Indian Point 2
1Q/2009 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify Charred Components in EDG Ventilation Motor Control Center #2
The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Actions, because Entergy did not identify that an electrical fault occurred in a safety-related motor control center (MCC) prior to re-energizing the MCC. In addition, the damaged portion of the MCC remained energized for 14 days after it was identified. Entergy entered the issue into the corrective action program, trained all operations personnel on the requirements to replace fuses and re-energize electrical equipment, and is revising the operations procedure for operating electrical equipment.

This issue was more than minor because the finding was associated with the external factors attribute of the initiating events cornerstone and impacted the initiating events cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety systems during shutdown as well as power operations. Specifically, energizing charred electrical components and maintaining them energized for 14 days increased the likelihood of a fire in the EDG building. The condition was evaluated by a Senior Reactor Analyst utilizing phase two of IMC 0609 Appendix F, Fire Protection Significance Determination Process. It was determined that in the event of an electrical fault-induced fire consuming the MCC, no transient would be placed on the plant and no components required to safely shutdown the plant would be impacted. As a result, in accordance with task 2.3.5 of Appendix F, the issue was screened to Green. The inspectors determined that a cross-cutting aspect was associated with this finding in the area of human performance, in the component of decision making, in the aspect of conservative assumptions. Specifically, the decision by Operations personnel to replace fuses and re-energize the EDG building MCC without determining the source of acrid odor in the building was non-conservative. The decision by operations to attempt to locally reclose switches on the affected MCC without performing internal visual inspections was non-conservative. And lastly, after the charred bucket was identified on January 28, 2009, the organizational decision to leave the bucket energized was non-conservative. H.1(b)

Inspection Report# : 2009002 *(pdf)*

Significance: G Mar 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Maintenance Procedure for EDG Ventilation Motor Control Center #2
The inspectors identified a Green non-cited violation of TS 5.4.1, “Procedures,” because Entergy did not maintain an adequate maintenance procedure for a safety related motor control center (MCC). Specifically, the eight-year MCC maintenance procedure, which was performed for the first time on April 6, 2008, did not contain an adequate method to identify high resistance connections within the cubicle. Subsequently, a high resistance connection within the MCC developed into a phase-to-phase electrical fault on January 28, 2009. Entergy entered the issue into the corrective action program, scoped the affected MCC and 21 additional MCCs into the site’s thermography program, and planned to revise the maintenance procedure.

The inspectors determined that the finding was more than minor because it was associated with the external factors attribute of the initiating events cornerstone and impacted the initiating events cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety systems during shutdown as well as power operations. Specifically, the inadequate maintenance procedure resulted in a phase-to-phase fault on January 28, 2009 which increased the likelihood of a fire in the EDG building. The condition was evaluated by a Senior

Reactor Analyst utilizing phase two of IMC 0609 Appendix F, Fire Protection Significance Determination Process. It was determined that in the event of a fire consuming the MCC, no transient would be placed on the plant and no components required to safely shutdown the plant would be impacted. As a result, in accordance with task 2.3.5 of Appendix F, the issue was screened to Green. The inspectors determined that the finding had a cross-cutting aspect associated with the area of problem identification and resolution, in the component of operating experience (OE), in the aspect of implementation. Specifically, Entergy did not implement industry recommended practices, or an alternate equivalent method, for identifying high resistance connections in electrical switchgear. P.2(b)
Inspection Report# : 2009002 *(pdf)*

Significance: G Jun 30, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow Plant Start-Up Procedure Regarding MBFP Turbine Runback Arm/Defeat Switch
A Green, self-revealing non-cited violation (NCV) of Technical Specification 5.4.1, “Administrative Controls - Procedures,” was identified, because Entergy did not implement the requirements of plant startup procedure 2-POP-1.3, "Plant Startup from Zero To 45% Power.” Specifically, operators performed a step out of sequence in the plant operating procedure that was not warranted by plant conditions, and resulted in a main turbine runback followed by a manual reactor trip initiated by control room operators. Entergy entered this issue into the corrective action program, initiated procedural enhancements, performed a post-trip evaluation, and a root cause evaluation.

The inspectors determined that this finding was more than minor because it was associated with the human performance attribute of the Initiating Events cornerstone and impacted 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. The inspectors evaluated this finding using the Phase 1 analysis of IMC 0609, Appendix A, “Significance Determination of Reactor Inspection Findings for At-Power Situations,” and determined it to be of very low safety significance because it did not contribute to the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would be unavailable.

The finding had a cross-cutting aspect in the area of human performance because Entergy staff utilized work practices that did not support effective human error prevention techniques by proceeding in the face of uncertainty and unexpected circumstances, when they prematurely positioned the arm/defeat switch contrary to plant procedures and conditions. (H.4(a))
Inspection Report# : 2008003 *(pdf)*

Significance: G Jun 30, 2008
Identified By: Self-Revealing
Item Type: FIN Finding
Failure to Follow Camera Controls Procedure Resulting in RFI Induced MBFP Runback and Subsequent Manual Reactor Trip
A Green, self-revealing finding was identified because Entergy did not implement procedural requirements to evaluate flash photography in the vicinity of sensitive control cabinets. Specifically, Entergy did not implement procedure EN-NS-214, “Camera Controls for Access and Use,” and evaluate the potential impact of flash photography on sensitive control circuitry. Radiofrequency interference (RFI) from the digital camera during flash photography resulted in a main boiler feed pump runback which required a subsequent manual reactor trip. Entergy entered the issue into the corrective action process, performed site-wide training regarding the potential impacts of RFI from digital cameras on digital plant equipment and reinforced expectations to site
personnel regarding procedural compliance.

The inspectors determined that this finding was more than minor because it was associated with the human performance attribute of the Initiating Events cornerstone and impacted the objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors evaluated this finding using Phase 1 of IMC 0609, Appendix A, “Determining the Significance of Reactor Inspection Findings for At-Power Situations.” The inspectors determined that this finding was of very low safety significance because it did not contribute to both the likelihood of a

reactor trip and the likelihood that mitigation equipment or functions would not be available.

The inspectors determined that this finding has a cross-cutting aspect in the area of human performance because Entergy did not effectively communicate expectations regarding procedural compliance and personnel did not follow the applicable procedures. (H.4(b))
Inspection Report# : 2008003 *(pdf)*

Mitigating Systems

Significance: G Mar 31, 2009
Identified By: NRC
Item Type: FIN Finding
Failure to Identify Stuck Open Louvers in 11 Fire Pump House
The inspectors identified a Green Finding because Entergy did not identify stuck-open louvers in a fire protection pump room following a pump test on January 14, 2009. The open louvers resulted in freezing conditions in fire protection piping located in the room and cracked two six-inch header isolation valves on January 17, 2009. Entergy entered the issue into the corrective action program and performed a site-wide extent-of-condition walkdown of louvers.

The inspectors determined that the finding was more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems cornerstone, and it affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the catastrophic failure of the six-inch valves impacted the reliability of the fire header until the ruptured valves were isolated. This finding was evaluated using Phase 1 of Inspection Manual Chapter (IMC) 0609 Appendix F, “Fire Protection Significance Determination Process.” The inspectors determined the issue was of very low safety significance because the cracked valves were easily isolated and did not pass sufficient water to render the fire header non-functional. Specifically, the inspectors assigned a low degradation to the fire header because the fire pumps were able to maintain pressure in the fire header until the ruptured valves were isolated. The inspectors determined that the finding had a cross-cutting aspect in the area of human performance, in the component of work practices, in the aspect of human error prevention techniques, because Entergy personnel proceeded in the face of unexpected circumstances. Specifically, personnel that routinely tour the 11 fire pump house did not question why the room was much colder than normal. H.4(a)

Inspection Report# : 2009002 *(pdf)*

Significance: G Mar 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify and Promptly Correct Degraded 480 Volt Switchgear Room Fore Door
The inspectors identified a Green non-cited violation of License Condition 2.K., fire protection program, because Entergy did not promptly identify and correct a degraded three-hour rated fire door latch mechanism on the west entrance of the 480 Volt switchgear room. Specifically, inspectors identified the fire door in a non-functional state on February 6, 2009, again on February 18, 2009, and again on March 3, 2009. Entergy replaced the fire door latch mechanism on March 3, 2009. This issue was entered into the corrective action program as six condition reports spanning several weeks and included an extent of condition walkdown on March 3, 2009 of all site fire doors.

The finding was more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems cornerstone and it affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, in the event of a large fire in the 480-Volt switchgear room or the Turbine Building, the affected fire door is credited to prevent the spread of fire from one area to the other area. When degraded, this door impacts the reliability of mitigating systems in the 480-Volt switchgear room that are relied upon during a large fire in the turbine building, and vice versa. This finding was

evaluated using Phase X of Inspection Manual Chapter (IMC) 0609 Appendix F, “Fire Protection Significance Determination Process.” The inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution because Entergy personnel did not thoroughly evaluate a degraded fire door latch on February 6, 2009, again on February 18, 2009, and again on February 23, 2009, such that the resolution addressed the cause. P.1(c)

Inspection Report# : 2009002 *(pdf)*

Significance:  Mar 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Include RWST Level Indicator Maintenance in Online Risk Assessment
The inspectors identified a Green non-cited violation of 10 CFR 50.65(a)(4), because Entergy did not adequately assess and manage the risk associated with the unavailability of the Refueling Water Storage Tank (RWST) level indication during planned maintenance on the level transmitters and instrumentation. Entergy entered the issue into the corrective action program, updated the risk model to include the maintenance activity, assessed the risk, and appropriately coded the maintenance activity to ensure it would be risk assessed in the future.

The inspectors determined that this finding was more than minor because Entergy failed to consider risk significant SSCs that were unavailable during maintenance. The RWST level indication is specifically listed in Table 2 of the plant specific Phase 2 SDP risk-informed inspection notebook. The inspectors determined the significance of this issue in accordance with Inspection Manual Chapter (IMC) 0609, Appendix K, “Maintenance Risk Assessment and Risk Management Significance Determination Process.” The inspectors determined that this finding was of very low safety significance because the Incremental Core Damage Probability Deficit was less than 1E-6. The inspectors determined that the finding had a cross-cutting aspect related to using risk insights to plan work in the Work Control component of the Human Performance area. Specifically, Entergy did not appropriately plan work activities by incorporating risk insights for affected plant equipment. H.3(a)

Inspection Report# : 2009002 *(pdf)*

Significance:  Mar 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Test Acceptance Criteria for Auxiliary Component Cooling Check Valves
The inspectors identified a non-cited violation of 10 CFR 50.55a, “Codes and standards,” because Entergy’s procedure, 2-PT-Q031A, did not contain appropriate acceptance criteria for positively determining that safety related check valves performed their safety function when required in accordance with the American Society of Mechanical Engineers (ASME) OM Code. Specifically, the test used reverse rotation of a parallel pump to verify that the pump’s discharge check valve was closed although past performance demonstrated that the pump, in fact, does not spin backwards when the check valve was stuck open. Entergy entered this issue into their corrective action program as CR-2009-1312.

The inspectors determined that the performance deficiency was greater than minor because it was associated with the Procedure Quality attribute of the Mitigating System cornerstone and it adversely affected the cornerstone’s objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the test criterion used in procedure 2-PT-Q013A did not ensure that valve 755A reliably performed its safety function when tested as demonstrated by testing performed in January 2005. The inspectors determined that the performance deficiency was of very low safety significance (Green) using NRC Inspection Manual Chapter 0609, Attachment 4, “Phase 1 – Initial Screening and Characterization of Findings.” Specifically, the inspectors answered “no” to all of the questions in the Mitigating Systems Cornerstone column of the characterization worksheet. The performance deficiency had a cross-cutting aspect related to appropriate corrective actions in the Corrective Action Program component of the Problem Identification and Resolution area. P.1(d).

Inspection Report# : 2009002 *(pdf)*

Significance: G Aug 15, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Design Control of Internal Recirculation Pumps
•Green. The team identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control, because Entergy did not verify the adequacy of the internal recirculation pump minimum flow rates. Specifically, Entergy did not verify the adequacy of the pump minimum flow rates for sustained operation under low flow rate conditions or for strong-pump to weak-pump interactions which could result in dead-heading the weaker pump during parallel pump operation. Following identification of the issue, Entergy revised the Emergency Operating Procedures (EOP) to not start a second internal recirculation pump during conditions of high head recirculation, submitted a licensee event report (LER) for each generating unit, and entered the issue into the corrective action program.

The finding was determined to be more than minor because it is associated with the design control attribute of the Mitigating Systems (MS) Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. On Unit 2, the team determined the finding was of very low safety significance because it was a design or qualification deficiency confirmed not to result in loss of operability or functionality.

The deficiency was not indicative of current performance because the modification on Unit 2 was performed in May 2000. Therefore, there was no cross-cutting aspect.

Inspection Report# : 2008012 *(pdf)*

Significance: G Aug 08, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Auxiliary Feedwater System Configuration Control Deficiencies
The inspectors identified a Green NCV of Technical Specification 5.4.1, “Administrative Controls - Procedures,” because Entergy did not implement the Auxiliary Feedwater (AFW) operating procedures required by Regulatory Guide 1.33 Appendix A. Specifically, the inspectors identified an AFW drain valve that was not in the required position and an AFW isolation valve that was in the correct position but was not locked as required. Entergy evaluated the as-found configuration of the valves and determined that the AFW system operability was not impacted. Entergy also performed system alignment verifications of AFW and other safety-related systems as part of an extent-of-condition review.

The inspectors determined the finding was more than minor because it was associated with the configuration 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. The inspectors determined the significance of the finding using Inspection Manual Chapter 0609.04, “Phase 1 – Initial Screening and Characterization of Findings.” The inspectors determined that this finding was of very low safety significance because the finding did not result in a loss of safety function and did not screen as potentially risk-significant due to external events initiating events. Specifically, the inspectors determined that the as-found configuration of the identified components did not adversely impact system operability. The finding had a cross-cutting aspect in the area of human performance because operators did not use adequate self and peer checking techniques when shutting an open drain valve or when attaching a locking device to an isolation valve. (H.4(a))

Inspection Report# : 2008004 *(pdf)*

Significance: G Jul 29, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
On-line Leak Repairs Made Without Use of Proper Procedures
The inspectors identified a non-cited violation of Technical Specification 5.4.1, “Procedures,” when Entergy did not

implement on-line leak repair procedures to repair a steam leak on valve MS-2A. Specifically, Entergy performed multiple leak sealant injections on valve MS-2A without engineering controls described in station on-line leak repair procedures. Corrective actions planned included reviewing this issue with the planning and component engineering departments and determining if training on the on-line leak sealing procedures is warranted.

The finding was more than minor because, if left uncorrected, inadequate control of leak-sealant injections would become a more significant safety concern. The inspectors determined the significance of the finding using Inspection Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings." The finding was determined to be of very low safety significance (Green) because it did not represent a loss of system safety function. Specifically, Entergy's operability evaluation concluded that the sealant that was injected extruded back out of the leak path and likely did not reach the valve's seat or hinge. The finding had a cross cutting aspect related to work control in the area of Human Performance. Entergy personnel did not appropriately plan work activities to conduct online leak repairs on a safety related component. Specifically, Entergy did not identify necessary engineering procedures to adequately perform leak seal repairs on MS-2A during the planning process. These procedures provide necessary limitations, contingencies, and abort criteria. (H.3.(a))
Inspection Report# : 2008004 *(pdf)*

Significance: G Jul 26, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
City Water Tank Below Required Level due to Inadequate Design Change Implementation
The inspectors identified a non-cited violation of Technical Specification 5.4.1, "Procedures," because Entergy did not implement portions of an engineering change package for an alarm setpoint change following modification to the city water tank minimum required water volume calculation. As a result, city water tank level dropped below the minimum water level required by the Technical Requirements Manual. Corrective actions included updating plant procedures and training of personnel.

The finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the Cornerstone's objective to ensure the capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the significance of the finding using a phase 1 analysis described in Inspection Manual Chapter 0609 Appendix F, "Fire Protection Significance Determination Process." The finding was determined to be of very low safety significance (Green) because the degradation rating was determined to be low. The finding had a cross-cutting aspect related to formally defining the authority and roles for decisions affecting nuclear safety in the area of Human Performance in that Entergy management did not ensure that roles and responsibilities were communicated clearly to a member of the engineering change team responsible for implementing Operations procedure changes. As a result, the proper procedure changes were not made to plant procedures and logs which ultimately led to unmitigated low levels in the city water tank. (H.1(a))
Inspection Report# : 2008004 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Site Procurement Procedure for EDG Temperature Control Valve Elements
The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" because Entergy personnel did not implement the requirements of procedure SAO-270, "Procurement Program," for the procurement of safety related temperature control valve (TCV) elements for the emergency diesel generators (EDGs). Specifically, Entergy did not perform a technical evaluation as required for the TCV elements which resulted in the purchase and installation of incorrect TCV elements on the 21 and 22 EDGs between 2002 and 2003.

The inspectors determined that this finding was more than minor because it was associated with the human performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable

consequences. The inspectors evaluated this finding using the Phase 1 analysis in IMC 0609, Appendix A, “Determining the Significance of Reactor Inspection Findings for At-Power Situations.” The inspectors determined that this finding was of very low safety significance (Green) because the installation of incorrect TCV elements represented a design deficiency that was confirmed not to result in a loss of operability of the EDGs. Specifically, engineering analysis verified past EDG operability was maintained based on analysis that assumed the highest observed service water temperature over the past three years. Entergy entered this issue into the corrective action program and installed the correct TCV elements in 21 and 22 EDGs.
Inspection Report# : 2008003 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Station Blackout/Appendix-R Diesel Generator Post Modification Test Deficiencies
The inspectors identified a Green NCV of Technical Specification 5.4.1, “Administrative Controls - Procedures,” because Entergy did not implement the requirements of EN-DC-117, “Post Modification Testing and Special Instructions,” to control revisions to the station blackout/Appendix R diesel generator (SBO/App-R DG) post modification test, or to review and approve the test results. Specifically, the SBO/App-R DG post modification test was not sufficient to demonstrate the SBO/App-R DG could perform its intended design functions. As a corrective measure, Entergy subsequently performed additional testing to demonstrate system operability.

The inspectors determined the finding was more than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the post modification test deficiencies represented reasonable doubt regarding the operability of the SBO/App-R DG. The inspectors evaluated this finding using the Phase 1 analysis in IMC 0609, Appendix A, “Determining the Significance of Reactor Inspection Findings for At-Power Situations.” The inspectors determined that this finding was of very low safety significance (Green) because it was not a design or qualification deficiency; it did not represent a loss of system safety function of a single train; and it did not screen as potentially risk significant due to external events.

The finding had a cross-cutting aspect in the area of human performance because Entergy's supervisory and management oversight of work activities was not adequate to ensure testing was properly performed. H.4(c))
Inspection Report# : 2008003 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Operating Procedure for Station Blackout/Appendix-R Diesel Generator
The inspectors identified a Green NCV of Technical Specification 5.4.1, “Administrative Controls - Procedures,” because the SBO/App-R DG operating procedure 2-SOP-27.6, "Appendix-R Diesel Generator Operation," was not adequate. Specifically, the procedure could not be performed as written, and was not sufficient to ensure operators could start the SBO/App-R DG, and energize an electrical bus within the required time of one hour. Entergy subsequently revised the procedure to correct the most critical deficiencies, and pre-staged equipment to reduce the time needed to energize a bus. As an interim corrective measure, Entergy relied upon operator training for other deficiencies, pending final corrective actions.

The finding was more than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the procedure deficiencies resulted in a reasonable doubt whether the SBO/App-R DG could be started and aligned in a timely and correct manner, as required by design. The inspectors evaluated this finding using the Phase 1 analysis in IMC 0609, Appendix A, “Determining the Significance of Reactor Inspection Findings for At-Power Situations.” The inspectors determined that this finding was of very low safety significance (Green) because it was not a design or qualification deficiency; it did not represent a loss of system safety function of a single train; and it did not screen as potentially

risk significant due to external events.

The finding had a cross-cutting aspect in the area of human performance because Entergy's procedure for the SBO/App-R DG was not adequate to assure nuclear safety in implementing necessary operator actions for a SBO. (H.2(c))
Inspection Report# : 2008003 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Seismic Design Control Associated with a Temporary Modification to Emergency Diesel Generator Service Water Return Piping
The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control" because Entergy did not adequately analyze, document, or translate seismic considerations for temporary service water hoses installed on the 21 and 23 emergency diesel generator (EDG) heat exchangers during the March 2008 refueling outage. Entergy entered the issue into the corrective action program, evaluated past operability concerns, and added restraints to the temporary service water hoses.

The inspectors determined that 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 availability, reliability, and capability of the EDG system during a Seismic Class I design basis event. This finding was evaluated using IMC 0609, Appendix G, attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Operational Checklists for Both PWRs [Pressurized Water Reactors] and BWRs [Boiling Water Reactors]." The finding was determined to be of very low safety significance (Green) because the finding did not degrade the equipment, instrumentation, training or procedures needed for any shutdown safety function. Entergy performed a subsequent operability evaluation which provided reasonable assurance that the EDGs would have performed the safety function
during a design basis seismic event.

The finding had a cross-cutting aspect in the area of human performance because Entergy personnel made non-conservative assumptions regarding the seismic adequacy of the temporary hose modification. Specifically, Entergy personnel did not perform an engineering analysis to validate their assumptions that the temporary service water hoses would not adversely impact the seismic qualification of the EDGs. (H.1(b))
Inspection Report# : 2008003 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain Quality Records for Containment Sump Modification
The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVII, "Quality Assurance Records," because Entergy did not maintain sufficient records to furnish evidence that a safety-related containment sump modification was performed in accordance with the design documentation. Specifically, nine of 63 work orders completed during the 2R17 refueling outage for the modification were missing data or missing entirely due to being lost, misplaced, or contaminated during implementation of the project. Entergy entered the issue into the corrective action process, evaluated the operability impact of the missing data, and performed visual inspections of accessible safety-related welds during the 2R18 refueling outage.

The inspectors determined that 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 availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated this finding using the Phase 1 analysis in IMC 0609, Appendix A,
"Determining the Significance of Reactor Inspection Findings for At-Power Situations." The inspectors determined that this finding was of very low safety significance because the finding did not represent a design or qualification deficiency, did not result in a loss of safety function, and did not screen as potentially risk-significant due to external

events initiating events. Entergy performed inspections during 2R18 and completed technical evaluations of missing data that provided reasonable assurance of sump operability.

The finding had a cross-cutting aspect in the area of human performance because Entergy did not appropriately coordinate work activities to communicate, coordinate, and cooperate with each other during activities in which interdepartmental coordination was necessary to assure plant and human performance. (H.3(b))
Inspection Report# : 2008003 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Mar 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Radiation Procedures
The inspector identified a non-cited violation of Technical Specification 5.4.1, “Procedures,” which requires that written procedures be implemented covering the activities specified in Regulatory Guide (RG) 1.33, Revision 2, Appendix A, section 7.e, radiation protection procedures for personnel monitoring. Specifically, during the period from January 2009 through March 2009, there were twenty one (21) instances identified where workers received an unanticipated or un-briefed electronic dosimeter (ED) alarm with no condition report or investigation paperwork being generated as required by Entergy’s procedure EN-RP-203. The performance deficiency resulted in workers receiving unanticipated dose rate alarms with no formally documented investigation prior to returning to work in a Radiologically Controlled Area. Entergy entered the finding into the corrective action program (CR-IP3-2009-01253 and CR-IP3-2009-01318).

The finding was more than minor, in that it affected the Occupational Radiation Safety Cornerstone attribute of procedures and process to ensure adequate protection of worker health and safety from exposure to radiation because electronic dosimeter dose rate alarms were not fully evaluated using existing processes and procedures as required. In addition, because multiple examples were identified of failures to satisfy station radiation protection procedures indicating a failure to maintain and implement programs to keep exposures as low as reasonably achievable. Using the Occupational Radiation Safety Significance Determination Process, the inspector determined that the finding was of very low safety significance (Green) because it did not involve: (1) as low as is reasonably achievable planning and controls, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose. The inspectors determined that the finding had a cross-cutting aspect related to procedural adherence in the Work Practices component of the Human Performance area. Specifically, Entergy employees did not follow procedures to generate condition reports and document investigations when high-dose rate alarms were received by workers. H.4 (b)

Inspection Report# : 2009002 *(pdf)*

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

Significance: SL-IV Dec 31, 2008
Identified By: NRC
Item Type: VIO Violation
Site Access Procedure Violation
Site Access Procedure Violation - SLIV (involved willfulness)

There was no cross-cutting aspect
Inspection Report# : 2008014 *(pdf)*

Significance: N/A Jun 11, 2008
Identified By: NRC
Item Type: FIN Finding
2008 IP2 Biennial Problem Identification and Resolution Inspection
Identification and Resolution of Problems

The inspectors concluded that Entergy identified, evaluated, and resolved problems. The inspectors verified that Entergy had taken actions to address previous NRC findings. In general, Entergy personnel identified problems and entered them into the corrective action program (CAP) at a low threshold. The inspectors also determined that Entergy properly screened equipment issues for operability and reportability, as well as prioritized and evaluated them commensurate with their safety significance. Evaluations appropriately considered extent of condition, generic issues, and previous occurrences. However, broader issues involving evaluations into substantive cross-cutting issues were not appropriately prioritized and evaluated commensurate with the significance of the issues.

The inspectors determined that corrective actions addressed the identified causes and were generally implemented in a timely manner. Notwithstanding, the inspectors noted several examples of minor conditions involving identification of issues, prioritization and quality of evaluations, and implementation of corrective actions. Entergy's audits and self-assessments were thorough and probing. The inspectors concluded that Entergy identified, reviewed, and applied relevant industry operating experience (OE). Based on interviews, observations of plant activities, and reviews of the CAP and the Employees Concerns Program (ECP), the inspectors determined that site personnel were willing to raise safety issues and to document them in the CAP.

While the inspectors recognized Entergy has reassessed and revised their corrective action plans to address the substantive cross-cutting issue in the area of procedure adequacy, the inspectors concluded that minimal progress had been made in implementation of the planned actions. The inspectors also concluded that Entergy had identified corrective actions and were in the early stages of implementation of corrective action plans to resolve the substantive cross-cutting issue in corrective action implementation

Inspection Report# : 2008010 *(pdf)*

Last modified : May 28, 2009