UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

June 25, 2010

Mr. Joseph E. Pollock
Site Vice President
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
450 Broadway, GSB
Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 –
NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT
05000247/2010008

Dear Mr. Pollock:

On May 20, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Indian Point Nuclear Generating (Indian Point) Unit 2. The enclosed report documents the inspection results, which were discussed on May 20, 2010, with you and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

Based on the samples selected for review, the inspectors concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. Entergy personnel identified problems at a low threshold and entered them into the Corrective Action Program (CAP). Station personnel generally screened issues appropriately for operability and reportability, and prioritized issues commensurate with the safety significance of the problems. Corrective actions addressed the identified problems and were typically implemented in a timely manner. However, the inspectors identified one violation of NRC requirements in the area of corrective action effectiveness.

This report documents one NRC-identified finding of very low safety significance (Severity Level IV). The finding was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), consistent with Section VI.A.1 of the NRC's Enforcement Policy. If you contest the NCV, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region I; the Director, Office of

NRC Senior Resident Inspector at Indian Point Unit 2. In addition, if you disagree with the characterization of any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Senior Resident Inspector at Indian Point Unit 2. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

Mel Gray

Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

Docket No. 50-247
License No. DPR-26

Enclosure: Inspection Report No. 05000247/2010008
w/ Attachment: Supplemental Information

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NRC Senior Resident Inspector at Indian Point Unit 2. In addition, if you disagree with the characterization of any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Senior Resident Inspector at Indian Point Unit 2. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

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Sincerely,
/RA/
Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

Docket No. 50-247
License No. DPR-26

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w/ Attachment: Supplemental Information

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Enclosure

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	50-247
License No.:	DPR-26
Report No.:	05000247/2010008
Licensee:	Entergy Nuclear Northeast (Entergy)
Facility:	Indian Point Nuclear Generating (Indian Point) Unit 2
Location:	450 Broadway, GSB Buchanan, NY 10511-0249
Dates:	May 3 through May 20, 2010
Team Leader:	Brice Bickett, Senior Project Engineer, Division of Reactor Projects (DRP)
Inspectors:	Chris Newport, Project Engineer Odunayo Ayegbusi, Resident Inspector (Indian Point Unit 2) Jeff Bream, Project Engineer David Everhart, Security Specialist
Approved by:	Mel Gray, Chief Projects Branch 2 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000247/2010008; 05/03/2010 - 05/20/2010; Indian Point Nuclear Generating (Indian Point) Unit 2; Biennial Baseline Inspection of the Identification and Resolution of Problems. One finding was identified in the area of effectiveness of corrective actions.

This NRC team inspection was performed by four NRC regional inspectors and one resident inspector. One finding of very low safety significance (Severity Level IV) was identified during this inspection and was classified as a non-cited violation (NCV). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). The cross-cutting aspect was determined using IMC 0310, "Components Within The Cross-Cutting Areas." Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, December 2006.

Identification and Resolution of Problems

The inspectors concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. Entergy personnel identified problems at a low threshold and entered them into the Corrective Action Program (CAP). For most condition reports (CRs) reviewed, the inspectors determined that site personnel screened issues appropriately for operability and reportability, and generally prioritized issues commensurate with the safety significance of the problems. The inspectors determined that causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that corrective actions addressed the identified causes and were implemented in a timely manner. However, the inspectors identified one violation of NRC requirements in the area of effectiveness of corrective actions. The issue was entered into Entergy's CAP during the inspection.

Entergy's audits and self-assessments reviewed by the inspectors were thorough and probing. Additionally, the inspectors concluded that Entergy adequately identified, reviewed, and applied relevant industry operating experience (OE) to Indian Point Unit 2. Based on interviews, observations of plant activities, and reviews of the CAP and the Employee Concerns Program (ECP), the inspectors concluded that there was not evidence of challenges to the free flow of information regarding safety concerns.

Cornerstone: Mitigating Systems

- The inspectors identified a Severity Level IV (SLIV) NCV of 10 CFR 50.71(e) because Entergy personnel did not revise the updated final safety analysis report (UFSAR) with information consistent with plant conditions. Specifically, Entergy personnel did not remove reference to or correct information to reflect current plant conditions related to systems described as having cathodic protection consistent with UFSAR Section 5.1.3.12, Cathodic Protection. Entergy personnel identified that the UFSAR was inconsistent with current plant conditions in 2005. However, the corrective action to resolve the discrepancy was not completed. Entergy issued CR-IP2-2010-03512 to address the UFSAR discrepancy.

  This issue is considered within the traditional enforcement process because it has the potential to impede or impact the NRC's ability to perform its regulatory functions. The inspectors used the Enforcement Policy, Supplement I – Reactor Operations, to evaluate the significance of this violation. The inspectors concluded that the violation is more than minor because the longstanding and incorrect information in the UFSAR had a potential impact on safety and licensed activities. Similar to Enforcement Policy Supplement I, example D.6, the inspectors determined the violation was of SLIV (very low safety significance) since the erroneous information not updated in the UFSAR was not used to make an unacceptable change to the facility nor impacted a licensing or safety decision by the NRC.

  The inspectors determined there was a cross-cutting aspect in the area of problem identification and resolution associated with the component area of corrective action effectiveness. Specifically, Entergy personnel did not implement adequate actions in a timely manner to update the UFSAR to be consistent with plant conditions. (P.1.d per IMC 0310) (Section 4OA2.1.c)

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (PI&R) (71152B – 1 sample)

.1 Assessment of the Corrective Action Program (CAP) Effectiveness

a. Inspection Scope

The inspectors reviewed Entergy's procedures that describe the CAP implementation at Indian Point Unit 2. Entergy personnel identified problems by initiating CRs for conditions adverse to quality, plant equipment deficiencies, industrial or radiological safety concerns, or other significant issues. Condition reports were subsequently screened for operability and reportability, categorized by significance level (A, most significant, through D, least significant), and assigned to personnel for evaluation and resolution or trending.

The inspectors evaluated the process for assigning and tracking issues to ensure that issues were screened for operability and reportability, prioritized for evaluation and resolution in a timely manner commensurate with their safety significance, and tracked to identify adverse trends and repetitive issues. In addition, the inspectors interviewed plant staff and management to determine their understanding of, and involvement with, the CAP.

The inspectors reviewed CRs selected across the seven cornerstones of safety in the NRC's Reactor Oversight Process (ROP) to determine if site personnel properly identified, characterized, and entered problems into the CAP for evaluation and resolution. The inspectors selected items from functional areas that included chemistry, emergency preparedness, engineering, maintenance, operations, physical security, radiation safety, and oversight programs to ensure Entergy staff appropriately addressed problems identified in these functional areas. The inspectors selected a risk-informed sample of CRs issued since the last NRC PI&R inspection conducted at Unit 2 in June 2008. Insights from the site's risk analyses were considered by the inspectors to focus the sample selection and plant walkdowns on risk-significant systems and components. The corrective action review was expanded to five years for evaluation of identified concerns within CRs relative to charging pump reliability and safety injection (SI) accumulator and pressurized operated relief valve (PORV) nitrogen low pressure alarms.

The inspectors selected items from various processes implemented at Indian Point Unit 2 to verify issues were appropriately considered for entry into the CAP. Specifically, the inspectors reviewed a sample of engineering requests, operator workarounds, operability determinations, system health reports, equipment problem lists, work orders (WOs) and issues entered into the ECP.

The inspectors reviewed CRs to assess whether Entergy personnel adequately evaluated and prioritized identified issues. The CRs reviewed encompassed the full range of evaluations, including root cause analyses, apparent cause evaluations, and common cause analyses. A sample of CRs that were categorized at lower levels (level C and level

D) which did not include formal cause evaluations were also reviewed by the inspectors to ensure appropriate classification consistent with EN-LI-102, Corrective Action Process, guidance. The inspectors' reviews included the appropriateness of the assigned category, the scope and depth of the causal analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified causes. As part of this review, the inspectors interviewed various station personnel to fully understand details within the evaluations and the planned and completed corrective actions. The inspectors observed daily condition review group (CRG) meetings in which Entergy personnel reviewed new CRs for prioritization and assignment. The inspectors also observed Corrective Action Review Board (CARB) meetings in which station management assessed the adequacy of recent apparent and root cause analysis reports. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected CRs to verify these specific reviews adequately addressed equipment operability, reporting of issues to the NRC, and the extent of problems.

The inspectors' reviews of CRs also focused on the associated corrective actions to determine whether the actions addressed the identified causes of the problems. The inspectors reviewed CRs for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Entergy's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed CRs associated with NRC NCVs and findings since the last PI&R inspection to determine whether Entergy personnel properly evaluated and resolved the issues. Specific documents reviewed during the inspection are listed in the Attachment to this report.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples reviewed, plant walkdowns, and interviews of site personnel, the inspectors determined that Entergy personnel identified problems and entered them into the CAP at a low threshold. For the issues reviewed, the inspectors determined problems or concerns were documented in sufficient detail to understand the issues. The inspectors observed managers and supervisors at CRG and CARB meetings appropriately questioning and challenging CRs to ensure clarification of the issues. The inspectors determined Entergy personnel trended equipment and programmatic issues at levels consistent with the station's implementing procedures. In general, the inspectors did not identify issues or concerns that had not been appropriately entered into the CAP for evaluation and resolution. However, the inspectors identified and/or observed during plant tours a number of minor conditions with regards to general housekeeping and cleanliness standards that did not meet station expectations and/or were not previously entered into the CAP. Specifically:

- A fire extinguisher remained unsecured in the SI pump area and had an expired inspection sticker;
- Valve locks and chains lying on the floors in safety-related pump areas;
- 22 auxiliary boiler feedwater pump oil leak beneath the pump's governor with no deficiency tag or associated CR;

- Unrestrained equipment located near safety-related pumps; and
- Loose debris in containment spray pump room behind flow meter panel.

In response to the equipment observations identified by the inspectors during plant walkdowns, Entergy personnel promptly initiated CRs and/or took immediate action to correct the conditions.

The inspectors determined that the issues identified did not impact equipment operability or availability. The inspectors independently evaluated the issues noted above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined that the issue was of minor significance and, therefore, is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, Entergy personnel appropriately prioritized and evaluated issues commensurate with their safety significance. CRs were screened for operability and reportability, categorized by significance, and assigned to a department for evaluation and resolution. The CR screening process considered human performance issues, radiological safety concerns, repetitiveness and adverse trends. The inspectors observed managers and supervisors at CRG and CARB meetings appropriately questioning and challenging CRs to ensure appropriate prioritization.

The inspectors determined CRs were generally categorized for evaluation and resolution commensurate with the safety and security significance of the issues. Based on the sample of CRs reviewed, the guidance provided by the Entergy implementing procedures appeared sufficient to ensure consistency in categorization of the issues. Operability and reportability determinations were generally performed when conditions warranted and the evaluations supported the conclusions. Causal analyses appropriately considered the extent of the condition or problem, generic issues, and previous occurrences of the issue.

The inspectors, however, identified one example where a lower tier apparent cause evaluation was not adequate consistent with expectations in EN-LI-119, Apparent Cause Evaluation Process, to enable effective resolution of the problem. Specifically:

- CR-IP2-2009-4419 documented a licensee-identified condition regarding a communication pathway setting (microwave or Telco) discrepancy for the alert notification system (ANS) in the emergency operations facility. Entergy personnel conducted an apparent cause evaluation and determined that the issue was likely related to a procedure adequacy issue. However, the inspectors noted that subsequent review by station personnel determined that the procedure was adequate and a procedure revision was not necessary. Further, the inspectors identified no corrective action was initiated by station personnel at that time to review the initial cause evaluation adequacy. Entergy personnel initiated CR-IP2-2010-3273 to address the issue.

  The inspectors noted that this setting discrepancy with the ANS communication pathway preferred position did not have an impact on ANS functionality and was

related to a conservative approach for backup power selection. The inspectors independently evaluated the issue noted above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined that the issue was of minor significance and, therefore, is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely and adequately implemented. For significant conditions adverse to quality, corrective actions were identified to prevent recurrence. The inspectors concluded that corrective actions to address NRC NCVs and findings since the last PI&R inspection were timely and effective. There was, however, one performance issue of more than minor significance related to the effectiveness of corrective actions regarding actions taken to ensure the UFSAR was updated consistent with the current plant design. This finding is documented in Section 4OA2.1.c.

Additionally, there were other examples where corrective actions were not fully effective or consistent with standards outlined in EN-LI-102, Corrective Action Program. Specifically:

- The inspectors identified that corrective actions have not been effective in addressing and reinforcing station standards/expectations regarding alternate safe shutdown (ASSD) cabinet and inventory control deficiencies identified over the last two years. Specifically, the 2008 and 2010 NRC PI&R team identified similar cabinet control issues regarding outdated procedure revisions required for implementation of 2-AOP-SSD-1, Control Room Inaccessibility – Safe Shutdown Control. Entergy personnel also self-identified, in 2008 and 2009, missing equipment in ASSD cabinets required for implementation of alternate safe shutdown procedures. Additionally, based on limited discussions with operations staff and review of the April 2010 ASSD quarterly inventory and inspection record, the inspectors noted that there did not appear to be a consistent implementation of the station expectations regarding ASSD inventory and cabinet control specific to evaluation of tools/inventory issues for operator impact and CR initiation threshold for ASSD inventory control discrepancies.

  Entergy personnel issued CR-IP2-2010-3535/3548 to address the performance issues. The inspectors determined that the issues identified were of minor significance and did not impact the ability of operations personnel to implement safe shutdown procedures nor adversely impact critical operator actions within assumed safe shutdown time lines.

- The inspectors identified that corrective actions to reduce the likelihood of repeat failures of charging pump internal check valves experienced in June 2009 and January 2010 (CR-IP2-2009-2376 and 2010-0448) have not been implemented consistently with CAP expectations. Specifically:

  - The inspectors identified the above CRs and related cause evaluations contained limited, documented technical rationale and engineering basis to support the failure determinations and effectiveness of previous corrective actions. The inspectors identified that Entergy personnel did not evaluate, in

January 2010, whether corrective actions implemented by station personnel to reduce the likelihood of these failures since June 2009 were appropriate or adequate to minimize the repeat issues.

- The inspectors identified that Entergy personnel's monitoring actions to reduce charging pump failures regarding internal check valves were not described in the CAP or other formal station process. Specifically, system engineering staff was tracking various monitoring aspects regarding pump run-time to ensure appropriate valve inspections/valve replacement activities were accomplished in a manner to minimize repeat failures. However, the inspectors identified these monitoring actions were conducted informally by station personnel. Additionally, the inspectors identified that one of the informal thresholds for initiating charging pump package replacement work orders was not accomplished as expected in April 2010.

Entergy personnel issued CR-IP2-2010-4031 to address the performance issues. The inspectors, through document review supported by interviews with the system manager, determined that the corrective action related observations identified did not impact the current functionality and availability of the charging pumps.

- The inspectors identified corrective actions associated with emergency operating facility (EOF) battery replacements as documented in CR-IP2-2008-03062 did not correct the underlying condition. Specifically, Entergy personnel identified that EOF batteries had not been replaced in accordance with procedures within the station-specified 2 year frequency (~5 years). Station personnel took corrective actions to replace the batteries at that time. However, personnel did not take action to develop a recurring replacement task or formalize the expected replacement frequency in a station process (work control) to provide for future battery replacements. Entergy personnel issued CR-IP2-2010-3554 to address the issue. The inspectors noted that the corrective action observations did not impact EOF equipment functionality or availability.

- The inspectors identified that corrective actions documented in CR-IP2-2010-00331, regarding investigation of unexpected contamination levels in Unit 2 storm drains, were not specific to address contributing causal factors identified by Entergy staff. Specifically, Entergy's apparent cause appropriately identified contributing causes related to the evaluation of radiation protection controls for job coverage and radiation protection staff threshold for CR initiation. The actions assigned to address those causes were not specific, nor could it be assumed by the corrective action description that actions would address the contributing causes. Entergy personnel issued revised corrective actions to CR-IP2-2010-00331.

The inspectors independently evaluated the performance issues and corrective action observations documented above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined that the issues were of minor significance and, therefore, are not subject to enforcement action in accordance with the NRC's Enforcement Policy.

c. Findings

UFSAR Section 5.1.3.12, Cathodic Protection, Not Updated Consistent with Current Plant Conditions

Introduction: The inspectors identified a Severity Level IV (SLIV) NCV of 10 CFR 50.71(e) because Entergy personnel did not update the UFSAR with information consistent with plant conditions. Specifically, Entergy personnel did not remove reference to or correct information to reflect current plant conditions with regard to systems described as having cathodic protection consistent with UFSAR Section 5.1.3.12, Cathodic Protection.

Description: In late 2005, Entergy personnel identified that UFSAR Section 5.1.3.12, regarding cathodic protection of certain systems, was not consistent with current plant conditions. Specifically, Section 5.1.3.12 described circulating water lines, service water lines, and metallic structures inside the intake structure as having cathodic protection. Entergy's review determined that as early as the 1980s either these systems' associated cathodic protection systems were no longer functional or were potentially not installed. As part of a number of actions to address overall cathodic protection at Units 2 and 3, Entergy personnel issued a corrective action to revise the UFSAR [CR-IP2-2005-03902: corrective action (CA) #14]. However, the inspectors noted this corrective action was dependent upon the completion of further engineering assessments/surveys regarding existing site corrosion conditions and subsequent engineering determinations of the need for cathodic protection to be installed at the station.

In 2008, Entergy personnel, in part to ensure actions and resources applied would support the resolution of the degraded cathodic protection system, designated the cathodic protection system as a top ten equipment reliability station focus item and developed a revised action plan that included verification of existing cathodic protection systems, performance of site corrosion surveys, and final determination on systems requiring cathodic protection. At that time, Entergy personnel continued to identify that the UFSAR remained inconsistent with current plant conditions and continued to extend the due date for CR-IP2-2005-03902 (CA #14) since the corrosion surveys and engineering assessments had not been completed.

The inspectors identified that the discrepancy in UFSAR Section 5.1.3.12 should have been updated in a timeframe consistent with the standards and expectations delineated in IP-SMM-LI-113, IPEC Technical Specification Bases, Technical Requirements Manual and Updated Final Safety Analysis Report Amendment Preparation, Control and Change Process. Station procedures require Entergy personnel to periodically update/correct information in the UFSAR within an operating cycle to ensure the UFSAR accurately reflects the plant configuration and operation. The inspectors determined there were multiple opportunities and various levels of recognition by Entergy staff and management since 2005 in which the UFSAR should have been updated to reflect the status of cathodic protection at the station. The inspectors noted that Entergy personnel tracked the corrective action in accordance with CAP procedures. However, the inspectors determined those corrective action reviews were not sufficient to determine whether the corrective action remained adequate when long-lead items like engineering assessments were not completed in the timeframe assumed in 2005.

Entergy issued CR-IP2-2010-03512 to address the UFSAR discrepancy. The inspectors also noted that Entergy staff has made progress consistent with its current action plan including completion of a site cathodic protection and corrosion survey that included service water and metallic structures of the intake structure.

Analysis: This issue was a performance deficiency because Entergy personnel had reasonable opportunity to correct and update the UFSAR to be consistent with current plant conditions. This issue is considered within the traditional enforcement process because it has the potential to impede or impact the NRC's ability to perform its regulatory functions. The inspectors used the Enforcement Policy, Supplement I – Reactor Operations, to evaluate the significance of this violation. The inspectors concluded that the violation is more than minor because the longstanding and incorrect information in the UFSAR had a potential impact on safety and licensed activities. Cathodic protection is important to ensure the long-term reliability of piping systems that are located at the site in environmental conditions susceptible to corrosion induced failures. Similar to Enforcement Policy Supplement I, example D.6, the inspectors determined the violation was of SLIV (very low safety significance) because the erroneous information not updated in the UFSAR was not used to make an unacceptable change to the facility nor did it impact a licensing or safety decision by the NRC.

The inspectors determined there was a cross-cutting aspect in the area of problem identification and resolution associated with the component area of corrective action effectiveness. Specifically, Entergy personnel did not implement adequate actions in a timely manner to update the UFSAR to be consistent with current plant conditions. (P.1.d per IMC 0310)

Enforcement: 10 CFR 50.71(e) requires that licensees shall periodically update the Final Safety Analysis Report (FSAR), originally submitted as part of the application for the operating license, to assure that the information included in the report contains the latest information developed. In part, the submittal shall include the effects of all changes made in the facility or procedures as described in the FSAR such that FSAR as updated remains complete and accurate. Contrary to the above, since 2005 Entergy became aware of and failed to update the UFSAR to accurately reflect the status of cathodic protection systems as described in UFSAR Section 5.1.3.12. The failure to adequately update the UFSAR as required by 10 CFR 50.71(e) is characterized as a Severity Level IV violation. However, because the violation was of very low safety significance and was entered in the Entergy's corrective action program (CR-IP2-2010-03512), this violation is being treated as an NCV consistent with NRC Enforcement Policy and is identified as **NCV 05000247/2010008: UFSAR Section 5.1.3.12, Cathodic Protection, not updated consistent with current plant conditions.**

.2 Assessment of the Use of Operating Experience (OE)

a. Inspection Scope

The inspectors selected a sample of CRs associated with the review of industry OE to determine whether Entergy personnel appropriately evaluated the OE information for applicability to Indian Point Unit 2 and had taken appropriate actions, when warranted. The inspectors reviewed CR evaluations of OE documents associated with a sample of NRC generic letters and information notices to ensure that Entergy staff adequately

considered the underlying problems associated with the issues for resolution via their CAP. The inspectors also observed CRG and CARB meetings to determine if industry OE was considered during the CR screening and resolution process. A list of the documents reviewed is included in the Attachment to this report.

b. Assessment

The inspectors determined that Entergy staff appropriately considered industry OE information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. The inspectors determined that OE was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures when applicable. The inspectors observed that industry OE was routinely discussed and considered during the conduct of CRG and CARB meetings.

c. Findings

No findings of significance were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of Quality Assurance (QA) audits, including a review of several of the findings from the most recent audit of the CAP, and a variety of self-assessments focused on various plant programs. These reviews were performed to determine if problems identified through these assessments were entered into the CAP when appropriate, and whether corrective actions were initiated to address identified deficiencies. The effectiveness of the audits and assessments was evaluated by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

Additionally, the inspectors reviewed a 2009 station self-assessment regarding the safety culture and work environment at the station. This review was conducted to evaluate whether Entergy self-identified areas for improvement and current challenges regarding the safety culture. The inspectors verified Entergy initiated actions to address areas for improvement. A list of documents reviewed is included in the Attachment to this report.

b. Assessment

The inspectors concluded that QA audits and self-assessments were critical, thorough, and generally effective in identifying issues. The inspectors observed that these audits and self-assessments were conducted by personnel knowledgeable in the subject areas and were completed to a sufficient depth to identify issues that were then entered into the CAP for evaluation. Corrective actions associated with the issues were implemented commensurate with their safety significance. Entergy managers evaluated the results and initiated appropriate actions to focus on areas identified for improvement.

c. Findings

No findings of significance were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed aspects of the safety conscious work environment at Indian Point. Specifically, as part of personnel interviews during the inspection, the inspectors asked questions to identify whether station personnel were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed the station ECP coordinator to determine what actions were implemented to ensure employees were aware of the program and its availability with regard to raising concerns. The inspectors reviewed a number of ECP files to ensure that issues were entered into the CAP when appropriate.

b. Assessment

During interviews, plant staff expressed a willingness to use the CAP to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation where there were indications an individual had been hesitant to raise a safety issue. All persons interviewed demonstrated an adequate knowledge of the CAP and ECP. Based on these limited interviews, the inspectors concluded that there was not evidence of challenges to the free flow of information regarding safety concerns.

c. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On May 20, 2010, the inspectors presented the inspection results to Mr. Joseph Pollock, Site Vice President, and to other members of the Entergy staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in the report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

Joe Pollock, Site Vice President
Ann Stewart, Licensing Engineer
Anthony Ambrose, Senior Emergency Planner
Barbara Taggart, Employee Concerns Coordinator
Bob Walpole, Licensing Manager
Brian Sullivan, Emergency Planning Manager
Brian Zanstra, System Engineer
Charles Johnson, Security Supervisor
Christopher Ingrassia, System Engineer
Dan Morales, System Engineer
Dan Wilson, Chemistry Manager
Frank Inzirillo, Quality Assurance Manager
George Dahl, Licensing Engineer
Ivan Sinert, System Engineer
Jeff Cottam, Fire Protection Engineer
Joe Reynolds, Specialist - Corrective Actions & Assessment
John Balletta, Control Room Supervisor
John Dinelli, Operations Manager
Kevin Davidson, Assistance Plant Manager
Mark Cox, Manager, Corrective Action & Assessment Manager
Michael Dries, System Engineer
Mike Ferreti, Maintenance Supervisor/Coordinator
Mike Tumicki, Specialist - Corrective Actions & Assessment
Nelson Azevedo, Engineering Supervisor
Ovidio Ramirez, Jr., System Engineer
Patric Conroy, Nuclear Safety Assurance Director
Paul Bode, OE Coordinator
Robin Daley, System Engineer
Tat Chan, Engineering Supervisor
Thomas Gander, Operations Procedure Group
Tim Garvey, Supervisor of Emergency Planning Infrastructure
Timothy Garvey, Emergency Planning Supervisor

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000247/2010008-01	NCV	UFSAR Section 5.1.3.12, Cathodic Protection, not updated consistent with current plant conditions (Section 4OA2.1.c)

LIST OF DOCUMENTS REVIEWED

Audits and Self-Assessments

IP3LO-2009-00003	IP3LO-2009-00009	IP3LO-2009-00021
IP3LO-2009-00026	IP3LO-2009-00031	IP3LO-2009-00064
IP3LO-2009-00090	IP3LO-2009-00091	IP3LO-2009-00117
IP3LO-2009-00159	IP3LO-2009-00183	QA-03-2009-IP-1
QA-07-2008-IP-1	QA-08-2009-IP-1	

Condition Reports (Unit 2 unless denoted otherwise)

IP2-2004-02736	IP2-2005-04125	IP2-2006-01012	IP2-2006-01027
IP2-2006-05316	IP2-2006-06513	IP2-2007-00717	IP2-2007-00726
IP2-2007-01434	IP2-2007-02023	IP2-2008-00827	IP2-2008-01675
IP2-2008-02886	IP2-2008-02908	IP2-2008-02917	IP2-2008-02932
IP2-2008-02958	IP2-2008-02962	IP2-2008-02996	IP2-2008-03005
IP2-2008-03027	IP2-2008-03053	IP2-2008-03062	IP2-2008-03065
IP2-2008-03070	IP2-2008-03093	IP2-2008-03110	IP2-2008-03142
IP2-2008-03144	IP2-2008-03147	IP2-2008-03190	IP2-2008-03201
IP2-2008-03202	IP2-2008-03330	IP2-2008-03514	IP2-2008-03614
IP2-2008-03642	IP2-2008-03662	IP2-2008-03749	IP2-2008-03781
IP2-2008-03799	IP2-2008-03809	IP2-2008-03817	IP2-2008-03893
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IP2-2008-04646	IP2-2008-04653	IP2-2008-04654	IP2-2008-04675
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IP2-2008-04762	IP2-2008-04772	IP2-2008-04773	IP2-2008-04784

IP2-2008-04804	IP2-2008-04805	IP2-2008-04816	IP2-2008-04832
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IP2-2008-05101	IP2-2008-05109	IP2-2008-05125	IP2-2008-05127
IP2-2008-05135	IP2-2008-05149	IP2-2008-05175	IP2-2008-05177
IP2-2008-05218	IP2-2008-05219	IP2-2008-05225	IP2-2008-05240
IP2-2008-05270	IP2-2008-05271	IP2-2008-05288	IP2-2008-05322
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IP2-2009-00342	IP2-2009-00342	IP2-2009-00346	IP2-2009-00356
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IP2-2009-00623	IP2-2009-00628	IP2-2009-00666	IP2-2009-00674
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IP2-2009-01041	IP2-2009-01124	IP2-2009-01146	IP2-2009-01168
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IP2-2009-01704	IP2-2009-01712	IP2-2009-01721	IP2-2009-01730
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IP2-2009-02120	IP2-2009-02169	IP2-2009-02171	IP2-2009-02173
IP2-2009-02180	IP2-2009-02217	IP2-2009-02226	IP2-2009-02232
IP2-2009-02253	IP2-2009-02264	IP2-2009-02322	IP2-2009-02360
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IP2-2009-03489	IP2-2009-03496	IP2-2009-03560	IP2-2009-03578
IP2-2009-03750	IP2-2009-03778	IP2-2009-03837	IP2-2009-03854
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IP2-2009-04013	IP2-2009-04024	IP2-2009-04029	IP2-2009-04082
IP2-2009-04104	IP2-2009-04116	IP2-2009-04147	IP2-2009-04198
IP2-2009-04215	IP2-2009-04216	IP2-2009-04249	IP2-2009-04251
IP2-2009-04276	IP2-2009-04338	IP2-2009-04354	IP2-2009-04358
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IP2-2009-05110	IP2-2009-05155	IP2-2009-05200	IP2-2009-05201
IP2-2009-05213	IP2-2009-05276	IP2-2009-05277	IP2-2009-05277
IP2-2009-05391	IP2-2009-05405	IP2-2010-00001	IP2-2010-00032
IP2-2010-00049	IP2-2010-00054	IP2-2010-00072	IP2-2010-00079
IP2-2010-00086	IP2-2010-00091	IP2-2010-00122	IP2-2010-00142
IP2-2010-00147	IP2-2010-00265	IP2-2010-00266	IP2-2010-00321
IP2-2010-00369	IP2-2010-00448	IP2-2010-00480	IP2-2010-00510
IP2-2010-00609	IP2-2010-00610	IP2-2010-00666	IP2-2010-00708
IP2-2010-00776	IP2-2010-00818	IP2-2010-00866	IP2-2010-00989
IP2-2010-01045	IP2-2010-01112	IP2-2010-01136	IP2-2010-01165
IP2-2010-01166	IP2-2010-01181	IP2-2010-01229	IP2-2010-01251
IP2-2010-01271	IP2-2010-01344	IP2-2010-01373	IP2-2010-01447
IP2-2010-01563	IP2-2010-01609	IP2-2010-01623	IP2-2010-01649
IP2-2010-01667	IP2-2010-01689	IP2-2010-01698	IP2-2010-01779
IP2-2010-01862	IP2-2010-01865	IP2-2010-01956	IP2-2010-02298
IP2-2010-02389	IP2-2010-02396	IP2-2010-02462	IP2-2010-02483
IP2-2010-02534	IP2-2010-02654	IP2-2010-02666	IP2-2010-02672
IP2-2010-02690	IP2-2010-02701	IP2-2010-02820	IP2-2010-02969*
IP2-2010-03109	IP2-2010-03120	IP2-2010-03266*	IP2-2010-03273*
IP2-2010-03329*	IP2-2010-03331	IP2-2010-03331*	IP2-2010-03380
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IP2-2010-03535*	IP2-2010-03548*	IP2-2010-03554*	IP2-2010-05405*
IP3-2007-00760	IP3-2009-00520	IP3-2009-00643	IP3-2009-02664
IP3-2009-02716	IP3-2009-02773	IP3-2009-03209	IP3-2009-03211
IP3-2009-03213	IP3-2009-03216	IP3-2009-03936	IP3-2010-00201
IP3-2010-00639	IP3-2010-00938	IP3-2010-02363	

*NRC Identified During Inspection

Operating Experience

IP2-2009-00099	IP2-2009-02531	IP2-2009-04646
IP2-2009-04725	LO-NOE-2005-00241	LO-NOE-2005-00886
LO-NOE-2006-00442	LO-NOE-2008-00173	LO-NOE-2008-00194
LO-NOE-2008-00226	LO-NOE-2008-00280	LO-NOE-2009-00003
LO-NOE-2009-00231	OE260133	OE30839

IN 1995-23, Control Room Staffing Below Minimum Regulatory Requirements
IN 2006-024, Recent Operating Experience Associated with Pressurizer and Main Steam Safety/Relief Valve Lift Setpoints
GL 2003-01, Control Room Habitability
NL-03-181, 180-Day Response to NRC Generic Letter 2003-01 Regarding Control Room Habitability

Drawings
9321-F-2720, Flow Diagram Auxiliary Coolant System, Rev. 89
A235296, Flow Diagram Safety Injection System, Rev. 70
A227781, Flow Diagram Auxiliary Coolant System, Rev. 82
A235306, Flow Diagram Nitrogen to Nuclear Equipment, Rev. 16
252665, Control Building (CCR) Control and Air Flow Diagrams, Rev. 00

Non-Cited Violations and Findings

NCV-08-003-02	NCV-08-003-03	NCV-08-003-04	NCV-08-004-01
NCV-08-004-03	NCV-08-402-01	NCV-08-012-01	NCV-09-002-04
NCV-09-002-05	NCV-09-002-07	NCV-09-007-03	NCV-09-402-02

Procedures
DR-ECH-QAPM, Quality Assurance Program Manual, Rev. 19
EN-DC-128, Fire Protection Program Review, Rev. 3
EN-DC-204, Maintenance Rule Scope and Basis, Rev. 2
EN-DC-205, Maintenance Rule Monitoring, Rev. 2
EN-DC-206, Maintenance Rule (a)(1) Process, Rev. 1
EN-EC-100, Guidelines for the Implementation of the Employees Concern Program, Rev. 4
EN-EP-305, Emergency Planning 10CFR 50.54(q) Review Program, Rev. 1
EN-FAP-LI-001, Condition Review Group, Rev. 1
EN-FAP-LI-003, Condition Action Review Board Process, Rev. 1
EN-FAP-LI-004, Corrective Action Program Performance Indicators, Rev. 0
EN-HU-101, Human Performance Program, Rev. 6
EN-HU-103, Human Performance Error Reviews, Rev. 1
EN-LI-100, Process Applicability Determination, Rev. 7
EN-LI-102, Corrective Action Process, Rev. 15
EN-LI-104, Self-Assessment and Benchmark Process, Rev. 5
EN-LI-114, Performance Indicator Process, Rev. 4
EN-LI-118, Root Cause Analysis Process, Rev. 12
EN-LI-119, Apparent Cause Evaluation (ACE) Process, Rev. 10
EN-LI-121, Entergy Trending Process, Rev. 8
EN-MA-101, Fundamentals of Maintenance, Rev. 9

EN-OE-100, Operating Experience Program, Rev. 9
EN-OP-104, Operability Determinations, Rev. 4
EN-OP-111, Operational Decision-Making Issue Process. Rev. 4
EN-OP-115, Conduct of Operations, Rev. 9
EN-PL-187, Safety Conscious Work Environment Policy, Rev. 0
EN-PL-190, Maintaining a Strong Safety Culture , Rev. 1
EN-QV-108, QA Surveillance Process, Rev. 7
EN-QV-132, Site Executive Protocol Group, Rev. 0
EN-WM-100, Work Request Generation, Screening and Classification, Rev. 4
EP-AD6, IPEC Emergency Plan Administrative Procedures, Rev. 16
IP-EP-AD9, Notifications Systems Testing and Maintenance, Rev. 7
IP-EP-AD30, IPEC ATI Siren System Administration, Rev. 2
0-PT-Q001, Alternate Safe Shutdown Equipment Inventory and Inspection, Rev. 6
2-PT-Q029B, 22 Safety Injection Pump, Rev. 18
2-PT-Q030B, 22 Component Cooling Water Pump, Rev. 21
2-PT-2Y023B, 22 Component Cooling Water Pump Comprehensive Test, Rev. 1

Work Orders

00001533	00127097	00135097
00136222	00149226	0153648
00158954	00160104	00168110
00170244	00170691	00171617
00180366	00180550	00180551
00181006	00182575	00193961
00199699	50058068	50059479
50061939	51272114	52039207
52191942	52231426	

Miscellaneous
IP2 Online Corrective and Elective Maintenance Backlog
IP2 Outage Corrective and Elective Maintenance Backlog
Indian Point Energy Center 10CFR50.65 Maintenance Rule Action Plan (IP3 Chemical & Volume Control System - 3/16/2010)
Chemical & Volume Control System Maintenance Rule Basis Document, Rev. 0
0-PMP-413-CVCS, Inspection/Replacement of Charging Pump Fluid Cylinder Stuffing Box Seals, Rev. 2
Maintenance Rule Action Plan – RPI System in a(1) Status
Maintenance Rule Action Plan – Unit 2 Main Generator (Generrex) System in a(1) Status
IPEC-EP, Indian Point Energy Center Emergency Plan, Rev. 09
3-PT-Q120B, 32 ABFP (Turbine Driven) Surveillance and IST, 02/25/2010
2009 Quarterly Performance Trends
System Engineering Health Reports (Various)
FMX-00237, Verification of Auxiliary Feed Pump Full Flow Test Acceptance Criteria, Rev. 0
FMX-00227, Pipe Flow Calculation of Service Water System, Rev. 2

LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
ANS	Alert and Notification System
ASSD	Alternate Safe Shutdown
CAP	Corrective Action Program
CARB	Corrective Action Review Board
CFR	Code of Federal Regulations
CR	Condition Report
CRG	Condition Review Group
DRP	Division of Reactor Projects
ECP	Employee Concerns Program
EOF	Emergency Operating Facility
FSAR	Final Safety Analysis Report
IMC	Inspection Manual Chapter
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
OE	Operating Experience
PARS	Publicly Available Records System
PI&R	Problem Identification and Resolution
PM	Preventive Maintenance
PORV	Pressurized Operated Relief Valve
QA	Quality Assurance
ROP	Reactor Oversight Process
SCWE	Safety Conscious Work Environment
SDP	Significance Determination Process
SI	Safety Injection
SL	Severity Level
SSCs	Structures, Systems and Components
SR	Surveillance Requirement
UFSAR	Updated Final Safety Analysis Report
WO	Work Order