate operability.

The team also identified that a contributing cause of the finding was related to the problem identification and resolution cross-cutting area, in that, the licensee reviewed each of these events narrowly, determined that each was an isolated case and failed to identify the adverse trend of procedure inadequacies that contributed to the repetitive events. (Section 1R21.3)

Inspection Report# : [2004008\(pdf\)](#)

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Significance: Sep 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Design information on standby gas treatment system not translated into operating procedures

A self-revealing non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control, of very low safety significance was identified because Entergy did not adequately translate design information, associated with the maximum allowable leak rate from the standby gas treatment (SBGT) control air system, into the station's operating and alarm response procedures. As a result, Entergy did not have information readily available to recognize that leakage from the "B" train SBGT control air system rendered the "B" train of SBGTS inoperable while the "A" train of SBGTS was removed from service for planned maintenance.

The issue is more than minor because it is associated with the Maintain Functionality of Containment-Design Control attribute and affected the Mitigating System cornerstone objective to provide reasonable assurance that the containment can protect the public from radio nuclide releases caused by accidents. Specifically, for approximately 14 hours, neither the "A" nor "B" train of SBGTS was able to perform its safety function for the required 30-day post accident mission time. The finding is of very low safety significance when evaluated in the significance determination process because the B train of SBGT was always available when the A train was unavailable for service due to maintenance and could have functioned for a considerable portion of the 30-day mission time.

A contributing cause of this finding is related to the cross-cutting area of problem identification and resolution, in that Entergy did not generate a CR or perform a formal operability evaluation when station staff suspected a "B" train SBGT control air system leak prior to performing maintenance on the "A" train of SBGTS.

Inspection Report# : [2004005\(pdf\)](#)

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Significance: Jun 30, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Bussmann Fuses Affecting High Pressure Coolant Injection

A very low safety significance self-revealing non-cited violation (NCV) of 10 CFR 50 Criterion XVI was identified because Entergy did not promptly identify a condition adverse to quality. Specifically, Entergy performed a limited review of Bussmann fuse problems in the industry and at Pilgrim station following failed 125 vdc Bussmann control power fuses that impacted the high pressure coolant injection (HPCI) system components in July 2002 and October 2003. As a result, Entergy did not assure that faulty Bussmann fuses would not be used in safety related systems at Pilgrim and did not identify, prior to February 2004, that the industry reported manufacturing problems with Bussmann fuses. The HPCI system was found inoperable on February 26, 2004, due to a faulty Bussmann fuse in the control power circuit for the HPCI gland seal condensate pump.

The finding is greater than minor since it is associated with Mitigating System Equipment and because it affected the associated cornerstone objective. The finding had very low safety significance when evaluated in a significance determination process (SDP) Phase 2 analysis, which determined that for the individual system failures when HPCI operability was impacted, the inoperability lasted less than 3 days which was much less than the technical specification allowed outage time of 14 days.

A contributing cause of this finding is related to the cross cutting area of problem identification and resolution. Entergy did not adequately take corrective actions in response to industry operating experience to preclude the recurrence of a significant condition adverse to quality associated with Bussmann fuses.

Inspection Report# : [2004004\(pdf\)](#)

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Significance: May 12, 2004

Identified By: Self Disclosing

Item Type: FIN Finding

Plant Personnel Did Not Perform Adequate Trouble Shooting Activities on a Degraded Residual Heat Removal System Motor-

Operated Valve

A self-revealing finding of very low safety significance was identified because on December 5, 2003, plant personnel did not perform trouble shooting activities on a degraded residual heat removal system motor-operated valve (MO-1001-7D), in accordance with the station's trouble shooting procedure. Specifically, maintenance workers did not adequately consider potential latent failures and as a result did not adequately diagnose the extent of the valve's degraded condition. During post maintenance testing, significant additional damage to the valve's motor and associated thermal overload heaters occurred causing additional unnecessary unavailability for the D train of the residual heat removal system.

The finding is greater than minor because it is associated with the equipment performance attribute of the mitigating system cornerstone and adversely affects the cornerstone objective; it resulted in the valve being inoperable and unnecessarily increased the unavailability of the D train of the residual heat removal system. The finding is of very low safety significance because the residual heat removal system's safety functions were not lost and the D train was not inoperable for more than the Technical Specification allowed outage time. No violation of regulatory requirements occurred.

A contributing cause of the finding relates to the human performance cross-cutting area in that plant personnel conducting trouble shooting did not adequately consider potential latent failures during trouble shooting activities as prescribed in the station's trouble shooting procedure. Inspection Report# : [2004002\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : March 09, 2005