



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
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LISLE, IL 60532-4352

August 25, 2011

Mr. Michael J. Pacilio  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO), Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

**SUBJECT: LASALLE COUNTY STATION UNITS 1 AND 2 PROBLEM IDENTIFICATION  
AND RESOLUTION INSPECTION REPORT 05000373/2011008;  
05000374/2011008**

Dear Mr. Pacilio:

On July 29, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution (PI&R) inspection at LaSalle County Station Units 1 and 2. The enclosed report documents the inspection results, which were discussed on April 29, 2011, with the Plant Manager, Mr. Peter Karaba, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

The inspection concluded that your staff was effective at identifying problems and incorporating them into the corrective action program. In general, issues were appropriately prioritized, evaluated, and corrected, audits and self-assessments were thorough and probing, and operating experience was appropriately screened and disseminated. Your staff was aware of the importance of having a strong safety-conscious work environment and expressed a willingness to raise safety issues.

Based on the results of this inspection, two NRC-identified findings of very low safety significance were identified. The findings involved violations of NRC requirements. However, because of their very low safety significance, and because the issues were entered into your corrective action program, the NRC is treating the issues as non-cited violations (NCVs) in accordance with Section 2.3.2 of the NRC Enforcement Policy.

If you contest the subject or severity of any of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the LaSalle County Station. In addition, if you disagree with the

M. Pacilio

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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 III, and the NRC Resident Inspector at LaSalle County Station.

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

Sincerely,

*/RA/*

Kenneth Riemer, Chief  
Branch 2  
Division of Reactor Projects

Docket Nos. 50-373;50-374  
License Nos. NPF-11; NPF-18

Enclosure: Inspection Report 05000373/2011008; 05000374/2011008  
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServe

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-373; 50-374  
License Nos: NPF-11; NPF-18

Report No: 05000373/2011008; 05000374/2011008

Licensee: Exelon Generating Company, LLC

Facility: LaSalle County Station, Units 1 and 2

Location: Marseilles, IL

Dates: July 11 – 29, 2011

Inspectors: N. Shah, Project Engineer - Team Lead  
R. Ruiz, Senior Resident Inspector - LaSalle  
P. Smagacz, Reactor Engineer  
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Approved by: Kenneth Riemer, Chief  
Branch 2  
Division of Reactor Projects

Enclosure

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## SUMMARY OF FINDINGS

IR 05000373/2011008; 05000374/2011008 (July 11 – 29, 2011), LaSalle County Station; Biennial Baseline Inspection of the Identification and Resolution of Problems.

This team inspection was performed by three regional inspectors and the senior resident inspector. Two Green findings and two Severity Level IV violations were identified by the inspectors. These findings were considered non-cited violations (NCVs) of Nuclear Regulatory Commission (NRC) regulations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP); the cross-cutting aspects were determined using IMC 0310, "Components Within the Cross-Cutting Areas." Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in Nuclear Regulatory Guide (NUREG) 1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### Identification and Resolution of Problems

Overall, the corrective action program (CAP) was appropriately identifying, evaluating, and correcting issues. Workers were generally encouraged to raise issues and felt comfortable doing so. Operating experience was recognized as valuable and was being well communicated. The Nuclear Oversight (NOS) group was maintaining a good oversight role and self-assessments were generally good.

However, there were several examples of inadequate Effectiveness Reviews and two examples where corrective actions were either not timely or inadequate. These issues were entered into the licensee's CAP for resolution.

The licensee had a strong safety culture and workers were comfortable with raising issues with station management. However, the inspectors had some observations regarding the efficacy of the safety culture surveys and the licensee's monitoring of contractor employee concern programs (ECP). These issues were also documented in the licensee's CAP.

### **A. NRC-Identified and Self-Revealed Findings**

#### **Cornerstone: Mitigating Systems**

- Green. A finding of very low safety significance (Green) and associated non-cited violation of Technical Specifications (TS) was identified by the inspectors for the licensee's failure to follow station procedure OP-AA-108-115, "Operability Determinations," Revisions 8 and 10. Specifically, the licensee failed to follow their operability determination procedure during loss of shutdown cooling (SDC) events occurring on July 20, 2009, and February 2, 2011. These events were caused by the closure of the residual heat removal (RHR) common suction valve. These events also resulted in the violation of TS 3.4.9, 3.4.10, and 3.0.2. The licensee entered this issue into its CAP as Issue Report (IR) 1248293.

The finding was considered more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, failing to follow the Operability Determinations procedure caused the licensee to incorrectly assess the RHR SDC system's capability to perform its safety function, and also led the licensee to make a specific TS required isolation feature unavailable. This finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee used non-conservative assumptions when confronted with unexpected system failures. [H.1(b)] (Section 40A2.1(1))

- Green. A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the licensee's failure to develop and implement adequate corrective action to prevent recurrence (CAPR) in response to a significant condition adverse to quality (SCAQ) associated with work activities on the 1D RHR service water (WS) pump. The licensee entered this issue into their CAP as IR 1241118.

The finding was considered more than minor because it impacted the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences and affected the cornerstone attribute of Equipment Performance. Specifically, the inadequate corrective action allowed for recurrence of this issue during similar work on other safety-related components. A cross-cutting aspect associated with Problem Identification and Resolution was also assigned to this finding. [P.1(d)] (Section 40A2.1(3))

**B. Licensee-Identified Violations**

None.

## REPORT DETAILS

### 4. OTHER ACTIVITIES

#### 4OA2 Problem Identification and Resolution (71152B)

The activities documented in Sections .1 through .4 constituted one biennial sample of Problem Identification and Resolution (PI&R) as defined in Inspection Procedure (IP) 71152.

#### .1 Assessment of the Corrective Action Program Effectiveness

##### a. Inspection Scope

The inspectors reviewed the licensee's CAP implementing procedures and attended selected CAP program meetings to assess the implementation of the CAP by site personnel.

The inspectors reviewed risk and safety-significant issues in the licensee's CAP since the last NRC PI&R inspection in 2009. The items selected ensured an adequate review of issues across the NRC cornerstones. The inspectors used issues identified through NRC generic communications, department self-assessments, licensee audits, operating experience reports, and NRC-documented findings as sources to select issues. Additionally, the inspectors reviewed CAP items generated as a result of licensee staff performance in daily plant activities. The inspectors also reviewed CAP items and a selection of completed investigations from the licensee's various investigation methods, including apparent (ACE), common (CCE) and root cause (RCE) evaluations.

The inspectors performed a more extensive review of licensee efforts to resolve seal failures on the recirculation pumps and fuel failures on units 1 and 2. These reviews consisted of a five year search of related issues identified in the CAP and discussions with appropriate licensee staff to assess the licensee's efforts in addressing identified concerns.

The inspectors attended meetings of the Station Oversight (SOC) and Management Review Committees (MRC) to observe how issues were being screened and evaluated and to obtain insights into the licensee's oversight of the CAP program.

During the reviews, the inspectors evaluated whether the licensee's actions were in compliance with the facility's CAP and 10 CFR Part 50, Appendix B requirements. Specifically, the inspectors evaluated if licensee personnel were identifying plant issues at the proper threshold, entering the plant issues into the station's CAP in a timely manner, and assigning the appropriate prioritization for resolution of the issues. The inspectors also assessed whether the licensee staff assigned the appropriate investigation method to ensure the proper determination of root, apparent, and contributing causes. The inspectors also reviewed the timeliness and effectiveness of corrective actions for selected IRs, completed investigations, and NRC findings, including NCVs.

b. Assessment

(1) Effectiveness of Problem Identification

Issues were generally being identified at a low threshold, evaluated appropriately, and corrected in the CAP. Workers were familiar with the CAP and felt comfortable raising concerns. This was evident by the large number of CAP items generated annually; which were reasonably distributed across the various departments. A shared, computerized database was used for creating individual reports and for subsequent management of the processes of issue evaluation and response. These processes included determining the issue's significance, addressing such matters as regulatory compliance and reporting, and assigning any actions deemed necessary or appropriate.

The inspectors determined that the station was generally effective at trending low level issues to prevent larger issues from developing. A review of specific trend evaluations did not identify any concerns.

Findings

Technical Specification Violation Due to Failures to Follow Operability Determinations Procedure

Introduction: A finding of very low safety significance (Green) and associated non-cited violation of TS was identified by the inspectors for the licensee's failure to follow station procedure OP-AA-108-115, "Operability Determinations," Revisions 8 and 10.

Description: The inspectors identified that the licensee had failed to follow their operability determination procedure during loss of SDC events occurring on July 20, 2009, and February 2, 2011. These events were caused by the closure of the RHR common suction valve. These events also resulted in the violation of TS 3.4.9, 3.4.10, and 3.0.2.

As background, in 1990 the licensee had experienced a spurious closure of the RHR common suction valve resulting in a loss of SDC. This valve was required to close upon a high pressure/high flow condition that may be indicative of a pipe break. The licensee identified that a sudden perturbation in RHR suction flow (such as by starting a pump) likely caused the spurious closure of the valve due to a perceived high flow condition by the controlling relay. To prevent this, the licensee installed new relays with a one second time delay. The licensee also revised applicable procedures to allow for the installation of jumpers to bypass the relay (preventing valve closure). These jumpers were then removed in order to restore the high pressure/high flow isolation function.

On July 20, 2009, Unit 1 was in cold shutdown (Mode 4) with the "A" train of the RHR system operating in the SDC configuration. For dose reduction purposes, the licensee chose to also start the "B" loop of RHR. Prior to the start, the licensee had jumpered out the relay to prevent spurious closure of the common suction valve. Once both pumps were running, the licensee removed the jumper.

During the removal, technicians noted a spark from the jumper to the relay; no other abnormal indications were observed. The technicians finished removing the jumper, secured the panel, verified the relay position was correct, and left the area.

Within one minute of leaving, bystanders heard the relay change state, and the control room observed the closure of the 1E12-F009 common suction isolation valve. With the valve closed, both RHR SDC pumps tripped and a complete loss of SDC occurred. The control room operators entered LOA-RH-101, "Unit 1 RHR Abnormal," Revision 11, and checked for any decrease in reactor vessel level, inspected the RHR SDC suction piping outside the drywell for leakage, determined the isolation was spurious, reset the containment isolation logic, re-opened the suction valve, and restarted the "A" RHR pump. The licensee later attributed the valve closure to degradation of the relay exacerbated by the sparking occurring during removal of the jumpers.

The licensee did not consider RHR SDC inoperable during this event, as it was able to be manually restored within two hours. This was based on their interpretation of the Bases for TS 3.4.10 which permitted both RHR SDC subsystems and recirculation pumps to not be in operation for a period of 2 hours in an 8 hour period. However, this interpretation was erroneous, as this statement was not intended for troubleshooting activities. This was confirmed by the inspectors during a discussion with NRC technical staff in the office of Nuclear Reactor Regulation.

The licensee should have declared RHR SDC inoperable and entered TS 3.4.10, until a reasonable expectation of operability was established. This was consistent with the guidance in NRC Inspection Manual Part 9900 Technical Guidance - "Operability Determinations/Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," and with step 4.1.6 of OP-AA-108-115, which required operability to be immediately determined based on a detailed examination of the deficiency.

On February 2, 2011, Unit 1 was in hot shutdown (Mode 3), following an unexpected scram occurring the previous day. The licensee was in the process of placing the "B" train of SDC in operation. After the pump was started, the common suction valve closed resulting in a complete loss of SDC. The licensee declared both trains of SDC inoperable and entered TS 3.4.9.

The licensee initiated system restoration in accordance with LOP-RH-07, Attachment A, "Defeating Shutdown Cooling High Flow Isolation in Modes 2 or 3," Revision 62. This included a walkdown of the RHR SDC system piping to verify no leaks in order to determine that the isolation was "spurious," followed by the instructions to jumper out the affected relay. Subsequently, the licensee concluded that the isolation was "spurious," exited TS 3.4.9 by declaring both trains of SDC operable, and proceeded to bypass the affected relay and restart the pump. The licensee then proceeded with reactor cooldown.

However, the inspectors determined that the licensee had not established a reasonable expectation of operability consistent with the NRC Part 9900 guidance and OP-AA-108-115, prior to exiting TS LCO 3.4.9. Specifically, the circumstances surrounding this loss of SDC were significantly different than those occurring in 1990 and 2009. The licensee had not experienced a spurious loss of SDC, since the installation of the time delayed relays after the 1990 event. Also, as stated above, the July 2009 event was caused by a degraded relay exacerbated by sparking during removal of the jumpers. Therefore, the unexpected spurious isolation in 2011 should have been treated as an unknown condition requiring an operability evaluation.

The inspectors also noted that installing the jumpers disabled the safety-functions required by TS 3.3.6.1 (function 5.b, Primary Containment Isolation Instrumentation - Unit 1 Division II Reactor Vessel Pressure-High isolation safety function) and TS 3.6.1.3 (Primary Containment Isolation Valves, Condition A). This was not an issue during the July 20, 2009 event, as these functions were only required in Modes 1-3. Bypassing these safety-functions for “operational convenience” (i.e., to enable the restoration of SDC) was prohibited by TS 3.0.2.

Analysis: The failure to adequately assess operability for the loss of SDC events on July 20, 2009, and February 2, 2011, was considered a performance deficiency warranting a significance evaluation in accordance with IMC 0612, Appendix B, “Issue Disposition Screening.”

The performance deficiency was considered more than minor and a finding because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, failing to follow the Operability Determinations procedure caused the licensee to incorrectly assess the RHR SDC system’s capability to perform its safety function, and also led the licensee to make a specific TS required isolation feature unavailable.

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 3b for the Mitigating Systems Cornerstone. Because the plant had met the entry conditions for RHR and the reactor coolant system pressure was less than RHR cut-in permissive, Table 3b directs the finding to be processed through IMC 0609, Appendix G, Shutdown Operations SDP. The NRC Region III Senior Reactor Analyst (SRA) reviewed IMC 0609 Appendix G checklists for boiling water reactor hot shutdown and cold shutdown and determined that this finding met the criteria for a phase 2 evaluation because both the 2009 and 2011 events resulted in an actual loss of RHR SDC. The SRA completed a modified phase 2 evaluation using worksheet 4, “SDP Worksheet for a BWR Plant – Loss of Operating Train of RHR in Plant Operating State 1”. For this evaluation, the inspectors determined that all other emergency core cooling systems were available, including the low pressure coolant injection function. Since the RHR function was recoverable well within the time to reactor coolant system pressurization above RHR pump shutoff head in both events, the SRA determined that the operator action credit for recovering RHR should be adjusted from a “3” to a “4”. As a result, the finding was determined to be of very low safety significance or Green.

The dominant sequence was a loss of RHR SDC, failure to recover RHR, and the failure to vent containment.

The SRA also reviewed the 2011 event as a finding that potentially increased the likelihood of a loss of inventory event because the automatic isolation function of the RHR SDC system was disabled for approximately 11 minutes with the SDC suction valves in the open position. However, the SRA determined that due to the short duration that the function was disabled, the likelihood of a loss of inventory event was very low and the risk due to the loss of SDC event would be the dominant core damage scenario.

The inspectors determined that the failures to follow the Operability Determination procedure were caused by numerous non-conservative decisions made by the licensee. Specifically:

- the licensee's conclusion that the RHR SDC system remained operable on July 20, 2009, due to an erroneous interpretation of the bases for TS 3.4.10;
- the licensee's assumption that the February 2, 2011, loss of RHR SDC was due to the exact condition previously experienced in 1990 and 2009; and
- the use of a proceduralized workaround (i.e., installing jumpers) to address the relay design deficiency, instead of properly evaluating the cause and instituting corrective actions, which also resulted in the disabling of TS required safety features for operational convenience.

This finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee used non-conservative assumptions when confronted with unexpected system failures. [ H.1(b)]

Enforcement: TS 3.4.9 and 3.4.10 requires, in part, that "Two RHR shutdown cooling subsystems shall be OPERABLE."

TS 3.0.2 requires, in part, that "Upon discovery of a failure to meet an LCO, the Required Actions of the associated Condition shall be met." The Bases for this TS states in part, that "Intentional entry into ACTIONS should not be made for operational convenience."

Contrary to the above, the licensee violated TS requirements on the following occasions:

- on July 20, 2009, by failing to declare the Unit 1 RHR SDC subsystem inoperable, as required by TS 3.4.10;
- on February 2, 2011, by improperly exiting TS 3.4.9, prior to establishing operability of the Unit 1 RHR SDC subsystem; and
- on February 2, 2011, from 5:52 p.m. to 6:03 p.m. by failing to comply with TS 3.0.2 by bypassing the safety-functions required by TS 3.3.6.1 and 3.6.1.3, for "operational convenience" in order to allow the restoration of Unit 1 SDC.

Because this violation was of very low safety significance and it was entered into the licensee's CAP as IR 1248293, this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000373/2011008-01, Technical Specification Violation Due to Failures to Follow Operability Determinations Procedure.).

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors observed that the majority of issues identified were of low-level and were either closed to trend or at a level appropriate for a condition evaluation. Issues were being appropriately screened by both the SOC and MRC and the inspectors had no concerns with those items assigned an ACE, CCE, or RCE. There were no items in the

operations, engineering, or maintenance backlogs that were risk-significant, individually or collectively.

The inspectors identified some concerns with the screening of IRs 1238180, 1238398 and 1238699 during SOC and MRC meetings on July 13 and 14, respectively. For example, IR 1238180 concerned a door with an inoperable opening and locking mechanism. During screening, the licensee treated this as a low level issue and closed it to a work request. However, the inspectors questioned whether the door was the only access into the affected area and whether the inability to properly secure the door was a potential safety issue (i.e., an individual could be prevented from exiting a potential confined space area). The IR did not address this concern. The inspectors identified similar examples with the other two IRs. The licensee subsequently brought all three IRs back to the MRC for rescreening based on the inspectors concerns. The inspectors subsequently verified that the specific concerns had been addressed by the MRC.

The inspectors noted that IR 1068805 was closed without addressing all the concerns that had been documented. The IR was issued after the station entered an Orange risk configuration due to thunderstorms passing through the area. One of the concerns was that the licensee had received conflicting weather information during the event. However, this issue was never addressed in the IR. The licensee issued IR 1245239 to evaluate this concern.

The inspectors also noted that the licensee did not have clear guidance regarding what issues constituted a SCAQ. Although defined in the CAP procedures, there were no listed examples of issues considered a SCAQ. Some licensee staff stated that only items assigned a root cause were SCAQs while others stated that only those classified as significance level 1 or 2 met the criteria. For example, an issue involving the recirculation pump thermal barriers (a non-safety related system) was classified as a significance level 2 and assigned a root cause. However, licensee staff gave conflicting opinions of whether this issue was a SCAQ. The inspectors did not identify any examples where SCAQs were not addressed. The licensee issued IR 1241186 to document this issue.

### Findings

No findings were identified.

### (3) Effectiveness of Corrective Actions

Corrective actions were generally appropriate for the identified issues. Over the two year period encompassed by the inspection, the inspectors identified no significant examples where problems recurred.

Issues closed to a work request or to another CAP report, generally had the necessary verbiage to document the interrelationship. However, the inspectors identified one example where cross-referenced issue was inappropriately closed. IR 947835, "Working with High Rad Material outside the Schedule," was closed to IR 9521830, which was written after the NOS group had identified a negative performance trend. IR 9521830 was then closed to a CCE assigned as part of IR 9511830. However, the inspectors noted that the CCE did not adequately address

the concerns documented in IR 947835. The licensee issued IR 1245389 to evaluate this concern.

The inspectors found several examples of inadequate Effectiveness Reviews. For example, IR 994136 was written to perform an RCE following an adverse trend in human performance events. The Effectiveness Review was to evaluate whether the corrective actions resulted in a 25% decrease in the number of these events. However, since the licensee had never defined an “acceptable” number of human performance events, it was unclear how this review was to be applied. Another example was the review for IR 997150, which documented a RCE following several fuel failures on Unit 2. The Effectiveness Review was to verify that there were no additional failed fuel events six months after completion of the corrective actions. However, a more appropriate monitoring period would have been one complete operating cycle (i.e., two years). Several other examples identified by the inspectors were also discussed with licensee staff. The licensee issued IRs 1245384 and 1245247 to evaluate this concern.

The licensee failed to take timely corrective action to address an operability issue with the Public Address (PA) system. In February 2010, the licensee had received Operating Experience regarding a potential operability issue with the PA system speakers due to inappropriate testing. In April 2010, the licensee’s corporate office required that the licensee make substantive changes to the surveillance test procedure to address this concern. The licensee made the changes, but did not test the speakers until the next scheduled interval in June 2011. In the interim, other licensee facilities subject to the same concern had identified a high failure rate of the speakers after testing. Despite this, the licensee did not evaluate rescheduling the testing date. Finally, during the June 2011 testing, the licensee experienced a similar high failure rate on the speakers. The failure to take timely corrective action to address this issue was not considered a violation because the PA speakers were not safety-related and the licensee immediately implemented appropriate compensatory measures after discovery such that the emergency response capability was not degraded. The licensee issued IR 1230327 to evaluate this concern.

## Findings

### Failure to Implement Adequate Corrective Action to Prevent Recurrence to Address a Significant Condition Adverse to Quality

Introduction: The inspectors identified a finding of very low significance and a NCV of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to develop and implement an adequate CAPR in response to a SCAQ associated with work activities on the 1D RHR WS pump. A cross-cutting aspect associated with Problem Identification and Resolution (P.1(d)) was also assigned to this finding.

Description: On February 19, 2010, the licensee identified that the mounting bolts for the 1D RHR WS pump had sheared following work to replace the pump suction valve. Because this pump was safety-related, the licensee considered this issue a SCAQ and initiated a RCE. The cause was the failure to properly account for dimensional changes in the piping during the work. Specifically, the pump mounting bolts had sheared after being displaced about 0.325 inches (approximately 50% of their diameter), from a combination of weld shrinkage (from two field welds necessary to install the valve) and bolting of the valve flange to the pump. A single CAPR was initiated which consisted of

revising procedure NSWP-M-02, "Fabrication and Installation of Piping and Tubing," to include the following statement: "In areas where components are or could be highly restrained evaluate weld execution and fit up sequence to prevent possible equipment damage or distortion."

The inspectors concluded that this guidance was insufficient to prevent a similar event from recurring. Specifically, the type of evaluation was not defined nor was it required to be documented. Licensee staff stated that the evaluation was an informal, "skill of the craft" activity, and that it was expected that workers would report any observed anomalies to their supervision for evaluation. For example, a welder would be expected to report any unacceptable weld shrinkage to their supervision; unacceptable shrinkage being informally determined based on the welder's skill and experience. The inspectors also noted that workers were not required to record dimensional changes from work activities unless an anomaly was noted. For example, welders did not have to document the observed weld shrinkage, if no problems were observed. Therefore, it was unclear how the aggregate affects of work on a component would be evaluated. The inspectors noted that that the workers involved in the 1D RHR WS work had not raised any concerns with their work. Therefore, it was reasonable to conclude that they believed that the welding and fit-up activities were acceptable. However as stated, it was the aggregate affects of the welding and bolting that eventually resulted in the shearing of the pump mounting bolts. These aggregate affects were not evaluated until after the licensee had identified the sheared bolts.

Analysis: The failure to implement an adequate corrective action was considered a performance deficiency warranting a significance evaluation in accordance with IMC 0612, Appendix B, "Issue Disposition Screening." The inspectors determined that the performance deficiency was more than minor and a finding because it impacted the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences and affected the cornerstone attribute of Equipment Performance. Specifically, the inadequate corrective action allowed for recurrence of this issue during similar work on other safety-related components.

The inspectors evaluated the finding using IMC 0609, Appendix A, Attachment 1, "Significance Determination of Reactor Inspection Findings for At-Power Situations," using the Phase 1 Worksheet for the Initiating Events Cornerstone. Since the inspectors answered "No" to all of the Exhibit 1, Table 4a Mitigating Systems questions, the inspectors concluded that the finding was of very low safety significance.

The inspectors determined that this finding also affected the cross-cutting aspect of Problem Identification and Resolution. Specifically, that the licensee takes corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity.( P.1(d)).

Enforcement: 10 CFR Part 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. In the case of SCAQs, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above, as of July 29, 2011, the licensee had failed to take corrective action to preclude repetition for a SCAQ associated with the 1D RHR WS pump. Specifically, the revision to procedure NSWP-M-02 was not sufficient to ensure that the licensee would be able to identify and respond to conditions similar to those that caused the 1D RHR SW pump SCAQ. Because this violation was of very low safety significance and was entered into the licensee's CAP (IR 1241188), it is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy. (NCV 05000373/2011008-02; 05000374/2011008-02, Failure to Implement A Corrective Action To Prevent Recurrence to Address a Significant Condition Adverse to Quality)

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the facility's operating experience (OE) program. Specifically, the inspectors reviewed OE program procedures, observed daily meetings for the use of OE information, and reviewed completed evaluations of OE issues and events. The intent was to determine if the licensee was effectively integrating OE experience into the performance of daily activities, whether evaluations of issues were proper and conducted by qualified personnel, whether the licensee's program was sufficient to prevent future occurrences of previous industry events, and whether the licensee effectively used the information in developing departmental assessments and facility audits. The inspectors also assessed if corrective actions, as a result of OE experience, were identified and implemented effectively and in a timely manner.

b. Assessment

In general, OE was effectively used at the station. The inspectors observed that OE was discussed as part of the daily station and pre-job briefings. Industry OE was effectively disseminated across the various plant departments and no issues were identified during the inspectors' review of licensee OE evaluations. During interviews, several licensee personnel commented favorably on the use of OE in their daily activities. The inspectors also noted that the quality of OE review in ACE and RCEs had improved since the 2009 PI&R inspection.

Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors assessed the licensee staff's ability to identify and enter issues into the CAP program, prioritize and evaluate issues, and implement effective corrective actions through efforts from departmental assessments and audits.

b. Assessment

The inspectors considered the quality of the NOS audits to be thorough and critical. The department self-assessments were acceptable but were not of the same level of quality as the NOS audits. The inspectors observed that CAP items had been initiated for issues identified through the NOS audits and self-assessments.

One of the indicators that the licensee used to monitor CAP performance was called the "Site Engagement Ratio." This indicator was a ratio of the total number of individuals writing a CAP divided by the total number of individuals in a particular department. The inspectors noted that this ratio may not provide an effective indicator, as it did not account for staff who relied on others (such as supervisors) to input issues into the CAP process. For example, the security officers typically relied on their supervisors to input issues into the CAP due to the inability to access a computer during routine rounds. This has resulted in the Security group indicating a lower proclivity towards using the CAP than was otherwise the case. The licensee initiated IR 1245237 to evaluate this observation.

Findings

No findings were identified.

.4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

The inspectors assessed the licensee's safety-conscious work environment (SCWE) through the reviews of the facility's ECP, implementing procedures, discussions with ECP coordinators, interviews with personnel from various departments, and reviews of IRs. The inspectors also reviewed the results of licensee safety culture surveys.

The inspectors also reviewed the selected ECP case files (titles redacted) from 2009 to 2011 involving potential cases of harassment and intimidation for raising safety issues.

b. Assessment

The inspectors determined that the plant staff were aware of the importance of having a strong SCWE and expressed a willingness to raise safety issues. No one interviewed had experienced retaliation for safety issues raised or knew of anyone who had failed to raise issues. All persons interviewed had an adequate knowledge of the CAP process. These results were similar with the findings of the licensee's safety culture surveys. Based on these limited interviews, the inspectors concluded that there was no evidence of an unacceptable SCWE.

The inspectors determined that the ECP process was being effectively implemented. The inspectors noted that the licensee had appropriately investigated and taken constructive actions to address issues involving potential cases of harassment and intimidation for raising issues. However, the inspectors did identify a potential vulnerability in the licensee's oversight of contractor ECP programs. Specifically, there was no formal requirement for the licensee to monitor contractor ECP programs. This may result in a potential nuclear safety/quality issue raised via the contractor

program to not be communicated to the site. This licensee issued IR 1244215 to evaluate this observation.

Although the licensee has scored well on the internal safety culture surveys, the inspectors had some concerns with their overall effectiveness. The licensee corporate staff sent the safety culture surveys to staff on a biennial basis. The responses were then collated before being sent to the individual sites for evaluation. The inspectors noted that the questions have not changed in the past several years, which could potentially bias the results. Additionally, there were no defined “trigger” levels to resolve potential inconsistencies. For example, in the 2009 survey, 15% of respondents stated that their work group sometimes or rarely uses self-assessments, benchmarking or OE to improve processes. Although this contradicted the results of other internal self-assessments, the licensee had not done an assessment to determine if this was a real concern. Similar issues were also seen in the responses to the 2011 survey, which was still being evaluated by the licensee. The licensee initiated IR 1250626 to evaluate these observations.

#### Findings

No findings were identified.

#### 4OA6 Management Meetings

##### .1 Exit Meeting Summary

On July 29, 2011, the inspectors presented the inspection results to Mr. Karaba and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors returned to the licensee the results of the 2009 safety culture survey, which was the only item considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

N. Darrow, Nuclear Oversight Manager  
K. Lyons, Chemistry Manager  
P. Karaba, Plant Manager  
T. Simpkin, Regulatory Assurance Manager  
B. Speek, Exelon Corporate—Nuclear Oversight  
J. Williams, Operations—Shift Operations Superintendent  
H. Vinyard, Engineering Director

#### Nuclear Regulatory Commission

K. Riemer, Chief, Branch 2, Division of Reactor Projects

**LIST OF ITEMS OPENED, CLOSED AND DISCUSSED**

Opened

05000373/2011008-01	NCV	Technical Specification Violation Due to Failures to Follow Operability Determinations Procedure
05000373/2011008-02 05000374/2011008-02	NCV	Failure to Implement A Corrective Action To Prevent Recurrence to Address a Significant Condition Adverse to Quality

Closed

05000373/2011008-01	NCV	Technical Specification Violation Due to Failures to Follow Operability Determinations Procedure
05000373/2011008-02 05000374/2011008-02	NCV	Failure to Implement A Corrective Action To Prevent Recurrence to Address a Significant Condition Adverse to Quality

Discussed

None

## LIST OF DOCUMENTS REVIEWED

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

### PLANT PROCEDURES

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
EI-AA-101	Employee Concerns Program	Revision 9
NSWP-M-02	Fabrication and Installation of Piping and Tubing	Revision 4
LS-AA-125-1003	Apparent Cause Evaluation Manual	Revision 9
LS-AA-115	Operating Experience Program	Revision 17
LS-AA-125-1002	Common Cause Analysis Manual	Revision 7
LS-AA-125-1004	Effectiveness Review Manual	Revision 5
LS-AA-125	Corrective Action Program (CAP) Procedure	Revision 15
NF-AA-430	Failed Fuel Action Plan	Revision 11
LS-AA-125-1002	Common Cause Analysis Manual	Revision 7
LS-AA-126-1006	Benchmarking Program	Revision 2
	LaSalle County Generating Station Foreign Material Exclusion (FME) Improvement Plan	Revision 30
OP-LA-102-104-1002	LaSalle Station Fuel Reliability Advocacy Team (FRAT)	Revision 0
LOP-FC-12, Revision 30	Drainage of the Reactor Well and Dryer/Separator Pit to Waste Collector Tank	January 24, 2011
LMP-GM-75, Revision 7	Hydrolazing	June 2, 2011
AD-AA-101-1002	Writer's Guide for Procedures and T&RM	Revision 15
LS-AA-125	Corrective Action Program (CAP) Procedure	Revision 15
LS-AA-120	Issue Identification and Screening Process	Revision 12
LOP-RH-07	Shutdown Cooling System Startup, Operation and Transfer	Revision 62
LOP-RH-08	Shutdown Cooling System Shutdown	Revision 39
EP-AA-125	Emergency Preparedness Self Evaluation Process	Revision 7
EP-AA-122	Drills & Exercises	Revision 11
OP-AA-108-115	Operability Determinations (CM-1)	Revision 10
LOP-RH-07	Shutdown Cooling System Startup, Operation and Transfer	Revision 62
LOA-RH-101	Unit 1 RHR Abnormal	Revision 11
OP-AA-108-115-1002	Supplemental Consideration for On-Shift Immediate Operability Determinations (CM-1)	Revision 2

## CORRECTIVE ACTION PROGRAM DOCUMENTS REVIEWED

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
01017150	Generate Actions to Perform Root Cause Investigation	January 15, 2010
01221195	Dry Cask Storage LPT Not Seismically Qualified	May 26, 2011
01147131	Perform CCA For RT System	December 1, 2010
01084606	OPS Requests CCA on Procedure Adherence	June 25, 2010
00951830	Potential Adverse Trend in Radiation Worker Practices	August 11, 2009
01166211	CCA: Maintenance Crew Clock Resets	January 24, 2011
01132199	ACE: 1B RT Pump Motor Issues	October 28, 2010
01127924	2A RT Pump Inadvertently Tripped Off	October 19, 2010
00949081	RB Crane Insufficient Control of Design Analysis	August 3, 2009
01166922	DCS – Hillman Roller Failure During HI-STORM Transport	January 26, 2011
01238678	1B RR Pump Seal Cavity 2 Pressure Oscillations	July 11, 2011
010662731	Create Root Cause Report Concerning 1B RR Pump Issue	April 28, 2010
01068805	U2 Online Risk Orange Due to Severe Thunderstorm Warning	May 13, 2010
00934253	Observed Increase in U1 Offgas Pre-Treat Activities	June 23, 2009
00934253	Observed Increase in U1 Offgas Pre-Treat Activities	June 23, 2009
00818563	Observed Increase in U2 Offgas Pre-Treat Activity	September 16, 2008
00827452	Perform Root Cause Investigation for L1C12 Fuel Failures	October 7, 2008
00696848	2007 WANO Area for Improvement	November 9, 2007
538854	Nuclear Safety Culture Check-In	October 2, 2006
01167062	Incorrect Calculation for CST	January 26, 2011
01118498	Gypsum Missing From Underside of the Fire Rated Slab	September 27, 2010
01058504	Problems with OPRM Bypass Switches	April 19, 2010
01077193	Maintenance Rule (a)(1) Determination	June 4, 2010
01019471	Summary of Recent SBLC Relief Valve Issues	January 21, 2010
01106881	Appendix R Emergency DC Lights Adverse Monitoring Trend	August 27, 2010
01153692	ARMCO Gate Failure Challenged Ability To Close for PRA Flood	December 17, 2010
01198810	Received Drywell Equipment Drain Sump Trouble Alarm	April 6, 2011
01178620	PBI In Place More Than The Allotted 7 Days	February 23, 2011
00991337	Miscellaneous Automatic Control System Power Failure	November 10, 2009
01180823	“C” SRV Actuator Also Closed When “U” C/S Taken to Auto	February 27, 2011

1039210	Breaker Trip While Removing Temp Power	June 30, 2010
1069006	MWP Perform CCA on Work Package Instruction Issues	May 13, 2010
0930540	Request CCA on LaSalle Configuration Control Events	December 23, 2009
1178537	L2R13 CRB Exchange Mispositioning Event	February 22, 2011
0116211	CCA: Maintenance Crew Clock Resets	January 24, 2011
1213491	CCA to Evaluate Deficiencies Listed in CAP Audit Report	April 13, 2011
0947500	NOS ID: Unqualified Individual Utilized to Perform Hot Work	July 30, 2009
1071449	Perform CCA on Maintenance Procedure Adherence	May 17, 2010
1205332	RM-Reactor Water Cleanup Isolated On High Diff Flow	April 20, 2011
1166596	ACE for Protected Pathways	January 11, 2011
0936557	M&TE Out-Of-Tolerance	June 29, 2009
0969479	IMD Technician Exceeded the GL 82-12 Overtime Guideline	September 16, 2009
1136071	CDBI: Potential Non-Conservative Tech Spec for EDG Fuel Oil	November 5, 2010
1122224	Des Eng IDs Fermi/Braidwood CDBI Issue Applicable to LaSalle	October 5, 2010
1128749	CDBI—Discrepancy in NPSH Calculation	October 20, 2010
1197603	NRC: 4 <sup>th</sup> QTR Report 05000373(374)/2010005, 7200070/2010001	December 31, 2010
1220537	NRC 1 <sup>st</sup> QTR Insp Rpt—Green Finding W/Associated NCV	May 11, 2011
1176668	NRC Non-Cited Violation REC-D—EDG Max Freq	February 15, 2011
1141618	NRC Identified CDBI, ECCS NPSH With Increase DG Frequency	November 17, 2010
0995981	NRC Recommendation Regarding OPEX Use in CAP Investigations	November 17, 2009
1117744	2VD05C and 2VD07C Were Found Not Running	September 25, 2010
1029238	Wrong EFCV Tested During LIS-NB-115B	February 11, 2010
1019471	Summary of Recent SBLC Relief Valve Issues	January 21, 2010
1188632	Perform Root Cause on Degraded Performance U2 Main Condenser	March 17, 2011
1169946	LaSalle Unit 1 SCRAM 2-1-11	February 1, 2011
0994136	Root Cause Investigation Needed for Station THU Events	November 16, 2009
1213491	CCA To Evaluate Deficiencies Listed In CAP Audit Report	April 13, 2011
0966326	CCA Needed For Critical Component Clock Resets	September 17, 2009 1104907
1104907	Perform CCA for Engineering Procedure Adherence	August 23, 2010

0938362	NOS ID: Security: Human Performance Error Precursors	July 2, 2009
1176714	RM - L2C13 Suspect Fuel Defect 29-16 Location	February 17, 2011
1180642	RM - Fuel-MR Performance Criteria Exceeded on Unit 2	February 27, 2011
1210441	Increase in Xe-133 Activity in U-2 Offgas System	May 1, 2011
1210533	Elevated Off Gas Post Treatment Radiation Readings – Unit 2	May 2, 2011
1182236	Fuel Exposure Margin Loss Due to Core Redesign	March 2, 2011
1162523	Unit 2 Spent Fuel Pool FME From Netco Insert Tool	January 14, 2011
1182531	RM – Fuel Assembly Could be Reassembled	March 2, 2011
1177416	FME – Foreign Material Identified on Fuel Assembly in Core	February 19, 2011
1178659	L2R13 – Foreign Material on Fuel Assembly- Update to IR 1177416	March 23, 2011
1214191	Failed fuel Root Cause Report Pulled from MRC	May 10, 2011
1219314	CM.4-1 Fuel Failures AFI Off-Track (INPO Mid-Cycle 2011)	May 23, 2011
1217013	RM – L2C14 Fuel Defect Located in Control Cell 18-23	May 17,2011
1215085	Results of RP Checklist for Nuclear Fuel Failures	May 12, 2011
941387	Fuel-MR Performance Criteria Exceeded on Unit 1	July 13, 2009
938344	Fuel Inspection Unable to be Performed Due to TS 3.7.4	July 2, 2009
947657	Chipping of Top Pellet in GE14 Fuel Rods (NFM IR 943662)	July 30, 2009
947462	Exited Failed Fuel Action Level 2 on Unit 1	July 30, 2009
999387	Operator Fundamental Negative Trends	November 30, 2009
955598	Pump Rotor Was Not Able to Spin Freely Prior to Disassembly	August 20, 2009
1045983	Perform ACE for Issues Related to Control of Quality Parts	March 22, 2010
1075021	Level 3 DC Ground on Unit 1 Div 1	May 30, 2010
1092040	Replacement Motor 5 Tons Heavier than Original Motor	July 19, 2010
1181399	Fuel Move Sheet Update Not Provided	February 28, 2011
931503	Initiate CCA for SRM and IRM Failures	June 15, 2009
1077194	Perform CCA for Analysis of Critical Component Failures	June 04, 2010
1104907	Perform CCA for Engineering Procedure Adherence	August 23, 2010
1058504	Problems with OPRM Bypass Switches	April 19, 2010
984534	Assign EACE for 2B RPS MG Set Voltage Fluctuations	October 26, 2009

1090426	SBLC Pump Pressure Oscillations During Operability Run	July 13, 2010
1147131	Perform CCA for RT System	December 1, 2010
1071449	Perform CCA on Maintenance Procedure Adherence	May 20, 2010
1217013	RM – L2C14 Fuel Defect Located in Control Cell 18-23	May 17, 2011
997150	Perform Root Cause Investigation for L2C12 Fuel Failure	November 23, 2009
1191445	Fuel Failure Root Cause Report	March 24, 2011
953784	U-2 Automatic Scram from Full Power	August 15, 2009
1101063	Dual Unit LCO Entered Due to High Lake Temperature	August 12, 2010
01086216	RCR Unit 1 Condensate Storage Tank (1CY01T) Bottom Leakage	August 12, 2010
01175095	RCR L2R13 Refuel Floor Contamination Event	April 11, 2011
01175716	L2R13 elevated dose identified undervessel during initial survey due to crud in the reactor building being forced into CRD housing at the stub tube-to-mechanism flange area during the August, 2009, unit 2 scram	March 24, 2011
01104606	RCR High Failure Rate on LaSalle ILT Class 09-1 Certification Written Exam	September 9, 2010
00945167	ACE MMD Technician Entered High Rad Area Under Wrong RWP	September 2, 2009
00950325	ACE Secured High Radiation Area (HRA) Found Unsecured	September 3, 2009
00956955	ACE Secured High Radiation Area Found Unsecured	September 24, 2009
01095910	ACE Security Officer Injured Knee Conducting Limited Scope Drills (OSHA)	August 26, 2010
01203193	ACE Insufficient RP Planning Delays Work	June 10, 2011
00938362	CCA Human Performance	July 23, 2009
00951830	CCA Potential Adverse Trend in Radiation Worker Performance	September 25, 2009
01061668	CCA L1R13 Personnel Contamination Events	May 8, 2010
01070787	CCA On-Line Emergent Work Impacting Station Dose	June 24, 2010
01123365	CCA RP Conservative Decision Making	October 28, 2010
01192068	CCA Potential Adverse Trend in RP Fundamental Performance	April 28, 2011
01001148	ACE Miles Weapon Malfunction	January 21, 2010
00950222	CCA Continued Adverse Trend in Human Performance Related Events at LaSalle Station	September 29, 2009
1175716	OTDM L2R13 Drywell Dose rates under RPV ...possible scope change to reduce Outage Dose	February 16, 2011
1248293	NRC:PI&R Inspection – Potential Violation	August 5, 2011
1033501	Unit 1 SAT Trip	February 21, 2010

943883	Spurious Isolation of RHR SDC Inboard Isolation	July 20, 2009
971982	Failure to Notify the NRC of Spurious Isolation of RHR SDC	September 25, 2009
880069	NER NC-09-007 Yellow, Loss of SDC (Dresden)	February 12, 2009
1056174	NER NC-10-024 Yellow on Site Warning System Maintenance	April 13, 2010
1224752	LOS-CQ-A2 Does not Test Items Required by NER NC-10-024	June 4, 2011
1237808	PA Speaker S157 Is Missing	July 8, 2011
946200	NOS ID: Clearance Order Electronic Sign on Not Used	July 27, 2011
1182255	Loss of Secondary Containment During Fuel Movement	March 2, 2011
977872	U-2 Technical Specification Required Shutdown	October 12, 2009
979004	Water Leak from Insulation Lagging	October 14, 2009
1238355	U2 WS PRM Low Flow Alarm	July 11, 2011
1221750	Missed PMT for U2 Instrument 2C71-N005A	February 26, 2011
1243910	Loss of Shutdown Cooling Issue raised during NRC PI&R	July 26, 2011
1153692	ARMCO Gate Failure Challenged Ability to Close for PRA Flood	December 17, 2010

#### **OPERATING EXPERIENCE**

<b><u>Number</u></b>	<b><u>Description or Title</u></b>	<b><u>Date or Revision</u></b>
0984453	Standby Liquid Control System Performance	October 26, 2009
0727691	OPEX—Actions from LaSalle SME Review of GE TIL 1594	May 25, 2010
0982193	Level 3 OPEX Review Requested	October 21, 2009
1021318	Review of OE30388	January 21, 2010
0989748	Ops Perform OPEX Review	October 27, 2009
0919230	Review of NER QC-09-032	May 13, 2009
0930551	Perform OPEX Review of OE28926 Degradation of SFP Racks	June 12, 2009
0993949	Ops Perform OPEX Review	November 13, 2009
0962965	Security—OE29558—Live Round Received w/Blank Miles Ammo	September 9, 2009
01099882	NOS ID OPEX Review Lacking Detail	August 10, 2010
1163658	OPEX Review of OE32228	January 18, 2011

#### **AUDITS, ASSESSMENTS, AND SELF-ASSESSMENTS**

<b><u>Number</u></b>	<b><u>Description or Title</u></b>	<b><u>Date or Revision</u></b>
996169	Independent Spent Fuel Storage Installation Audit NOSA-LAS-10-11	November 3, 2010
1021395	Employee Concerns Program Check-In	January 25, 2011
1140380	Preparation for NRC Problem Identification and Resolution Inspection	June 20, 2011
1106640	Pre Job Briefs	June 30, 2011

1106640	CHECK-IN: Performance on Use of HU-AA-1211 (CCA 1090701)	June 30, 2011
1164561	Effectiveness of Corrective Actions for CCA (IR 914174)	March 28, 2011
1140449	CHECK-IN: Assessment of LaSalle OPEX Program	September 28, 2011
1009836	INPO Performance Deficiency on Adequacy of OE Reporting 1009836	September 23, 2010
1006712	Station Rework Program	September 23, 2010
0988146	Maintenance CAP Product Closures	July 29, 2010
1147399	Corrective Action Programs Audit Report NOSA-LAS-11-04	April 13, 2011
1090701	NOS Identified a Trend IN HLA Briefing Standards	August 5, 2010
1147451	Maintenance Increased Frequency Audit Report NOSA-LAS-11-11	June 1, 2011
0996170	Corrective Action Program Increased Frequency Audit NOSA-LAS-10-16	March 10, 2010
0996160	Maintenance Audit NOSA-LS-10-01	February 3, 2010
1144313	Documentation	June 2, 2011
1006752	Radiation Monitoring Instrumentation	July 21, 2011
1009885	Collective Radiation Exposure & Source Term Reduction INPO Assist Visit Assessment Plan	June 24, 2010
1145892	Pre-NRC Inspection FASA	March 31, 2011
1145894	1144313	May 19, 2011
1006783	Protective Strategy	April 29, 2010
1000473	Human Performance Review	December 28, 2009
1144313	Documentation	June 2, 2011
1006752	Radiation Monitoring Instrumentation	July 21, 2011
1009885	Collective Radiation Exposure & Source Term Reduction INPO Assist Visit Assessment Plan	June 24, 2010
1145892	Pre-NRC Inspection FASA	March 31, 2011
1145894	Pre NRC Inspection-Security Equipment Performance, Testing and Maintenance	May 19, 2011
1006783	Protective Strategy	April 29, 2010
1000473	Human Performance Review	December 28, 2009
AR 946200	Apparent Cause Evaluation: NOS Identified: Clearance Order Electronic Sign on Not Used	July 27, 2009
AR 1221750-02	Root Cause Investigation Report of Technical Specification Post Maintenance Test not Performed as Required following Component Replacement	February 26, 2011
AR 1153692	Apparent Cause Evaluation: ARMCO Gate Failures in Relation to the PRA Interface with PM Process	December 2010

### CONDITION REPORTS GENERATED DURING INSPECTION

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
01241188	NRC AUDIT TEAM CHALLENGES THE CAPR IN RCR IR# 1032670	July 18, 2011
01244487	Failure to Properly Revise OP Eval 10-005	July 27, 2011
01244215	LaSalle PI&R Identified Improvement Opportunity (ECP)	July 26, 2011
1241188	NRC Audit Team Challenges the CAPR in RCR IR# 1032670	July 15, 2011
01241186	Examples of a SCAQ Are Not Listed In A LS Procedure	July 15, 2011
01250626	Standard Fleet Nuclear Safety Culture Assessment Process	August 12, 2011

### MISCELLANEOUS

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
N-LA-RP-CDM	RP Training Lesson Plan Conservative Decision-Making, Revision 0	June 2011
EC No. 381385	[U1 CY Tank Tritium Leakage]	Revision 0
	Radiation Protection Monthly Trend Report	May 2011
SO 11-07	Unit Common Standing Order: Response to Inoperable or Degraded Area PA Speakers	Revision 2
SO 11-07	Unit Common Standing Order: Response to Inoperable or Degraded Area PA Speakers	Revision 4
AR 1056174-37	Evaluate Condition of Warning Systems	August 16, 2010
AR 1056174-27	Describe Warning System Component Identification 4	July 15, 2010
AR 1056174	Verify Contents of PA Speaker Tests	July 23, 2010
1056174-07	Expectation for Shift Managers to Establish Comp Measures	June 11, 2010
SO-11-07	Response to Inoperable or Degraded Area PA Speakers	June 18, 2011
AR 943883-02	Perform Root Cause Investigation on Spurious Isolation of RCR SDC Inboard Isolation	August 27, 2009

## LIST OF ACRONYMS USED

ACE	Apparent Cause Evaluation
ADAMS	Agencywide Document Access Management System
CAP	Corrective Action Program
CCE	Common Cause Evaluation
CFR	Code of Federal Regulations
CAPR	Corrective Action to Prevent Recurrence
ECP	Employee Concerns Program
FME	Foreign Material Exclusion
IMC	Inspection Manual Chapter
IR	Issue Report
IP	Inspection Procedure
MRC	Management Review Committee
NCV	Non-Cited Violation
NOS	Nuclear Oversight
NRC	U.S. Nuclear Regulatory Commission
NUREG	Nuclear Regulatory Guide
OE	Operating Experience
PA	Public Address
PARS	Publicly Available Records System
PI&R	Problem Identification and Resolution
RCE	Root Cause Evaluation
RHR	Residual Heat Removal
SCAQ	Significant Condition Adverse to Quality
SCWE	Safety-Conscious Work Environment
SDC	Shutdown Cooling
SDP	Significance Determination Process
SOC	Station Oversight Committee
SRA	Senior Reactor Analyst
TS	Technical Specification
WS	Service Water

M. Pacilio

-2-

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 III, and the NRC Resident Inspector at LaSalle County Station.

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

Sincerely,

*/RA/*

Kenneth Riemer, Chief  
Branch 2  
Division of Reactor Projects

Docket Nos. 50-373;50-374  
License Nos. NPF-11; NPF-18

Enclosure: Inspection Report 05000373/2011008; 05000374/2011008  
w/Attachment: Supplemental Information

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DATE	08/24/11		08/25/11	08/24/11					

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Letter to M. Pacilio from K. Riemer dated August 25, 2011

SUBJECT: LASALLE COUNTY STATION UNITS 1 AND 2 PROBLEM IDENTIFICATION  
AND RESOLUTION INSPECTION REPORT 05000373/2011008;  
05000374/2011008

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