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Indian Point 3 – Quarterly Plant Inspection Findings

4Q/2017 – Plant Inspection Findings

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Initiating Events

Mitigating Systems

Significance: G Dec 05, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Alternative Post-Fire Safe Shutdown Procedure

An NRC-identified finding of very low safety significance (Green), involving a NCV of Indian Point Unit 3 Facility Operating License (FOL) Condition 2.H, was identified because Entergy did not implement and maintain in effect all provisions of the Fire Protection Program (FPP), as approved by the NRC. Specifically, Entergy did not have an adequate post-fire operating procedure for its alternative shutdown capability to ensure that safe shutdown (SSD) equipment analyzed to be available during the postulated fire in fire area ETN-4{2}, Upper Electrical Tunnel, were credited in the procedure. Entergy entered this issue into its corrective action program (CAP) and promptly implemented compensatory measures by establishing a fire watch.

This finding was more than minor because it was associated with the Protection Against External Factors (e.g., fire) attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective of ensuring the reliability and capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). The team performed a Phase 2 Significance Determination Process (SDP) screening for this issue, in accordance with NRC IMC 0609, Appendix F, "Fire Protection Significance Determination Process." This finding affected the post-fire safe shutdown category because the implementing procedures were adversely affected. The team determined that this finding screened to very low safety significance (Green) based upon, task 2.3.5, because no credible fire ignition source scenarios were identified in fire area ETN-4{2} that could affect both electrical channels I

and II cables. This finding did not have a cross-cutting aspects because it was a legacy issue and was considered to not be indicative of current licensee performance.

Inspection Report# : 2017007 (*pdf*)

Significance:  Dec 05, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Maintain B.5.b Mitigating Strategies

An NRC-identified finding of very low safety significance (Green) and NCV of 10 CFR 50.54(hh)(2), "Conditions of Licenses," the Unit 2 FOL Condition 2.N, and the Unit 3 FOL Condition 2.AC was identified for failure to maintain strategies for addressing large fires and explosions. Specifically, Entergy failed to maintain the B.5.b strategies when the site's Diesel Contingency Pump (B.5.b Pump), B5B-101-PMP, was declared non-functional and unavailable on March 20, 2017, due to a deficiency associated with the pump's engine and failed to promptly restore the pump to a functional status or establish any compensatory measures. Entergy entered this issue into its CAP and promptly completed repairs B.5.b pump.

This finding was more than minor because it is associated with the Protection Against External Factors (e.g., fire) attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent core damage. The team evaluated the significance of the finding in accordance Inspection Manual Chapter 0609, Appendix L, "B.5.b Significance Determination Process." The finding was determined to be of very low safety significance (Green) because, although the B.5.b Pump was considered unavailable, the team concluded that the pump was recoverable. This finding had a cross-cutting aspect of Resources (H.1), in the area of Human Performance, because leaders did not ensure that personnel, equipment, procedures, and other resources were available and adequate to support nuclear safety. Specifically, procedural guidance and equipment were not available to operators to implement adequate compensatory measures when the B.5.b Pump became non-functional and unavailable.

Inspection Report# : 2017007 (*pdf*)

Significance:  Aug 07, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Maintain Flow Channeling Gate Closed in Accordance with the Containment Procedure

The inspectors identified a Green NCV of Technical Specification (TS) 5.4.1, "Procedures," for Entergy's failure to implement procedure OAP-007, "Containment Entry and Egress." Specifically, workers transiting the inner and outer crane wall sections of containment on May 14, 2017, did not maintain flow channeling gate C secured during Mode 4 to ensure availability of the containment sumps to provide suction for the emergency core cooling system (ECCS). Entergy immediately restored gate C to an acceptable configuration, and generated condition report (CR)-IP3-2017-02737 to address this issue.

This performance deficiency was more than minor because it is associated with the configuration control (shutdown equipment lineup) attribute and adversely affected the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). A detailed risk assessment was conducted and the change in core damage frequency was determined to be 2E-8, therefore, this issue represents a Green finding. The inspectors determined that this finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Resolution, because Entergy did not take effective corrective actions to address issues in a timely manner commensurate with their safety significance. Specifically, the corrective actions from the event for the prior year were ineffective at preventing this occurrence. Inspection Report# : 2017002 (*pdf*)

Significance:  May 10, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Operation in Mode 1 with Pressurizer Code Safety Valves in an Inoperable Condition

The inspectors identified an NCV of very low safety significance of Technical Specification (TS) 3.4.10, "Pressurizer Safety Valves," when two of three pressurizer code safety valves, RC-PCV-464 and RC-PCV-468, were reported to have failed surveillance test 3.4.10.1 on July 1, 2015, at Wylie Laboratory. Entergy reported these failures under Unit 3 licensee event reports (LERs) 2015-006-00 and 2015 006 01, and concluded that Unit 3 had violated TS 3.4.10, Condition B. Entergy had failed to evaluate three prior test failures from RC-PCV-468 and recognized that RC-PCV-468 had degraded reliability. As a result, Entergy elected not to reinstall RC-PCV-468 at the end of the current outage (condition report (CR) IP3 2017 0913).

The inspectors determined that failing to correlate the symptoms and identify the cause for the repeated failure history of valve RC-PCV-468 over the last ten years resulted in a reported violation of TS 3.4.10 as reported in LERs 2015-006-00 and 2015-006-01. RC PCV-468 was reinstalled in the system in 2012 and subsequently failed its lift setpoint test in 2015. 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 impacts the objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to be of very low safety significance (Green) because the small increase (5 percent) in the lift setpoint of the safety valves would not have prevented the valve from failing to relieve and, therefore, the failed surveillance test did not represent a loss of safety function. The inspectors concluded this finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Evaluation, because Entergy did not thoroughly evaluate the failure history to address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : 2017001 (*pdf*)

Significance:  Jul 20, 2012

Identified By: NRC

Item Type: VIO Violation

Failure to Protect Safe Shutdown Equipment from the Effects of Fire

The inspectors identified a finding of very low safety significance (Green), involving a cited violation of Indian Point Unit 3 Operating License Condition 2.H to implement and maintain all aspects of the approved fire protection program. Specifically, ENO failed to protect required post-fire safe shutdown components and cabling to ensure one of the redundant trains of equipment remained free from fire damage as required by 10 CFR Part 50, Appendix R, Section III.G.2. In lieu of protecting a redundant safe shutdown train, ENO utilized unapproved operator manual actions to mitigate component malfunctions or spurious operations caused by postulated single fire-induced circuit faults. ENO submitted an exemption request (M1090760993) on March 6, 2009, in which it sought exemption from requirements of Paragraph III.G.2, to permit the use of OMAs upon which it had been relying for safe-

shutdown in a number of fire areas. However, several OMAs within the exemption request were denied because ENO failed to demonstrate that the OMAs were feasible and reliable, or to appropriately evaluate fire protection defense-in-depth. ENO's performance deficiency delayed achieving full compliance with fire protection regulations and adversely affected post-fire safe shutdown. ENO has entered this issue into the corrective program for resolution. The inspectors found the manual actions in addition to roving fire watches in all affected areas to be reasonable interim compensatory measures pending final resolution by ENO.

ENO's failure to protect components credited for post-fire safe shutdown from fire damage caused by single spurious actuation is considered a performance deficiency. The performance deficiency was more than minor because it affected the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to an external event to prevent undesirable consequences in the event of a fire. Specifically, the use of operator manual actions during postfire safe shutdown is not as reliable as normal systems operation which could be utilized had the requirements of 10 CFR 50, Appendix R, Section III.G.2 been met and, therefore, prevented fire damage to credited components and/or cables. The inspectors used IMC 0609, Appendix F, Fire Protection Significance Determination Process, Phase 1 and a Senior Reactor Analyst conducted a Phase 3 evaluation, to determine that this finding was of very low safety significance (Green). This finding does not have a cross cutting aspect because the performance deficiency occurred greater than three years ago when the exemption request was submitted to the NRC on March 6, 2009, and is not indicative

of current licensee performance.

Inspection Report# : 2012008 (*pdf*)

Barrier Integrity

Significance: G May 10, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Standard Operation Procedure for the Backup Spent Fuel Pool Cooling System

The inspectors identified an NCV of very low safety significance of TS 5.4, "Procedures," because Entergy did not adequately establish and maintain procedure 3-SOP-SFP-003, "Operation of the Backup Spent Fuel Pool Cooling (BSFPC) System." The updated final safety analysis report (UFSAR) for Unit 3 included several administrative controls for the use of the BSFPC system as the sole source of cooling to the fuel pool; and some of these controls were not captured in 3 SOP SFP 003 and, therefore, were not implemented. Entergy wrote CR IP3-2017-00510 to enter this concern into their corrective action program (CAP).

The inspectors determined that failing to include all of the administrative controls in procedure 3-SOP-SFP-003 was a performance deficiency. This performance deficiency was more than minor because it is associated with the Procedure Quality attribute of the Barrier Integrity cornerstone; and if the condition was left uncorrected, the latent equipment issues in the system could have resulted in an undetected or uncorrectable loss of spent fuel pool (SFP) cooling. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 3 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued June 19, 2012, the inspectors determined that the finding was of very low safety significance (Green) because it did not cause the SFP temperature to exceed the maximum analyzed temperature limit specified in the licensing basis. This finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Evaluation, because when Entergy improved 3-SOP-SFP-003 in response to other identified procedural deficiencies, they did not capture the missing administrative controls in their extent of condition.

Inspection Report# : 2017001 (*pdf*)

Emergency Preparedness Occupational Radiation Safety

Public Radiation Safety Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : February 01, 2018

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