

Pilgrim 1

4Q/2013 Plant Inspection Findings

Initiating Events

Significance:  Oct 03, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Inappropriate Fatigue Rule Waivers

The inspectors identified a Green non-cited violation of 10 CFR 26.207(a) for Entergy's failure to issue waivers that were necessary to mitigate or prevent conditions adverse to safety, and only to address circumstances that could not have been reasonably controlled. Specifically, Entergy issued multiple fatigue waivers during planned and forced outages that were determined to be inappropriate based on plant conditions. Additionally, the inspectors identified other waivers of the fatigue rule that Entergy issued during non-outage periods that were inappropriate based on plant conditions. Entergy's immediate corrective action was to enter this issue into their corrective action program as condition reports CR-PNP-2013-06706 and CR-PNP-2013-06707 for further evaluation.

The inspectors determined that Entergy's failure to grant waivers in accordance with regulatory requirements was a performance deficiency that was within Entergy's ability to foresee and correct. This performance deficiency is more than minor because it was associated with the human performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the resulting increased likelihood of human error could adversely affect the station's defense-in-depth. Additionally, the finding was similar to IMC 0612, Appendix E, "Examples of Minor Issues," Example 9.a and is more than minor because this inappropriate use of work hour control waivers was not an isolated incident (e.g., one or two instances). The finding has been reviewed by NRC management in accordance with IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria." The violation was determined to be of very low significance because no significant events or human performance issues were directly linked to personnel fatigue as a result of the hours worked. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because Entergy did not thoroughly evaluate problems such that the resolutions address causes and extent conditions. Specifically, Entergy previously identified that waivers were inappropriately granted for conditions that were not necessary to mitigate or prevent conditions adverse to safety. However, because the previous evaluations were limited in scope and focus, Entergy did not develop corrective actions to address the deficient condition. [P.1(c)]

Inspection Report# : [2013008](#) (*pdf*)

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedures Results in Loss of Shutdown Cooling

Green. A self-revealing NCV of Technical Specification (TS) 5.4.1, "Procedures," was identified for operators not implementing procedures to supply safety-related alternate electrical power to shutdown cooling valves during shutdown cooling operation. Specifically, because operators did not perform all applicable steps in a procedure, a loss of shutdown cooling resulted when operators were shifting power supplies for the 'B' train shutdown cooling suction

and discharge valves on May 2, 2013. Corrective actions included restoring shutdown cooling following a prompt investigation of the event. Entergy has captured this event in their corrective action program (CAP) as CR-PNP-2013-3457.

The performance deficiency is more than minor because it affects the objective of the Initiating Events cornerstone to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The unavailability of shutdown cooling for five hours challenged the safety function of decay heat removal (DHR) supplied by the residual heat removal (RHR) system. A review of IMC 0612, Appendix E, "Examples of Minor Issues," found no more than minor examples that applied. The inspectors evaluated the finding using IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings." The inspectors determined that the finding required further review using IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process," because the issue affected the safety of the reactor during a refueling outage. The inspectors determined that this finding was of very low safety significance (Green), using IMC 0609, Appendix G, Checklist 7, "BWR Refueling Operation with Reactor Coolant System (RCS) Level >23'." This determination did not require a further phase 2 or phase 3 analysis in that it did not increase the likelihood of a loss of RCS inventory; did not result in the loss of RCS level instrumentation; did not degrade Entergy's ability to terminate a leak path or add RCS inventory; and did not degrade Entergy's ability to recover DHR once it was lost. In addition, a loss of thermal margin did not occur since the change in RCS temperature resulted in less than 20 percent of the temperature margin to boil. The inspectors determined that this finding had a cross-cutting aspect in the Human Performance area, Work Practices component, because personnel did not follow procedures [H.4(b)]. (Section 1R20)

Inspection Report# : [2013003](#) (pdf)

Mitigating Systems

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Complete a Design Control Review for the SBO Fuel Oil Transfer System in a Timely Manner

Green. The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," because Entergy did not complete a design control review for the station blackout (SBO) fuel oil transfer system in a timely manner. Entergy extended the corrective action due date out to greater than a year from the discovery of the original condition. Entergy has increased the priority of this design review and captured this issue in condition report CR-PNP-2013-6906.

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 objective to ensure the capability of systems that respond to initiating events to prevent undesirable consequences. The failure to complete a timely design review of a credited support system for the onsite power safety function further extends the vulnerability of the safety function if the design review determines the system is inadequate. 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 that did not result in the loss of system safety function or a loss of safety function of a single train for greater than its Technical Specification allowed outage time. The finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because Entergy did not take appropriate corrective actions to address a safety issue in a timely manner, commensurate with its safety significance. [P.1(d)]. (Section 4OA2)

Inspection Report# : [2013004](#) (pdf)

Barrier Integrity

Emergency Preparedness

Significance:  Oct 03, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Station Meteorological Towers

The inspectors identified a Green non-cited violation of 10 CFR Part 50.54(q)(2) because Entergy did not ensure that the Pilgrim Emergency Plan met the planning standards in 10 CFR 50.47(b). Specifically, on various occasions in 2012 and 2013, Pilgrim failed to maintain both meteorological towers as necessary to support emergency response. Entergy entered this issue into their corrective action program as condition report CR-PNP-2013-06829 for further evaluation. Additionally, as of the date of this inspection, the 220' meteorological tower was functional and the National Weather Service is still available as an alternate data source.

The inspectors determined that failure to maintain the 160' and 220' meteorological towers resulting in both towers being out of service concurrently for three separate periods in 2012 and 2013 was a performance deficiency that was within Entergy's ability to foresee and correct. This performance deficiency is more than minor because it is associated with the facilities and equipment attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective of ensuring the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. In accordance with IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Table 5.8-1, the inspectors determined the finding to be of very low safety significance (Green) because the planning standard function was degraded. Specifically, a significant amount of equipment necessary to implement the emergency plan was not functional to the extent that an emergency response organization member could not perform assigned functions, in the absence of compensatory measures. However, Pilgrim was able to make adequate dose assessments at all times using the National Weather Service to obtain necessary data. This finding has a crosscutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because Pilgrim did not take appropriate corrective actions to address safety issues and trends in a timely manner. Specifically, the station did not take timely corrective actions to correct deficiencies associated with both meteorological towers resulting in both towers being simultaneously non-functional on multiple occasions. [P.1(d)]

Inspection Report# : [2013008](#) (pdf)

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

Significance:  Oct 03, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide an Adequate Detection and Assessment System

The inspectors identified a Green non-cited violation of 10 CFR 73.55(i)(3)(vii).

This finding has a cross-cutting aspect in the area of Human Performance, Decision Making, because Entergy did not use conservative assumptions in decision making and adopt a requirement to demonstrate a proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disprove an action.

Inspection Report# : [2013008](#) (*pdf*)

Last modified : February 24, 2014