

March 22, 2006

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: ERRATA TO DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3
NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION
REPORT 05000237/2006002; 05000249/2006002

Dear Mr. Crane:

On March 9, 2006, the U.S. Nuclear Regulatory Commission (NRC) issued problem identification and resolution Inspection Report 05000237/2006002; 05000249/2006002 (ML060680422) for your Dresden Nuclear Power Station, Units 2 and 3. The list of items opened and closed during the inspection is incomplete in the original report. The enclosed errata contains the complete listing, and should be inserted where appropriate into problem identification and resolution Inspection Report 05000237/2006002; 05000249/2006002.

We apologize for any inconvenience to you and your staff.

Sincerely,

/RA/

Mark A. Ring, Chief
Branch 1
Division of Reactor Projects

Docket Nos. 50-237; 50-249
License Nos. DPR-19; DPR-25

Enclosure: Errata to Inspection Report No. 05000237/2006002;
05000249/2006002

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C. Crane

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Dresden Nuclear Power Station Plant Manager
Regulatory Assurance Manager - Dresden
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional
Operating Group
Vice President - Mid-West Operations Support
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ERRATA TO NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION
REPORT 05000237/2006002; 05000249/2006002

1. On Page 1 of the attachment under the heading of "ITEMS OPENED, CLOSED, AND DISCUSSED" insert the following:

ITEMS OPENED, CLOSED, AND DISCUSSED

Items Opened

05000237/2006002-01 05000249/2006002-01	FIN	Failure to enter ERV discrepancies into CAP.
05000237/2006002-02 05000249/2006002-02	NCV	Failure to identify an inadequate surveillance test procedure.
05000237/2006002-03 05000249/2006002-03	URI	Adequacy of licensee's practice of not performing as-found testing of the ERVs.

Items Closed

05000237/2006002-01 05000249/2006002-01	FIN	Failure to enter ERV discrepancies into CAP.
05000237/2006002-02 05000249/2006002-02	NCV	Failure to identify an inadequate surveillance test procedure.

Items Discussed

None

Enclosure

Enclosure

March 9, 2006

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3
NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION
REPORT 05000237/2006002; 05000249/2006002

Dear Mr. Crane:

On January 27, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of problem identification and resolution at your Dresden Nuclear Power Station, Units 2 and 3. The enclosed inspection report documents the inspection findings which were discussed on January 27, 2006, with Mr. Bost 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, compliance with the Commission's rules and regulations and with the conditions of your operating license. Within these areas, the inspection involved selected examination of procedures and representative records, observations of activities, and interviews with personnel.

On the basis of the sample selected for review, the team concluded that, in general, problems were properly identified, evaluated, and corrected. There were two findings of very low safety significance (Green) identified during this inspection associated with the effectiveness of problem identification. The first finding involved the failure to enter discrepancies into the corrective action program that were previously identified in work orders associated with the electromatic relief valves (ERVs) during the 2005 Unit 2 and 2004 Unit 3 refueling outages. The second finding involved the failure to identify an inadequate procedure for surveillance testing of safe shutdown emergency lights. This finding was also determined to be a violation of NRC requirements. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), in accordance with Section VI.A.1 of the NRC's Enforcement Policy.

If you contest the subject or severity of an NCV in this report, 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 III; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Dresden Nuclear Power Station.

C. Crane

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Sincerely,

/RA/

Mark A. Ring, Chief
Branch 1
Division of Reactor Projects

Docket Nos. 50-237; 50-249
License Nos. DPR-19; DPR-25

Enclosure: Inspection Report No. 050000237/2006002; 050000249/2006002

cc w/encl: Site Vice President - Dresden Nuclear Power Station
Dresden Nuclear Power Station Plant Manager
Regulatory Assurance Manager - Dresden
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional
Operating Group
Vice President - Mid-West Operations Support
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Operating Group
Document Control Desk - Licensing
Assistant Attorney General
Illinois Emergency Management Agency
State Liaison Officer
Chairman, Illinois Commerce Commission

In addition, examples of minor problems were identified, including conditions adverse to quality regarding corrective actions that were untimely, to narrow in scope to be effective and/or not completed. The problems that were identified, if appropriate, were entered into your corrective action program.

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

Sincerely,

/RA/

Mark A. Ring, Chief
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-237; 50-249

License Nos: DPR-19; DPR-25

Report No: 05000237/2006002; 05000249/2006002

Licensee: Exelon Nuclear Generation Company

Facility: Dresden Nuclear Power Station, Units 2 and 3

Location: Morris, IL 60450

Dates: January 9, 2006 through January 27, 2006

Inspectors: A. Barker, Project Engineer - Team Lead
D. Schrum, Reactor Engineer
D. Smith, Senior Resident Inspector

Approved by: Mark A. Ring, Chief
Branch 1
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000237/2006002, 05000249/2006002; 01/09/2006 - 01/27/2006; Dresden Nuclear Power Station, Units 2 & 3; Identification and Resolution of Problems.

The inspection was conducted by two region-based inspectors and the senior resident inspector at the Dresden Nuclear Power Station. Two findings of very low safety significance (Green) were identified, one of which involved an associated non-cited violation (NCV). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," (SDP). 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 3, dated July 2000.

Identification and Resolution of Problems

In general, the station identified issues and entered them into the corrective action program (CAP) at the appropriate level. In addition, issues that are identified from operating experience reports and instances where previous corrective actions were ineffective or inappropriate were also entered into the CAP. The inspectors concluded that issues were properly prioritized and generally evaluated well. The sample of corrective actions reviewed appeared to be appropriate and effective. The inspectors determined that conditions at the Dresden station were conducive to identifying issues. The licensee staff at Dresden was aware of and generally familiar with the CAP and other station processes, including the Employee Concerns Program, through which concerns could be raised. Two findings of very low safety significance (Green) were identified associated with the effectiveness of problem identification. These findings originated from a review of station procedures based on known Quad Cities station electromatic relief valve operating experience and Dresden's high failure rate of safe shutdown emergency lighting units.

A. Inspector-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a failure to enter discrepancies into the corrective action program that were previously identified in work orders associated with the electromatic relief valves (ERVs) during the 2005 Unit 2 and 2004 Unit 3 refueling outages. This information was important for confirming the operability of the relief valves following the discovery of degraded ERVs at the Quad Cities Station.
- The finding was greater than minor because if left uncorrected, the extent of degradation of ERVs would not be fully identified or evaluated which could result in inappropriately concluding that equipment important to safety was operable. The inspectors concluded that the finding impacted the Mitigating Systems Cornerstone. The inspectors determined that the finding did not result in an actual loss of a safety function; and concluded that this issue was of very low safety significance. (Section 4OA2.1)
- Green. The inspectors identified an NCV of Technical Specification (TS) 6.8.A.1,

which required that written procedures be implemented covering the activities in the applicable procedures recommended by Regulatory Guide 1.33, including procedures for surveillances. The surveillance procedure for testing Appendix R, safe shutdown emergency lighting was inadequate because it failed to use an approved testing method of the Technical Requirements Manual (TRM). The licensee entered this performance deficiency into the CAP for resolution.

This finding is associated with the Mitigating Systems Cornerstone. The finding was greater than minor because the lack of emergency lighting could result in a delay in accomplishing safe shutdown actions. The finding was of very low safety significance because of the availability of portable head lamps. (Section 4OA2.1)

B. Licensee-Identified Violations

No findings of significance were identified.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

.1 Effectiveness of Problem Identification

a. Inspection Scope

The inspectors reviewed documentation for the past 2 years including: NRC inspection report findings, selected corrective action documents, licensee self-assessments, Nuclear Oversight (NOS) audits, operating experience reports, human performance initiatives, component issue reports that led to system walkdowns and trend assessments to determine if problems were being identified and entered into the CAP at the proper threshold. CAP implementation, metrics, and status, and departmental performance indicators were also reviewed and discussed with the station staff.

In addition, as a result of identified deficiencies with the ERVs on both units at the Quad Cities Station (i.e., operating experience), the inspectors reviewed the Dresden Station ERVs for historical and current-day station actions in the context of problem identification and resolution. This review included assessing the operational status of both units' ERVs through Engineering Change (EC) #358832, maintenance and inspection practices previously performed, review of the testing methodology for the ERVs, and the station's actions in applying the Quad Cities Station operating experience.

b. Assessment

The inspectors concluded, in general, that the station identified issues and entered them into the CAP at the appropriate level. The inspectors' review of operating experience reports identified that the licensee was appropriately including the issues into the CAP. The licensee has also used the CAP to document instances where previous corrective actions were ineffective or were inappropriately closed.

NOS audit, "NOSA-DRE-04-01," on the Maintenance Functional Area that was completed March 3, 2004, concluded that ineffective and untimely corrective actions were contributing factors to the two audit findings. The findings were on continuing poor safety behaviors and practices, and the continued inadequate controls of parts, materials, and nonconforming items.

The licensee self-assessment entitled, "Pre-NRC Problem Identification and Resolution Focus Area Self-Assessment," that was performed December 5-9, 2005, was reviewed for scope, content and corrective actions. The scope of the self-assessment included the CAP attributes of Inspection Procedure 71152, "Identification and Resolution of Problems." The content of the self-assessment identified the deficiencies at the problem statement level. The self-assessment did not employ investigative methodologies to identify associated issue causal factors. However, the licensee generated issue reports

(IRs) for each of the seven deficiencies and nine recommendations that were identified by the self-assessment.

As part of this inspection, the inspectors reviewed previously documented issues in the quarterly integrated inspection reports. Several areas that needed improvement had been identified which included: IRs did not have adequate operability basis, corrective actions were slow and ineffective, and IRs were not generated by the licensee even after prompting by the inspectors. The inspectors' review of these areas did not identify any deficiencies. In response to IRs not clearly documenting the operability basis for why equipment was operable, the licensee made a change to the IR software program in 2005 to require the necessary information prior to routing the IR to the next CAP process step. Therefore, the inspectors did not identify any IRs which failed to include the proper operability basis for degraded equipment. For slow and ineffective corrective actions, the inspectors did not identify any specific examples indicating that this was a continuing problem. In addressing the licensee's failure to generate IRs, a review of a sampling of control room logs indicated that on-shift operations personnel ensured that IRs were generated when warranted by the condition.

In reviewing IR #351829, "second Quarter NRC Exit Observation - IR Generation," the inspectors identified that a corrective action (CA) assignment was lacking, in that, all affected operations personnel were not properly identified. The CA was limited to those operators assigned to an operating crew. There were operators that were not assigned to a crew; but, were required to conduct shift work to maintain their license and should have been listed on this CA assignment. These individuals were not identified as part of the assigned population. Discussions with the shift operations supervisor indicated that the group of operators not assigned to an operating crew were aware of the expectation. This group was designated as crew 7. When the station recognized this oversight in July 2005, a crew 7 CA was initiated to capture this group of affected operators. However, a crew 7 CA assignment was not consistently generated by the licensee to capture this group. When this deficiency was identified in July 2005, operations personnel did not generate an IR, nor did operations personnel determine what potential corrective actions this group had not received. The licensee generated IR #450542 to address this issue. Additionally, the inspector identified that a crew member had not received the training due to scheduled vacation. In response to this information, the licensee reviewed the CAs for all crew members and identified another operator who had not received the training due to scheduled vacation. The licensee generated IRs #449131, 450542, and 451690 for the failure to capture these two operators.

The licensee initiated a site wide human performance plan to address the substantive cross-cutting issue in human performance identified by the NRC in 2004. The licensee's plans and implemented actions were assessed as part of the reactor oversight program mid-cycle performance review in May 2005. The review determined that the licensee's corrective actions were effective in addressing the station's human performance problems.

The human performance coordinator planned monthly meetings with the plant manager and all the department directors to discuss the station's performance in human performance. Additionally, the human performance coordinator planned to conduct meetings with first line supervisors. A common cause evaluation was performed which

indicated that improvement was still needed in enforcing the use of human performance tools. Additional actions to be taken by the licensee to further improve in this area involved scheduled 2006 site-wide training on effective coaching to first line supervisors. Another Exelon Fleet-wide rollout of human performance was also planned for 2006, with an emphasis on each department driving human performance improvement. Additionally, each department planned to have a dynamic learning activity to strengthen the understanding of specific departmental human performance tools. The licensee planned to begin reporting the station's performance in this area at the plan-of-the-day meeting.

On January 27, 2006, the inspectors walked down emergency safe shutdown lights, radiation monitors, the standby gas treatment system, and the emergency diesel generators to assess the material condition of these systems. The systems were selected due to their association with IRs that were reviewed as part of the inspection. The licensee generated IR #446645 to capture the concerns that were identified.

The inspectors' review of IRs identified that there were a significant number of failed emergency lighting units (ELUs). The licensee was aware of the high failure rate of ELUs. The inspectors requested ELU surveillances to verify that ELU failures were being documented in IRs. For those surveillances reviewed, all failures had been documented in IRs. The inspectors also reviewed a sample of the corrective actions that the licensee had taken to reduce ELU failures.

c. Findings

(1) Identification of Electromatic Relief Valve (ERV) Degradation

Introduction: A Green finding was identified that involved the failure to enter discrepancies into the corrective action program that were previously identified in work orders associated with the ERVs during the 2005 Unit 2 and 2004 Unit 3 refueling outages.

Description: The licensee performed maintenance procedure, "Electromatic Relief Valve Replacement," MA-DR-ME-4-020046, Revision 3, each refueling outage to disassemble, inspect, and reassemble the ERVs. The procedure contained Attachment B, "Discrepancies and Corrective Actions," which was utilized by the electricians to document the as-found material condition of each valve. Procedural step 4.6.7.4.A specified to document the repairs on Attachment B. The licensee provided the inspectors the results of the November 2005 Unit 2 and November 2004 Unit 3 refueling outage valve inspections. A number of discrepancies were identified and corrected. Examples included: limit switch missing lock washers, failed limit switches, worn actuator guides, inadequate pilot lever arm gap, missing thumb screws on actuator, and worn spring guideposts. The licensee captured and evaluated the discrepancies in EC #358832, Revision 1, "Evaluation of Quad Cities 2 Electromatic Relief Valve (ERV) Failure Applicability to Dresden Units 2 and 3," to justify the basis for operability of the ERVs on both units at Dresden. The inspectors questioned why these discrepancies were not entered into the CAP. Design Engineering personnel generated IR #443829 to address this issue.

The inspectors' review of EC #358832, Revision 1, determined that more information was required from the licensee to support that the as-found deficient conditions, during the last refueling outage on each unit, did not adversely affect the operation of any of the ERVs. Specifically, the inspectors could not assess the deficient conditions as noted in the EC because the description of the degradation was too vague. More specificity was required in describing the level of degradation observed to allow the inspectors to properly and objectively evaluate the as-found conditions of the ERVs. The licensee agreed with the inspectors and stated that the EC would be revised to qualify the level of degradation seen on the ERVs. The licensee conducted interviews with electrical maintenance personnel for some of the discrepancies to see if they could recall a description of the as-found degradation in order to more fully evaluate its potential adverse effect.

The inspectors' review of EC #358832, Revision 2, identified additional problems including the omission of deficient as-found conditions during the performance of the ERV replacements using MA-DR-ME-4-020046. The inspectors reviewed the actual work order packages for November 2005 on Unit 2 and November 2004 on Unit 3 involving the inspection and rebuilding of the ERVs, and compared the documented work order package deficiencies to the deficiencies identified in the EC. During the review the inspectors identified that discrepant conditions were not always noted on Attachment B, but instead were listed in the as-found section of the work order package. Two examples of this documentation condition were leads with cracked insulation and Grayboot connectors coming apart. As a result, the inspectors determined that the licensee had not captured all of the deficient conditions that were present during the ERV inspections in EC #358832, Revision 2. The licensee agreed to conduct a review of the work order packages to ensure all deficiencies were identified and subsequently captured in a revised EC. The licensee subsequently generated IR #452634 for the missing information in EC #358832 that was documented by the work order packages. In addition, the inspectors questioned if an aggregate evaluation of all documented work order ERV as-found discrepancies for the 2005 Unit 2 and 2004 Unit 3 refueling outages was warranted. Design Engineering personnel generated IR #446702 to address this issue.

Analysis: The inspectors determined that the licensee's failure to enter discrepancies into the corrective action program that were previously identified in work orders associated with the ERVs was a performance deficiency warranting a significance evaluation. The licensee's CAP allows documentation of as-found conditions on work orders as long as the conditions can be considered normal wear. In this case, the quality of the work order documentation was weak and vague, such that the licensee had to interview maintenance technicians in order to confirm that the deficient conditions noted represented normal wear on the valves. The inspectors concluded that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," issued on September 30, 2005. The inspectors concluded that if the finding was left uncorrected, the extent of degradation of ERVs would not be fully identified or evaluated, which could result in inappropriately concluding that equipment important to safety was operable. The inspectors completed a Phase 1 significance determination of this issue using IMC 0609, "Significance Determination Process (SDP)," Appendix A, Attachment 1, dated November 22, 2005. The inspectors concluded that the finding impacted the Mitigating Systems Cornerstone.

The primary cause of this finding was related to the cross-cutting issue of problem identification and resolution. The inspectors determined that the finding did not result in an actual loss of a safety function and concluded that this issue was of very low safety significance (Green).

Enforcement: No violations of NRC requirements occurred because the CAP program allowed the documentation of as-found discrepancies on work orders and the licensee was able to recover information from the maintenance technicians to clarify the vague descriptions that were found on the work orders. As a result, the licensee was able to conclude that the valves were operable. The licensee entered this issue into the corrective action program as IR# 443829. EC #358832, Revision 3, determined that the observed conditions did not approach the extent of degradation that had been identified at Quad Cities, and did not impact the ability of the ERVs to perform their function. **(FIN 05000237/2006002-01; 05000249/2006002-01).**

(2) Failure to Identify Inadequate Procedure for Surveillance of Remote Shutdown Emergency Lights

Introduction: The inspectors identified a non-cited violation of Technical Specifications having very low safety significance (Green) for the licensee's failure to identify an inadequate procedure for surveillance testing safe shutdown emergency lights. The licensee failed to ensure that the method of testing ELUs was approved in the Technical Requirements Manual (TRM).

Description: On January 20, 2006, the inspectors identified that the surveillance procedure for testing Appendix R safe shutdown emergency lighting, DOS 7900-02, "Emergency Lighting Battery Pack Quarterly Inspection," Revision 3, had been inadequate because it failed to use an approved testing method of the TRM. On January 31, 2004, the licensee changed TRM Surveillance Requirement (TSR) 3.7.m.5 to provide for conductance testing using a 50.59 screening. TSR 3.7.m.5 had previously stated that an 8-hour discharge test was required every 18 months. Instead of an 8-hour discharge test, the licensee had been using conductance tests, without having evaluated this method of testing, and had not changed the TRM to reflect this method of testing ELUs until January 2004. The licensee had also not documented the change in testing method in the corrective action program.

After the inspectors identified this concern, the licensee determined that the use of a 50.59 screening to evaluate the acceptability of the TRM changes was not the correct process. The TRM changes only affected Fire Protection sections of the TRM. Therefore, an Applicability Review in accordance with step 4.2.2 of Exelon Procedure LS-AA-104, Rev. 05, "Exelon 50.59 Review Process" should have identified that the proposed changes fell under the Fire Protection Program. Consequently, the governing procedure to evaluate the acceptability of the TRM changes was Exelon Procedure LS-AA-128, Rev. 0, "Regulatory Review of Proposed Changes to the Approved Fire Protection Program."

Title 10 CFR 50.48(b)(2) requires, in part, that all nuclear power plants licensed to operate before January 1, 1979, must satisfy the applicable requirements of Appendix R to this part, including the requirements of Sections III.G, III.J, and III.O. Title 10 CFR Part 50, Appendix R, Section III.J requires, in part, that ELUs with at least an 8-hour battery power supply be provided in all areas needed for operation of safe shutdown equipment and in access and egress routes thereto.

Dresden's specific requirements are documented in the Updated Fire Hazards Analysis, Section 5.0, "Guidelines of Appendix A to APCS 9.5.1; Overall Requirements of Nuclear Plant Fire Protection Program," Amendment 12. Section D.5 (a) stated, "Fixed emergency lighting should consist of sealed beam units with individual 8-hour minimum battery power supplies." Dresden's response was, "Comply: Fixed 8-hour emergency lighting is installed at selected locations throughout the plant per Appendix R, Section 7.5 of the Safe Shutdown Report." In addition, Section C.5, "Test and Test Control," required testing to demonstrate conformance with design and system readiness requirements. By performing conductance testing of ELUs instead of 8-hour discharge testing without an appropriate evaluation, the licensee was not meeting these sections of the Updated Fire Hazards Analysis.

Licensee personnel stated that they would utilize the above referenced Fire Protection Program procedure to document the acceptability of the TRM changes, including the acceptability of using conductance testing for testing ELUs. The licensee generated IR #446729 to address this issue.

Analysis: In accordance with IMC 0612, the inspectors determined that the issue was more than minor because the finding was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems Cornerstone and affected the Mitigating Systems objective, in that, the failure to have required emergency lighting could result in a delay in accomplishing safe shutdown actions. In accordance with IMC 0609, Appendix A, the inspectors performed an SDP Phase 1 screening and determined that the finding degraded the fire protection portion of the Mitigation Systems Cornerstone. As such, screening under IMC 0609, Appendix F, was required. Based on review of IMC 0609, Appendix F, the inspectors determined that the finding did not require a Phase 2 evaluation because no fire protection feature was affected. It did not represent an actual loss of safety function, and was not potentially risk-significant due to possible external events. Moreover, the inspectors concluded that necessary safe shutdown actions could be accomplished in areas lacking emergency lighting due to the availability of flashlights which could be obtained from the control room. As such, this finding was considered to be of very low safety significance (Green).

Enforcement: Technical Specification (TS) 6.8.A.1 requires that written procedures be implemented covering the activities in the applicable procedures recommended by Regulatory Guide 1.33, Appendix A. Regulatory Guide 1.33, Appendix A, recommends procedures for Surveillance Tests and for Fire Protection System Functional Tests.

Contrary to the above, the licensee did not implement an adequate Appendix R safe shutdown emergency lighting surveillance test procedure. This is a violation of TS 6.8.A.1. This violation is associated with a finding that is characterized by the SDP as having very low risk significance (Green) and is being treated as an NCV, consistent

with Section VI.A.1 of the NRC Enforcement Policy. This violation was entered into the licensee's CAP as IR #446729. **(NCV 05000237/2006002-02; 05000249/2006002-02).**

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The inspectors reviewed procedures, inspection reports, and corrective action documents to verify that identified issues were appropriately characterized and prioritized in the CAP. Evaluations documented in condition reports (CRs) or issue reports (IRs) were evaluated for appropriateness of depth and thoroughness relative to the significance or potential impact of each issue. Inspectors attended management meetings to observe the assignment of CR categories for current issues and to observe the review of root, apparent, and common cause analyses, and corrective actions for existing CRs.

b. Assessment

The inspectors observed that the Station Ownership Committee (SOC) exhibited a strong bias in correcting the issues that were identified. Examples of SOC actions taken were to assign work requests, evaluations, and/or corrective actions to specific departmental groups. Additionally, for some issues, SOC members chose to investigate the issue prior to the committee presentation. This action resulted in a greater level of understanding of the issue so the committee could make an informed decision. The inspectors observed the Management Review Committee (MRC) functioning in an oversight role of SOC activities, and guiding CAP implementation. For example, the MRC changed the SOC recommended actions of some issues based on committee dialogue. Additionally, the MRC performed grading of investigative CAP products to provide feedback on product quality to the sponsoring manager. This grading resulted in establishing CAP quality standards for investigative products based on outcomes that were determined and communicated by the MRC.

The IRs that were observed being reviewed by the SOC were also observed being reviewed by the MRC in their oversight role. Both of the committees functioned well to appropriately characterize and prioritize issues in the CAP. The MRC dialogue in the review of root, apparent, and common cause analyses was informative and challenging. These MRC reviews were conducted at a sufficient level of completeness to ensure the evaluation was appropriate in depth and thoroughness relative to the significance of the issue. The inspectors concluded that issues were properly prioritized and generally evaluated well. From the inspectors' review, the following two issues were identified. The first involved a common cause evaluation that was difficult to follow, and the second involved system information that was not shared with the appropriate engineering personnel.

The licensee performed Common Cause Assessment (CCA) 204721-01 due to operations procedural adherence problems which covered the period of March 7, 2003 - March 7, 2004. The CCA was difficult to follow even with assistance from the operations staff manager and the shift operations supervisor. Follow-up discussions with the operations staff manager indicated that several numbers were incorrect with respect to

procedure adherence issue causes and program requirement adherence. As a result, the percentage that “management enforcement of program requirement” contributed to procedural adherence issues changed from 87 percent to 45 percent and the percentage of “operations department programs’ contribution to program requirement adherence” was changed to 39 percent from 40 percent. Additionally, comments from the MRC involving this CCA directed the correction of numbers on April 21, 2004; however, neither the inspectors nor the operations staff manager could determine which specific numbers referenced by the MRC required revision. The licensee generated IR #449745 to address this issue.

The licensee prepared EC #358042, a complex troubleshooting plan, to evaluate the cause of why the Unit 2 125Vdc undervoltage alarm was actuating in the control room. The licensee’s evaluation indicated that the alarm was actuating for two reasons: modifications to the reactor building ventilation system, and the decision to set the alarm on the high end of the alarm setting. The modifications resulted in higher starting currents for the equipment which caused the 480 Vac voltage to dip low enough such that it resulted in a lower 125 Volt direct current system voltage. The inspectors determined that the licensee had not discussed this information with personnel in the engineering department; therefore, the system engineer generated IR #446803, to ensure this information was communicated to appropriate personnel.

.3 Effectiveness of Corrective Actions

a. Inspection Scope

The inspectors reviewed past inspection results, selected CRs and IRs, root cause reports, and common cause evaluations to verify that corrective actions, commensurate with the safety significance of the issues, were specified and implemented in a timely manner. The inspectors evaluated the effectiveness of corrective actions. The inspectors also reviewed the licensee’s corrective actions for NCVs documented in NRC inspection reports in the past 2 years.

In addition, the site’s practice of not conducting as-found testing of the ERVs based on the level of maintenance conducted on the valves was reviewed in light of the Quad Cities Station operating experience. A TS amendment was submitted in January 2004 that detailed Dresden’s testing approach.

b. Assessment

In general, the licensee corrective actions for the samples reviewed were appropriate and appeared to have been effective. The inspectors determined that the licensee generated IRs when a corrective action was identified which was either inadequate or inappropriate. However, the inspectors developed observations regarding corrective actions that were untimely, too narrow in scope to be effective, and/or not completed. The following paragraphs provide examples of these observations.

Station’s Response to Tripping of the 2/3A Emergency Diesel Generator Starting Air Compressor

On August 26, 2005, an operator found smoke coming from the Unit 2/3A emergency diesel generator air compressor motor so the motor was replaced. On September 9, 2005, an operator found the breaker for the motor had tripped on thermal overloads. After resetting the thermal overloads, the compressor continued to run continuously. Troubleshooting activities initiated by the licensee identified a faulty pressure switch and an inspection of the motor control center for the breaker did not reveal any deficiencies. A new design switch was subsequently installed under EC #357280 on October 28, 2005.

On October 29, 2005, the licensee identified that the compressor was not loading. Again, troubleshooting initiated by the licensee determined that there were problems with a different pressure switch, which was replaced under work order (WO) #862165. Although the post maintenance test was acceptable, the licensee held the WO open for system monitoring and troubleshooting. However, on November 17, 2005, the licensee identified that the motor was found trying to run, and again tripped on thermal overloads. The licensee used WO #862165 which had remained opened since November 1, 2005, to investigate this problem and initiated a complex troubleshooting plan on December 1, 2005.

On December 8, 2005, by using the complex troubleshooting plan, the licensee identified that the compressor motor main line contactors were severely degraded. Therefore, the licensee replaced the main line and auxiliary contactors. These contactors were most likely damaged during the motor smoking event on September 9, 2005; however, the licensee had not inspected the contactors during the event because they were not readily accessible. Therefore, the licensee was untimely in determining that the damaged motor was indirectly due to degraded contactors which were caused by the faulty pressure switch. If the licensee's troubleshooting plan had been more detailed and broader, the degraded contactors would have been identified earlier. The licensee generated IRs #448199 and 4533093 for this issue. The licensee's line staff disagreed with the inspectors' conclusion and claimed that the station would not have initiated a troubleshooting plan upon the failure of the motor. However, this issue was presented by the licensee's Nuclear Oversight staff at the Nuclear Station Review Board meeting as inadequate troubleshooting.

NCV 05000249/2004013-05, Unexpected Control Rod Motion During Surveillance Testing

The inspectors reviewed the above NCV associated with the on-shift operating crew members' misinterpretation of the prerequisites of Dresden Operating Surveillance 500-07, "Reactor Mode Switch in Shutdown Functional and Scram Auxiliary Functions Valve Operability Test," Revision 23, resulting in the insertion of 10 previously withdrawn control rods. The licensee conducted an apparent cause evaluation for this event.

In reviewing this issue, the inspectors identified the following deficiencies with the licensee's completed CAs. First, the CA assignment population was too narrow, in that operators who were not assigned a shift did not get assigned this CA. This issue is similar to an issue that is described in the effectiveness of problem identification section of this report. Secondly, the licensee did not have adequate documentation for an independent reviewer to determine if the specified CAs were completed. Each shift

manager for all six operating crews had an assignment to present this issue as “lessons learned” to their crew. Each shift manager indicated that the assigned actions had been completed, 273067-9 through 14; however, the inspectors could not determine if all members of each assigned crew had actually received the required information because a list of operators was not included as part of the completed action. This same deficiency, the inability to verify the completeness of the licensees’ corrective actions, was discussed and documented during the 2004 biennial problem identification and resolution inspection. Therefore, the inspectors considered this deficiency as a repeat issue. The licensee generated IR #445468 to address this issue.

Corrective Actions Not Implemented to Address Deficient Walkdown of the Drywell by Operations Department Personnel

The inspectors requested that the licensee conduct a search of IRs associated with NRC inspector walkdowns of the drywell. A total of seven IRs had been generated over the last 2-year period. The inspectors conducted their walkdowns after operations management declared the drywell ready for closeout. The licensee addressed the specific deficiencies or issues in each IR; however, the licensee had not taken action to address the quality of the drywell walkdowns by operations department personnel or to determine why the deficiencies had not been identified during station drywell walkdowns. The licensee had generated IRs #256375, #277506, #279018, #277146, #281105, #330409 and #372284 for the deficiencies. Subsequent to this inspection, the licensee generated IR #452548 regarding the ineffectiveness of the station’s completed corrective actions to improve the quality of operations department drywell walkdowns.

NCV 2004013-04: “Failure to Adequately Ensure that a Contract Worker Followed Station Standards While Working in an Area Flagged with a Protected Pathway Sign”

This issue was associated with the licensee’s failure to adhere to station procedures and standards for protected pathway equipment signs. During the 2004 outage, a worker threw a tool and tripped a safety-related breaker resulting in the temporary loss of a 480VAC power source. In reviewing the licensee’s corrective actions for this event, the inspectors determined that an apparent cause evaluation was generated for this event, as well as a number of other outage-related events. One of the CAs required the station to perform a review of the effectiveness of the CAs during the 2005 Unit 2 refueling outage as specified by assignment 273150-14; however, when the inspectors inquired about the results of this review, the licensee indicated that the assignment had not been completed because the assignment was not captured in the CAP as an action item. The licensee provided the inspectors with the meeting notes from the MRC meeting on January 27, 2005, and there were no comments regarding the deletion of this assignment. The licensee generated IR #446222 to address this issue.

ERV As-Found Testing

During every refueling outage, the licensee’s maintenance practice was that each ERV actuator was refurbished, the pilot and main valves for two ERVs were replaced, and the pilot internals were replaced for the remaining two ERVs. Based on this level of maintenance activity with the valves, the licensee only performed as-left testing, and not as-found testing, on the ERVs to ensure the ERVs would remain operational for the

cycle. In January 2004, the licensee submitted a TS amendment to discontinue in-situ testing of the ERVs and the NRC approved this amendment. This amendment submittal also described the licensee's continuing practice of not conducting as-found testing of the ERVs, based on the level of maintenance conducted on the valves.

The TS amendment modified the TS surveillance requirements for Specifications 3.4.3.2, 3.5.1.10, and 3.6.1.6.1 to provide for an alternative means of testing the ERVs. The amendment essentially allowed testing of the ERV actuators and verification of the ERVs' ability to open without cycling the valves with steam pressure while installed in the plant. In the NRC's evaluation of this submittal, the station's current practice of using overlapping tests to verify the functionality of the ERVs was determined to be acceptable and no objection was made to the station's practice of not conducting as-found testing.

The licensee's position was based on the verification of each valve's ability to open at the steam facility; as-left testing after refurbishment of all four ERV actuators, replacement of the pilot internals for two ERVs, installation of two new pilot and main valves for the other two ERVs; and the maintenance history coupled with the inspection of the ERVs during each refueling outage. Due to the discovery of ERV degradation related to extended power uprate operation experienced at the Quad Cities Station, the inspectors questioned whether the licensee's practice of not performing as-found testing of the ERVs was appropriate. The adequacy of the licensee's current testing methodology for the ERVs is considered an unresolved item pending NRC review of this issue. **(URI 05000237/2006002-03; 05000249/2006002-03)**

4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

In the course of the inspection, the inspectors interviewed the Dresden station staff to determine if there were any impediments to the establishment of a safety conscious work environment. In addition, the inspectors discussed the implementation of the Employee Concerns Program (ECP) with the ECP Coordinator. Licensee programs to publicize the CAP and ECP programs were also reviewed.

b. Assessment

The inspectors determined that the conditions at the Dresden station were conducive to identifying issues. The staff was aware of and generally familiar with the CAP and other station processes, including the ECP, through which concerns could be raised. In addition, a review of the types of issues in the ECP indicated that site personnel were appropriately using the corrective action and employee concerns programs to address issues. The inspectors interviewed the ECP Coordinator, and concluded that he was appropriately focused on ensuring all site individuals were aware of the program, reviewing individual concerns, and using the corrective action and employee concerns programs to appropriately resolve issues.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. Bost and other members of the staff at an exit meeting on January 27, 2006. Mr. Bost acknowledged the findings presented, and indicated that no proprietary information was provided to the inspectors.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

G. Bockholdt, Maintenance Director
D. Bost, Site Vice President
H. Bush, Acting Radiation Protection Manager
V. Earl, Regulatory Assurance
R. Fenili, SOC Chairman
R. Gadbois, Operations Director
D. Galanis, Design Engineering Manager
J. Griffin, NRC Coordinator
M. Kanavos, Site Engineering Director
R. Kearney, Work Management Director
A. Khanifar, Nuclear Oversight Manager
M. Kluge, Design Engineering
M. Kusnick, Nuclear Oversight and Employee Concerns
S. Livecchi, Chemistry CAPCO
G. Papanic, Regulatory Assurance CAPCO
M. Pavey, Radiological Protection CAPCO
F. Polak, Engineering CAPCO
C. Rodriguez, Maintenance CAPCO
B. Rybak, Lead Licensing Engineer
P. Salas, Regulatory Assurance Manager
F. Winter, Regulatory Assurance Site CAP Manager

Nuclear Regulatory Commission

M. Ring, Chief, Branch 1, Division of Reactor Projects

Illinois Emergency Management Agency

R. Schulz, IEMA Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Items Opened

05000237/2006002-03	URI	Adequacy of licensee's practice of not performing as-found testing of the ERVs.
05000249/2006002-03		

Items Closed

None

Items Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire document, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

NCV 05000237/2004013-01, "Unit 2 Torus to Hotwell Isolation Valve Mispositioned"

-IR 00261526; LPCI manual valve 2-1501-35 out of position; October 8, 2004

-ACE 261526; LPCI manual valve 2-1501-35 out of position; October 8, 2005

NCV 05000249/2004013-04, "Failure to Adequately Ensure That a Contract Worker Followed Station Standards While Working in an Area Flagged with a Protected Pathway Sign"

-MRC meeting minutes on January 27, 2005

-ACE 273150; Contractor Craft errors in the performance of work during D3R18

NCV 05000249/2004013-05, "Unexpected Control Rod Motion During Surveillance Testing"

-Check-in Self Assessment Report 273067-15; Self-Assessment on Dresden Operations Lessons Learned Database; March 11, 2005

-ACE 273067; CRD inserting during DOS 500-07, Reactor Mode Switch in Shutdown Functional and SCRAM Auxiliary Functions Valve Operability Test

-Lessons Learned, #652; DOS 500-07 Mode Switch and Scram Aux Functional Test

-Pre-Job Briefing Checklist, "DOS 0500-07," HU-AA-1211, Revision 2

-Training Request 04-1593; Train on the following lessons learned and knowledge deficiency during D3R18; February 8, 2005

-Internal OPEX: Unplanned Control Rod Insertion

-DOS 0500-07, Revision 23, "Reactor Mode Switch in Shutdown Functional and Scram Auxiliary Functions Valve Operability Test"

Documents:

-2/3A EDG Starting Air Compressor Timeline (revised 01/20/2006)

-Dresden Station Operations Department Human Performance Improvement Plan, Revision 11, dated January 20, 2006

-RS-04-005; Letter from Patrick Simpson, Exelon, to NRC, subject: Request for Amendment to Technical Specifications Surveillance Requirements for the Main Steam Line Relief Valves and Associated Relief Requests; dated January 15, 2004

ML042600563; Letter from Gene Suh, NRR, to Exelon, subject: Dresden Nuclear Power Station, Units 2 and 3 and Quad Cities Nuclear Power Stations, Units 1 and 2 - Issuance of Amendments for Main Steam Line Relief Valves and Associated Relief Requests (TAC Nos. MC1792, MC 1793, MC 1794 and MC 1795), dated October 19, 2004

-Quarterly Instrument Performance Trending Report - 09/1/2005 through 11/30/2005

-CCA 204721-01, "Focused Area Self Assessment of Procedure Adherence on Operator Department," March 7, 2003, and March 7, 2004

-CCA 173092-03, "4KV horizontal Breaker Failures," January 1, 2003 to February 29, 2004

-ACE 320258-03; Time for Standby Gas Treatment (SBGT) to Recover Building DP Abnormally Long; April 1, 2005

- EC 358042, "Evaluation of Complex Trouble Shooting Plan for the U2 125Vdc Under Voltage Alarm"
- EC 358832, "Evaluation of Quad Cities 2 Electromatic Relief Valve (ERV) Failure Applicability to Dresden Units 2 and 3," Revision 0, 1, and 2
- ACE 395911; Loss of Foreign Material Exclusion (FME) Integrity on U2 Reactor Vessel; November 7, 2005
- Information Notice 2005-30; Safe Shutdown Potentially Challenged by Unanalyzed Internal Flooding Events and Inadequate Design; November 7, 2005
- Trend Report of Reactor Building DP Loss and Recovery July 5, 2005, to December 2, 2005; January 10, 2006
- DOP 0202-14; Filling and Venting the Recirculation Pump Seals; Revision 3
- UFSAR; 3.5.4; Missiles Generated by Natural Phenomena; Revision 5
- Results of FME Trend; May 13, 2005, to January 11, 2006; January 11, 2006
- CCA 371891-02; January 1, 2005, to October 15, 2005; November 3, 2005
- CCA ATI 349589-02; Modification and Temporary Configuration Control Implementation - July 10, 2003 to July 10, 2005; August 18, 2005
- Safe Shutdown Emergency Light Maintenance Rule Functional Failures; November 24, 2005
- Vendor Document; 126-3084-UT-001; High Temperature Slide Out Charger Assembly; January 10, 2006
- Safe Shutdown (SSD) Lighting (Z7902-1) (a)(1) Action Plan; May 21, 2004
- DOS 7900-02; Emergency Lighting Battery Pack Quarterly Inspection; Revision 3 - 2 years of data; January 10, 2006
- SSD Emergency Light Temperature and Mhos Trending Data; January 24, 2006
- ATI 214581-09; Evaluate Big Beam Temp Chassis Assembly Cat. Id # 1228172 For Use at Dresden Station; June 1, 2004
- Quarterly Instrument Performance Trending Report - 06/1/2005 through 08/31/2005; September 7, 2005
- List of Motor Operated Valve (MOV) IRs; January 10, 2006
- List of Corporate IRs on OPEX January 1, 2004, to December 28, 2005
- List of Temporary Modifications - 2 years of data; January 10, 2006
- List of IRs Written From January 2004, to November 1, 2005 that Involved Inadequate or Ineffective Corrective Actions; January 10, 2006
- List of FME IRs; January 10, 2006
- List of Heating, Ventilation, and Air Conditioning (HVAC) IRs; January 10, 2006
- List of Differential Pressure IRs; January 10, 2006
- Technical Requirements Manual Change Request Form; TRM Control Program Appendix G; November 23, 2004
- Guidelines of Appendix A to APCS 9.5.1; Overall Requirements of Nuclear Plant Fire Protection Program; Amendment 12
- 50.59 Screening No. 2004-0380; TRM Change Request #04-010; November 20, 2004
- Pre-NRC Problem Identification and Resolution Focus Area Self-Assessment; December 20, 2005
- NOSA-DRE-04-01; NOS Audit on the Maintenance Functional Area; March 3, 2004
- RCR 214543; Unit 2 High Pressure Coolant Injection was rendered inoperable when electrical leads that were lifted per DIS 2300-16 for a scheduled surveillance were not landed when the surveillance was stopped.
- RCR 219063; Switching Fault Cause LOOP and Reactor Scram.
- RCR 258172; Isolation Condenser Time Delay Relays Exceed Technical Specification Allowable Value Due to Ineffective Extent of Condition Corrective Actions from Previous Events.

- RCR 329888; 3B Recirc Pump Seal Degradation.
- Fundamental Management System (FMS) User Instructions; Revision 2

Work Orders:

- 99129494; Computer Point G223, Generator Cold Gas Pt. 2 (IM); It appears the point is not accurate. Reference detail section & DOC IDs# 61141731/ 6197316 (D2R18); May 19, 2000
- 632151; TR 2-0260-20B Pt 3, DW Ambient Temp (D2HOLD); Open TC (this point used for DW Temp Surv) (D2R18); October 6, 2001
- 468547; 3ARWCU Pump; Outboard seal leak - pump needs to be rebuilt; July 24, 2002
- 508869; 903-7, E-10 North turbine cavity alarm fire (D3RHOLD); Alarm spuriously comes in when fire hdr pressure changes; November 8, 2002
- 827536; South well pump (1B) doesn't start in auto; Didn't start when required; May 6, 2003
- 632494; 2-1501-25B Open valve indication (D2RHOLD); Does not indicate open when valve is open; October 30, 2003
- 632934; 2-1501-3A Closed indication; Control room indication shows dual indication when valve is full open; October 29, 2003
- 633104; 2E DW CLR RBCCW Outlet TE 2-3741-33 (D2HOLD); TE reads food at element but open at inside penetration; October 31, 2003
- 635716; SER #53 for IC "2" valve; SER #53 indicated "OFF NORMAL" when the 1 and 4 valves were cycled, however, the 2 valve did not move; December 10, 2003
- 640184-01; 2C RFP high vibrations (D2R20); Elevated vibrations on 2C RFP pump outboard bearing; November 18, 2003
- 665185; RE-2-263-104 Pt 4 TE 2-263-69-D1; TE failed open (at penetration); January 27, 2003
- 842170; 2/3 'A' EDG starting air compressor failure; August 26, 2005

Procedures:

- DOS 7900-02; Emergency Lighting Battery Pack Quarterly Inspection; Revision 3
- EI-AA-1; Employee Issues; Revision 1
- EI-AA-101; Employee Concerns Program; Revision 4
- HU-AA-102, Technical Human Performance Practices, Revision 1
- LS-AA-104-1000; Exelon 50.59 Resource Manual; Revision 3
- LS-AA-115; Operating Experience; Revision 6
- LS-AA-120, Issue Identification and Screening Process, Revision 3
- LS-AA-125, Corrective Action Program (CAP) Procedure, Revision 8
- LS-AA-125-1001; Root Cause; Revision 4
- LS-AA-125-1002; Common Cause; Revision 3
- LS-AA-125-1003; Apparent Cause; Revision 5
- LS-AA-125-1004; Effectiveness Review; Revision 2
- LS-AA-126-1001; Focused Area Self-Assessments; Revision 3
- MA-AA-716-210; Performance Centered Maintenance (PCM) Process; Revision 4
- MA-AA-716-008; Foreign Material Exclusion Program; Revision 2
- MA-DR-ME-4-020046; Electromatic Relief Valve Replacement, Revision 3

Issue Reports:

- 181207; Inaccurate/misleading DAN 902(3)-5; January 12, 2004
- 216646; Operating Experience Review - OE18201 - Hydrogen Found in Safety Relief Valve (SRV) Downcomers; April 23, 2004
- 211191; Conflicting operational guidance; April 4, 2004
- 212507; Enhancement to DGP 02-01; April 15, 2004
- 217532; NER PB-04-017 Yellow, Maintenance Rule Implementation Concerns; April 28, 2004
- 228221; Electric Power Research Institute (EPRI) Revised SQUG Relay Capacity; June 14, 2004
- 247947; Enhancements identified; September 6, 2005
- 253533; Operating Experience Review - OE19025 Floor Plug Design Requirements; September 16, 2004
- 256375; U2 DW Closeout Inspection unsat; September 23, 2004
- 258754; Conductance Testing Not Performed on SSD Emergency Lighting During Quarterly Surveillance; December 13, 2004
- 267475; OE19348 - Primary Containment Coatings, Maintenance & Updated Final Safety Analysis Report (UFSAR) Calculations; October 27, 2004
- 277146; D3R18LL: U3 drywell closeout identified discrepancies; November 29, 2004
- 277840; Discovered a crack in the turbine; September 3, 2005
- 277506; NRC identified issues during unit 3 drywell closeout; November 30, 2004
- 279018; D3R18LL: DW issues identified; January 20, 2005
- 280345; Enhancements needed; April 20, 2005
- 281105; Unit 2 NRC drywell walkdown items; December 10, 2004
- 299574; Perry Emergency Diesel Generator (EDG) Operating Experience Review; February 9, 2005
- 303174; 2/3 B SBTG Train Flow Oscillations; February 18, 2005
- 317943; Replace the motor pinion key; April 13, 2005
- 319157; No fire alarm, and no fire extinguisher; September 20, 2005
- 320258; Reactor Building Differential Pressure (DP) Indicated $>.25"$ but Remained $<0"$; April 1, 2005
- 329242; D3M11: Found loose hardware on 3E ERV microswitch; April 27, 2005
- 330409; D3M11 drywell closeout walkdown discrepancies; April 29, 2005
- 334295; Adverse trend - rising water level; August 24, 2005
- 346661; U2 service water rad monitor; June 29, 2005
- 354351; CRD F-8 Challenges control room; July 27, 2005
- 354719; Control room distractions; July 27, 2005
- 355050; Additional transients; August 30, 2005
- 356099; Isol cond level HI alarm; September 6, 2005
- 365691; Received alarm for 125 Vdc low voltage; September 6, 2005
- 366914; Unexpected alarm; September 6, 2005
- 370261; 2-220-2 valve failed to open; September 15, 2005
- 372322; DAN 903-4 C-23 torus narrow; September 16, 2005
- 372284; D2F46 Drywell closeout issues; September 16, 2005
- 373146; Unexpected MCR alarm 902-8 E-9; September 16, 2005
- 378272; Received alarm for 125 Vdc low voltage; October 3, 2005
- 379402; 3B1 Level controller failing; October 4, 2005
- 379362; Level II 125 Vdc ground alarm; October 4, 2005
- 381889; Received 902-3 D-4 Iso Condenser; October 17, 2005

- 388508; Unexpected U2 125 Vdc undervoltage; October 24, 2005
- 395296; Weather causes 138 KV switchyard; November 16, 2005
- 395887; Bus 33-1 and Bus 34-1 low voltage; November 16, 2005
- 396946; Maintenance Rule Performance Criteria Exceeded; November 9, 2005
- 426537; D2R19LL; Reactor Vessel Clarity; November 21, 2005

Drywell Issues:

- IR 277146; U3 Drywell closeout identified discrepancies; November 29, 2004
- IR 277506; NRC identifies issues during Unit 3 drywell closeout; November 30, 2004
- IR 279018; D3R18LL: DW issues identified during DW closeout; December 3, 2004

Issue Reports generated for the inspection included:

- 443829; NRC/IEMA inspectors question no IR on ERV as-found condition; January 19, 2006
- 445468; Closure concerns of IR #273067; January 24, 2006
- 445482; NRC questions on FASA 273067-15; January 24, 2006
- 445928; Enhancements Required for SSD Emergency Lighting Surveillance Procedure; January 25, 2006
- 446222; Correction action 273150-14 to conduct post D2R19 review; January 26, 2006
- 446627; NRC Comments on TRM 3.7 N Applicability Statement; January 27, 2006
- 446645; NRC identifies concerns during plant tour; January 27, 2006
- 446702; Aggregate evaluation needed for ERV as-found conditions; January 27, 2006
- 446729; Safe Shutdown (SSD) Emergency Light Technical Requirements Manual (TRM) Requirements Not Met; January 27, 2006
- 446757; NRC Raised Concern of Multiple TRM Changes 50.59 Screened Together; January 27, 2006
- 446803; Lessons learned from EC eval not shared with others; January 27, 2006
- 446645; NRC identifies concerns during plant tour; January 27, 2006
- 448199; NRC questions depth of troubleshooting on EDG start air compressor; January 31, 2006
- 449131; NRC Identified operations inadequate closure of ATI 351829-04; February 2, 2006
- 449745; NRC identified incorrect information in ATI 204721-01 (CCA); February 3, 2006
- 450542; NRC identified communication to all ops not performed; February 6, 2006
- 451690; NRC resident concern on extent of condition on communication; February 8, 2006
- 452548; NRC resident questions depth of actions for drywell walkdown; February 10, 2006
- 452634; NRC identifies not all as-found ERV conditions evaluated; February 10, 2006
- 453303; NRC identifies inadequate troubleshooting on WO #842170; February 13, 2006

LIST OF ACRONYMS

ACE	Apparent Cause Evaluation
CCA	Common Cause Evaluation
DP	Differential Pressure
EPRI	Electric Power Research Institute
FME	Foreign Material Exclusion
HVAC	Heating, Ventilation, and Air Conditioning
NCV	Non-Cited Violation
OE	Operating Experience
RCR	Root Cause Report
SBGT	Standby Gas Treatment
SRV	Safety Relief Valve
SSD	Safe Shutdown
TRM	Technical Requirements Manual
UFSAR	Updated Final Safety Analysis Report