



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

September 14, 2011

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 3 - NRC PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTION REPORT
05000286/2011010

Dear Mr. Pollock:

On August 5, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Indian Point Nuclear Generating Unit 3. The enclosed report documents the inspection results, which were discussed on August 5, 2011, with you and other members of your staff.

This inspection examined 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 with the conditions of your 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 and entered them into the Corrective Action Program (CAP) at a low threshold. 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.

This report documents two NRC-identified findings of very low safety significance (Green). The inspectors determined that one of the findings also involved a violation of NRC requirements. However, because of its very low safety significance and because it was entered into your CAP, the NRC is treating this as a non-cited violation (NCV) consistent with Section 2.3.2 of the NRC Enforcement Policy. If you contest this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region 1; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Senior Resident Inspector at Indian Point Nuclear Generating Unit 3. In addition, if you disagree with the cross-cutting aspect assigned to 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 1, and the NRC Senior Resident Inspector at Indian Point Nuclear Generating Unit 3.

J. Pollock

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In accordance with Title 10 of the Code of Federal Regulations Part 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,

A handwritten signature in black ink, appearing to read "Mel Gray", with a long, sweeping horizontal stroke extending to the right.

Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

Docket No. 50-286
License No. DPR-26

Enclosure: Inspection Report No. 05000286/2011010
w/ Attachment: Supplemental Information

J. Pollock

2

In accordance with Title 10 of the Code of Federal Regulations Part 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,

/RA/

Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

Docket No. 50-286
License No. DPR-26

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U.S. Nuclear Regulatory Commission

Region I

Docket No.: 50-286

License No.: DPR-26

Report No.: 05000286/2011010

Licensee: Entergy Nuclear Northeast (Entergy)

Facility: Indian Point Nuclear Generating Unit 3

Location: 450 Broadway, GSB
Buchanan, NY 10511-0249

Dates: July 18 through August 5, 2011

Team Leader: E. Knutson, Senior Resident Inspector, James A. FitzPatrick Nuclear
Power Plant

Inspectors: J. Schoppy, Senior Reactor Inspector, Division of Reactor Safety
M. Halter, Resident Inspector, Indian Point Unit 3
J. Ayala, Project Engineer, Division of Reactor Projects

Approved By: Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000286/2011010; 7/18/11 - 8/5/11; Indian Point Nuclear Generating (Indian Point) Unit 3; Biennial Baseline Inspection of Problem Identification and Resolution. The inspectors identified two findings in the area of effectiveness of identification and prioritization of issues.

This NRC team inspection was performed by two resident and two region-based inspectors. Two findings of very low significance (Green) were identified. One finding was also determined to be a non-cited violation (NCV) of NRC requirements. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." Findings for which the significance determination process (SDP) does not apply may be Green, or be assigned a severity level after NRC management review. The cross-cutting aspects for the findings were determined using IMC 0310, "Components within the Cross-Cutting Areas." The NRC's program for overseeing safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated 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, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. In most cases, Entergy personnel appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues and previous occurrences. The inspectors also determined that Entergy staff typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner. However, the inspectors identified two findings, one of which was also a violation of regulatory requirements, and several weaknesses of minor safety significance associated with problem identification, evaluation, and prioritization of corrective actions.

The inspectors concluded that, in general, Entergy adequately identified, reviewed, and applied relevant industry operating experience to Indian Point Nuclear Generating Unit 3 operations. In addition, based on those items selected for review, the inspectors determined that Entergy's audits and self-assessments were thorough.

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

Cornerstone: Mitigating Systems

- Green. The inspectors identified a finding of very low safety significance (Green) because Entergy personnel did not adequately implement the procedural requirements of EN-DC-115, "Engineering Change Process," during the installation of a modification to the 33 instrument air desiccant dryer. Specifically, Entergy staff incorrectly replaced fuses in the motor control center (MCC) which powers the dryer with smaller capacity fuses, rather than

replacing existing control power fuses in the dryer control panel with fuses of increased capacity, as intended by the design change. As a result, the fuses in the MCC performed their intended function and burned out, deenergizing the dryer, and leading to excessive unavailability of the dryer and high humidity air in the instrument air header. Entergy staff entered this issue into their corrective action process as condition report (CR)-IP3-2011-03798.

The inspectors determined the finding was more than minor because the finding was similar to the "more than minor if" statement associated with example 5.b of Inspection Manual Chapter (IMC) 0612 Appendix E, "Examples of Minor Issues." Additionally, the finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the unavailability of the 33 instrument air dryer caused moist air in the instrument air header which in turn led to high humidity and low pressure alarms on the 33 instrument air header. The inspectors evaluated the finding using IMC 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," and determined the finding was of very low safety significance because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to external initiating events. This finding had a cross-cutting aspect in the area of Human Performance, associated with the Work Control attribute. Specifically, Entergy personnel did not adequately coordinate the planning and implementation of the engineering change process, which involved several site departments, and resulted in incorrectly installed fuses and multiple missed opportunities to both prevent and identify the error. (H.3(b)) (Section 4OA2.1.c(1))

- Green. The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for Entergy's failure to take adequate corrective actions for a condition adverse to quality involving service water (SW) pipes to the emergency diesel generators (EDGs). Specifically, Entergy personnel did not take timely and appropriate corrective actions for carbon steel pipe wall thinning on the common SW supply lines to the EDGs. Entergy staff entered this issue into their corrective action process as condition report (CR)-IP3-2011-03831. Entergy's short-term corrective actions included a structural engineering inspection, an operability evaluation, redirecting the source of continual wetting, and reprioritizing the SW piping refurbishment work order. Subsequent to this inspection, Entergy personnel performed ultrasonic testing of the affected area on one of the pipes that they concluded was most affected and confirmed that the pipe remained operable.

The finding was more than minor because if left uncorrected the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the continuing wetting and associated external corrosion of the pipe without appropriate monitoring could adversely impact the structural integrity of one or both EDG SW supply headers. The inspectors evaluated the finding in accordance with Inspection Manual Chapter (IMC) 0609, Attachment 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," and determined the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of system safety function, and was not risk significant with respect to external events. This finding had a cross-cutting aspect in the area of Problem Identification and Resolution, associated with the Corrective Action Program attribute. Specifically, Entergy personnel did not take timely

corrective actions to address SW carbon steel pipe wall thinning due to external corrosion and periodically monitor the pipe for further degradation, commensurate with the safety significance of the pipe. (P.1(d)) (Section 4OA2.1.c(2))

REPORT DETAILS

4. OTHER ACTIVITIES**4OA2 Problem Identification and Resolution (71152B - 1 sample)**

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of Corrective Action Program (CAP) Effectiveness**a. Inspection Scope**

The inspectors reviewed the procedures that described Entergy's corrective action program at Indian Point Unit 3. To assess the effectiveness of the corrective action program, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in Title 10, Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," and Entergy's procedure EN-LI-102, "Corrective Action Process," Revision 16. For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed condition reports (CRs) selected across the seven cornerstones of safety in the NRCs Reactor Oversight Process. Additionally, the inspectors attended multiple Operations Focus, Condition Review Group (CRG), and Corrective Action Review Board (CARB) meetings. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and oversight programs.

(1) Effectiveness of Problem Identification

In addition to the items described above, the inspectors reviewed a sample of completed corrective and preventative maintenance work orders, completed surveillance test procedures, operator logs, and periodic trend reports. The inspectors also completed field walkdowns of various plant systems, such as the service water (SW), auxiliary feedwater (AFW), and instrument air systems. Additionally, the inspectors reviewed a sample of condition reports written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that Entergy staff entered conditions adverse to quality into their corrective action program as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of CRs issued since the last NRC biennial Problem Identification and Resolution inspection completed in June 2009. The inspectors also reviewed CRs that were assigned lower levels of significance that did not include formal cause evaluations to ensure that they were

properly classified. The inspectors' review included the appropriateness of the assigned significance, 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. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of the issues.

(3) Effectiveness of Corrective Actions

The inspectors reviewed Entergy's completed corrective actions through documentation review and, in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also 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 a sample of CRs associated with non-cited violations (NCVs) and findings to verify that Entergy personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Entergy's actions related to conditions adverse to quality associated with SW system corrosion, instrument air system performance, and AFW system performance.

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 that problems or concerns were generally 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 low levels and CR descriptions appropriately included reference to repeat occurrences of issues. 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 the following example of a minor issue that was not adequately identified by Entergy staff. Entergy staff promptly entered the issue into the CAP for resolution.

- The inspectors identified that Entergy personnel performed maintenance on three AFW flow control valves during the 2011 refueling outage, but did not perform the required post maintenance tests (PMTs) on the valves prior to declaring the AFW system operable. The inspectors also identified the PMTs were not correctly scheduled to be completed after the maintenance that occurred during the outage. The inspectors noted that Entergy personnel subsequently satisfactorily stroked the

valves during the next normally scheduled, quarterly AFW in-service testing approximately one week later.

The inspectors determined that the missed PMT for the valves was a performance deficiency. However, because the subsequent valve stroke times a week later indicated that the AFW valves were operable, the inspectors determined that the issue was of minor significance and not subject to enforcement action in accordance with the NRCs Enforcement Policy. Entergy staff initiated CR-IP3-2011-03815 for this performance deficiency.

(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 that CRs were generally categorized for evaluation and resolution commensurate with the 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.

Notwithstanding these conclusions, the inspectors identified the following example where the evaluation of a repeat issue was not commensurate with the potential significance of the issue.

- Based on a nuclear plant operator (NPO) log and CAP database review, the inspectors noted that on several occasions NPOs documented degraded conditions regarding roof leaks and housekeeping issues in the primary auxiliary building (PAB) during the week of July 3, 2011. Further, the inspectors noted that some of these conditions had existed for six months. The inspectors determined that Entergy staff missed an opportunity to trend these conditions and ensure conditions were appropriately addressed in a timely manner consistent with CAP expectations. However, because none of the leaks or housekeeping conditions challenged or impacted equipment important to safety, the inspectors determined that the issues were of minor significance and not subject to enforcement action in accordance with the NRCs Enforcement Policy. Entergy staff documented this issue in CR-IP3-2011-03295.

(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 the sample of NRC NCVs and findings since the last problem identification and resolution inspection were timely and effective. The inspectors noted, based on the samples inspected, that Entergy staff completed effectiveness reviews for significant issues to verify that implemented corrective actions were effective. However, the inspectors identified two issues (replacement of incorrect fuses associated with the 33 instrument air dryer, and ineffective actions taken to address leakage from a SW vacuum breaker that was causing corrosion issues) that had contributed to findings that were determined to be more than minor (Green). These findings are documented in the following Section (Section 4OA2.1.c).

c. Findings

(1) Ineffective Use of the Engineering Change Process During Modification of the 33 Instrument Air Dryer

Introduction: The inspectors identified a finding of very low safety significance (Green) because Entergy personnel did not adequately implement the procedural requirements of EN-DC-115, "Engineering Change Process," during the installation of a modification to 33 instrument air desiccant dryer.

Description: Entergy personnel developed Engineering Change (EC) 8501 to prevent intermittent failures of the 33 instrument air desiccant dryer blower motor due to high motor inrush currents during startup. Based on a vendor recommendation, the EC directed the replacement of existing four amp control power fuses with six amp fuses. The fuses are located in the 33 instrument air dryer control panel.

During implementation of the EC on May 11, 2011, Entergy personnel removed 15 amp fuses from the 33 motor control center (MCC), which powers the 33 instrument air dryer, rather than removing the four amp fuses from the dryer control panel. The electricians proceeded to replace the 15 amp fuses with the new six amp fuses. When the instrument air dryer was reenergized, the six amp fuses, which did not have sufficient amperage capacity for the MCC application, performed their intended function and burned out, deenergizing the dryer. The dryer remained deenergized and unavailable for a period of approximately two weeks until Entergy personnel found water in the air supply to BFD-PCV-3, the steam generator blowdown recovery outlet backpressure controller. Upon troubleshooting the water issue, Entergy personnel found and corrected the undersized fuses in 33 MCC and placed the dryer back in service. On June 9, 2011, the four amp fuses in the dryer control panel were correctly replaced with six amp fuses, in accordance with the EC. This issue was previously entered into Entergy's CAP as CR-IP3-2011-02767, CR-IP3-2011-02918, and CR-IP3-2011-02920. At the time of the inspection, these CRs had been closed to corrective actions already taken, which included correcting the fuse error and coaching personnel to read the EC documentation more thoroughly.

The inspectors questioned the causes of humidity and low pressure alarms on the 33 instrument air header, which had been documented in condition reports initiated in June and July 2011. Through interviews with the system engineer, the inspectors learned that after the fuse issue had been resolved, troubleshooting of high humidity and low pressure alarms on the 33 instrument air header had revealed that the 33 instrument air dryer had been degraded by moisture passing into the air header while the dryer had been unavailable due to the blown fuses. Degradation of the dryer's tower swapping mechanism allowed air to partially bypass the dryer, thereby causing the high humidity and low pressure alarms. The inspectors noted that additional unavailability of the dryer was accrued while Entergy personnel performed troubleshooting and repair of the degraded dryer. Based on the inspectors' questioning, Entergy personnel documented the issue as a maintenance rule functional failure of the 33 instrument air dryer and calculated the total cumulative unavailability of the dryer attributed to the modification error. The calculated unavailability was 580 hours, which exceeded the licensee's established Maintenance Rule (10 CFR 50.65) threshold of 525 hours for (a)(1) consideration.

The inspectors reviewed EN-DC-115, "Engineering Change Process," and identified several examples where Entergy personnel did not implement the requirements of the modification process. First, the EC package incorrectly identified the location of the fuses, and this error was translated into the work package which was used by maintenance personnel who implemented the EC. Specifically, the Post Modification Test Plan package stated that the four amp fuses were located in the 33 MCC. Additionally, the maintenance personnel who implemented the EC did not follow the fuse verification procedure when removing the 15 amp fuses from the MCC and prior to reinstalling the six amp fuses. Finally, the PMT was not performed in a timely manner in that the 33 instrument air train was placed back in service without a PMT having been performed. The inspectors determined that each of these examples had been opportunities, or "barriers", built into the Engineering Change process, through which Entergy personnel could have either prevented or recognized the error and avoided the cumulative unavailability of the instrument air dryer and associated moist air in the air header.

The inspectors determined these problems were not identified by Entergy personnel. Entergy staff entered this issue into their CAP as CR-IP3-2011-03798. Planned corrective actions include performing an Apparent Cause Evaluation for the issue.

Analysis: The inspectors determined that the issue was a performance deficiency because Entergy personnel did not follow procedures to effectively implement the engineering change to the 33 instrument air dryer. The inspectors determined that the finding was more than minor because the finding was similar to the "more than minor if" statement associated with example 5.b of Inspection Manual Chapter (IMC) 0612 Appendix E, "Examples of Minor Issues." Additionally, the finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the unavailability of the 33 instrument air dryer resulted in moist air in the instrument air header which in turn led to high

humidity and low pressure conditions on the 33 instrument air header. The inspectors evaluated the finding using IMC 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," and determined the finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to external initiating events.

The inspectors determined that the finding had a cross-cutting aspect in the area of Human Performance, associated with the Work Control attribute, because Entergy personnel did not appropriately coordinate work activities by incorporating actions to address: 1) the need for work groups to communicate, coordinate, and cooperate with each other during activities in which interdepartmental coordination is necessary to assure plant and human performance; and 2) the need to keep personnel apprised of work status and the operational impact of work activities. Specifically, Entergy personnel did not adequately coordinate the planning and implementation of the engineering change process, which involved several site departments, and resulted in incorrectly installed fuses and multiple missed opportunities to both prevent and subsequently identify the error. (H.3(b))

Enforcement: Enforcement does not apply because the performance deficiency did not involve a violation of regulatory requirements. The instrument air system is not a safety related system and 10 CFR Part 50 Appendix B requirements are not applicable. Because this issue does not involve a violation of regulatory requirements and is of very low safety significance, it is being treated as a finding (FIN). **(FIN 05000286/2011010-01, Procedural Requirements of Engineering Change Process Not Implemented)**

(2) Failure to Take Adequate Corrective Action for Degraded EDG SW Piping

Introduction. The inspectors identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for Entergy's failure to take adequate corrective actions for a condition adverse to quality involving SW pipes to the EDGs. Specifically, Entergy personnel did not take timely and appropriate corrective actions for carbon steel pipe wall thinning on the common SW supply lines to the EDGs.

Description. On July 19, 2011, the inspectors observed that a leaking SW return line vacuum breaker (SWN-69) ported water into the piping pit in the EDG valve room, which indirectly sprayed the bottom of both redundant EDG SW supply pipe headers. The inspectors noted that this portion of both 10-inch diameter SW supply headers was continuously wetted over a length of approximately two feet. The inspectors noted that the vacuum breaker had been leaking since February 2009. Based on the corroded condition of the bottom portion of both headers and the quantity of accumulated rust flakes/pieces beneath both headers, the inspectors questioned the condition of these pipes.

Entergy personnel informed the inspectors that they had originally identified the external corrosion on the SW supply lines at that specific location on September 30, 2008 (CR IP3-2008-02383). The inspectors reviewed CR-IP3-2008-02383 and Entergy's associated corrective actions and noted the following: (1) the CR initiator, operations, and CRG screened the CR as not requiring an operability review (thus no operability

review was performed for this safety-related SW piping degraded condition); (2) CRG classified the CR as significance "D" and closed the CR to WO 166970; (3) WO 166970 was created to clean, repaint and inspect the piping per the external corrosion monitoring program; (4) planning took the WO to "plan" status on October 1, 2008; and (5) as of August 2011, the WO was active and targeted to work in 2015. The inspectors requested operability evaluations of this degrading condition, other associated CRs, documented inspections (including ultrasonic tests) or trending reports, and any associated WOs since October 2008. Entergy personnel stated that no additional documented information was identified but indicated that the system engineers periodically inspected the piping during their walkdowns.

Based on the inspectors' questions, Entergy staff initiated CR-IP3-2011-03831. Entergy structural engineering personnel inspected the piping on July 21. Based on their input regarding iron oxide exfoliation, an estimate of SW piping wall loss and no leakage, engineering personnel determined that the structural integrity of the pipe was not affected and that the pipe remained operable. The inspectors reviewed Entergy's operability evaluation and determined that it was adequate based on the information available. Entergy's short-term corrective actions also included redirecting the vacuum breaker discharge to a local sump (completed on August 2) and reprioritizing the SW piping refurbishment work order (scheduled to work in 2011). Subsequent to this inspection, Entergy personnel performed ultrasonic testing of the affected area on one of the pipes that they concluded was most affected and confirmed that the pipe remained operable.

Analysis. The inspectors determined that Entergy's failure to take adequate corrective actions for an adverse condition associated with the EDG SW supply piping was a performance deficiency that was reasonably within Entergy's ability to foresee and prevent. Specifically, Entergy personnel did not take timely and appropriate corrective actions commensurate with the safety significance of a potential common mode failure of all three EDGs due to carbon steel pipe wall thinning on the common SW supply. The finding was determined to be more than minor because if left uncorrected the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the continuing wetting and associated external corrosion of the pipe without appropriate monitoring could adversely impact the structural integrity of one or both EDG SW supply headers. The inspectors evaluated the finding in accordance with IMC 0609, Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems Cornerstone. The inspectors determined that the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of system safety function, and was not risk significant with respect to external events.

This finding had a cross-cutting aspect in the area of Problem Identification and Resolution, associated with the Corrective Action Program attribute, because Entergy personnel did not take appropriate corrective actions to address an adverse trend in a timely manner, commensurate with the safety significance. Specifically, Entergy personnel did not take timely corrective actions to address SW carbon steel pipe wall thinning due to external corrosion, such as eliminating the source of the wetting by redirecting the flow of water, evaluating the as-found structural integrity of the pipe, and

periodically monitoring the pipe for further degradation, commensurate with the safety significance of the pipe. (P.1(d))

Enforcement. 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and non-conformances are promptly identified and corrected." Contrary to the above, Entergy staff did not promptly correct the degraded condition of the EDG SW piping from September 30, 2008, to August 2, 2011. Because this violation was of very low safety significance and it was entered into Entergy's CAP (CR-IP3-2011-03831), it is being treated as an NCV consistent with the Enforcement Policy. **(NCV 05000286/2011010-02, Inadequate Corrective Action for Degraded EDG SW Piping)**

.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 3 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 through their CAP. The inspectors also observed CRG and CARB meetings to determine if industry OE was considered during the CR screening and resolution processes.

b. Assessment

The inspectors determined that, in general, 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 discussed and considered during the conduct of CRG and CARB meetings. However, the inspectors noted in one CR that, Entergy staff had not appropriately considered internal and industry OE and/or effectively used the information to implement timely corrective and preventive actions. For example:

- The inspectors noted that Entergy staff had received from industry sources operating experience related to the Calvert Cliffs plant, where water intrusion from a roof leak had caused a dual unit trip in 2010. The inspectors noted that, in May 2010, Entergy staff determined that the Indian Point Units were not susceptible to the same type of event due to the design of the electrical systems, in that the Units are electrically isolated from one another. Entergy staff determined that no additional actions were necessary to address this industry OE. The inspectors determined that, in this instance, Entergy's response was narrowly focused, given the presence of roof leaks in the Unit 3 PAB and the identified roof leak in the 31 EDG cell (WO 225582).

However, the inspectors noted that, as of July 2011, Entergy had an open action item in their CAP to perform an OE review of NRC Information Notice 2011-12, "Reactor Trips Resulting from Water Intrusion into Electrical Equipment," which the NRC issued in June 2011 in response to the Calvert Cliffs event. Therefore, because none of the leaks challenged or impacted equipment important to safety, and Entergy has open actions to address potential site-specific applicability of the OE regarding roof leaks, the inspectors determined that the performance aspects regarding this issue were of minor significance and not subject to enforcement action in accordance with the NRCs Enforcement Policy.

c. Findings

No findings 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 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.

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 completed 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.

c. Findings

No findings 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 Unit 3. 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 Employee Concerns Program (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 indicated 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 no evidence of significant challenges to the free flow of information regarding safety concerns.

c. Findings

No findings were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On August 5, 2011, the inspectors presented the inspection results to Mr. Joseph Pollock, Site Vice President, and other members of the Entergy staff. The inspectors reviewed proprietary information, which was returned to Entergy staff at the end of the inspection. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION**KEY POINTS OF CONTACT****Entergy Personnel**

J. Pollock	Site Vice President
R. Aguiar	Security Supervisor
B. Altadonna	Programs and Components Engineer
J. Bencivenga	Design Engineering
M. Burney	Licensing Specialist
P. Conroy	Director, Nuclear Safety Assurance
K. Curley	System Engineer
G. Dahl	Licensing Specialist
M. Ferretti	Maintenance Supervisor
E. Firth	Manager, Corrective Action & Assessment
D. Gagnon	Site Security Manager
M. Haggstrom	System Engineer
C. Hasenbein	System Engineer
T. Iavicoli	Radiation Protection Specialist
R. Johnson	Maintenance Supervisor
J. Lafferty	System Engineering Supervisor
R. Martin	Senior Planner, Emergency Planning
F. Philips	Senior Planner, Emergency Planning
J. Reynolds	Corrective Action & Assessment Specialist
B. Schmidt	Operations
B. Taggart	Employee Concerns Program Coordinator
M. Tumicki	Corrective Action & Assessment Specialist
J. Ventosa	General Manager, Plant Operations

LIST OF ITEMS OPENED, CLOSED AND DISCUSSEDOpened and Closed

05000286/2011010-01	FIN	Procedural Requirements of Engineering Change Process Not Implemented
05000286/2011010-02	NCV	Inadequate Corrective Action for Degraded EDG SW Piping

LIST OF DOCUMENTS REVIEWED

Section 40A2: Identification and Resolution of Problems

Audits and Self-Assessments

LO-IP3LO-2009-00067, "Plant Status and Configuration Control - IPEC Snapshot Self-Assessment Report," dated December 12, 2009

LO-IP3LO-2009-00071, "QA NIEP Audit Criteria - IPEC Focused Self-Assessment Report," dated July 13, 2009

LO-IP3LO-2010-00008, "Quality of CR Closures Performed by Department Improvement Coordinators (DPICs) - IPEC Snapshot Self-Assessment Report," dated December 31, 2010

LO-IP3LO-2010-00074, "Conduct of Operations - IPEC Snapshot Self-Assessment Report," dated November 13, 2010

LO-IP3LO-2010-00157, "Tone Alert Radio Program Administration and Recordkeeping - IPEC Snapshot Self-Assessment Report," dated May 10, 2010

LO-IP3LO-2011-00023, "Operations Facilities and Equipment - IPEC Snapshot Self-Assessment Report," dated June 1, 2011

LO-IP3LO-2010-00035, "Snapshot Self-Assessment on Access Controls," dated May 26, 2010

LO-IP3LO-2010-00078, "Focused Self-Assessment on Closed Cooling Water Chemistry," dated May 14, 2010

LO-IP3LO-2010-00045, "Fatigue Rule Compliance", dated February 23, 2010

LO-IP3LO-2010-00196, "Preventive Maintenance (PM) Feedback," dated September 28, 2010

QA-07-2011-IP-1, "Emergency Preparedness (EP) Quality Assurance Audit Report," dated June 13, 2011

QA-12-2009-IP-1, "Operations/Technical Specifications Quality Assurance Audit Report," dated August 3, 2009

QA-04-2010-IP-1, "Engineering Design Control Quality Assurance Audit Report," dated May 27, 2010

QA-10-2010-IP-1, "Maintenance Quality Assurance Audit Report," dated October 13, 2010

QA-01-2009-IP-1, "Fitness for Duty Quality Assurance Audit Report," dated August 20, 2009

QA-16-2009-IP-1, "Security Quality Assurance Audit Report," dated December 17, 2009

QA-16-2010-IP-1, "Security Quality Assurance Audit Report," dated February 9, 2011

Calculations

IP3-CALC-SWS-02022, "Operability Determination and Supports Repair in the Zurn Pit," Revision 0

IP-CALC-08-00118, "Evaluation of Through Wall Leak for Tee Downstream of SWN-38 for Line 408," Revision 0

Completed Surveillances

3-PT-M079A, "31 EDG Functional Test," performed May 15, 2011 and June 16, 2011

3-PT-M079B, "32 EDG Functional Test," performed May 17, 2011 and June 13, 2011

3-PT-M079C, "33 EDG Functional Test," performed June 14, 2011

3-PT-Q120B, "32 ABFP (Turbine Driven) Surveillance and IST," performed April 15, 2011

3-PT-Q134A, "31 RHR Pump Functional Test (RHR Cooling Not in Service)," performed June 3, 2011

3-PT-Q134B, "32 RHR Pump Functional Test (RHR Cooling Not in Service)," performed June 29, 2011

3-PT-R007B, "32 ABFP Full Flow Test," performed April 6, 2011

3-PT-R090E, "Local Operation of 32 ABFP," performed July 5, 2011

3-PT-R160A, "31 EDG Capacity Test," performed March 29, 2011

3-PT-R160B, "32 EDG Capacity Test," performed March 29, 2011

3-PT-R160C, "33 EDG Capacity Test," performed March 20, 2011

3-PT-R189A, "Functional Test of 31 Automatic Trips," performed March 24, 2011

3-PT-R189B, "Functional Test of 32 Automatic Trips," performed March 28, 2011

3-PT-R189C, "Functional Test of 33 Automatic Trips," performed March 17, 2011

3-PT-R198, "32 ABFP Turbine Overspeed Test," performed April 1, 2011

3-PT-Q116B, "32 Safety Injection Pump," dated July 11, 2011

3-PT-Q116B, "32 Safety Injection Pump," dated July 12, 2011

Condition Reports (CR-IP2-)

2010-00746	2010-06527	2011-01610	2011-03604*
2010-05639	2011-00654	2011-02392	
2010-06497	2011-01608	2011-03603*	

* CR written as a result of this inspection

Condition Reports (CR-IP3-)

2003-01600	2009-00381	2009-03538	2009-04452
2003-03613	2009-00512	2009-03546	2009-04462
2003-04298	2009-00572	2009-03562	2009-04482
2006-00013	2009-02368	2009-03578	2009-04498
2006-00290	2009-02443	2009-03590	2009-04499
2006-01596	2009-02462	2009-03786	2009-04502
2006-02071	2009-02539	2009-03808	2009-04523
2006-04063	2009-02573	2009-03819	2009-04585
2007-00275	2009-02587	2009-03867	2009-04607
2007-01010	2009-02626	2009-03904	2009-04638
2007-01512	2009-02716	2009-03908	2009-04655
2007-03393	2009-02720	2009-03943	2009-04693
2007-04212	2009-02791	2009-03956	2009-04694
2008-00334	2009-02831	2009-04006	2009-04769
2008-00369	2009-03040	2009-04035	2009-04819
2008-00409	2009-03089	2009-04077	2009-04867
2008-00489	2009-03150	2009-04123	2009-04876
2008-00698	2009-03177	2009-04219	2009-04901
2008-00717	2009-03311	2009-04262	2010-00007
2008-01589	2009-03321	2009-04281	2010-00045
2008-02026	2009-03336	2009-04282	2010-00060
2008-02137	2009-03341	2009-04288	2010-00202
2008-02166	2009-03343	2009-04359	2010-00269
2008-02383	2009-03375	2009-04401	2010-00347
2008-02787	2009-03386	2009-04420	2010-00410
2008-03009	2009-03481	2009-04450	2010-00419

2010-00420	2010-03099	2011-01345	2011-02835
2010-00421	2010-03109	2011-01371	2011-02844
2010-00549	2010-03119	2011-01377	2011-02867
2010-00631	2010-03141	2011-01398	2011-02918
2010-00735	2010-03216	2011-01403	2011-02920
2010-00853	2010-03229	2011-01434	2011-03080
2010-00863	2010-03299	2011-01447	2011-03127
2010-00917	2010-03469	2011-01465	2011-03148
2010-00998	2010-03478	2011-01492	2011-03170
2010-01028	2010-03554	2011-01496	2011-03243
2010-01034	2010-03686	2011-01517	2011-03280
2010-01217	2010-03687	2011-01525	2011-03295
2010-01227	2010-03696	2011-01588	2011-03360
2010-01238	2010-03859	2011-01615	2011-03481
2010-01433	2011-00018	2011-01619	2011-03522
2010-01533	2011-00021	2011-01745	2011-03561
2010-01543	2011-00039	2011-01869	2011-03574
2010-01692	2011-00205	2011-01915	2011-03583
2010-01730	2011-00232	2011-01917	2011-03584
2010-01825	2011-00259	2011-01929	2011-03592
2010-01883	2011-00318	2011-01944	2011-03594
2010-01890	2011-00369	2011-01997	2011-03596
2010-01924	2011-00394	2011-02131	2011-03599
2010-01964	2011-00396	2011-02139	2011-03609
2010-02005	2011-00433	2011-02142	2011-03613
2010-02204	2011-00574	2011-02146	2011-03614
2010-02231	2011-00575	2011-02204	2011-03616
2010-02288	2011-00576	2011-02227	2011-03617
2010-02294	2011-00577	2011-02240	2011-03619
2010-02331	2011-00580	2011-02305	2011-03631
2010-02348	2011-00858	2011-02309	2011-03632*
2010-02376	2011-00860	2011-02352	2011-03648*
2010-02377	2011-00926	2011-02358	2011-03654*
2010-02379	2011-00955	2011-02391	2011-03656*
2010-02384	2011-01028	2011-02397	2011-03663*
2010-02395	2011-01052	2011-02403	2011-03664
2010-02396	2011-01056	2011-02413	2011-03672*
2010-02444	2011-01078	2011-02417	2011-03676
2010-02501	2011-01107	2011-02474	2011-03682*
2010-02504	2011-01115	2011-02496	2011-03685*
2010-02588	2011-01120	2011-02504	2011-03704
2010-02614	2011-01136	2011-02520	2011-03705*
2010-02617	2011-01156	2011-02521	2011-03709*
2010-02690	2011-01186	2011-02524	2011-03713
2010-02723	2011-01246	2011-02594	2011-03727
2010-02731	2011-01252	2011-02609	2011-03729*
2010-02755	2011-01254	2011-02749	2011-03734*
2010-02854	2011-01260	2011-02767	2011-03735
2010-02900	2011-01327	2011-02785	2011-03759
2010-03061	2011-01330	2011-02834	2011-03779

2011-03789	2011-03806*	2011-03831*	2011-03845*
2011-03798*	2011-03810*	2011-03832*	2011-04040*
2011-03804*	2011-03815*	2011-03833*	
2011-03805*	2011-03827*	2011-03840*	

* CR written as a result of this inspection

Drawings

9321-F-20333 Sheets. 1 & 2, "Flow Diagram Service Water System," Revisions 50 and 28
 9321-F-20343 Sheets. 1 & 2, "Flow Diagram City Water," Revisions 36 and 20
 9321-F-21223, "Flow Diagram Appendix 'R' 6.9 KV Emergency Diesel Generator Jacket Water System," Revision 3
 9321-F-27533, "Flow Diagram Hydrogen Recombiner System," Revision 12
 9321-F-33733, "Logic Tripping Diagram for RCS Overpressurization Protection System," Revision 3
 9321-H-20283, "Flow Diagram Jacket Water to Diesel Generators," Revision 22
 INSUL-50453, "Containment Building Restraint & Support Design Line 62 Insulation Details," Revision 0

Emergency Preparedness Related

Binder #EOF-1, "Emergency Director Emergency Response Organization Position Binder," updated July 8, 2011
 Binder #EOF-4, "Radiological Assessment Coordinator Emergency Response Organization Position Binder," updated July 8, 2011
 Binder #EOF-5, "Dose Assessor Emergency Response Organization Position Binder," updated July 8, 2011
 Binder #ICP-1, "Security Coordinator ICP," updated July 8, 2011
 Binder #TSC-1, "Emergency Plant Manager Emergency Response Organization Position Binder," updated July 8, 2011
 Binder #TSC-4, "Reactor Engineer Emergency Response Organization Position Binder," updated July 8, 2011
 Binder #TSC-8, "TSC Communicator Emergency Response Organization Position Binder," updated July 8, 2011
 Drill Number 2008-7, "Emergency Preparedness Unit 3 Exercise December 3, 2008 Performance Report," Revision 0
 Drill Number 2010-5, "Emergency Preparedness Unit 2 FEMA/NRC Exercise September 14, 2010 Performance Report," dated October 12, 2010
 Drill Number 2010-6, "Emergency Preparedness Unit 2 Training Drill December 7, 2010 Performance Report," dated December 15, 2010
 Drill Number 2011-1, "Emergency Preparedness Unit 2 Training Drill February 3, 2011 Performance Report," dated February 10, 2011
 Drill Number 2011-2, "Emergency Preparedness Unit 3 SAMG Training Drill June 9, 2011 Performance Report," dated June 30, 2011
 EN-PL-155 Attachment 9.1, "Notification Forms Revision Change Management Checklist," dated January 25, 2011
 Form EP-3, "Control Room NOE Notification Checklist," Revision 14
 Form EP-4, "CCR Initial Notification Checklist - Alert/SAE/GE," Revision 13

Form EP-5, "Upgrade/Update Notification - Alert/SAE/GE Checklist," Revision 11
IP-EP-AD33, "IPEC ATI Siren System Quarterly Preventative Maintenance," Revision 6
IP-EP-AD34, "IPEC ATI Control Station Semi-Annual Preventative Maintenance," Revision 4
IP-EP-AD35, "IPEC ATI Siren Site Annual Preventative Maintenance," Revision 4
Siren-01, "Siren Main and Auxiliary Amplifier Board Replacement," Revision 4
TSC-1, "Indian Point Energy Center Emergency Telephone Directory," July 2011

Evaluations

CR IP2-2009-03701, "Alert Notification System Test Failure Root Cause Analysis Report,"
Revision 1
CR IP3-2009-02640, "32 Main Boiler Feed Pump Rework Root Cause Analysis Report,"
Revision 1
CR IP3-2009-02831, "Lifting of SI-855 Relief Valve During 3PT-Q116B Functional Test for 32 SI
Pump Apparent Cause Evaluation," dated July 15, 2009
CR IP3-2009-02968, "Emergency Plan Contingency Actions with the Seismic Monitoring
Instrumentation Out-of-Service Apparent Cause Evaluation," dated August 4, 2009
CR IP3-2009-04454, "Main Line "A" Phase Fuse Blown to the 33 EDG Auxiliaries in MCC 39
Cubicle 5BL Apparent Cause Evaluation," dated December 9, 2009
CR IP3-2010-01542, "Two Performance Indicator Opportunities Were Missed During
Emergency Planning Drill Apparent Cause Evaluation," dated June 29, 2010
CR IP3-2010-02082, "MIDAS (Meteorological Information and Data Acquisition System)
Program Displayed an Incorrect Emergency Classification Apparent Cause Evaluation,"
dated August 9, 2010
CR IP3-2011-00680, "U3 Service Water Leak Downstream of SWN-6 Root Cause Analysis
Report," Revision 1
PMRQ 50068322-02, "1Y INSP HX (Tube-Side) IAW HTX-022-EDG PM Deferral Request,"
dated May 19, 2011
SW Line 1222 Equipment Failure Evaluation, Revision 0

Learning Organization Tracking Reports (LO-IP3LO-)

2010-00164
2010-00189

Licensee Event Reports

LER 05000286/2009-009-01, "Loss of a Single Train Neutron Flux Detector N-38 Required for
Plant Shutdown Remote from the Control Room due to a Power Supply Failure," dated
October 29, 2010

Maintenance Rule, System Health, and Trending

32 ABFP Oil Analysis Report Summary, dated August 3, 2010 - July 5, 2011
IP3-WebCDMS Sample Analysis Results Summary (EDG Fuel Oil), dated July 2, 2011 - August
1, 2011
IPEC Top Ten Equipment Reliability Issues, dated July 14, 2011
IP-RPT-11-00020, "Maintenance Rule Structural Monitoring Inspection Report (4th Cycle) for
Intake Structure," dated April 15, 2011
LO-IP3LO2011-00003, "Operations Department Quarterly Trend Report, 4th Quarter 2010"

LO-IP3LO2011-00125, "Operations Department Quarterly Trend Report, 1st Quarter 2011"
 SEP-SW-001 Attachment G, "31 EDG JW & LO Coolers Inspection Report," dated August 11,
 2010 and July 14, 2011
 SOP-WDS-010 Attachment 1, "Containment Sump Flow Daily Average," dated April 10, 2011 -
 July 29, 2011
 Unit #3 Boric Acid Walkdown, performed July 13, 2011
 IP3-RPT-IA-01891, "Maintenance Rule Basis Document for Instrument Air and Instrument Air
 Closed Cooling Systems," Revision 0
 System Health Report Unit 3 AFW, 1st Quarter 2011
 System Health Report Unit 3 DC, 1st Quarter 2011

Miscellaneous

3-PT-D001, "CCR TS Rounds," dated July 3-9, 2011
 3-PT-D001C, "Field TS Rounds," dated July 3-9, 2011
 3-RND-CV, "Conventional Rounds," dated July 3-9, 2011, and July 19, 2011
 3-RND-NUC, "Nuclear Rounds," dated July 3-9, 2011
 EN-MA-118 Attachment 9.6, "Intake Structure Access Port Line 409 Foreign Material Exclusion
 Component Close-Out," dated March 25, 2011
 IPEC Operations Shift Order, dated June 24, 2011, June 27-30, 2011, July 5-8, 2011, and July
 11, 2011
 Log Entries Report, dated June 19-24, 2011 and July 3-9, 2011
 SIPD 1248, "Install Status Light on EDG JWPS 1 and 2 Air Start Pressure Switches," dated
 June 1, 2010
 TS-MS-003, "Technical Specification for Piping and Equipment Insulation," Revision 8
 Unit 3 Control Room Deficiency Log, dated June 15, 2011
 Unit 3 Operations Feedback Report for Group 3-AOP, dated July 13, 2011
 Unit 3 Operations Feedback Report for Group 3-ARP, dated July 13, 2011
 Unit 3 Operations Feedback Report for Group 3-ECA, dated July 13, 2011
 EC 8501, "Replace existing Gould Shawmut model number TRS4R fuses for 33 Instrument Air
 Desiccant Dryer Blower Motor with Ferraz Shawmut model number TRS6R fuses,"
 Revision 0
 Maintenance Aggregate Index, as of May 2011
 Non-Outage Fluid Leaks, as of May 2011
 On-Line Corrective Maintenance Backlog, as of May 2011
 On-Line Deficient Maintenance, as of May 2011
 Outage Corrective Maintenance Backlog, as of May 2011
 Outage Deficient Maintenance, as of May 2011
 Outage Fluid Leaks, as of May 2011
 PIR Rework Analysis, as of May 2011

Non-Cited Violations and Findings

FIN 05000286/2010003-02, "Failure to Perform an Adequate Operability Evaluation for Neutron
 Detector N-38 Anomalous Behavior"
 NCV 05000286/2009005-02, "Untimely Compensatory Measures for Degraded EDG Pressure
 Switches"
 NCV 05000286/2009005-03, "Siren Test Failure"
 NCV 05000286/2009005-04, "Failure to Promptly Identify and Correct a Molded Case Circuit
 Breaker Service Life Nonconformance"

NCV 05000286/2010004-01, "Untimely Corrective Actions for Degraded Capacitors for the 31 Static Inverter"
NCV 05000286/2010005-03, "Failure of the Offsite Notification Procedure to Meet the Requirements of the Site Emergency Plan"
NCV 05000286/2010009-01, "Inadequate Design Control of Service Water Strainer Room Flood Barrier"
NCV 05000286/2010005-01, "Repeated Control Room Air Conditioner Gasket Failures"

Non-Destructive Examination Reports

IP3-UT-08-034, "18-inch Line-408 U/S Valve SWN-40-2 UT Erosion/Corrosion Examination," performed August 24, 2008
IP3-UT-08-055, "18-inch Line-408 U/S Valve SWN-40-2 UT Erosion/Corrosion Examination," performed November 10, 2008
IP3-UT-09-083, "Gas Intrusion - 4" Line #16 @ Penetration Q - PAB Side of Containment UT Calibration/Examination," performed July 16, 2009
IP3-UT-10-008, "31 SW Pump Discharge 14" Line #1081 UT Erosion/Corrosion Examination," performed February 5, 2010
IP3-UT-10-009, "32 SW Pump Discharge 14" Line #1082 UT Erosion/Corrosion Examination," performed February 5, 2010
IP3-UT-10-010, "33 SW Pump Discharge 14" Line #1083 UT Erosion/Corrosion Examination," performed February 5, 2010
IP3-UT-10-011, "34 SW Pump Discharge 14" Line #1084 UT Erosion/Corrosion Examination," performed February 5, 2010
IP3-UT-10-012, "35 SW Pump Discharge 14" Line #1085 UT Erosion/Corrosion Examination," performed February 5, 2010
IP3-UT-10-013, "36 SW Pump Discharge 14" Line #1086 UT Erosion/Corrosion Examination," performed February 5, 2010
VT-07-033, SW "34 Support-ATT Visual Examination of Component Supports and Snubbers (VT-1)," performed January 22, 2007
VT-07-034, "AFW 32 Support Visual Examination of Component Supports and Snubbers (VT-3)," performed January 22, 2007
VT-07-067, "SW-H&R-12C-17 Visual Examination of Pipe Hanger, Support or Restraint (VT-3)," performed March 8, 2007
VT-07-069, "SW-H&R-12B-12-ATT Visual Examination of Pipe Hanger, Support or Restraint (VT-1)," performed March 9, 2007

Operating Experience

CR-IP2-2010-7322, "NRC-IN-2010-23, Malfunctions of Emergency Diesel Generator Speed Switch Circuits," dated February 9, 2011
CR-IP2-2011-00832, CA-2, "Containment Insulation Walkdowns at domestic PWRs in Support of NRC Generic Safety Issue 191," dated April 8, 2011
CR-IP2-2011-00834, CA-2, "Containment Insulation Drawing Review in Support of NRC Generic Safety Issue 191," dated June 21, 2011
CR-IP2-2011-00835, CA-2, "Insulation Specification Update for Unit 3 (TS-MS-003) to identify GSI-191 related information," dated May 25, 2011
CR-IP2-2011-00836, CA-1, "Control of Containment Insulation in Support of NRC Generic Safety Issue 191," dated March 10, 2011

CR-IP3-2011-03811, "10CFR21-0102 Concerning the Potential for Failures of SS810 Air Start Motors," dated August 2, 2011
 LO-WTIPC-2011-00029, CA-49, "NRC-IN-2011-02 Operator Performance Issues Involving Reactivity Management at Nuclear Power Plants," Revision 0
 LO-WTIPC-2011-00029, CA-60, "NRC-Event-4607-A2-IPC-001, Potential Voiding in Auxiliary Feedwater Alternate Suction Line," Revision 0
 NRC Information Notice 2007-06, "Potential Common Cause Vulnerabilities in Essential Service Water Systems," dated February 9, 2007
 NRC Information Notice 2008-11, "Service Water System Degradation at Brunswick Steam Electric Plant Unit 1," dated June 18, 2008
 NRC Information Notice 2011-12, "Reactor Trips Resulting from Water Intrusion into Electrical Equipment," dated June 16, 2011

Procedures

0-AOP-SEC-3, "Event Contingency Actions," Revision 3
 0-GNR-403-ELC, "Emergency Diesel Generator Quarterly Inspection," Revision 2
 3-AOP-Flood-1, "Flooding," Revision 4
 3-AOP-Leak-1, "Sudden Increase in Reactor Coolant System Leakage," Revision 5
 3-ARP-009, "VC Sump Pump Running," Revision 41
 3-ARP-011, "Panel SHF Electrical," Revision 33
 3-ARP-019, "Panel Local - Diesel Generators," Revision 26
 3-ECA-0.0, "Loss of All AC Power," Revision 6
 3-ECA-1.2, "LOCA Outside Containment," Revision 0
 3-PT-W001, "Emergency Diesel Support Systems Inspection," Revision 40
 3-SAG-2, "Depressurize the RCS," Revision 1
 3-SOP-AFW-001, "Auxiliary Feedwater System Operation," Revision 3
 3-SOP-CB-002, "Containment Entry and Egress," Revision 33
 3-SOP-EL-001, "Diesel Generator Operation," Revision 45
 3-SOP-EL-005A, "480 Volt Electrical System Operation," Revision 12
 EN-LI-102, "Corrective Action Process," Revision 16
 EN-LI-104, "Self-Assessment and Benchmark Process," Revision 7
 EN-LI-118, "Root Cause Evaluation Process," Revision 14
 EN-LI-118-06, "Common Cause Analysis (CCA)," Revision 1
 EN-LI-119, "Apparent Cause Evaluation (ACE) Process," Revision 12
 EN-LI-121, "Entergy Trending Process," Revision 10
 EN-OE-100, "Operating Experience Program," Revision 12
 EN-OP-115, "Conduct of Operations," Revision 11
 EN-WM-107, "Post Maintenance Testing," Revision 3
 IPEC Emergency Action Levels," Revision 10-2
 SEP-SW-001, "NRC Generic Letter 89-13 Service Water Program," Revision 4
 EN-LI-102, "Corrective Action Process," Revision 16
 EN-WM-107, "Post Maintenance Testing," Revision 3
 3-REF-002-GEN, "Indian Point Unit 3 Refueling Procedure," Revision 4
 3-PT-M108, "RHR/SI/CS System Venting," Revision 14
 0-CY-2510, "Closed Cooling Water Chemistry Specifications and Frequency," Revision 12
 EN-RP-101, "Access Control for Radiologically Controlled Areas," Revision 6
 0-RP-RWP-407, "Refueling Support," Revision 2
 3-PT-R032A, "Fuel Storage Building Filtration System," Revision 20
 0-NF-311, "NIS Power Range Gain Adjustment," Revision 2

EN-DC-117, "Post Modification Testing and Special Instructions," Revision 4
3-SOP-IA-001, "Instrument Air System Operation," Revision 25
EN-DC-115, "Engineering Change Process," Revision 11
3-ARP-012, "Panel SJF - Cooling Water and Air," Revision 48
3-AOP-AIR-1, "Air Systems Malfunction," Revision 3
EN-DC-205, "Maintenance Rule Monitoring," Revision 3
EN-DC-204, "Maintenance Rule Scope and Basis," Revision 2
EN-DC-206, "Maintenance Rule (a)(1) Process," Revision 1

Safety Culture / Employee Concerns Program

LO-HQNLO-2010-00002, "Entergy Nuclear Fleet 2009 Nuclear Safety Culture Survey Action Plan," dated January 28, 2010
LO-IP3LO-2009-00164, "Indian Point Energy Center 2009 Nuclear Safety Culture Survey Action Plan," dated January 28, 2010
LO-IP3LO-2010-00138, "Security Department Nuclear Safety Culture Survey Action Plan," dated January 28, 2010
LO-IP3LO-2009-00164, "Indian Point Employee Concerns Improvement Plan," dated November 30, 2009
Meeting Minutes, Indian Point Energy Center Executive Protocol Group Meeting 09-016, dated December 7, 2009
Meeting Minutes, Indian Point Energy Center Special Executive Protocol Group Meeting 10-001, dated January 8, 2010
Summary List of ECP Cases for 2009, 2010, and 2011
IPEC ECP Monthly Report for June, 2011
Indian Point Employee Concerns Data Analysis Reports for 2009 and 2010
Self-Assessment of IPEC Nuclear Plant Employee Concerns Program, dated October, 2010

Work Orders

00185072	00233344	00163657	52036144
00195796	52214280	00278896	

LIST OF ACRONYMS

ADAMS	Agencywide Document Management System
AFW	auxiliary feedwater
CA	corrective action
CAP	corrective action program
CARB	Corrective Action Review Board
CFR	Code of Federal Regulations
CR	condition report
CRG	Condition Review Group
CW	city water
DRS	Division of Reactor Safety
EC	engineering change
ECP	Employee Concerns Program
EDG	emergency diesel generator
Entergy	Entergy Nuclear Northeast
FIN	finding
GL	Generic Letter
gpm	gallons per minute
HX	heat exchanger
IMC	inspection manual chapter
IST	in-service test
kV	kilovolt
LO	lubricating oil
MCC	motor control center
NCV	non-cited violation
NPO	nuclear plant operator
NRC	Nuclear Regulatory Commission
OE	operating experience
PAB	primary auxiliary building
PMT	post-maintenance test
QA	quality assurance
SCWE	safety conscious work environment
SDP	significance determination process
SSC	structures, systems, and components
ST	surveillance test
SW	service water
TS	Technical Specifications
unsat	unsatisfactory
UT	ultrasonic testing
WO	work order