

FitzPatrick

4Q/2012 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Install Reserve Station Service Transformers in Accordance with Procedure

The inspectors identified a self-revealing, Green non-cited violation (NCV) of Technical Specification (TS) 5.4, "Procedures," because FitzPatrick personnel did not perform installation of replacement reserve station service transformers (RSSTs) 71T-2 and 71T-3 in accordance with written procedures. Specifically, station personnel did not remove the shorting bars from the current transformer (CT) circuits, as specified by the work instructions, which impacted trip set points for the transformer differential current protection relays. As a result, the 71T-3 differential protection circuitry actuated after the start of a major electrical load when it was not required, which caused a transformer lockout and loss of offsite power. As immediate corrective action, operators reestablished station power from the normal station service transformer via the 345 kilovolt (KV) back feed and secured the emergency diesel generators (EDGs). The issue was entered into the corrective action program (CAP) as condition report (CR)-JAF-2012-06866.

The finding was more than minor because it affected the equipment performance attribute of the Initiating Events cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors evaluated the finding in accordance with IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process." Per Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Operational Checklists for both PWRs and BWRs," Checklist 7, "BWR Refueling Operation with RCS Level > 23'," the issue constituted a finding because, after the event, FitzPatrick did not have one operable qualified circuit between the offsite transmission network and the onsite 1E AC electrical power distribution subsystems. Also, per Checklist 7, this was not a finding requiring phase 2 or phase 3 analysis, nor did it constitute a loss of control event per Appendix G, Table 1. Therefore, the finding screened as very low safety significance (Green).

This finding had a cross-cutting aspect in the area of Human Performance, Resources, because Entergy staff did not provide an accurate and up-to-date work package for installation of the RSSTs, in that the package did not include a drawing of the CT shorting terminal configured with the shorting bar removed, nor did they ensure that the work package was appropriately updated with clarifying information after workers questioned the existing instructions [H.2(c)].

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

Significance: G Jun 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Procedure for Installation of Reactor Water Recirculation Motor-Generator Scoop Tube Positioners

The inspectors identified a self-revealing non-cited violation (NCV) of Technical Specification (TS) 5.4, "Procedures," because Entergy staff did not provide adequate procedures for installation of a plant modification to replace the reactor water recirculation (RWR) motor-generator (MG) scoop tube positioners during the 2010 refueling outage. Specifically, excessive torque was specified for use on positioner ball joint fasteners, which damaged one of

the ball joints and resulted in subsequent binding during attempted operation. As a result, on November 11, 2010, the 'B' RWR MG scoop tube positioner bound when operators attempted to reduce pump speed, and released the following day which resulted in an unexpected power reduction of approximately 1.5 percent (40 megawatts thermal (MWt)). As immediate corrective action, control room operators reduced flow in the 'A' RWR loop to restore compliance with the TS requirement for balanced loop flow, then locked the scoop tubes for both RWR MGs pending further evaluation of the event. The issue was entered into the corrective action program (CAP) as condition report (CR)-JAF-2010-07782.

The finding was more than minor because it was similar to example 4.b in Inspection Manual Chapter (IMC) 0612, Appendix E, "Examples of Minor Issues," in that it resulted in a plant transient. The finding also affected the Initiating Events 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. The inspectors evaluated the finding using the Phase 1, "Initial Screening and Characterization," worksheet in Attachment 4 to IMC 0609, "Significance Determination Process." The inspectors determined the finding was not a loss of coolant accident or external events initiator, and did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Therefore, the inspectors determined the finding to be of very low safety significance. The finding had a cross-cutting aspect in the area of Human Performance, Resources, because Design Engineering personnel did not ensure that accurate design documentation and procedures were available to assure successful implementation of the RWR MG scoop tube positioner modification [H.2(c)]. (Section 4OA2)

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

Mitigating Systems

Significance: G Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure of 'A' EDG Output Breaker to Close Following Loss of Offsite Power

The inspectors identified a self-revealing, Green non-cited violation (NCV) of Technical Specification (TS) 5.4, "Procedures," because Entergy did not establish and implement an adequate procedure for installation of a 4160 volt alternating current (VAC) circuit breaker. Specifically, FitzPatrick's procedure for 4160 VAC circuit breaker installation did not provide sufficient guidance to station personnel to preclude physical misalignment of the 'A' emergency diesel generator (EDG) output breaker which occurred during installation on September 15, 2011, and resulted in failure of the breaker to close when required following a loss of offsite power on October 5, 2012. As immediate corrective action, the 'A' EDG output breaker was racked out, re-aligned in the cubicle, and racked back in such that it was no longer misaligned and was flush with the front of the cubicle. An instrumented test of the 'A' and 'C' EDGs was performed and all breakers operated correctly. The issue was entered into the corrective action program (CAP) as condition report (CR)-JAF-2012-06868. The finding was more than minor because it affected the equipment performance attribute of the Mitigating Systems cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the reliability of Division 1 EDG automatic operation was degraded for approximately one year due to the 'A' EDG breaker misalignment issue. Although the issue was identified while the plant was shut down, the inspectors determined that it was appropriate to evaluate the condition in accordance with the at-power SDP because the condition existed for the previous year. In accordance with Inspection Manual Chapter (IMC) 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," the inspectors determined that the finding was of very low safety significance because the finding was not a design qualification deficiency resulting in a loss of functionality or operability, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk significant due to external initiating events. Specifically, the 'A' EDG breaker continued to perform its safety

function as evidenced by monthly surveillance tests until the misalignment condition ultimately impacted its ability to close subsequent to October 3, 2012 testing. The finding had a cross-cutting aspect in the area of Human Performance, Resources, because FitzPatrick personnel did not ensure that a complete, accurate and up-to-date procedure was available for 4160 VAC circuit breaker installation. Specifically, procedure did not include steps to ensure correct alignment during breaker racking and to verify flush alignment [H.2(c)].

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

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Action to Address Crescent Area Unit Cooler Operability

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," because FitzPatrick staff did not take timely corrective action to verify that a crescent area unit cooler was operable under postulated conditions of degraded grid voltage. Specifically, FitzPatrick staff did not schedule first time low voltage pickup testing for unit cooler 66UC-22B until after summer lake temperature had increased to the point that removing the unit cooler from service would have challenged the temperature limit for ultimate heat sink (UHS) operability. When the test was later performed, the as-found pickup voltage exceeded the maximum allowed by the procedure and required a case-specific analysis to demonstrate operability. As immediate corrective action, FitzPatrick electricians cleaned the contact assembly and retested the unit, with satisfactory results. FitzPatrick staff entered this issue into the corrective action program as condition report (CR)-JAF-2012-04443.

The finding was more than minor because it was similar to example 3.i in Inspection Manual Chapter (IMC) 0612, Appendix E, "Examples of Minor Issues," in that a case-specific engineering analysis was required to assure the accident analysis requirements were met. The finding also affected the equipment performance attribute of the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding in accordance with IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," and determined that the finding was of very low safety significance (Green) because 66UC-22B maintained its functionality. The finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because FitzPatrick staff did not take appropriate corrective actions to address a safety issue in a timely manner, commensurate with its safety significance [P.1.(d)]. (Section 1R15)

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

Significance:  Jun 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Follow Procedure During Removal from Service of Emergency Diesel Generator Ventilation

The inspectors identified a self-revealing non-cited violation (NCV) of Technical Specification (TS) 5.4, "Procedures," because Entergy personnel did not adequately implement procedures when removing the ventilation system for the 'A' emergency diesel generator (EDG) subsystem from service. Specifically, operators did not implement tagout placement instructions, which required that the affected EDGs be declared inoperable once the ventilation system was tagged out. Additionally, control room operators did not respond to the resultant 'A' EDG ventilation system common alarm in accordance with the alarm response procedure, which also would have led to the EDGs being declared inoperable. As a result, TS 3.8.1 was not entered in a timely manner and the TS surveillance requirement was not performed within the specified completion time. As immediate corrective action, the 'A' EDG subsystem was declared inoperable and the specified surveillance requirement was completed. The issue was entered

into the corrective action program (CAP) as condition report (CR)-JAF-2012-02591.

The finding was more than minor because it affected the equipment performance attribute of the Mitigating Systems cornerstone objective to ensure the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the offsite electrical circuits were not verified available by operators for approximately three hours while the 'A' EDG subsystem was inoperable. The inspectors evaluated the finding using the Phase 1, "Initial Screening and Characterization of Findings," worksheet in Attachment 4 to Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." The inspectors determined this finding was not a design qualification deficiency resulting in a loss of functionality or operability, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk significant due to external initiating events. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of Human Performance, Work Practices, because operators did not follow procedures [H.4(b)]. (Section 1R13)

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

Significance: N/A Apr 24, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

NRC Not Notified of a Licensed Operator's Change in Medical Status

The inspectors identified a Severity Level IV NCV 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 a licensed operator. Subsequently, Entergy submitted a notification for the operator on February 15, 2012, and entered the issue into their corrective action program (CR-JAF-2012-00576). The inspectors determined that Entergy's failure to notify the NRC within 30 days of discovering the change in medical condition for the licensed operator was a performance deficiency that was within Entergy personnel'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.

The significance of the associated performance deficiency was screened against the ROP per the guidance of IMC 0612, Appendix B. No associated ROP finding was identified and no cross-cutting aspect was assigned. This issue is similar to violation example 6.4'd.1 (a) in the NRC Enforcement Policy for a Severity Level IV violation because it involves noncompliance with medical requirements where the operator did not perform the functions of a licensed operator while having the potentially disqualifying medical condition. (Section 4OA5)

Inspection Report# : [2012301](#) (*pdf*)

Significance: N/A Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Submit an LER Revision for a Condition Prohibited by TS Associated with the HPCI System

The inspectors identified a Severity Level (SL) IV non-cited violation (NCV) of 10 CFR Part 50.73, "Licensee Event Report [LER] System," because a violation of Technical Specification (TS) 3.5.1.G for the condition of the high pressure coolant injection (HPCI) and reactor core isolation cooling (RCIC) systems being simultaneously inoperable was not reported to the NRC within 60 days of discovery. After this was identified by the inspectors, the issue was entered into Entergy's corrective action program (CAP) as CR-JAF-2011-04779. Entergy subsequently submitted Revision 1 to LERs 05000333/2010-005-00 and 05000333/2011-001-00.

The inspectors determined that the failure to revise LER 05000333/2010-005-00 within 60 days to include the violation of TS 3.5.1.G in accordance with 10 CFR Part 50.73 was a performance deficiency that was reasonably within Entergy's ability to foresee and correct, and should have been prevented. Because the issue impacted the regulatory process, in that a violation of site Technical Specifications was not reported to the NRC within the required timeframe, thereby delaying the NRC's opportunity to review the matter, the inspectors evaluated this performance deficiency in accordance with the traditional enforcement process. Using example 6.9.d.9 from the NRC Enforcement Policy, the inspectors determined the violation was a SL IV violation because Entergy personnel did not make a report required by 10 CFR Part 50.73. In accordance with IMC 0612, Appendix B, there was no underlying ROP performance issue that was more than minor and therefore the issue was not assigned a cross-cutting aspect.

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

Significance: N/A Mar 16, 2012

Identified By: NRC

Item Type: FIN Finding

Identification and Resolution of Problems

The inspectors concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. James A. FitzPatrick Nuclear Power Plant (FitzPatrick) personnel identified problems, entered them into the corrective action program (CAP) at a low threshold, and prioritized issues commensurate with their safety significance. In most cases, station personnel appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent-of-condition, generic issues, and previous occurrences. The inspectors also determined that Entergy personnel typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner.

The inspectors concluded that, in general, Entergy adequately identified, reviewed, and applied relevant industry operating experience to FitzPatrick operations. In addition, based on those items selected for review, the inspectors determined that Entergy's self-assessments and audits were self-critical and thorough. Station personnel effectively identified and elevated adverse performance trends for senior site management review through use of the Entergy Trending Process.

Based on interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify indications that site personnel were unwilling to raise safety issues nor did they identify conditions that could have had a negative impact on the site's safety conscious work environment.

Inspection Report# : [2012008](#) (*pdf*)

Significance: SL-III Dec 31, 2011

Identified By: NRC

Item Type: VIO Violation

EA-10-090/EA-10-248/EA-11-106 RP Technician Willful Violations

During NRC investigations initiated on July 1, 2009, February 5, 2010, and April 8, 2010, violations of NRC requirements were identified. The following requirements were violated: 10 CFR 20.1703, 'Use of individual respiratory protection equipment'; 10 CFR 20.1501, Subpart F, 'Surveys and Monitoring'; 10 CFR 50.9, 'Completeness and accuracy of information'. Contrary to the listed requirements, the licensee employees willfully violated multiple procedures and incorrectly documented completion of surveys and respirator fit tests.

These violations are categorized collectively as a Severity Level III violation. The NRC offered and Entergy accepted to conduct Alternative Dispute Resolution (ADR) for the above listed violations. The NRC has issued Confirmatory Order (CO) EA-10-090, EA-10-248, EA-11-106 in response to the agreed upon ADR actions. As addressed in the CO, no civil penalty was assessed based on previous actions completed and actions agreed to be completed by the licensee.

Inspection Report# : [2011009](#) (*pdf*)

Last modified : February 28, 2013