

Indian Point 2

3Q/2011 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Operability Evaluation for Degraded Pressurizer Modulating Heater Group Controller

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion V “Instructions, Procedures, and Drawings,” because Entergy personnel did not adequately implement Procedure EN-OP-104 “Operability Determination Process,” to assess the operability of the pressurizer modulating heater group. Specifically, Entergy personnel did not adequately evaluate a degraded condition identified with the modulating heater group controller and the impact on the modulating heater group operability. This resulted in the modulating heater being inoperable between August 18, 2010 and January 19, 2011, and an unplanned entry into a Technical Specification (TS) limiting condition for operation (LCO) 3.4.9, “Pressurizer.” This issued was entered into Entergy’s corrective action program (CAP) as CR-IP2-2011-3493.

This finding is more than minor because it is associated with the equipment performance attribute of the Initiating Events cornerstone and affects 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 inadequate procedure implementation resulted in the pressurizer modulating heater group being inoperable for approximately five months and an unplanned entry into a TS LCO. Using IMC 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the inspectors determined this finding was of very low safety significance (Green) because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available.

The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the CAP attribute because Entergy personnel did not thoroughly evaluate the problems associated with the pressurizer modulating heater group controller such that the resolutions address causes and extent of conditions, as necessary. This includes properly classifying, prioritizing, and evaluating for operability and reportability conditions adverse to quality.

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Main Boiler Feed Pump Speed Controller Setting

A Green self-revealing finding was identified because Entergy’s procedure 2 IC PC-N-P-408A, “Main Boiler Feed Pump (MBFP) Discharge Pressure Speed Control,” did not provide adequate guidance to ensure proper settings for the MBFP speed controller settings at low power operations. Specifically, between May 5, 2006 and September 3, 2010, procedure 2-IC-PC-N-P-408A did not provide adequate guidance to ensure proper settings for the MBFP speed controller settings at low power operations, resulting in a slow MBFP response, which contributed to a reactor trip from 41% power. Entergy personnel took immediate corrective actions to change the MBFP speed controller settings. This issue was entered into Entergy’s corrective action program (CAP) as condition report (CR)-IP2-2010-05484.

This finding is more than minor because it is associated with the design control attribute of the Initiating Events cornerstone and affects the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. Specifically, inadequate design control of the MBFP speed controller settings contributed to a reactor trip. Using IMC 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” the finding was determined to have very low safety significance (Green) because the finding did not contribute to the likelihood that mitigation equipment or functions would not be available.

The inspectors determined there was no cross-cutting issue associated with the finding because the performance deficiency did not reflect Entergy's current performance. Specifically, the performance deficiency occurred more than three years ago and was outside the current assessment period.

Inspection Report# : [2010005](#) (pdf)

Mitigating Systems

Significance: G Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Marginally Designed Fuse Results in Fuse Failure and Inoperability of the Refueling Water Storage Tank

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," because Entergy personnel did not establish measures to assure that the design basis for sizing of a fuse was adequate and correctly translated into specifications, drawings, procedures, and instructions. Specifically, between November 29, 2005 and September 13, 2010, the fuse for four control room annunciator panels SA-SC was marginally sized which resulted in fatigue-induced fuse failure, associated loss of lighting to the annunciator panels, the loss of the refueling water storage tank (RWST) low low level alarms, and the inoperability of the RWST. Entergy personnel immediately replaced the fuse. This issue was entered into Entergy's CAP as CR-IP2-2010-5713 and CR IP2 2011-2967.

This finding is more than minor because it is associated with the design control attribute of the Mitigating Systems cornerstone and adversely affected the objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the loss of the RWST low low level alarms impacts an alert function relied on by operations personnel to swap the suction of the safety injection pumps from the RWST to the containment sump during accident conditions. Using IMC 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the inspectors determined this finding was of very low safety significance (Green) because the finding was related to a design or qualification deficiency confirmed to result in a loss of operability of the RWST low low level alarms; however, the finding did not represent a loss of safety system function because RWST level indication was available via redundant level instruments on the control room instrument panel that operators also normally rely on and are trained to use. Also the finding did not screen as potentially risk significant due to external initiating events. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program attribute because Entergy personnel did not thoroughly evaluate problems associated with the fuse for control room annunciator panels SA-SC, such that the resolution address causes and extent of conditions, as necessary. This includes properly classifying, prioritizing, and evaluating for operability and reportability conditions adverse to quality.

Inspection Report# : [2011004](#) (pdf)

Significance: G Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Monitoring of Maintenance Rule In-Scope Service Water Pump and Circulating Water Pump Bay Structures

The inspectors identified a Green NCV of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," because Entergy personnel did not monitor the performance or condition of structures, systems, or components, against licensee-established goals, in a manner sufficient to provide reasonable assurance that these structures, systems, and components, as defined in paragraph (b) of 10 CFR 50.65, are capable of fulfilling their intended functions. Specifically, between August 25, 2004 and May 19, 2011, Entergy personnel did not monitor the condition of the service water pump (SWP) and circulating water pump (CWP) bays in a manner sufficient to provide reasonable assurance that the SWP and CWP bays remained capable of fulfilling their intended function. This issued was entered into Entergy's CAP as CR-IP2-2011-2006.

This finding is more than minor because if left uncorrected, the condition could have resulted in the loss of function due to degrading concrete material properties of structures and systems designed to mitigate design basis events. This

finding is associated with the Mitigating Systems cornerstone. Entergy personnel evaluated the condition of the SWP and CWP bays and determined these structures continued to meet the licensing basis requirements, with reduced margin, and thus remained operable for design loads inclusive of site extreme environmental conditions. Using IMC 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the inspectors determined this finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not result in an actual loss of safety function, was not a loss of barrier function, and was not potentially risk significant for external events.

The finding has a cross-cutting aspect in the area of human performance associated with the work practices attribute because Entergy personnel did not define and effectively communicate expectations regarding procedural compliance and personnel follow procedures when Entergy staff documented a preventive maintenance (PM) task as complete when the work had not been performed.

Inspection Report# : [2011003](#) (pdf)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Inaccurate 21 Inverter AC Output Voltmeter

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XI, "Test Control," because Entergy personnel did not assure that adequate test instrumentation was available and used for 21 inverter surveillance tests. Specifically, between April 4, 2010, and July 13, 2011, the 21 inverter alternating current (AC) output voltage meter was used for TS surveillance tests without adequately addressing its degraded condition, which resulted in recording inaccurate and non-conservative TS surveillance test results. This issue was entered into Entergy's CAP as CR IP2-2011-03468.

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affects the objective to ensure the capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the degraded meter resulted in inaccurate and nonconservative TS surveillance results from April 4, 2010, to July 13, 2011. Using IMC 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the inspectors determined this finding was of very low safety significance (Green) because the finding was not related to a design or qualification deficiency, did not represent a loss of system safety function because the control room instrument bus provided reasonable assurance that the requirements of the TS surveillance tests were met, and the finding did not screen as potentially risk significant due to external events.

The finding has a cross-cutting aspect in the area of human performance associated with the decision making attribute because Entergy personnel did not use conservative assumptions in decision making. Specifically, Entergy personnel did not use appropriate assumptions regarding the inverter performance expectations during the 2010 to 2012 cycle considering actual performance during the 2008 to 2010 cycle.

Inspection Report# : [2011003](#) (pdf)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Main Steam Configuration Control Procedure Not Adequate to Ensure Closure of MS-55D

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because Entergy procedure 2 COL 18.1, "Main Steam and Reheat System," was not adequate to ensure closure of main steam isolation valve (MSIV) bypass stop valve MS 55D. Specifically, between April 10, 2010 and September 12, 2010, procedure 2 COL 18.1 did not provide adequate instructions to operators to ensure MS 55D was closed, which resulted in MS 55D being left partially open, and unable to isolate the 24 steam generator (SG) during accident conditions. Entergy personnel took immediate corrective actions to close MS 55D. This issue was entered into Entergy's CAP as condition reports (CRs) IP2 2010 05694 and IP2 2010 06745.

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affects the cornerstone objective to ensure the availability and reliability of systems that

respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the inadequate procedure resulted in the manual 3 inch MSIV bypass stop valve MS 55D for the 24 SG being left partially open for approximately five months. Based on NRC senior reactor analyst review, it was determined that operators could have isolated the other three SGs with their MSIVs and steamed them to remove decay heat and depressurize the plant using their atmospheric dump valves, while isolating the 24 SG further down the main steam system at the turbine bypass and stop valves. Therefore, using IMC 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the inspectors determined this finding was of very low safety significance (Green) because the finding did not result in a loss of the safety function given the operator's ability to isolate the other SGs and the 24 SG with the turbine bypass and stop valves. Additionally, the finding was not potentially risk significant due to a seismic, flooding, or severe weather initiating event.

The inspectors determined there was no cross cutting issue associated with the finding because the performance deficiency did not reflect Entergy's current performance. Specifically, the procedure change occurred more than three years ago and was outside the current assessment period.

Inspection Report# : [2011002](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Entergy Personnel Did Not Identify a Leak on the 25 Service Water Pump Piping

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because Entergy personnel did not promptly identify and correct an adverse condition related to a service water (SW) pipe leak. Specifically, on October 29, 2010, NRC inspectors identified a leak on the base weld of the 25 SW pipe vacuum breaker which required subsequent evaluation and repair by Entergy personnel to restore operability of the 25 service water pump (SWP). This issue was entered into Entergy's CAP as CR IP2 2010 6620.

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affects the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the 25 SW pipe weld leak challenged the capability and the reliability of the SWP, and the pump was declared inoperable by Entergy personnel to conduct repairs. Using IMC 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance (Green) because the finding was not related to a design or qualification deficiency, did not represent a loss of system safety function, and the finding did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

The finding has a cross cutting aspect in the area of problem identification and resolution associated with the CAP attribute because Entergy personnel did not implement a CAP with a low threshold for identifying issues, specifically, identifying a leak on the 25 SWP piping.

Inspection Report# : [2011002](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required Quality Control Inspections

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion X, "Inspection," because Entergy personnel did not ensure that quality control verification inspections were consistently included and correctly specified in quality-affecting procedures and work instructions for construction-like work activities as required by the quality assurance program (QAP). Entergy personnel performed extensive reviews and initiated prompt fleet-wide corrective actions to ensure proper work order evaluation and proper inclusion of quality control verification inspections. This issue was entered into Entergy's corrective action program (CAP) as CR-HQN-2009-01184 and CR-HQN-2010-0013.

This finding is more than minor because it is a programmatic deficiency that if left uncorrected, could lead to a more significant safety concern in that the failure to check quality attributes could involve an actual impact to plant

equipment. This finding is associated with the design control attribute of the Mitigating Systems cornerstone because missed quality control inspections during plant modifications could impact the availability, reliability, and capability of systems needed to respond to initiating events. Using IMC 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance (Green) because the finding is a qualification deficiency confirmed not to result in a loss of operability or functionality. Specifically, inspectors verified by sampling that work documents provided objective quality evidence that work activities that had missed quality control verifications were properly performed.

The finding has a cross-cutting aspect in the area of human performance associated with the decision-making attribute because Entergy personnel did not have an effective systematic process for obtaining interdisciplinary reviews of proposed work instructions to determine whether Quality Control verification inspections were appropriate.
Inspection Report# : [2010005](#) (pdf)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement the Experience and Qualification Requirements of the Quality Assurance Program

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion II, "Quality Assurance Program (QAP)," because Entergy personnel did not implement the qualification and experience requirements of the QAP to ensure that an individual assigned to the position of quality assurance manager (QAM) met the qualification and experience requirements of ANSI/ANS 3.1-1978. Specifically, the individual assigned as the responsible person for the Entergy's overall implementation of the QAP did not have at least one year of nuclear plant experience in the overall implementation of the QAP within the quality assurance organization prior to assuming those responsibilities. This issue was entered into Entergy's CAP as CR-HQN-2010-00386.

This finding is more than minor because if left uncorrected, it could lead to a more significant safety concern. Specifically, the failure to have a fully qualified individual providing overall oversight to the QAP had the potential to affect all cornerstones. However, this finding will be tracked under the Mitigating Systems cornerstone as the area most likely to be impacted. The finding was not suitable for quantitative assessment using existing Significance Determination Process guidance. Using IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," NRC management determined the finding to be of very low safety significance (Green) because other quality assurance program functions remained unaffected by this performance deficiency, so defense-in-depth continued to exist.

The inspectors determined there was no cross-cutting aspect associated with this finding because the performance deficiency did not reflect Entergy's current performance. Specifically, the performance deficiency occurred more than three years ago and was outside the current assessment period.

Inspection Report# : [2010005](#) (pdf)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Meet TS Oversight Requirement

A Green self-revealing NCV of Technical Specification (TS) 5.1, "Responsibility," was identified because on February 9, 2010, the control room supervisor (CRS) assigned as having the control room command function, left the control room without designating another senior reactor operator (SRO) qualified individual to assume the control room command function. The CRS promptly returned to the control room shortly after the issue was identified. This issue was entered into Entergy's CAP as CR-IP2-2010-00708.

The finding is more than minor because it could be reasonably viewed as a precursor to a significant event. Specifically, the absence of SRO oversight during licensed control room activities increases the likelihood of human performance errors contributing to an initiating event and reduces the effectiveness of event mitigation. The finding is associated with the human performance attribute of the Mitigating Systems cornerstone and affects the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was not suitable for quantitative assessment using existing Significance

Determination Process guidance. Using IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," NRC management determined the finding to be of very low safety significance (Green) because of the short period the CRS was absent from the control room, and because no initiating events occurred during that time.

The finding has a cross-cutting aspect in the area of human performance associated with the work practices attribute because of the ineffective use of shift turnover practices, in that the CRS did not self check or communicate his decision to leave the control room to the rest of the control room staff.

Inspection Report# : [2010005](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Entergy Did Not Identify and Correct a Performance Deficiency During an Emergency Preparedness Drill

The inspectors identified a Green NCV of 10 CFR 50.47, "Emergency Plan," paragraph (b)(14), because Entergy staff did not properly identify an emergency response deficiency which occurred during a drill. Specifically, during the operator training scenario conducted on January 25, 2011, the training staff did not identify that the Offsite Communicator had not contacted all offsite authorities, as required by the IPEC Emergency Plan (EP), thereby preventing the deficient performance from being placed in the corrective action program and remediated. This issue was entered into Entergy's CAP as CR-IP2-2011-3498.

This finding is more than minor because it affected the Emergency Response Organization attribute of the Emergency Preparedness cornerstone to ensure that Entergy personnel are capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. In accordance with IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," the inspectors determined the finding to be of very low safety significance (Green). Using IMC 0609, Appendix B, Section 4.14 and Sheet 1, "Failure to Comply," the inspectors determined that the failure to comply with an aspect of the Emergency Plan related to drill and exercise assessment (10 CFR 50.47(b)(14)) was a Planning Standard (PS) problem. Per Section 4.14.2.1 of Appendix B, states a critique that fails to identify any PS weakness during a limited facility interaction drill where there is a limited team of evaluators (e.g., facility table-top training drill, operator training simulator drill, individual facility training drill) is a green finding.

The finding has a cross-cutting aspect in the area of human performance associated with the decision making attribute because Entergy personnel did not communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely, in a timely manner.

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Compensatory Measures for Out-of-Service Plant Vent Process Radiation Monitor

The inspectors identified a Green NCV of 10 CFR 50.54, "Conditions of Licenses," paragraph (q), because Entergy staff did not implement adequate compensatory measures when the R-27 plant vent process radiation monitor, which is used for emergency action level (EAL) classification, was taken out of service. Specifically, between October 25, 2010 and November 24, 2010, the R-27 monitor was out of service for repair following preventive maintenance with inadequate compensatory measures regarding the impact on EAL classification capability. Entergy personnel

implemented short-term corrective actions by providing adequate compensatory instructions for the operating crews. The issue was entered into Entergy's CAP as CR-IP-2010-06721 which includes longer-term corrective actions regarding emergency preparedness procedure changes.

This finding is more than minor because it affected the Emergency Response Organization attribute of the Emergency Preparedness (EP) cornerstone to ensure that the Entergy personnel are capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. Specifically, Entergy personnel did not provide adequate compensatory measures for when the R-27 plant vent monitors were taken out of service. In accordance with IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," the inspectors determined the finding to be of very low safety significance (Green). Using IMC 0609, Appendix B, Section 4.9 and Sheet 1, "Failure to Comply," the inspectors determined that the failure to comply with an aspect of the Emergency Plan related to event classification (10 CFR 50.47(b)(4)) was a risk-significant planning standard (RSPS) problem; but it was not a RSPS functional failure of the Indian Point Energy Center (IPEC) event classification process.

This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program attribute of taking appropriate corrective actions to address safety issues in a timely manner. Specifically, Entergy staff did not take appropriate emergency planning compensatory corrective actions when the R-27 plant vent radiation monitor was taken out of service.

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Staff the Site TSC and OSC Within 60 Minutes of an Alert Emergency Declaration

A Green self-revealing NCV of 10 CFR 50.54, "Conditions of Licenses," paragraph (q), was identified because Entergy staff did not adequately implement the requirements of the IPEC Emergency Plan. On the evening of November 7, 2010, the Unit 2 operators declared an Alert emergency at 1849 hours. The technical support center (TSC) was staffed and declared operational at 2008 hours, and the operations support center (OSC) was staffed and declared operational at 2015 hours. Both of these activation times exceeded the 60-minute staffing requirement in the IPEC Emergency Plan. This issue was entered into Entergy's CAP as CR-IP2-2010-6813, CR-IP2-2010-6831, and CR-IP2-2010-6871.

This finding is more than minor because it affected the Emergency Response Organization (ERO) attribute of the EP cornerstone to ensure that Entergy personnel are capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. Entergy personnel did not meet the requirements of the IPEC Emergency Plan in that the TSC and OSC were not staffed nor declared operational within 60 minutes of the Alert emergency declaration on November 7, 2010. In accordance with IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," the inspectors determined the finding to be of very low safety significance (Green). Using IMC 0609, Appendix B, Section 4.2 and Sheet 2, "Actual Event Implementation Problem," the inspectors determined that the failure to comply with an aspect of the Emergency Plan related to ERO augmentation (10 CFR 50.47(b)(2)) was a non-risk-significant planning standard problem which occurred during an Alert emergency and is therefore of very low safety significance (Green).

This finding has a cross-cutting aspect in the area of human performance associated with the work practices attribute of defining and effectively communicating expectations regarding procedural compliance and personnel following procedures. Specifically, Entergy staff did not comply with ERO expectations and procedures regarding prompt reporting to an assigned emergency response facility during an actual event.

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure of Offsite Notification Procedure to Meet the Requirements of the Site Emergency Plan

The inspectors identified a Green NCV of 10 CFR 50.54, "Conditions of Licenses," paragraph (q), because the

Entergy emergency plan implementing procedure (EPIP) for notification of offsite officials did not meet the requirements of the IPEC Emergency Plan. This EPIP had contained a deficiency in the backup process for offsite notification since July 2006. Entergy personnel responded by documenting the deficiency in CR-IP2-2010-07563 and by initiating a procedure change to align the backup process with the Emergency Plan commitments.

This finding is more than minor because it affected the Emergency Response Organization attribute of the EP cornerstone to ensure that the Entergy personnel are capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. Entergy procedures allowed for a back-up notification process that did not comply with the requirements of the site emergency plan: the Emergency Plan requires that the Shift Manager or his designee notify the offsite authorities of an emergency declaration, while Form EP-4 directed the delegation of this responsibility to an offsite authority itself. In accordance with Inspection Manual Chapter (IMC) 0609, Appendix B, "Emergency Preparedness Significance Determination Process," the inspectors determined the finding to be of very low safety significance (Green). Using IMC 0609, Appendix B, Section 4.5 and Sheet 1, "Failure to Comply," the inspectors determined that the failure to comply with an aspect of the Emergency Plan related to event notification (10 CFR 50.47(b)(5)) was a RSPS problem. It was not a RSPS functional failure of the IPEC event notification process, because the deficiency in the IPEC EPIP was in the backup method for offsite notification, and despite the procedural flaw offsite notifications were made in a timely and accurate manner on November 7, 2010.

The inspectors determined there was no cross-cutting aspect associated with this finding because the performance deficiency did not reflect Entergy's current performance. Specifically, the performance deficiency associated with a procedure change made in July 2006 occurred more than three years ago and was outside the current assessment period.

Inspection Report# : [2010005](#) (pdf)

Occupational Radiation Safety

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Work Planning Control Relative to Regenerative Heat Exchanger Permanent Shielding Modification That Resulted in Additional Unplanned Collective Exposure

A Green self-revealing finding was identified because Entergy personnel did not adequately plan and control work activities related to a regenerative heat exchanger permanent shielding modification in accordance with radiation work permit (RWP) 20102537, "2R19 Permanent Regen Hx Shielding." Specifically, Entergy personnel did not perform walkdowns to support modification package planning and provided limited field supervision which resulted in significant unplanned collective exposure (17.189 person-rem compared to a revised work activity estimate of 8.000 person-rem). This issue was entered into Entergy's CAP as CR-IP2-2010-02817.

The finding is more than minor because it is associated with the program and process attribute of the Occupational Radiation Safety cornerstone and affected the cornerstone objective of ensuring the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine reactor operations. Additionally, this finding is similar to the more than minor example 6.j provided in IMC 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," because it involves an actual collective exposure greater than 5 person-rem and exceeded the planned, intended dose by more than 50%. Using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the finding was determined to have very low safety significance (Green) because the finding involved an as low as reasonably achievable (ALARA) planning issue and the 3-year rolling average collective dose history was less than 135 person-rem (52.261 person-rem average annual exposure for 2007-2009).

The finding has a cross cutting aspect in the area of human performance associated with the work control attribute because Entergy's planned work activities did not adequately incorporate the job site interferences and their resolution in accordance with radiological safety.

Inspection Report# : [2010005](#) (pdf)

Significance: **G** Dec 31, 2010

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Work Coordination Relative to Reactor Cavity Liner Repair That Resulted in Additional Unplanned Collective Exposure

A Green self-revealing finding was identified because Entergy personnel did not adequately plan and control work activities related to reactor cavity liner repair in accordance with RWP 20102530, "2R19 Cavity Liner Repair." Specifically, outage schedule delay and inadequate work coordination resulted in the use of back-up workers to perform the reactor cavity sealant removal work, and also resulted in reactor head shielding removal and cancellation of additional shielding that was specified in the ALARA plan, which resulted in significant unplanned collective exposure (7.058 person-rem compared to a revised work activity estimate of 3.635 person-rem). This issue was entered into Entergy's CAP as CR-IP2-2010-02817.

This finding is more than minor because it is associated with the program and process attribute of the Occupational Radiation Safety cornerstone and affected the cornerstone objective of ensuring the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine reactor operations. It is also similar to the more than minor example 6.j provided in IMC 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," because it involves an actual collective exposure greater than 5 person-rem and exceeded the planned, intended dose by more than 50%. Using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the finding was determined to have very low safety significance (Green) because the finding involved an as low as reasonably achievable (ALARA) planning issue and the 3-year rolling average collective dose history was less than 135 person-rem (52.261 person-rem average annual exposure for 2007-2009).

The finding has a cross-cutting aspect in the area of human performance associated with the work coordination attribute because Entergy personnel did not coordinate and implement work activities as planned, which resulted in significant dose overrun.

Inspection Report# : [2010005](#) (*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

Last modified : January 04, 2012