

Pilgrim 1

3Q/2010 Plant Inspection Findings

Initiating Events

Significance:  Jul 26, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Manage a Yellow Risk Condition for an unplanned half scram

The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50.65(a)(4) for Entergy's failure to manage a yellow risk condition for an unplanned half-scram. Specifically, Entergy performed an incorrect risk assessment and thereby did not recognize an increase in risk to a Yellow condition had occurred, and as a result Entergy did not specify any risk management activities. Entergy entered this issue into their Corrective Action Program (CAP), and specified corrective actions to upgrade this risk to Yellow and implement risk management actions.

A review of NRC Inspection Manual Chapter (IMC) 0612, Appendix E, "Minor Examples," identified that Section 7, Maintenance Rule, Example e, reflected a similar more than minor example. Specifically, this finding was determined to be more than minor because Entergy did not consider the increase in Initiating Event likelihood where the outcome of the overall elevated plant risk put the plant into a higher risk management category and thereby required additional risk management actions. In addition, the finding affected the Human Performance attribute of the Initiating Events cornerstone's objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions. The inspectors performed an evaluation in accordance with IMC 0609, "Significance Determination Process," Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process" because the finding related to Entergy's assessment and management of risk. The finding was determined to be of very low safety significance (Green) because the Incremental Core Damage Probability Deficit for the medium trip risk for the duration of the activity was less than 1.0 E-6 per year (approximately 1.0 E-9 per year). The inspectors determined that this finding had a cross-cutting aspect in the area of Human Performance, Decision Making, because when faced with an unexpected plant condition, Entergy did not correctly implement its systematic process to make an appropriate risk-significant decision. [H.1(a)] (Section 1R13)

Inspection Report# : [2010004](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: FIN Finding

Submerged Medium Voltage Cables

The inspectors identified a Green finding (FIN) for improper maintenance of underground non-safety related medium voltage electric cables. The inspectors identified that Entergy allowed non-safety related medium voltage cables to remain submerged in water for extended periods of time. Entergy entered this issue into their Corrective Action Program (CAP), and specified corrective actions to identify all underground medium voltage cables included under the Cable Reliability Program, and to identify which manholes should have dewatering capability.

The inspectors determined that the finding was more than minor because it was associated with the Design Control attribute of the Initiating Events cornerstone, and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, continued submergence of the non-safety related power cables (from the start-up transformer to electrical buses A2 and A4) could lead to cable failure and cause an event that would affect plant stability. The inspectors performed a Phase 1 Significance Determination Process screening of the finding in accordance with NRC Inspection Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance because the condition did not contribute to both the likelihood of a reactor trip and the unavailability of mitigating systems equipment. The inspectors determined that this finding had a cross-cutting aspect in the Problem Identification and Resolution cross-cutting area, Corrective Action Program component, because Entergy personnel did not thoroughly evaluate the problem when submerged cabling was initially

Inspection Report# : [2010003](#) (pdf)

Mitigating Systems

Significance:  Mar 10, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Actions to Promptly Correct Leaking Snubber Valves on the "A" Emergency Diesel Generator

The NRC identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, for Entergy's failure to promptly correct a condition adverse to quality. Specifically, Entergy did not correct defective material in their "A" Emergency Diesel Generators (EDG) in a timely manner which led to emergent maintenance and additional unplanned unavailability of the "A" EDG while they replaced cracked snubber valves.

The inspectors determined that the finding was more than minor because the finding was 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 (i.e., core damage). Specifically, the "A" EDG was unavailable during snubber valve replacements. The inspectors determined the significance of the finding using IMC 0609.04, "Phase 1 – Initial Screening and Characterization of Findings." The finding was determined to be of very low safety significance (Green) because the finding did not result in a loss of system safety function of a single train for greater than its Technical Specifications outage time, and did not screen as potentially risk significant due to external initiating events. This finding has a cross-cutting aspect in the Problem Identification and Resolution cross-cutting area, Corrective Action Program component, because Entergy did not take corrective actions in a timely manner. Specifically, Entergy did not replace the "A" EDG snubber valves in a prompt manner after repeated fuel leaks. Entergy's corrective actions include replacing the seven remaining snubber valves on their "A" EDG. (Section 1R19)

Inspection Report# : [2010002](#) (pdf)

Significance: SL-IV Dec 31, 2009

Identified By: NRC

Item Type: VIO Violation

Incomplete Licensed Operator Medical Examinations

A Severity Level IV violation (VIO) of 10 CFR 50.9, "Completeness and Accuracy of Information," was identified due to the submittal of inaccurate medical information for licensed operators. The submittals to the NRC were inaccurate because they certified that the operators had been medically examined and had met all medical qualifications, when in fact, olfactory testing to detect odor of products of combustion had not been performed. The facility has completed corrective actions to develop and administer an appropriate test. All licensed operators passed this new test, and no new license conditions were required.

The licensee's medical physician failed to adequately test all licensed operators (both initial and renewal licensees) in accordance with 10 CFR 55.21 and 55.33 with respect to ANSI/ANS-3.4 1983. The licensee submitted medical information for its licensed operators and applicants that was incomplete and incorrect in its assessment of the medical condition and general health of its licensed operators and initial applicants. The licensee's failure to provide complete and accurate information to the NRC, which could have resulted in an incorrect licensing action, is a performance deficiency because the licensee is expected to comply with 10 CFR 50.9, and because it was within the licensee's ability to foresee and prevent. Because violations of 10 CFR 50.9 are considered to be violations that potentially impede or impact the regulatory process, they are dispositioned using the Traditional Enforcement process. The applicability of cross-cutting aspects related to the performance deficiency of this finding will be determined after NRC review of Entergy's response to the Notice of Violation. (Section 1R11)

Inspection Report# : [2009005](#) (pdf)

Significance:  Oct 01, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to establish adequate procedures to prevent adverse impact due to spurious valve closure caused by fire damage.

The inspectors identified that Entergy did not ensure that plant procedures were adequate to prevent a spurious actuation from affecting the ability to provide a source of make-up water to the reactor vessel within 20 minutes following the evacuation of the control room during a fire as specified in procedure 2.4.143, Shutdown From Outside the Control Room, Revision 40. The finding was determined to be of very low safety significance (Green) and a NCV of the Pilgrim Nuclear Power Station Technical Specification 5.4.1.d, Procedures. Entergy entered the issue into the corrective action program and planned to implement changes to the procedure to resolve the issue. Entergy also reviewed completed reactor core isolation cooling (RCIC) and high pressure coolant injection (HPCI) system startup job performance measures (JPMs) and performed procedure walkthroughs to assess the time needed to attempt a RCIC start and then transfer to, and start HPCI to confirm these actions could be taken in within the time necessary to prevent lowering vessel level to that of the top of active fuel.

The inspectors determined that this finding was more than minor because it was associated with the procedure quality attribute of the mitigating system cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, during a fire in the control room or cable spreading room there are four valves in each of the RCIC and HPCI systems that could spuriously close due to fire damage to cabling. Procedure 2.4.143 does not ensure that the associated motor control center circuit breakers are opened (to prevent spurious closure) and that the valves are in the correct position prior to starting one of the systems to provide make-up to the reactor vessel. Unidentified spurious closure of the valves during or after startup of the systems could disable the system and delay establishment of reactor vessel makeup. The inspectors assessed this finding in accordance with NRC IMC 0609, Appendix F, Fire Protection Significance Determination Process. This finding affected safe shutdown capabilities and screened to very low safety significance (Green) in Phase 1 of the SDP because it was assigned a low degradation rating. A low degradation rating was assigned because it was determined to be a minor procedure issue that could be compensated for by operator experience and familiarity. No cross-cutting aspect was assigned because the inspectors concluded this issue was not indicative of current licensee performance. (Section 1R05.01)

Inspection Report# : [2009007](#) (*pdf*)

Barrier Integrity

Significance:  Sep 17, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain a Reliable Method for Transporting the SFP External Make-up Strategy Portable Fire Pump and Support Equipment.

This finding, affecting the Barrier Integrity Cornerstone, is related to mitigative measures developed to cope with losses of large areas of the plant; in response to Section B.5.b. of the February 25, 2002, Interim Compensatory Measures (ICM) Order (EA-02-026) and related NRC guidance. This finding has been designated as "Official Use Only - Security-Related Information;" therefore, the details of this finding are being withheld from public disclosure. This finding has a cross-cutting aspect in the area of Human Performance (Resources). [H.2(d)]. See inspection report for more details.

Inspection Report# : [2010008](#) (*pdf*)

Significance:  Jan 27, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Operability Determination Process and Temporary Modification Process for Compensatory Measures Required to Maintain Operability of Secondary Containment

The NRC identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion V, for Entergy's failure to implement procedures prescribed for activities affecting quality. Specifically, Entergy did not implement their operability determination process or their temporary modification process for compensatory measures needed to maintain the secondary containment operable.

The inspectors determined that the finding was more than minor because the finding was associated with the Human Performance attribute of the Barrier integrity Cornerstone, and adversely affected the cornerstone's objective to provide reasonable assurance that physical design barriers (containment) protect the public from radionuclide releases caused by accidents or events. Specifically, operations and engineering did not adequately implement operability determination and temporary modification procedures when degraded and/or non-conforming conditions associated with the secondary containment torus troughs were identified. The inspectors determined the significance of the finding using IMC 0609.04, "Phase 1 – Initial Screening and Characterization of Findings." The finding was determined to be of very low safety significance (Green) because the finding only represented an impact to the radiological barrier function provided by secondary containment and the standby gas treatment system. This finding has a cross-cutting aspect in the Human Performance cross-cutting area, Work Practices component, because Entergy did not follow procedures. Specifically, Entergy did not implement their operability determination or temporary modification procedures for compensatory measures needed to maintain the secondary containment operable. Entergy's corrective actions included designating the compensatory measures as necessary to maintain operability for both torus troughs and implementation of temporary modifications for the equipment installed in the plant to support these compensatory measures. (Section 1R18)

Inspection Report# : [2010002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : November 29, 2010