

Pilgrim 1

4Q/2012 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: FIN Finding

Inadequate Processing of Work Package Results in Reactor Scram

Green. A finding of very low safety significance (Green) was identified for personnel not adequately classifying work in regards to processing an emergent work order. Specifically, personnel classified work on a reach rod position indication for valve 1-HO-163, Steam Jet Air Ejector (SJAE) steam supply valve, as “minor” maintenance which resulted in the failure to identify and correct the reach rod indicator and position. This resulted in a degraded vacuum during a power maneuver and a subsequent reactor scram. Entergy entered this issue in the corrective action program (CR-PNP-2012-2304).

The finding was determined to be more than minor because it was associated with the Configuration Control (i.e., Operating Equipment Lineup) attribute of the Initiating Events cornerstone, and adversely affected the cornerstone’s objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The inspectors used IMC 0609.04, “Phase 1 – Initiating Screening and Characterization of Findings” and IMC 0609 Appendix A, Exhibit 1, “Initiating Events Screening.” The finding was determined to be of very low safety significance (Green) because although the performance deficiency did result in a reactor scram, it did not cause a reactor scram combined with the loss of mitigating equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition. This finding has a cross-cutting aspect in the Human Performance cross-cutting area, Work Control, because Entergy did not appropriately plan and coordinate the repair of the SJAE steam supply valve by incorporating the operational impact of the work activity consistent with nuclear safety. [H.3 (b)] (Section 4OA3)

Inspection Report# : [2012004](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Verify the Adequacy of the Design of the SBO Fuel Oil Transfer System

Green. The inspectors identified a finding of very low safety significance (Green) involving a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” because Entergy did not implement design control measures commensurate with those applied to the original design when a system modification was made to the Emergency Diesel Generators’ (EDG) fuel oil transfer system. Specifically, Entergy did not implement the design change or modification process when a Station Blackout Diesel Generator fuel oil transfer system was put in place in 1998 to meet the EDG support function of transferring sufficient fuel to meet the mission time of the EDG safety function. Entergy documented this issue in their corrective action program (CR-PNP-2012-3428).

The performance deficiency was determined to be more than minor because it is associated with the Design Control attribute of the Mitigating Systems cornerstone, and adversely affected the cornerstone’s objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance (Green) because the finding was a design process deficiency and did

not represent a loss of system and/or function or the loss of a single train for greater than its Technical Specification outage time. Specifically, follow-up testing of the hose that had been staged originally, identified that the hose would not have failed in a time-frame commensurate with the EDG safety function mission time. The finding does not have a cross-cutting aspect since the failure to implement the design change verification process is not indicative of current licensee performance. Entergy's current design change procedures require design reviews of this type of in-field modification. (Section 1R18)

Inspection Report# : [2012005](#) (pdf)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: FIN Finding

Inadequate Corrective Actions for Station Blackout Battery

Green. The inspectors identified a finding of very low safety significance (Green) because Entergy did not complete Shutdown Transformer Bus (A8) battery discharge testing within the required timeframe. Specifically, although Entergy identified in April 2011 that required battery testing had not been completed, as of this inspection, the testing had still not been completed.

This finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the inspectors determined the finding screened as very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program Component, because Entergy did not take appropriate corrective actions to address safety issues in a timely manner. Specifically, Entergy did not perform vendor required discharge testing in a timeframe consistent with the safety significance of the equipment. [P.1(d)] (Section 4OA2)

Inspection Report# : [2012005](#) (pdf)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: FIN Finding

Inadequate Design Control for Station Blackout Battery

Green. The inspectors identified a finding of very low safety significance (Green) because Entergy did not verify the adequacy of the design of the Station Blackout (SBO) battery. Specifically, Entergy used an incorrect minimum voltage for the SBO battery resulting in the sizing calculation significantly overstating the available design margin.

This finding was more than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the inspectors determined the finding screened as very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of Human Performance, Resources Component, because Entergy did not ensure that accurate design documentation was available. Specifically, Entergy used the incorrect minimum voltage for the SBO battery, resulting in non-conservative conclusions in the battery sizing calculation. [H.2(c)] (Section 4OA2)

Inspection Report# : [2012005](#) (pdf)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Evaluate Extent of Condition for B-15 Safety-Related Bus Following Overload Condition to B-14 Safety-Related Bus

Green. The inspectors identified a finding of very low safety significance (Green) involving a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," because Entergy did not identify an overload condition on the B-15 bus after a similar overload condition was known to exist on the opposite train B-14 bus. Entergy specified an extent of condition review to be performed as a corrective action but was not successful in completing this review to identify the similar vulnerability to B-15. Entergy's corrective actions included immediately reducing loading on the B-15 bus and revising procedures to prohibit overloading the B-15 bus. Entergy has captured these issues in condition reports CR-PNP-2012-2015, CR-PNP-2012-4185 and CR-PNP-2012-4884.

The performance deficiency was determined to be more than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone, and adversely affected the cornerstone's objective to ensure the availability of systems that respond to initiating events to prevent undesirable consequences. During certain accident scenarios, equipment electrically powered from the B-15 bus (Reactor Building Closed Cooling Water and Salt Service Water) would have been unavailable to mitigate the consequences of an event. The inspectors used IMC 0609.04, "Phase 1 – Initial Screening and Characterization of Findings" and Inspection Manual Chapter (IMC) 0609 Appendix A, Exhibit 2, "Mitigating Systems Screening." In accordance with Exhibit 2 of IMC 0609, this performance deficiency required a detailed risk analysis since the issue resulted in an actual loss of function of at least a single train for greater than its Technical Specifications (TS) allowed outage time. The Senior Risk Analyst performed a detailed risk evaluation and determined the finding to be of very low safety significance (Green) with a change in core damage frequency of $1.1E-7$. This finding has a cross-cutting aspect in the Problem Identification and Resolution cross-cutting area, Corrective Action Program component, because Entergy did not thoroughly evaluate the problem with B-14 such that the resolution addressed the extent of condition for the same vulnerability to B-15. [P.1(c)] (Section 1R15)

Inspection Report# : [2012005](#) (pdf)

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Verify the Adequacy of the Design of MCC-B18 with Respect to Internal Flooding

The inspectors identified a finding of very low safety significance (Green) involving a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control", because Entergy did not verify the adequacy of the design of the Motor Control Center (MCC) B-18 enclosure. Specifically, Entergy had not previously evaluated the susceptibility of MCC B-18 to internal flooding from a potential pipe break by the use of calculational methods or by the performance of design reviews. Entergy entered this issue in the corrective action program (CR-PNP-2012-1351).

The performance deficiency was determined to be more than minor because it is associated with the Design Control attribute of the Mitigating Systems cornerstone, and adversely affected the cornerstone's objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. The inspectors used IMC 0609.04, "Phase 1 – Initial Screening and Characterization of Findings" and IMC 0609 Appendix A, Exhibit 2, "Mitigating Systems Screening." The finding was determined to be of very low safety significance (Green) because the finding was a design deficiency and did not represent a loss of system and/or function or the loss of a single train for greater than its Technical Specification outage time. The finding does not have a cross-cutting aspect since the verification of the MCC B18 design is not indicative of current licensee performance. Entergy's current design change procedures require an evaluation of flooding vulnerabilities for new modifications. (Section 1R06)

Inspection Report# : [2012003](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Scope the Rod Worth Minimizer into the Maintenance Rule

The inspectors identified an NCV of very low safety significance (Green) of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," because Entergy did not include the Rod Worth Minimizer (RWM) system into the scope of Maintenance Rule (MR) systems. Specifically, Entergy did not include the RWM system into the scope of the MR monitoring program as required by 10 CFR 50.65 (b)(2)(i) as a non-safety related system that is relied upon to mitigate accidents or transients. Entergy entered this issue in the corrective action program (CR-PNP-2012-0394).

The inspectors performed a review of IMC 0612, Appendix E, "Examples of Minor Issues," and determined the issue was more than minor because it was similar to example 7.d; in that, the RWM system was not within the scope of the Maintenance Rule and that equipment performance problems were such that effective control of performance could not be demonstrated. The finding was also determined to be more than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affected the availability of the RWM to provide its mitigation function for a control rod drop accident (CRDA). This finding had a cross-cutting aspect in the Problem Identification and Resolution cross-cutting area, Self Assessment component, because previous assessments performed by Entergy did not include Maintenance Rule scoping attributes nor did they identify scoping issues such as the RWM system. [P.3(a)] (Section 1R12)

Inspection Report# : [2012002](#) (pdf)

Significance: TBD Dec 31, 2011

Identified By: NRC

Item Type: AV Apparent Violation

Licensed Operators Stood Watch Without Being Medically Qualified

TBD. The inspectors identified an apparent violation (AV) of Title 10 of the Code of Federal Regulations (10 CFR) 55.53 and 10 CFR 55.21 related to Entergy's medical examinations of licensed operators. Specifically, at various times over a period of almost four years, ten operators did not meet certain medical requirements (for stamina and/or blood pressure) for performing NRC-licensed operator activities, and the operators continued to perform NRC-licensed activities. Additionally, Entergy did not perform complete medical testing of its licensed operators, in that five of those licensed operators had not been administered stamina tests for more than two years and therefore did not complete their NRC-required biennial medical exam. Immediately after the NRC identified the issue, Entergy restricted operators from watch until they could pass the requirements of their medical testing. Entergy entered this issue into their corrective action program (CR-PNP-2011-04554).

The inspectors determined that Entergy's failure to ensure that licensed operators met the license conditions associated with medical testing prior to performing license activities was a performance deficiency that was within Entergy's ability to foresee and correct and should have been prevented. The inspectors determined that Traditional Enforcement applies, as the issue had the potential to impact the NRC's ability to perform its regulatory function because the NRC relies upon the accurate certification by the licensee's medical examiner to ensure all licensed operators meet the medical conditions of their license. Specifically, ten operators had not taken the stamina test during their annual physical, but were certified by the medical examiner and licensee as being fit to safely perform their watch-standing duties. Additionally, five of those operators had not taken the stamina test during their biennial physical, but were certified by the medical examiner and licensee as being fit to safely perform their watch-standing duties. Lastly, an individual who had not passed their blood pressure examination, and required a license condition to take medication, was placed back on watch-standing duty without such a license condition. The performance deficiency was screened against the Reactor Oversight Process (ROP) per the guidance of Inspection Manual Chapter (IMC) 0612, Appendix B, "Issue Screening." No associated ROP finding was identified and no cross-cutting aspect was assigned. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, and its final significance will be dispositioned in separate future correspondence. (Section 1R11)

Inspection Report# : [2011005](#) (pdf)

Significance: TBD Dec 31, 2011

Identified By: NRC

Item Type: AV Apparent Violation

Entergy did not Provide Complete and Accurate Medical Information for Licensed Operator Renewal Applications

TBD. The inspectors identified an AV of 10 CFR 50.9, "Completeness and Accuracy of Information," related to Entergy's medical examinations of licensed operators. Specifically, Entergy did not provide information to the NRC that was complete and accurate in all material respects, in that Entergy submitted two NRC licensed operator renewal applications which certified that the applicants met the medical requirements for license renewal when in fact they did not complete the required stamina tests. Entergy entered this issue into their corrective action program (CR-PNP-2011-04554).

The inspectors determined that Entergy's failure to provide complete and accurate information to the NRC was a performance deficiency that was within Entergy's ability to foresee and correct and should have been prevented. The inspectors determined that Traditional Enforcement applies, as the issue had the potential to impact the NRC's ability to perform its regulatory function. Specifically, Entergy did not provide information to the NRC that was complete and accurate in all material respects, in that although Entergy had not administered complete medical examinations of licensed operators in accordance with American National Standards Institute/American Nuclear Society (ANSI/ANS) 3.4-1983 (because it had not conducted stamina testing), it submitted two NRC Form 396s for renewal of operator licenses which certified that the applicants met the medical requirements of ANSI/ANS 3.4-1983. Subsequently, the NRC made a licensing decision based on this information that was not complete and accurate in all material respects. The performance deficiency was screened against the ROP per the guidance of IMC 0612, Appendix B, "Issue Screening." No associated ROP finding was identified and no cross-cutting aspect was assigned. This issue constitutes an apparent violation in accordance with the NRC's Enforcement Policy, and its final significance will be dispositioned in separate future correspondence. (Section 1R11)

Inspection Report# : [2011005](#) (*pdf*)

Significance: TBD Dec 31, 2011

Identified By: NRC

Item Type: AV Apparent Violation

Entergy did not Notify the NRC Within 30 Days of Discovering Changes in Medical Conditions

TBD. The inspectors identified an AV of 10 CFR 50.74, "Notification of Change in Operator or Senior Operator Status." Specifically, Entergy did not notify the NRC within 30 days of discovering a change in medical condition for two licensed operators. Subsequently, Entergy submitted notifications for both operators on November 10, 2011, and entered the issue into their corrective action program (CR-PNP-2011-04554).

The inspectors determined that Entergy's failure to notify the NRC within 30 days of discovering the change in medical condition for two licensed operators was a performance deficiency that was within Entergy's ability to foresee and correct and should have been prevented. The inspectors determined that Traditional Enforcement applies, as the issue had the potential to impact the NRC's ability to perform its regulatory function because if a licensed operator has a change in medical condition, the NRC may need to perform a review for consideration of a licensing action. Specifically, Entergy had not notified the NRC within 30 days of learning of a change in medical condition for two licensed operators for which a license condition was required. The performance deficiency was screened against the ROP per the guidance of IMC 0612, Appendix B, "Issue Screening." No associated ROP finding was identified and no cross-cutting aspect was assigned. This issue constitutes an apparent violation in accordance with the NRC's Enforcement Policy, and its final significance will be dispositioned in separate future correspondence. (Section 1R11)

Inspection Report# : [2011005](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

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