



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

August 2, 2013

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

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2  
NRC INTEGRATED INSPECTION REPORT 05000373/2013003;  
05000374/2013003; 07200070/2013001

Dear Mr. Pacilio:

On June 30, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your LaSalle County Station, Units 1 and 2. The enclosed report documents the inspection results which were discussed on July 3, 2013, with the Plant Manager, Mr. H. Vinyard, 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.

One NRC-identified finding of very low safety significance (Green) was identified during this inspection. This finding was determined to involve a violation of NRC requirements. Additionally, two licensee-identified violations are listed in Section 4OA7 of this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest 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 Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at LaSalle County Station.

If you disagree with the cross-cutting aspect assignment 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.

M. Pacilio

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In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and 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 Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Michael Kunowski, Chief  
Branch 5  
Division of Reactor Projects

Docket Nos. 50-373, 50-374, and 72-070  
License Nos. NPF-11 and NPF-18

Enclosure: Inspection Reports 05000373/2013003; 05000374/2013003; 0700070/2013001  
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 05000373; 05000374; 72-070  
License Nos: NPF-11; NPF-18

Report No: 05000373/2013003; 05000374/2013003;  
0720070/2013003

Licensee: Exelon Generation Company, LLC

Facility: LaSalle County Station, Units 1 and 2

Location: Marseilles, IL

Dates: April 1, 2013 – June 30, 2013

Inspectors: R. Ruiz, Senior Resident Inspector  
F. Ramirez, Resident Inspector  
K. Carrington, Acting Resident Inspector  
C. Phillips, Project Engineer  
M. Ziolkowski, Reactor Engineer  
M. Learn, Reactor Inspector  
R. Edwards, Reactor Inspector  
R. Jickling, Senior Emergency Preparedness Inspector  
T. Go, Health Physicist

Approved by: M. Kunowski, Chief  
Branch 5  
Division of Reactor Projects

Enclosure

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## SUMMARY OF FINDINGS

Inspection Report (IR) 05000373/2013003, 05000374/2013003, 07200020/2013001;  
04/01/2013 – 06/30/2013; LaSalle County Station, Units 1 and 2; Maintenance Risk  
Assessments and Emergent Work Control

This report covers a 3-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors. One Green finding was identified by the inspectors. The finding was considered a non-cited violation (NCV) of NRC regulations. The significance of inspection findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Components Within the Cross-cutting Areas" dated October 28, 2011. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy dated January 28, 2013. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4.

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

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

Green. A finding of very low safety significance and associated non-cited violation of 10 CFR 50.65, Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, section (a)(4), was identified by inspectors for the licensee's failure to perform an adequate risk assessment after a Unit 1 reactor core isolation cooling (RCIC) system surveillance test failed. Specifically, the licensee failed to declare the RCIC system unavailable when its high flow isolation switch failed to reset. As a result, for approximately 98 minutes, risk was maintained as green when it should have been yellow, which would have required additional risk management actions. The licensee entered this issue into its corrective action program (CAP).

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors performed a Phase 1 screening with assistance from the Regional Senior Reactor Analyst using IMC 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," Flowchart 1, "Assessment of Risk Deficit." The finding screened as Green. This finding has a cross-cutting aspect in the area of Human Performance, Work Control, because the licensee failed to appropriately plan the work activity by incorporating risk insights which resulted in the licensee's failure to declare the RCIC system unavailable and change online risk to yellow (H.3(a)). (Section 1R13)

### **B. Licensee-Identified Violations**

Two violations of very low safety significance that were identified by the licensee have been reviewed by the NRC. Corrective actions taken or planned by the licensee have been entered into the licensee's CAP. These violations and CAP tracking numbers are listed in Section 4OA7 of this report.

## **REPORT DETAILS**

### **Summary of Plant Status**

#### **Unit 1**

The unit began the inspection period operating at full power. On April 17, 2013, the unit experienced a weather-related electrical fault in the unit-common electrical distribution switchyard, which caused a loss of offsite power (LOOP) and automatic reactor scram (or reactor shutdown via instantaneous control rod insertion). The unit remained in a forced outage until it was restarted on April 27; however, while still in Mode 2 (Startup), at 6 percent power, a reactor coolant pressure boundary leak was identified on the RCIC system. In accordance with technical specifications (TSs), Unit 1 was shut down and entered Mode 4 (Cold Shutdown) to affect a repair. Following that repair, the unit was successfully restarted on April 29 and achieved full power on May 2. On May 24, the unit was downpowered to 66 percent power for a planned rod pattern adjustment. Following the adjustment, the unit was restored to full power the same day, where it remained for the duration of the inspection period.

#### **Unit 2**

The unit began the inspection period operating at full power. On April 17, the unit experienced a weather-related electrical fault in the unit-common electrical distribution switchyard, which caused a LOOP and automatic reactor scram. After the licensee completed the original forced outage work scope, the unit was restarted on April 25, but only reached 56 percent power before a manual scram was required due to a circulating water system leak. After resolving the circulating water leak issue, the unit was restarted on April 30, and reached full power on May 2. On May 18, the unit was downpowered to 78 percent power for routine control rod drive and turbine valve testing. Following the testing, the unit was restored to full power on May 19, where it remained for the duration of the inspection period.

### **REACTOR SAFETY**

#### **Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity**

1R01 Adverse Weather Protection (71111.01)

#### Readiness of Offsite and Alternate Alternating Current (AC) Power Systems

a. Inspection Scope

The inspectors verified that plant features and procedures for operation and continued availability of offsite and alternate AC power systems during adverse weather were appropriate. The inspectors reviewed the licensee's procedures affecting these areas and the communications protocols between the transmission system operator (TSO) and the plant to verify that the appropriate information was being exchanged when issues arose that could impact the offsite power system. Examples of aspects considered in the inspectors' review included:

- the coordination between the TSO and the plant during off-normal or emergency events;
- explanations for the events;

- estimates of when the offsite power system would be returned to a normal state; and
- notifications from the TSO to the plant when the offsite power system was returned to normal.

The inspectors also verified that plant procedures addressed measures to monitor and maintain availability and reliability of both the offsite AC power system and the onsite alternate AC power system prior to or during adverse weather conditions. Specifically, the inspectors verified that the procedures addressed the following:

- actions to be taken when notified by the TSO that the post-trip voltage of the offsite power system at the plant would not be acceptable to assure the continued operation of the safety-related loads without transferring to the onsite power supply;
- compensatory actions identified to be performed if it would not be possible to predict the post-trip voltage at the plant for the current grid conditions;
- re-assessment of plant risk based on maintenance activities which could affect grid reliability, or the ability of the transmission system to provide offsite power; and
- communications between the plant and the TSO when changes at the plant could impact the transmission system, or when the capability of the transmission system to provide adequate offsite power was challenged.

The inspectors also reviewed CAP items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their CAP in accordance with station CAP procedures. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one readiness of offsite and alternate AC power systems sample as defined in Inspection Procedure (IP) 71111.01-05.

b. Findings

No findings were identified.

Readiness for Impending Adverse Weather Condition – Tornado Watch

a. Inspection Scope

Since thunderstorms with potential tornados and high winds were forecast in the vicinity of the facility for May 30, 2013, the inspectors reviewed the licensee's overall preparations/protection for the expected weather conditions. The inspectors evaluated the licensee staff's preparations against the site's procedures and determined that the staff's actions were adequate. During the inspection, the inspectors focused on plant-specific design features and the licensee's procedures used to respond to specified adverse weather conditions. The inspectors also toured the plant grounds to look for loose debris that could become missiles during a tornado. The inspectors evaluated operator staffing and accessibility of controls and indications for those systems required to control the plant. Additionally, the inspectors reviewed the Updated Final Safety Analysis Report (UFSAR) and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures. The inspectors also reviewed a sample of CAP items to

verify that the licensee identified adverse weather issues at an appropriate threshold and dispositioned them through the CAP in accordance with station CAP procedures. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one readiness for impending adverse weather condition sample as defined in IP 71111.01-05.

b. Findings

No findings were identified.

Readiness for Impending Adverse Weather Condition – Imminent Loss of River Level Due to Damaged Downstream Dam Caused by Flood

a. Inspection Scope

On April 17, 2013, severe thunderstorms deposited record rainfalls in the vicinity of the plant and flooding occurred along the Illinois River. As a result of this flooding, floating freight barges broke free from their restraints on the river and struck a dam in Marseilles, Illinois, a short distance downstream from where the LaSalle Station river screen house takes its suction from the Illinois River. Due to the damage sustained by the dam and the possible methods proposed by the Army Corps of Engineers to repair the dam, there was a very high likelihood of a repair scenario that involved the need to decrease the river water level. This would have had an upsteam effect on the LaSalle river screen house. The potential existed to decrease river level to the point of going below that needed to sustain the functionality of the river screen house, impacting the ability of the plant to provide makeup water to the cooling pond, its ultimate heat sink. Due to the impending nature of this weather-related condition, the inspectors used this IP to assess the licensee staff's preparations against the site's procedures and determine if the staff's actions were adequate. During the inspection, the inspectors focused on plant-specific design features and the licensee's procedures used to respond to the specified adverse weather conditions of low river level. Additionally, the inspectors reviewed the UFSAR and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures. The inspectors also reviewed a sample of CAP items to verify that the licensee identified adverse weather issues at an appropriate threshold and dispositioned them through the CAP in accordance with station CAP procedures. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one readiness for impending adverse weather condition sample as defined in IP 71111.01-05.

b. Findings

No findings were identified.



## 1R04 Equipment Alignment (71111.04)

### Quarterly Partial System Walkdowns

#### a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- Unit 1B diesel generator (DG) walkdown following fast start;
- Unit 1 high pressure core spray system (HPCS);
- Unit 2 RCIC system; and
- Unit 1 Division I core standby cooling system.

The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, UFSAR, TS requirements, outstanding work orders (WOs), action reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

These activities constituted four partial system walkdown samples as defined in IP 71111.04-05.

#### b. Findings

No findings were identified.

### Semiannual Complete System Walkdown

#### a. Inspection Scope

On June 22, 2013, the inspectors performed a complete system alignment inspection of the standby liquid control system for Units 1 and 2 to verify the functional capability of the system. This system was selected because it was considered both safety-significant and risk-significant in the licensee's probabilistic risk assessment. The inspectors walked down the system to review mechanical and electrical equipment lineups; electrical power availability; system pressure and temperature indications, as appropriate; component labeling; component lubrication; component and equipment cooling; hangers and supports; operability of support systems; and to ensure that ancillary equipment or debris did not interfere with equipment operation. A review of a sample of past and outstanding WOs was performed to determine whether any

deficiencies significantly affected the system function. In addition, the inspectors reviewed the CAP database to ensure that system equipment alignment problems were being identified and appropriately resolved. Documents reviewed are listed in the Attachment to this report.

These activities constituted one complete system walkdown sample as defined in IP 71111.04-05.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

Routine Resident Inspector Tours (71111.05Q)

a. Inspection Scope

The inspectors conducted fire protection walkdowns which were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- fire zones 7C2 and 7C3 (Divisions I and II diesel fuel oil storage tank rooms);
- fire zone 2H4 (Unit 1 RCIC corner room);
- fire zone 5D1 (Unit 1 HPCS switchgear room);
- fire zone 7B2 (Division II DG room); and
- fire zone 4E1 (Unit 1 auxiliary electrical equipment room).

The inspectors reviewed areas to assess if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capability, maintained passive fire protection features in good material condition, and implemented adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems, or features in accordance with the licensee's fire plan.

The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to impact equipment which could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the Attachment to this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's CAP. Documents reviewed are listed in the Attachment to this report.

These activities constituted five quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings were identified.

## Annual Fire Protection Drill Observation (71111.05A)

### a. Inspection Scope

On June 1, 2013, the inspectors observed a fire brigade activation for a fire drill in the Division II battery room. Based on this observation, the inspectors evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that the licensee staff identified deficiencies, openly discussed them in a self-critical manner at the drill debrief, and took appropriate corrective actions. Specific attributes evaluated were:

- proper wearing of turnout gear and self-contained breathing apparatus;
- proper use and layout of fire hoses;
- employment of appropriate fire-fighting techniques;
- sufficient firefighting equipment brought to the scene;
- effectiveness of fire brigade leader communications, command, and control;
- search for victims and propagation of the fire into other plant areas;
- smoke removal operations;
- utilization of pre-planned strategies;
- adherence to the pre-planned drill scenario; and
- drill objectives.

Documents reviewed are listed in the Attachment to this report.

These activities constituted one annual fire protection inspection sample as defined in IP 71111.05-05.

### b. Findings

No findings were identified.

## 1R11 Licensed Operator Requalification Program (71111.11)

### Resident Inspector Quarterly Review of Licensed Operator Requalification (71111.11Q)

#### a. Inspection Scope

On May 21, 2013, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator requalification training to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of abnormal and emergency procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and Emergency Plan actions and notifications.

The crew's performance in these areas was compared to pre-established operator action expectations and successful critical task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator requalification program simulator sample as defined in IP 71111.11 and satisfied the inspection program requirement for the resident inspectors to observe a portion of an in-progress annual requalification operating test during a training cycle in which it was not observed by the NRC during the biennial portion of this IP.

b. Findings

No findings were identified.

.2 Resident Inspector Quarterly Observation of Heightened Activity or Risk (71111.11Q)

a. Inspection Scope

On April 27, the inspectors observed the control room operations shift perform reactor restart activities following the dual unit shutdown. This was an activity that required heightened awareness and was related to increased risk. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions.

The performance in these areas was compared to pre-established operator action expectations, procedural compliance, and task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator heightened activity/risk sample as defined in IP 71111.11.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

Routine Quarterly Evaluations (71111.12Q)

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the Unit 1 RCIC system due to performance issues with static O-ring style switches;

The inspectors reviewed events, such as where ineffective equipment maintenance had resulted in valid or invalid automatic actuations of engineered safeguards systems, and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- implementing appropriate work practices;
- identifying and addressing common cause failures;
- scoping of systems in accordance with 10 CFR 50.65(b) of the maintenance rule;
- characterizing system reliability issues for performance;
- charging unavailability for performance;
- trending key parameters for condition monitoring;
- ensuring 10 CFR 50.65(a)(1) or (a)(2) classification or re-classification; and
- verifying appropriate performance criteria for structures, systems and components/functions classified as (a)(2), or appropriate and adequate goals and corrective actions for systems classified as (a)(1).

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly maintenance effectiveness samples as defined in IP 71111.12-05.

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the licensee's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- Unit 1 standby gas treatment system out-of-service for preventative maintenance caused both units' risk to change to yellow on April 9;
- Unit 1 risk status changed to yellow due to RCIC TS violation on April 22;
- Unit 1 yellow risk during work on motor-driven reactor feed pump on May 15;
- severe weather impact on station and risk on June 13;
- Units 1 and 2 yellow risk due to service water work on May 24; and
- Unit 1 emergent yellow risk due to RCIC failed surveillance test.

These activities were selected based on their potential risk significance relative to the Reactor Safety Cornerstones. As applicable for each activity, the inspectors verified that risk assessments were performed as required by 10 CFR 50.65(a)(4) and were accurate and complete. When emergent work was performed, the inspectors verified that the

plant risk was promptly reassessed and managed. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed TS requirements and walked down portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met. Documents reviewed are listed in the Attachment to this report.

These maintenance risk assessments and emergent work control activities constituted six samples as defined in IP 71111.13-05.

b. Findings

Failure to Perform a Required Risk Assessment Following a Failed RCIC Surveillance

Introduction: A finding of very low safety significance and associated NCV of 10 CFR 50.65, Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, section (a)(4), was identified by the inspectors for the licensee's failure to adequately assess risk following an instrument surveillance failure on the Unit 1 RCIC system. Specifically, the licensee failed to declare the RCIC system unavailable when its high flow isolation switch failed to reset. As a result, for approximately 98 minutes, online risk was maintained green when it should have been changed to yellow.

Description: On May 30, 2013, instrument technicians and control room operators were performing LIS-RI-101, "Unit 1 RCIC Steam Line Flow Isolation Calibration." This procedure provides instructions for test and calibration of the RCIC steam line high flow isolation instrumentation. During the surveillance, RCIC may be considered available for risk purposes provided the system can be promptly restored to a standby condition by a dedicated operator and instrument technician. In order to assure action can be performed promptly, Attachment E of the surveillance provides the steps necessary to restore the system to a standby condition in the event it is needed. Additionally, the operator and instrument technician must be briefed on these actions so they could be accomplished in the minimum amount of time.

During the surveillance test, a high flow isolation switch failed to reset. This failure resulted in the RCIC isolation signal's inability to reset as well. With this being the case, even with the steps outlined in LIS-RI-101, Attachment E, the RCIC system would not have been able to start if needed because the isolation signal would have prevented it. The control room operators and instrument technicians did not reassess risk when the emergent condition resulted in a plant configuration that was not previously assessed as required by WC-AA-101, "Online Work Control Process." As a result, they continued to consider the RCIC system available until the inspectors visited the control room and asked questions about RCIC availability. Consequently, for approximately 98 minutes, the licensee failed to declare the RCIC system unavailable and assess the impact on online risk. With RCIC unavailable, the online risk profile should have been yellow.

Analysis: The inspectors determined that the licensee's failure to adequately assess risk for Unit 1 when the RCIC system became unexpectedly unavailable during the performance of surveillance procedure LIS-RI-101 was contrary to WC-AA-101, and a performance deficiency that warranted evaluation using the Significance Determination Process. The inspectors determined that the performance deficiency was more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B,

“Issue Screening,” dated September 7, 2012, because it was associated with the Mitigating Systems cornerstone attribute of Equipment Performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.

The inspectors performed a Phase 1 screening using IMC 0609, Appendix K, “Maintenance Risk Assessment and Risk Management Significance Determination Process,” Flowchart 1, “Assessment of Risk Deficit,” dated May 19, 2005. The LaSalle site risk management engineer performed a risk evaluation for this issue. The risk management engineer used 2 hours (time rounded up to the nearest hour conservatively) as the duration for the evaluation. As specified in Flowchart 1, the licensee calculated the incremental core damage probability (ICDP), or actual increase in risk during this work window, as  $3.7 \times 10^{-10}$ , and the incremental large early release probability (ILERP), as  $1.9 \times 10^{-11}$ . The risk deficit is assumed to be equal to the  $ICDP_{actual}$  and  $ILERP_{actual}$  in situations where a risk assessment was not performed. The regional senior reactor analyst evaluated the licensee’s risk significance evaluation and agreed with the licensee’s calculation method and conclusions for these values. In accordance with Flowchart 1, because the ICDP was less than  $1 \times 10^{-6}$  and the ILERP was less than  $1 \times 10^{-7}$ , the finding screened as Green.

This finding had a cross-cutting aspect in the area of Human Performance, Work Control, because the licensee failed to appropriately plan the work activity by incorporating risk insights (H.3(a)). Specifically, when the pressure switch failed, the licensee did not perform a risk assessment of the condition which resulted in the licensee’s failure to declare the RCIC system unavailable and change the online risk to yellow.

Enforcement: The requirements for monitoring the effectiveness of maintenance at nuclear power plants, as described in 10 CFR 50.65(a)(4), state, in part, that “before performing maintenance activities, the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities.”

Contrary to the above, on May 30, 2013, the licensee failed to assess risk during the Unit 1 RCIC system surveillance following the failure of the high steam flow switch. As a result, the increase in risk associated with making the RCIC system unavailable was not accounted for by the licensee. The licensee entered this issue into its CAP as AR 1519957 and AR 1520015. Corrective actions planned and completed by the licensee included immediately assessing risk and changing it to yellow for the duration of the unavailability window, and revising LIS-RI-101 to alert operators of RCIC’s unavailability if the high flow switch fails to reset. Because the licensee has restored compliance and entered the issue into its CAP, and the finding is of very low safety significance, this violation of 10 CFR 50.65(a)(4) is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000373/2013003-01; Failure to Perform a Required Risk Assessment Following a Failed RCIC Surveillance).

## 1R15 Operability Determinations and Functional Assessments (71111.15)

### Operability Evaluations

#### a. Inspection Scope

The inspectors reviewed the following issues:

- Unit 2 'B' residual heat removal (RHR) service water leak;
- Unit 2 drywell equipment drain system high temperatures;
- Unit 2 RCIC seal steam leak;
- Unit 2 loss of control room annunciators; and
- Unit 1 and Unit 2 emergency core cooling system room coolers.

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and UFSAR to the licensee's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors reviewed a sampling of CAP documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the Attachment to this report.

This operability inspection constituted five samples as defined in IP 71111.15-05.

#### b. Findings

No findings were identified.

## 1R19 Post-Maintenance Testing (71111.19)

### .1 Post-Maintenance Testing

#### a. Inspection Scope

The inspectors reviewed the following post-maintenance test (PMT) activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- Unit 1 'B' RHR following work on system;
- Unit 2 HPCS following leak repair to minimum flow recirculation line; and
- Unit 1 low pressure core spray following control switch repair.

These activities were selected based upon the structure, system, or component's ability to impact risk. The inspectors evaluated these activities for the following (as applicable): the effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed; acceptance criteria were clear and demonstrated



operational readiness; test instrumentation was appropriate; tests were performed as written in accordance with properly reviewed and approved procedures; equipment was returned to its operational status following testing (temporary modifications or jumpers required for test performance were properly removed after test completion); and test documentation was properly evaluated. The inspectors evaluated the activities against TSs, the UFSAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed CAP documents associated with PMTs to determine whether the licensee was identifying problems and entering them in the CAP and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

This inspection constituted three PMT samples as defined in IP 71111.19-05.

b. Findings

No findings were identified.

1R20 Outage Activities (71111.20)

Other Outage Activities

a. Inspection Scope

The inspectors evaluated outage activities for an unscheduled outage on both units that began on April 17, 2013, and continued through April 29<sup>th</sup> for Unit 1 and April 30<sup>th</sup> for Unit 2. The inspectors reviewed activities to ensure that the licensee considered risk in developing, planning, and implementing the outage schedule.

The inspectors reviewed the reactor shutdown and cooldown, outage equipment configuration and risk management, electrical lineups, selected clearances, control and monitoring of decay heat removal, control of containment activities, personnel fatigue management, startup and heatup activities, and identification and resolution of problems associated with the outage. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one other outage sample as defined in IP 71111.20-05.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

Surveillance Testing

a. Inspection Scope

The inspectors reviewed the test results for the following activities to determine whether risk-significant systems and equipment were capable of performing their intended safety function and to verify testing was conducted in accordance with applicable procedural and TS requirements:

- Unit 2 'B' DG idle start surveillance on April 5; (routine)
- Unit 1 secondary containment damper quarterly surveillance on May 29; (routine)
- Unit 2 RCIC cold quick start surveillance on June 10; (routine)
- surveillance test interval change evaluation LA-12-003; (surveillance frequency change, routine)
- Unit 2 'B' RHR quarterly inservice test; (Inservice Testing--IST) and
- Units 1 and 2 RCS leakage tracking program. (Reactor Coolant System--RCS)

The inspectors observed in-plant activities and reviewed procedures and associated records to determine the following:

- did preconditioning occur;
- the effects of the testing were adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- acceptance criteria were clearly stated, demonstrated operational readiness, and consistent with the system design basis;
- plant equipment calibration was correct, accurate, and properly documented;
- as-left setpoints were within required ranges; and the calibration frequency was in accordance with TSs, the UFSAR, procedures, and applicable commitments;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy; applicable prerequisites described in the test procedures were satisfied;
- test frequencies met TS requirements to demonstrate operability and reliability; tests were performed in accordance with the test procedures and other applicable procedures; jumpers and lifted leads were controlled and restored where used;
- test data and results were accurate, complete, within limits, and valid;
- test equipment was removed after testing;
- where applicable for inservice testing activities, testing was performed in accordance with the applicable version of Section XI, American Society of Mechanical Engineers code, and reference values were consistent with the system design basis;
- where applicable, test results not meeting acceptance criteria were addressed with an adequate operability evaluation or the system or component was declared inoperable;
- where applicable for safety-related instrument control surveillance tests, reference setting data were accurately incorporated in the test procedure;
- where applicable, actual conditions encountering high resistance electrical contacts were such that the intended safety function could still be accomplished;
- prior procedure changes had not provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- equipment was returned to a position or status required to support the performance of its safety functions; and
- all problems identified during the testing were appropriately documented and dispositioned in the CAP.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted four routine surveillance testing samples, one inservice testing sample, and one reactor coolant system leak detection inspection sample, as defined in IP 71111.22, Sections -02 and -05.

b. Findings

No findings were identified.

**Cornerstone: Emergency Preparedness**

1EP2 Alert and Notification System Evaluation (71114.02)

Alert and Notification System Evaluation

a. Inspection Scope

The inspectors reviewed documents and conducted discussions with emergency preparedness (EP) staff and management regarding the operation, maintenance, and periodic testing of the back-up and primary alert and notification system (ANS) in LaSalle County Station's plume pathway Emergency Planning Zone. The inspectors reviewed monthly trend reports and the daily and monthly operability records from March 2011 through March 2013. Information gathered during document reviews and interviews was used to determine whether the ANS equipment was maintained and tested in accordance with emergency plan commitments and procedures. Documents reviewed are listed in the Attachment to this report.

This ANS inspection constituted one sample as defined in IP 71114.02-06.

b. Findings

No findings were identified.

1EP3 Emergency Response Organization Staffing and Augmentation System (71114.03)

Emergency Response Organization Staffing and Augmentation System

a. Inspection Scope

The inspectors reviewed and discussed with plant EP management and staff the emergency plan commitments and procedures that addressed the primary and alternate methods of initiating an Emergency Response Organization (ERO) on-shift and augmentation staffing levels. The inspectors reviewed reports and a sample of CAP records of the 2012 drive-in drill and unannounced off-hour augmentation call-in tests, which were conducted between March 2011 and March 2013, to determine the adequacy of the drill critiques and associated corrective actions. The inspectors also reviewed a sample of the EP training records of approximately 28 ERO personnel, who were assigned to key and support positions, to determine the status of their training as it related to their assigned ERO positions. Documents reviewed are listed in the Attachment to this report.

This ERO augmentation testing inspection constituted one sample as defined in IP 71114.03-06.

b. Findings

No findings were identified.

1EP5 Maintenance of Emergency Preparedness (71114.05)

Maintenance of Emergency Preparedness

a. Inspection Scope

The inspectors reviewed a sample of nuclear oversight (NOS) staff's 2011, 2012, and 2013 audits of LaSalle Station's EP Program to determine that the independent assessments met the requirements of 10 CFR 50.54(t). The inspectors also reviewed samples of CAP records associated with the 2012 Biennial Exercise, as well as various EP drills conducted in 2011 and 2012, in order to determine whether the licensee fulfilled drill commitments and to evaluate the licensee's efforts to identify and resolve identified issues. The inspectors reviewed a sample of EP items and corrective actions related to the facility's EP program and activities to determine whether corrective actions were completed in accordance with the site's CAP. Documents reviewed are listed in the Attachment to this report.

This correction of EP weaknesses and deficiencies inspection constituted one sample as defined in IP 71114.05-06.

b. Findings

No findings were identified.

**RADIATION SAFETY**

**Cornerstones: Occupational and Public Radiation Safety**

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

The inspection activities supplement those documented in NRC Inspection Report 05000373(374)/2013002 and constituted a partial sample as defined in IP 71124.01-05.

Instructions to Workers (02.03)

a. Inspection Scope

The inspectors selected various containers holding non-exempt licensed radioactive materials that may cause unplanned or inadvertent exposure of workers, and assessed whether the containers were labeled and controlled in accordance with 10 CFR 20.1904, "Labeling Containers," or met the requirements of 10 CFR 20.1905(g), "Exemptions To Labeling Requirements."

For work activities that could suddenly and severely increase radiological conditions, the inspectors assessed the licensee's means to inform workers of changes that could significantly impact their occupational dose.

b. Findings

No findings were identified.

Contamination and Radioactive Material Control (02.04)

a. Inspection Scope

The inspectors reviewed the licensee's criteria for the survey and release of potentially contaminated material. The inspectors evaluated whether there was guidance on how to respond to an alarm that indicates the presence of licensed radioactive material.

The inspectors evaluated whether any transactions, since the last inspection, involving nationally tracked sources were reported in accordance with 10 CFR 20.2207.

b. Findings

No findings were identified.

Radiological Hazards Control and Work Coverage (02.05)

a. Inspection Scope

The inspectors evaluated the adequacy of radiological controls, such as required surveys, radiation protection job coverage (including audio and visual surveillance for remote job coverage), and contamination controls. The inspectors evaluated the licensee's use of electronic personal dosimeters in high noise areas as high radiation area monitoring devices.

The inspectors examined the licensee's physical and programmatic controls for highly activated or contaminated materials (nonfuel) stored within spent fuel and other storage pools. The inspectors assessed whether appropriate controls (i.e., administrative and physical controls) were in place to preclude inadvertent removal of these materials from the pool.

b. Findings

No findings were identified.

Risk-Significant High Radiation Area and Very High Radiation Area Controls (02.06)

a. Inspection Scope

The inspectors discussed with the radiation protection manager the controls and procedures for high-risk high and very high radiation areas. The inspectors discussed methods employed by the licensee to provide stricter control of very high radiation area access as specified in 10 CFR 20.1602, "Control of Access to Very High Radiation Areas," and Regulatory Guide 8.38, "Control of Access to High and Very High Radiation Areas of Nuclear Plants." The inspectors assessed whether any changes to licensee procedures substantially reduce the effectiveness and level of worker protection.

The inspectors evaluated licensee controls for very high radiation areas and areas with the potential to become a very high radiation areas to ensure that an individual was not able to gain unauthorized access to the very high radiation area.

b. Findings

No findings were identified.

Problem Identification and Resolution (02.09)

a. Inspection Scope

The inspectors evaluated whether problems associated with radiation monitoring and exposure control were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee's CAP. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by the licensee that involve radiation monitoring and exposure controls. The inspectors assessed the licensee's process for applying operating experience to their plant.

b. Findings

No findings were identified.

2RS7 Radiological Environmental Monitoring Program (71124.07)

This inspection constituted one complete sample as defined in IP 71124.07-05.

Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed the annual radiological environmental operating reports and the results of any licensee assessments since the last inspection to assess whether the radiological environmental monitoring program (REMP) was implemented in accordance with the TSs and Offsite Dose Calculation Manual (ODCM). This review included reported changes to the ODCM with respect to environmental monitoring, commitments in terms of sampling locations, monitoring and measurement frequencies, land use census, inter-laboratory comparison program, and analysis of data.

The inspectors reviewed the ODCM to identify locations of environmental monitoring stations.

The inspectors reviewed the UFSAR for information regarding the environmental monitoring program and meteorological monitoring instrumentation.

The inspectors reviewed quality assurance audit results of the program to assist in choosing inspection "smart samples" and audits and technical evaluations performed on the vendor laboratory program.

The inspectors reviewed the annual effluent release report and the 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," report, to determine if

the licensee was sampling, as appropriate, for the predominant and dose-causing radionuclides likely to be released in effluents.

b. Findings

No findings were identified.

Site Inspection (02.02)

a. Inspection Scope

The inspectors walked down select air sampling stations and thermoluminescent dosimeter monitoring stations to determine whether they were located as described in the ODCM and to determine the equipment material condition. Consistent with smart sampling, the air sampling stations were selected based on the locations with the highest X/Q, D/Q wind sectors, and thermoluminescent dosimeters were selected based on the most risk-significant locations (e.g., those that have the highest potential for public dose impact).

For the air samplers and thermoluminescent dosimeters selected, the inspectors reviewed the calibration and maintenance records to evaluate whether they demonstrated adequate operability of these components. Additionally, the review included the calibration and maintenance records of select composite water samplers.

The inspectors assessed whether the licensee had initiated sampling of other appropriate media upon loss of a required sampling station.

The inspectors observed the collection and preparation of environmental samples from different environmental media (e.g., ground and surface water, milk, vegetation, sediment, and soil) as available to determine if environmental sampling was representative of the release pathways as specified in the ODCM and if sampling techniques were in accordance with procedures.

Based on direct observation and review of records, the inspectors assessed whether the meteorological instruments were operable, calibrated, and maintained in accordance with guidance contained in the UFSAR, NRC Regulatory Guide 1.23, "Meteorological Monitoring Programs for Nuclear Power Plants," and licensee procedures. The inspectors assessed whether the meteorological data readout and recording instruments in the control room and, if applicable, at the tower were operable.

The inspectors evaluated whether missed and/or anomalous environmental samples were identified and reported in the annual environmental monitoring report. The inspectors selected events that involved a missed sample, inoperable sampler, lost thermoluminescent dosimeter, or anomalous measurement to determine if the licensee had identified the cause and had implemented corrective actions. The inspectors reviewed the licensee's assessment of any positive sample results (i.e., licensed radioactive material detected above the lower limits of detection) and reviewed the associated radioactive effluent release data that were the source of the released material.

The inspectors selected structures, systems, and components that involve or could reasonably involve licensed material for which there was a credible mechanism for

licensed material to reach ground water, and assessed whether the licensee had implemented a sampling and monitoring program sufficient to detect leakage of these structures, systems, and components to groundwater.

The inspectors evaluated whether records, as required by 10 CFR 50.75(g), of leaks, spills, and remediation since the previous inspection were retained in a retrievable manner.

The inspectors reviewed any significant changes made by the licensee to the ODCM as the result of changes to the land census, long-term meteorological conditions (3-year average), or modifications to the sampler stations since the last inspection. They reviewed technical justifications for any changed sampling locations to evaluate whether the licensee performed the reviews required to ensure that the changes did not affect its ability to monitor the impacts of radioactive effluent releases on the environment.

The inspectors assessed whether the appropriate detection sensitivities with respect to TSs/ODCM were used for counting samples (i.e., the samples meet the TS/ODCM required lower limits of detection). The licensee uses a vendor laboratory to analyze the REMP samples so the inspectors reviewed the results of the vendor's quality control program, including the interlaboratory comparison, to assess the adequacy of the vendor's program.

The inspectors reviewed the results of the licensee's interlaboratory comparison program to evaluate the adequacy of environmental sample analyses performed by the licensee. The inspectors assessed whether the interlaboratory comparison test included the media/nuclide mix appropriate for the facility. If applicable, the inspectors reviewed the licensee's determination of any bias to the data and the overall effect on the REMP.

b. Findings

No findings were identified.

Identification and Resolution of Problems (02.03)

a. Inspection Scope

The inspectors assessed whether problems associated with the REMP were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee's CAP. Additionally, they assessed the appropriateness of the corrective actions for a selected sample of problems documented by the licensee that involved the REMP.

b. Findings

No findings were identified.



#### 4. OTHER ACTIVITIES

##### **Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Occupational Radiation Safety, and Public Radiation Safety**

###### 4OA1 Performance Indicator Verification (71151)

###### Reactor Coolant System Leakage

###### a. Inspection Scope

The inspectors sampled licensee submittals for the RCS Leakage performance indicator (PI) for Units 1 and 2 for the second quarter 2012 through the first quarter 2013. To determine the accuracy of the PI data, definitions and guidance in the Nuclear Energy Institute (NEI) document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's operator logs, RCS leakage tracking data, action reports (also known as issue reports), event reports, and NRC Integrated Inspection Reports for the period to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two reactor coolant system leakage samples as defined in IP 71151-05.

###### b. Findings

No findings were identified.

###### Drill/Exercise Performance

###### a. Inspection Scope

The inspectors sampled licensee submittals for the drill/exercise performance (DEP) PI for the third quarter 2012 through first quarter 2013. Definitions and guidance in NEI 99-02 were used to determine the accuracy of the PI data reported. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the DEP indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI, assessments of PI opportunities during pre-designated control room simulator training sessions, performance during the 2012 biennial exercise, and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one DEP sample as defined in IP 71151-05.

###### b. Findings

No findings were identified.

## Emergency Response Organization Drill Participation

### a. Inspection Scope

The inspectors sampled licensee submittals for the ERO Drill Participation PI for the third quarter 2012 through first quarter 2013. For the PI data reported, definitions and guidance in NEI 99-02 were used to determine the accuracy. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes, including procedural guidance on assessing opportunities for the PI, performance during the 2012 biennial exercise and other drills, and revisions of the roster of personnel assigned to key ERO positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO drill participation sample as defined in IP 71151-05.

### b. Findings

No findings were identified.

## Alert and Notification System

### a. Inspection Scope

The inspectors sampled licensee submittals for the ANS PI for the third quarter 2012 through first quarter 2013. To determine the accuracy of the PI data reported, definitions and guidance contained in NEI 99-02 were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes, including procedural guidance on assessing opportunities for the PI and results of periodic ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ANS sample as defined in IP 71151-05.

### b. Findings

No findings were identified.

## Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM) Radiological Effluent Occurrences

### a. Inspection Scope

The inspectors sampled licensee submittals for the RETS/ODCM radiological effluent occurrences PI for the first quarter 2012 through the second quarter 2013. The inspectors used definitions and guidance in NEI 99-02 to determine the accuracy of the PI data reported. The inspectors reviewed the licensee's CAP database and selected individual reports generated since this indicator was last reviewed to identify any potential occurrences, such as unmonitored, uncontrolled, or improperly calculated effluent releases, that may have impacted offsite dose. The inspectors reviewed gaseous effluent summary data and the results of associated offsite dose calculations for selected dates to determine if indicator results were accurately reported. The

inspectors also reviewed the licensee's methods for quantifying gaseous and liquid effluents and determining effluent dose. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one RETS/ODCM radiological effluent occurrences sample as defined in IP 71151-05.

b. Findings

No findings were identified.

4OA2 Identification and Resolution of Problems (71152)

**Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Physical Protection**

Routine Review of Items Entered into the CAP

a. Inspection Scope

As part of the various baseline IPs discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: identification of the problem was complete and accurate; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are included in the Attachment to this report.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings were identified.

Daily CAP Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for followup, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished through inspection of the station's daily action report packages.

These daily reviews were performed by procedure as part of the inspectors' daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

Semiannual Trend Review

a. Inspection Scope

The inspectors reviewed the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the 6-month period of January 2013 through June 2013, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside of the normal CAP in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self-assessment reports, and Maintenance Rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's CAP trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

This review constituted a single semiannual trend inspection sample as defined in IP 71152-05.

b. Findings

No findings were identified.

Selected Issue Followup Inspection: Repeat Losses of Secondary Containment Safety Function

a. Inspection Scope

The inspectors evaluated the licensee's implemented and planned corrective actions associated with repeat losses of the secondary containment safety function. Specifically, the inspectors reviewed the equipment apparent cause evaluations (EACEs) for two separate instances where secondary containment function was lost as a result of reactor building airlock doors issues. In addition, the inspectors reviewed licensee event reports (LERs) 2012-001 and 2013-001, "Secondary Containment Inoperable Due to Interlock Doors Open," which were generated as a result of these issues. The review also included interviews of licensee personnel. Additional documents reviewed are listed in the Attachment to this report

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152-05.

b. Findings

(Opened) Unresolved Item: Potential Failure to Assign Appropriate Safety Classification to Secondary Containment Doors

Introduction: The inspectors identified an unresolved item (URI) associated with secondary containment doors. The first aspect of the URI is the potential failure to assign the proper safety classification to the secondary containment doors. The second aspect is associated with the potential failure to provide an adequate test for the secondary containment doors to ensure that the doors will perform satisfactorily while in service. This item remains unresolved pending further review by the NRC staff.

Description: The EACE 1414490, "Unit 2 Reactor Building 761' Interlock Allows Both Doors to be Open," and EACE 1481207, "Secondary Containment Door Interlock Failure," both document instances where both doors of an interlock in secondary containment were opened at the same time. This created a condition where secondary containment was declared inoperable and its safety function was considered lost.

During the review of the EACEs and associated documentation, the inspectors noted that the secondary containment structure was classified as safety-related but the secondary containment doors were classified as nonsafety-related. Licensee engineering personnel stated that the classification went back to the original licensed design requirements and that the bases were addressed in NUREG-0519, "Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2." However, following the review of NUREG-0519 and the UFSAR sections associated with classification of structures, systems and components, and secondary containment functional design, the inspectors determined that there is no distinction between secondary containment and its doors. The design and licensing basis documents reviewed describe secondary containment as a system and did not list exceptions to its components such as the doors.

The inspectors will discuss the issue with personnel in the NRC Office of Nuclear Reactor Regulation to help determine if the licensee is implementing the component classification guidelines and processes appropriately and if the classification of secondary containment doors is consistent with that of other licensees.

The inspectors also reviewed LOS-CS-M1, "Secondary Containment Integrity." This procedure outlines the steps to test the secondary containment doors as required per TS Surveillance Requirement (SR) to verify one secondary containment access door in each access opening is closed. The frequency stated for this TS SR is 31 days. The inspectors noted that prior to December 2011, the secondary containment doors were tested by opening one of the two interlock doors and physically challenging the other one to verify that the interlock mechanism had actuated, and the two doors could not be opened at the same time. However, in January 2012, operations personnel changed LOS-CS-M1 such that only the light indication would be checked, and the doors would not be physically challenged. The licensee stated that the reason for this change was to prevent inadvertent losses of the secondary containment function during the testing. The inspectors noted that merely checking the light to verify the interlock has engaged when one of the doors is open would not completely ensure that the doors will perform

satisfactorily while in service. Specifically, since the light indication and the door lock are wired in parallel, a test could be determined satisfactory (based on the light indication) when the locking mechanism could be non-functional.

This issue on secondary containment door testing is unresolved pending resolution of the inspectors' question regarding the safety classification of the doors.

An unresolved item is open pending further review by the NRC staff (URI 05000373/2013003-02 and 05000374/2013003-02; Potential Failure to Assign Appropriate Safety Classification to Secondary Containment Doors).

Selected Issue Followup Inspection: Organizational Independence of Quality Verification Inspectors

a. Inspection Scope

The inspectors evaluated the licensee's proposed actions associated with the maintenance department and the nuclear oversight department's organizational structures and their potential effects on the independence of the quality verification inspectors. The inspectors reviewed the organizational structure against 10 CFR Part 50, Appendix B quality assurance organizational requirements. The review also included interviews of licensee personnel and management. Additional documents reviewed are listed in the Attachment to this report.

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152-05.

b. Findings

No findings were identified.

40A3 Followup of Events and Notices of Enforcement Discretion (71153)

Dual Unit LOOP

a. Inspection Scope

The inspectors reviewed the plant's response to a dual unit LOOP event and the resultant automatic dual unit scram on April 17, 2013. The inspectors also reviewed the licensee's emergency response to the event since a notice of unusual event (the lowest level of the NRC's four tiered emergency classification scale) was declared by the licensee, per their emergency plan. The event was initiated by a lightning strike to an electrical power transmission component in the station's onsite electrical switchyard, and ultimately led to the LOOP and automatic scram of the reactors. Documents reviewed in this inspection are listed in the Attachment to this report.

This event was also the subject of an NRC Special Inspection, conducted in accordance with IP 93812. The results of that inspection were documented in stand-alone NRC Inspection Report 05000373/2013009; 05000374/2013009.

This event followup review constituted one sample as defined in IP 71153-05.

b. Findings

No findings were identified.

.1 (Discussed) LER 05000374-2012-001-00: Secondary Containment Inoperable Due to Interlock Doors Open

This event occurred on September 18, 2012, while Unit 2 was in Mode 1 at 100 percent reactor power. An equipment operator reported that the Unit 2 reactor building 761' elevation (interlock doors 424 and 314) were open at the same time for approximately 10 seconds. During the time that both interlock doors were open, TS SR 3.6.4.1.2, which requires the verification of one secondary containment access door in each access opening is closed, was not met. As a result, TS 3.6.4.1 was entered, and the secondary containment system was declared inoperable until it was verified that one of the doors would remain closed at all times.

This occurrence was reportable under 10 CFR 50.73(a)(2)(v)(C) and 10 CFR 50.73(a)(2)(v)(D) as an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material and to mitigate the consequences of an accident. This event constituted a safety system functional failure.

The inspectors are in the process of reviewing the adequacy of the licensee's implemented and planned corrective actions in response to the events described in the subject LER. Section 4OA2 of this report documents unresolved item 05000373/2013003-02 and 05000374/2013003-02, which is associated with the review of this LER. Since resolution of this URI is necessary to determine if there are any violations of NRC requirements, this LER review will not be closed.

Documents reviewed are listed in the Attachment to this report. This LER is not closed.

This event followup review did not constitute a sample as defined in IP 71153-05.

.2 (Discussed) LER 05000373/2013-001-00: Secondary Containment Inoperable Due to Interlock Doors Open

This event occurred on February 28, 2013, while Unit 1 was in Mode 5 for refueling outage L2R14. It was reported to the control room that both interlock doors on the Unit 1 reactor building 710' elevation (doors 225 and 226) were open at the same time for approximately 10 seconds. At the time of the event, there were no irradiated fuel movements, core alterations, or operations that could potentially drain the reactor vessel in progress. During the time that both interlock doors were open, TS SR 3.6.4.1.2, which requires the verification of one secondary containment access door in each access opening is closed, was not met. As a result, TS 3.6.4.1 was entered, and the secondary containment system was declared inoperable until it was verified that one of the doors would remain closed at all times.

This occurrence was reportable under 10 CFR 50.73(a)(2)(v)(C) and 10 CFR 50.73(a)(2)(v)(D) as an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material and to mitigate the consequences of an accident. This event constituted a safety system functional failure.

The inspectors are in the process of reviewing the adequacy of the licensee's implemented and planned corrective actions in response to the events described in the subject LER. Section 4OA2 of this report documents unresolved item 05000373/2013003-02 and 05000374/2013003-02, which is associated with the review of this LER. Since resolution of this URI is necessary to determine if there are any violations of NRC requirements, this LER review will not be closed.

Documents reviewed are listed in the Attachment to this report. This LER is not closed.

This event followup review did not constitute a sample as defined in IP 71153-05.

Operation of an Independent Spent Fuel Storage Installation at Operating Plants (60855.1)

a. Inspection Scope

During the licensee's 2013 dry fuel storage campaign, the inspectors observed and evaluated select licensee loading, processing, and transfer operations of the third canister to verify compliance with the applicable Certificate of Compliance, the associated TSs, and approved independent spent fuel storage installation (ISFSI) procedures. Specifically, the inspectors observed: loading and independent verification of fuel assemblies placed into a multi-purpose canister, heavy loads handling in and around the spent fuel pool, decontamination and surveying, and draining the dry fuel storage canister of water and vacuum drying. The licensee used the Holtec International HI-STORM 100 system for this campaign.

The inspectors reviewed procedures used to perform dry cask storage preparation, loading, sealing, transfer, monitoring, and storage activities. The inspectors reviewed applicable heavy loads procedures and inspection documentation to evaluate compliance with the site's control of heavy loads program. Select records, in part, were reviewed by the inspectors after the licensee completed certain loading activities.

The inspectors reviewed the licensee's evaluations associated with fuel characterization and selection for storage, including the licensee's characterization of fuel as intact or damaged. The licensee did not plan to load any damaged fuel assemblies or fuel debris during this campaign. The inspectors reviewed the campaign cask fuel selection packages to verify that the licensee was loading fuel in accordance with the Certificate of Compliance approved contents.

The inspectors reviewed a number of action requests and the associated corrective actions since the last ISFSI inspection. The inspectors also reviewed 10 CFR 72.48, "Changes, Tests, and Experiments," screenings and changes to the licensee's 10 CFR 72.212, "Conditions of General License Issued under §72.210," evaluations since the last ISFSI inspection.

The inspectors performed a walk down of the ISFSI pad to assess the material condition of the pad and the loaded HI-STORM 100 storage casks. The inspectors reviewed the licensee's evaluations of flammable materials near the ISFSI and radiation monitoring program. Additionally, the inspectors performed independent radiation surveys around the ISFSI pad and storage casks.



b. Findings

No findings were identified.

4OA6 Management Meetings

Exit Meeting Summary

On July 3, the inspectors presented the inspection results to Mr. H. Vinyard and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

Interim Exit Meetings

Interim exits were conducted to discuss the results of:

- EP program inspection, with Mr. H. Vinyard, conducted at the site on April 26, 2013;
- ISFSI operational inspection on June 28, 2013, with Mr. P. Karaba and other members of the licensee's management and staff; and
- radiological hazard assessment and exposure controls inspection, radiological environmental monitoring, and RETS/ODCM radiological effluent occurrences PI verification with Mr. P. Karaba, Site Vice President, on June 28, 2013.

Licensee personnel acknowledged the information presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary. Proprietary material received during the inspection was returned to the licensee.

4OA7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section 2.3.2 of the NRC Enforcement Policy for being dispositioned as NCVs.

.1 Failure to Implement Regulatory Requirement in a Timely Manner

Title 10 CFR 50, Appendix E, Section IV.A.9, "Content of Emergency Plans," requires, in part, a detailed analysis demonstrating that on-shift personnel assigned emergency plan functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan must be implemented no later than December 24, 2012. Contrary to this, on or about February 5, 2013, the licensee identified procedures LOA-RX-101(201) and LOA-FX-101(201), which had been revised to ensure the shift manager did not perform competing responsibilities and functions, had not been implemented until February 5, 2013, and initiated AR 01471558. The performance deficiency was determined to be more than minor because it was associated with Emergency Preparedness Cornerstone attribute of procedure quality and adversely affected the cornerstone objective of ensuring that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The finding was determined to have very low safety significance because there was no loss of planning standard function.

.2 Technical Specification LCO 3.0.4 Violation

Unit 1 TS Limiting Condition for Operation (LCO) 3.0.4 states, in part, “When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made: When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time.” Technical Specification 3.5.3 “RCIC System,” states, in part, that “The RCIC System shall be OPERABLE [in the following conditions of Applicability] MODE 1, MODES 2 and 3 with reactor steam dome pressure > 150 psig.” Contrary to this, on April 22, 2013, the licensee identified that it violated Unit 1 TS LCO 3.0.4 when reactor pressure was allowed to exceed 150 psig, thereby entering the condition of Applicability in TS 3.5.3 which required RCIC to be operable in that condition; however, RCIC was still isolated and inoperable at the time. The performance deficiency of failing to meet the requirements of the TS was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of Equipment Performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance in accordance with the SDP. The event was entered into the CAP as AR 01505120.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

P. Karaba, Site Vice President  
H. Vinyard, Plant Manager  
K. Hedgspeth, Radiation Protection Manager  
J. Washko, Engineering Manager  
G. Chavez, Dry Cask Storage Program Manager  
B. Maze, Project Management  
M. Sharma, Engineering Programs  
K. Hall, Buried Piping Program Owner  
V. Chopra, Engineering Programs  
J. Vergara, Regulatory Assurance  
L. Ekern, Nuclear Oversight  
B. Hilton, Design Manager  
G. Ford, Regulatory Affairs Manager  
J. Houston, Nuclear Oversight Manager  
A. Schierer, Engineer  
D. Amezaga, System Engineer  
J. Bendis, Engineer  
J. Feeney, LaSalle Nuclear Oversight  
J. Hughes, Emergency Preparedness Coordinator  
J. Smith, Operations Training Manager  
L. Blunk, Regulatory Affairs  
J. Shields, In-vessel Visual Inspection Program Supervisor  
S. Shields, Regulatory Affairs  
S. Tanton, Engineer  
T. Hapak, Chemistry  
C. Howard, RP Operation Manager  
R. Simonsen, RP Operation Manager  
A. Baker, Dosimetry Specialist  
A. Daniels, Exelon Emergency Preparedness Manager  
K. Rusley, Emergency Preparedness Manager  
S. Tutoky, Senior Chemist  
M. Martin, Chemistry Developmental Manager  
J. Mosher, Radiation Protection Manager (incoming)

#### U.S. Nuclear Regulatory Commission

M. Kunowski, Chief, Reactor Projects Branch 5

## LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

### Opened

05000373/2013003-01	NCV	Failure to Perform a Required Risk Assessment Following a Failed RCIC Surveillance (Section 1R13)
05000373/2013003-02; 05000374/2013003-02	URI	Potential Failure to Assign Appropriate Safety Classification to Secondary Containment Doors (Section 4OA2.4)

### Closed

05000373/2013003-01	NCV	Failure to Perform a Required Risk Assessment Following a Failed RCIC Surveillance (Section 1R13)
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### Discussed

05000374/2012-001-00	LER	Secondary Containment Inoperable Due to Interlock Doors Open (Section 4OA3.2)
05000373/2013-001-00	LER	Secondary Containment Inoperable Due to Interlock Doors Open (Section 4OA3.3)

## LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector 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.

### 1R01 Adverse Weather Protection

#### Procedures:

- EN-LA-402-0005; Extreme Heat Implementation Plan – LaSalle; Rev. 2
- EN-LA-402-0005; Extreme Heat Implementation Plan – LaSalle; Rev. 17
- LOA-GRID-001; Low Grid Voltage; Rev. 13
- LOA-TORN-001; High Winds / Tornado; Rev. 14
- LOS-ZZ-A2; Preparation for Winter/Summer Operation; Rev. 43
- OP-AA-108-107-1001; Station Response to Grid Capacity Conditions; Rev. 4
- OP-AA-101-113-1004; Guidelines for the Morning Plant Status Reports; Rev. 25
- WC-AA-101; Online Work Control Process; Rev. 20
- WC-AA-107; Seasonal Readiness; Rev. 11

#### Action Requests:

- 1416503; LaSalle Specific Summer Readiness AT's
- 1416608; LaSalle 2013 AR for Site Summer Readiness Actions
- 1437099; 2013 Summer Readiness Check-In Assessments
- 1502484; Illinois EPA Provisional Variance
- 1509974; 2013 Summer Environmental Check-In Gaps
- 1519957; OLR Color Change Due to RCIC Switch Failure

#### Miscellaneous:

- Marseilles Flood Briefing, U.S. Army Corp. of Engineers, Coast Guard, Marseilles Chief of Police, IEMA, IDOT, Red Cross, Salvation Army and American Legion; 9:00 a.m., 4/22/2013
- (Nuclear/Power) for Construction and Maintenance Activities; Rev. 6
- Operator Logs, 5/30/2013, 5/31/2013
- Summer Readiness; 2013 Attachment 3 Summary Sheet – Rev with WC Status; Rev. 1
- The Weather Channel, weather.com; Severe Thunderstorm Warning for LaSalle County, IL; 5/30/2013
- The Weather Channel, weather.com; Tornado Watch for LaSalle County, IL; 5/30/2013
- WC-AA-8000; Interface Procedure Between Comed/Peco and Exelon Generation VTEC; Chicago Severe Thunderstorm Warning #0026; 5/30/2013

### 1R04 Equipment Alignment

#### Procedures:

- LOS-DG-M2; 1A(2A) Diesel Generator Operability Test; Rev. 89

#### Figures and Drawings:

- M-68; P & ID Service Water System; Rev. AT
- M-87; P & ID Core Standby Cooling System Equipment Cooling Water System; Rev. AS
- M-91; P & ID Reactor Building Equipment Drains System; Rev. N
- M-101; P & ID, Reactor Core Isolation Coolant (RCIC); Rev. BH

- M-147; P & ID, Reactor Core Isolation Coolant System (RCIC), Unit 1; Rev. BL
- M-147; P & ID, Reactor Core Isolation Coolant System (RCIC), Unit 2; Rev. AD

Working Documents:

- Equipment Status Listing, EPN, Description, Location, Position, Remarks; 5/14/2013
- LOP-HP-01E; Unit 1 High Pressure Core Spray Electrical Checklist; Rev. 10; 9/17/1997
- LOP-HP-01M; Unit 1 High Pressure Core Spray Mechanical Checklist; Rev. 17; 2/10/2010
- Mechanical Checklist; 6/12/2013

Miscellaneous:

- B 3.5; Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling (RCIC) System; Rev. 13
- B 3.5; Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling (RCIC) System; Amendment No. 171/157
- LaSalle Station CheckLists Listing; 6/25/2013
- LaSalle Station Electrical Checklist; 7/12/2013
- LaSalle Station Mechanical Checklist; 7/12/2013
- LSCS-UFSAR 5.4-16; System Design; Rev. 14
- LSCS-UFSAR 5.4-9; Reactor Core Isolation Cooling (RCIC) System; Rev. 14
- Service Water Pump Location List; 5/17/2013

1R05 Fire Protection

Procedures:

- CC-AA-209; Fire Protection Program Configuration Change Review; Rev. 3
- CC-AA-211; Fire Protection Program; Rev. 4
- CC-AA-309; Control of Design Analyses; Rev. 11
- LMS-ZZ-04; Technical Surveillance; Water Tight Door Inspection; Rev. 5
- LOP-PF-01; Closure of Water Tight Doors; Rev. 5
- LOS-FP-D1; Fire Protection Door Daily Surveillance; Rev. 26
- OP-AA-201-009; Control of Transient Combustible Material; Rev. 11

Action Reports:

- 1221597; U-1 250 VDC Battery Support Degraded Insulation Material
- 1498556; Air Leakage Past Seals on Door #3
- 1498983; Fire Door Impaired
- 1499336; U2 Door 130, Aux Bldg 687' J—20, Division 3 Switchgear Room
- 1513810; Request Dept. Eval on Refuel Floor Fire Protection Detection

Calculations:

- L-000776, FZ 4D4; Combustible Load Calculation, U2 Electrical Equipment Room; Rev. 7

Miscellaneous:

- Action Reports Search on "Fire"; 5/10/2013 – 5/12/2013
- Fire Zone 4F1; LaSalle County Generating Station Pre-Fire Plan; Unit 1 Elevation 710'-0", Div. 1 Essential Switchgear Room
- Fire Zone 5D1; LaSalle County Generating Station Pre-Fire Plan; TB. Bldg. 687'0" Elev. U1 HPCS Switchgear Area
- Fire Zone 7B2; LaSalle County Generating Station Pre-Fire Plan, DG Bldg. 710'0" Elev. U1 Div. 2 Standby DG Room; Rev. 1

- Fire Zone 7C2; LaSalle County Generating Station Pre-Fire Plan; DG. Bldg. 674'-0" Elev. U1 Division 2 Diesel Fuel Tank Room; Rev. 0
- Fire Zone 7C3; LaSalle County Generating Station Pre-Fire Plan; DG. Bldg. 674'-0" Elev. U1 Division 1 Diesel Fuel Tank Room; Rev. 0
- H.3-162; LSCS-FPR; HCS DG; Rev. 5
- H.3-186; LSCS-FPR; Rev. 5
- LSCS-FPR; Fire Zone 5D1 (687'0"); 5/29/2013
- LaSalle County Power Station Fire Drill Scenario No. 60, Unit 2 Div III; 6/1/2013
- NES-MS-5.1; Combustible Loading Standard; Rev. 3

#### 1R11 Licensed Operator Regualification Program

##### Procedures:

- WC-AA-101; Online Work Control Process; Rev. 20

##### Action Requests:

- 1169232; FRPT: Operations Training: Simulator Instructor Performance
- 1172848; TRNG – LaSalle Simulator Ceiling Lights
- 1179074; TRNG – Simulator RCMS Unavailable Due to Outage Work

#### 1R12 Maintenance Effectiveness

##### Procedures:

- ER-AA-310-1001; Maintenance Rule – Scoping; Rev. 4
- ER-AA-310-1003; Maintenance Rule – Performance Criteria Selection; Rev. 3
- LIS-RI-101; Unit 1 RCIC Steam Line High Flow Isolation Calibration; Rev. 24
- LIS-RI-201; Unit 2 RCIC Steam Line High Flow Isolation Calibration; Rev. 26

##### Action Requests:

- 1489709; 2E31-N013BA Failed During Calibration
- 1519153; RCIC Switch 1E31-N007AA Had Excessive Air in Lines Purging
- 1112278; Spurious Unit 1 RCIC Inboard (Div. II) Steam Isolation
- 1435575; Spurious Isolation of RCIC On High Steam Flow
- 1487800; 2E51- F008 Closed During LIS-RI-201
- 1494522; NRC Question on Extent of Condition Review
- 1519149; 1E31 – N007AA Failed Switch Diaphragm Leaks By, RCIC
- 1519502; 1E31-NO13BA Failed/No Reset Obtainable LIS-RI-101
- 1519957; OLR Color Change Due to RCIC Switch Failure

##### Figures and Drawings:

- M-2101; P&ID and C&ID Details RCIC System RI

##### Miscellaneous:

- 1291276-02; EACE 1E31-N007BA SOR Differential Pressure Switch Failure; 7/15/2011
- CC-AA-103, Attachment G; Screening Criteria for Equivalent Changes; Rev. 8
- Edit Performance Criteria; LD: Leak Detection; 6/28/2013
- NUMARC 93-01; Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants; Rev. 4A
- Scoping/Risk Significance Detailed Report for RI Rx Core Isolation Cooling; 4/28/2005
- Scoping and Risk Significance – Scoping, RI RX Core Isolation Cooling; Reactor Vessel Depressurization, Unit 1; 7/8/2013

- Scoping and Risk Significance – Scoping, RI RX Core Isolation Cooling; Primary Containment Isolation, Unit 1; 7/8/2013
- System Health Report; Unit 1 LD – Leak Detection; 4/1/2013 – 6/30/2013

### 1R13 Maintenance Risk Assessments and Emergent Work Control

#### Procedures:

- LOA-TORN-001; High Winds / Tornado; Rev. 14
- LOS-VY-SR1; ECCS Cubicle Area Cooler Air Flow Rate Test; Rev. 5
- OP-LA-102-106; LaSalle Station Operator Response Time Program; Rev. 0
- OP-AA-108-111-1001; Severe Weather and Natural Disaster Guidelines; Rev. 9
- SY-AA-101-146; Severe Weather Preparation and Response; Rev. 0

#### Action Requests:

- 1496629; 2B 1<sup>st</sup> STG RHTR DRN Tank Drain Valve (2HD-1SRDCV-BH) Failed

#### Working Documents:

- 201315; Unit 1 Div. 1 / Div. 2 and Unit 2 RCIC, LaSalle April 8<sup>th</sup> Work Week; 4/8/2013
- 201321; Unit 1 Div. 1 / Unit 2 Div. 1, LaSalle May 20<sup>th</sup> Work Week; 5/20/2013
- OP-LA-101-111-1002; Protected Equipment Log, Standby Gas Treatment Train Unavailable; 4/6/2013
- OP-LA-101-111-1002; Protected Equipment Log, Unit 1 Div. 1 VY03C Protected Pathways; 4/9/2013
- OP-LA-101-111-1002; Protected Equipment Log, Unit 1 FC System; 8/21/2012

#### Miscellaneous:

- LaSalle Plant Status Conditions; 5/13/2013
- LOSW01; Loss of Service Water, Paragon 1.3; Tracing Result View Decision Tree Report; 5/22/2013
- Model LS1-PRD-M-012D, PRA: LS-PRD-P-08A; Schedule LS-PRD-2013; Paragon 1.3 Single Time Slice View; 5/22/2013
- Model LS1-PRD-M-012D, PRA: LS-PRD-P-08A; Schedule LS-PRD-2013; Paragon 1.3 Schedule View Report; 5/22/2013
- National Weather Service Hazardous Weather Outlook – LaSalle County; 6/12/2013
- NOAA Storm Prediction Center, Yesterday's Storm Reports; 6/13/2013
- PPC Data – Wind Speed; 6/12/2013, 5 p.m. – midnight
- PRA-Meeting; Probabilistic Risk Assessment; 4/3/2013
- Remain-in-Service List for MDRFP Work for Online Risk; 5/13/2013

### 1R15 Operability Determinations and Functional Assessments

#### Procedures:

- ER-AA-335-1008; Code Acceptance & Recording Criteria for Nondestructive (NDE) Surface Examination; Rev. 3
- LOA-AN-201; Loss of Annunciators; Rev. 19
- LOS-DG-SR6; Division 2 Cooling Water System Test; Rev. 11
- TCCP 394003; Temporary Reinforcement Pad on Line 2RH83AB-20" Pipe Through Wall Leak Area per ASME Code Case N-789; Rev. 1



Action Requests:

- 1430078; Low VY Cooler Flow Affects LOS-DG-Q2 Att B5 Performance
- 1482883; RCIC Turbine Leak
- 1483025; RM – Elevated Temperature Indication on 2TI-RE004
- 1520429; 2B RHR Service Water Leak
- 1525925; PS-10 Inverter #3 Power Failure Light Illuminated
- 1528170; Unit 2 Div2 ECCS Cooler Flow Outside of Procedure Band

Figures and Drawings:

- 1E-2-2011NC; Schematic & Internal Wiring Diagram Annunciator Window Box 2UL – AN001 At Panel 2H13-P601 System “AN”; Rev. J
- 1E-2-4011HA; Block Diagram Main Control Room Annunciator Power Scheme System “AN” Part 1; Rev. L

Working Documents:

- WO 1584918-02; Chemical Cleaning of Waterside of 2VY03A Cooler; 6/21/2013

Operability Evaluations:

- EC 391311; Establish Revised Acceptance Criteria for Quarterly “Group A” IST Pump Test and Biennial Comprehensive IST Pump Test for 2DG01P per LOS-DG-Q2
- EC 394—4; Min Wall Evaluation for Subsystem CS-16 Piping for Ultrasonic Thickness Examination; Rev. 0
- OE 13-004; Pin Hole Leak in Line 2RH83AB-20”; Rev. 0

Miscellaneous:

- ASME RRA 10-11, Record #10-1105; Case N-789; Alternative Requirements for Pad Reinforcement of Class 2 and 3 Moderate-Energy Carbon Steel Piping for Raw Water Service, Section XI, Division 1
- Operator Log Entries Report; 6/13/2013 – 6/14/2013 and 6/17/2013 – 6/18/2013
- WO 1433447-02; Common Cause Analysis Low Flow Condition in Core Standby Cooling System Surveillances; 11/20/2012

1R19 Post-Maintenance Testing

Figures and Drawings:

- 1E-1-4221AB; Schematic Diagram Low Pressure Core Spray System “LP”; Rev. T
- 1E-1-4221AD; Schematic Diagram Low Pressure Core Spray System “LP” ; Rev. Y

Working Documents:

- WO 1635134-01; Unit 1 LPCS Injection Valve 1E21-F005 Will Not Open (Task was to replace the switch); 04/20/2013
- WO 1635134-02; PMT Unit 1 LPCS Injection Valve 1E21-F005 Will Not Open; 04/20/2013

1R20 Outage Activities

Procedures:

- LAP-900-45; Drywell Entry; Rev. 12
- LAP-900-45; Drywell Entry; Rev. 13
- LGP-1-1; Normal Unit Startup; Rev. 102
- LOP-RM-01; Rod Control Management System; Rev. 38
- LOP-WS-01; Service Water System Startup; Rev. 12

- OP-LA-101-111-1002; LaSalle Operations Philosophy Handbook; Rev. 44

Action Requests:

- 1506247; Safety Alert, OSHA Recordable Injury at LaSalle Station; Fractured Fibula due to Trip Hazard; 4/24/2013
- 1506377; 1UR-RF002 Has No Power – MCR DWEFDS Recorder
- 1506809; Human Performance Alert, Unit 2 Scram

Figures and Drawings:

- DS-A-63800 (Crosby); Safety Relief Valve for Main Steam Service; Rev. C

Working Documents:

- OP-AA-108-114; Post Transient Review, Unit 1; 4/17/2013
- OP-AA-108-114; Post Transient Review, Unit 2; 4/17/2013
- Outage Control Center Log; 4/22/2013

Event Notifications:

- EN 48939; Notification of Unusual Event Declared Due to Loss of Offsite Power From a Lightning Strike; 4/17/2013

Miscellaneous:

- Dayshift Supervisor Resources and Dayshift Priorities; 4/21/2013
- Human Performance Alert during LGP-1-1, Normal Unit Startup; *undated*
- L2F42 – U2 Forced Outage Activities Listing; 4/21/2013
- OP-AA-108-114; Post Transient Review – BWR; 4/17/2013
- Photo; U2 LPHB 695 U-19; 4/25/2013 8:19 P.M.
- PORC 13-008-2; Startup, Unit 1; 4/25/2013
- PORC Review Topic: 1C SRV Tailpipe Leakage; *undated*
- Review of Previous Issues and Comments from previous incidents; Various dates
- U2 L2C15 April 2013 Startup (Gen Mgr. # 1027760); 4/24/2013 - 4/27/2013

1R22 Surveillance Testing

Procedures:

- LA-12-003; Surveillance Test Interval (STI) Evaluation; Rev. 0
- LES-DG-203, UFSAR Update LUCR 269; 2A Diesel Generator Trips and Trip Bypass Logic Test 50.59 Screening L12-196; Rev. 2;
- LOP-DC-07; Battery Equalizing Charge; Rev. 32
- LOP-NB-03; Troubleshooting Drywell Leakage; Rev. 3
- LOS-AA-S101; Unit 1 Shiftly Surveillance; Rev. 85
- LOS-CS-Q1; Secondary Containment Damper Operability Test; Rev. 33; 5/28/2013
- LOS-DG-M3; 1B (2B) Diesel Generator Operability Test; Rev. 87
- LOS-RI-Q5; Reactor Core Isolation Cooling (RCIC) System Pump Operability, Valve Inservice Tests in Modes 1,2,3 and Cold Quick Start; Rev. 35
- LOS-DC-Q2; Battery Readings for Safety-Related 250 VDC and Div. 1, 2, 3 125 VDC Batteries

Action Requests:

- 1482883; RCIC Turbine Leak
- 1518484; VR Vent Supply Fan Running with No Air Flow Alarm
- 1518531; Alarm 1PM06J-A408 "RB Exhaust Fans No Air Flow"

Working Documents:

- LOS-DC-Q3, Att. B; Technical Specifications Surveillance; Unit 1; Div. II 125 VDC Battery
- WO 1582084-01; LOS-DC-Q2 U1 Div II 125 VDC Batt. Att. B; 1/8/2013
- WO 1606682-01; LOS-DC-Q2 U1 Div II 125 VDC Batt. Att. B; 4/9/2013

Figures and Drawings:

- 1E-2-4009AA; Schematic Diagram 4160V Switchgear 242Y (2AP06E) Diesel Generator "2A" ACB 2423 System "DG"; Rev. W
- 1E-2-4009AE; Schematic Diagram Diesel Generator "2A" Generator Engine Control System "DG"; Rev. O
- 1E-2-4009AG; Schematic Diagram Diesel Generator "2A" Generator/Engine Control System "DG"; Rev. P
- 1E-2-4009AH; Schematic Diagram Diesel Generator "2A" Generator/Engine Control System "DG"; Rev. P
- 1E-2-4220AK; Schematic Diagram Residual Heat Removal System "RH"; Rev. S

Working Documents:

- AR 1470866; 2B DG Cooling Water Pump Strainer Leak with Pump Running; 2/4/2013
- AR 1472256; 2B DG HX Leaking Worse than Last Identified; 2/7/2013
- U1 A RHRWS Inservice Test, LOS\_RH-Q1 Att. 1D; Tech Spec Surveillance; 4/18/2013
- WO 1318995-01; IM LIS-PC-112 U1 Drywell Floor Drain Sump Fill-up Rate; 1/20/2012
- WO 1328187-01; Drywell Floor DRN Sump Disch Flow; 2/29/2012
- WO 1622791-01; LOS-DG-M3 2B DG Idle Start Att. 2B-IDLE; 4/1/2013
- WO 1625196-01; LOS-RI-Q5 U2 RCIC Cold-Quick Start Att 2A; 6/6/2013
- WO 1627119-01; LOS-RH-Q2 U2 B RHR Valves Att 2B
- WO 1633327-01; Drywell FLR DRN SMP Fillup Rate; 4/18/2013
- WR 427786; Work Request Desired Pump Flow Not Achieved During LOS-DG-Q2, Att A5; 3/20/2013

Miscellaneous:

- 3.4.7-1; RCS Leakage Detection Instrumentation; Amendment No. 171/157
- 3.7.1-1; Plant Systems, Residual Heat Removal Service Water (RHRSW) System; Amendment No. 194/181
- 3.8.d-1; TRM Battery Monitoring and Maintenance; Rev. 0
- 3.8.1-1; Electrical Power Systems; Amendment 172/158
- 3.8.6-1; Battery Parameters; Amendment No. 179/165
- B 3.4.7-1; RCS Leakage Detection Instrumentation; Rev. 53
- B 3.5; Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling (RCIC) System; Rev. 0
- B 3.5; Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling (RCIC) System; Rev. 13
- B 3.7.1-1; Plant Systems, Residual Heat Removal Service Water (RHRSW) System; Rev. 0
- B 3.8.2-1; Electrical Power Systems; Rev. 0
- B 3.8.6 Battery Parameters; Rev. 27
- LOS-CS-Q1 ATI 1A; Unit 1 Secondary Containment VR Dampers; 5/28/2013 – 5/29/2013
- LOS-CS-Q1 ATI 2A; Unit 2 Secondary Containment VR Dampers; 5/2013
- LSCS-UFSAR 5.2; Integrity of Reactor Coolant Pressure Boundary; Rev. 13
- LSCS-UFSAR 5.4; Component and Subsystem Design; Rev. 13
- LSCS-UFSAR 9.2-1; Water Systems; Rev. 13
- PMID/RQ 95973-01; Surveillance WO Disposition Sheet, (FINISH) LOS-AA-S101 TS Shiftly Surveillance Att A; 6/1/2013 – 6/24/2013

- RC4; Recognition Category Fission Product Barriers, RCS Leak Rate, EP-AA-1005; 12/2012

### 1EP2 Alert and Notification (ANS) Evaluation

#### Action Requests:

- 1294009; Revise Emergency Plan to Include Detail Regarding Backup ANS
- 1362824; Two ANS Siren Failures
- 1436650; Single ANS Siren Failure

#### Miscellaneous:

- EP-AA-1000; Exelon Nuclear Standardized Radiological Emergency Plan Section E; Rev. 23
- EP-AA-1005; Exelon Nuclear Radiological Emergency Plan Annex for LaSalle Station, Section 4; Rev. 35
- Exelon Semiannual Siren Reports; 1/1/2011 through 12/31/2012
- LaSalle Plant Warning System Maintenance and Operational Report; 3/12/2012 to 4/16/2012
- LaSalle Plant Warning System Maintenance and Operational Report; 3/16/2011 to 3/23/2011
- Siren Daily Operability Reports; 1/1/2011 through 12/31/2012
- LaSalle Monthly Siren Availability Reports; 7/2012 – 3/2013
- Offsite Emergency Plan Alert and Notification System Addendum for LaSalle County Station; 11/2009
- U. S. Department of Homeland Security, FEMA Letter; Backup Alert and Notification System; 12/10/2012

### 1EP3 Emergency Response Organization Augmentation Testing

#### Procedures:

- EP-AA-1000; Exelon Nuclear Standardized Radiological Emergency Plan, Sections B and N; Rev. 23
- EP-AA-1001; Exelon Nuclear Radiological Emergency Plan Annex for LaSalle County Station, Section 2; Rev. 35
- EP-AA-125-1003; Emergency Response Organization Call-Out Roster; 4/25/2013

#### Action Requests:

- 1414635; EP Call-In Drill 9/10/2012 Results
- 1428320; EP Drive-In Drill-TSC Declared Activated at 62 Minutes and Failed to Update Station Priority Logs
- 1435033; 10/2012 Call-In Drill – One Position Not Filled in a Timely Manner

#### Miscellaneous:

- Quarterly Unannounced Off-Hours Call-In Augmentation Drill Results; 3/29/2011 through 3/28/2013
- Off-Hours Unannounced Drive-In Augmentation and Performance Indicator Drill Report; 10/18/2012

### 1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

- LOS-CQ-A1; Current Site Public Address System Status and Compensatory Measures; 4/23/2013

#### Action Requests:

- 1505765; ODCM Effluent Monitoring During 4/17/2013, Dual Unit LOOP Unusual Event
- 1379040; Process Computer 33' Wind Speed Not Reading Correctly

- 1400931; Exercise-Few Simulator Briefings Were Conducted
- 1400953; Exercise-TSC Team Tracking Problem
- 1401051; Exercise-OSC Teams Dispatched Without Proper Radiological Controls Specified and Problems With Team Tracking and Timely Dispatch
- 1422001; LaSalle EP Staffing Analysis Results
- 1433431; Focused Area Self-Assessment NRC EP Baseline Inspection
- 1435003; Call-In Drill Failure – One Position Not Filled in a Timely Manner
- 1471558; EP New Rule Procedure Rev. Not Completed As Required
- 1476428; Assembly Sirens Not Audible in the Drywell or Steam Seal Evaporator Room
- 1505772; Drywell Atmosphere Samples Delayed Due to Isolation Signals and No Power
- 1506134; Unusual Event - OSC Team Dispatch and Tracking Process Not Used

Licensee Event Reports:

- Event Notification Report 48939; Notification of Unusual Event Due to Loss of Offsite Power and Records; 4/17/2013

Miscellaneous:

- LaSalle 2012 NRC Graded Exercise Evaluation Report; 8/23/2012
- Letters of Agreement for 2013; 12/31/2012
- NOSA-LSA-11-03; LaSalle Station County Emergency Preparedness Audit; 3/22/2011
- NOSA-LSA-12-03; LaSalle County Station Emergency Preparedness Audit Report; 5/9/2012
- NOSA-NCS-12-03; Nuclear Corporate Support Emergency Preparedness Audit Report; 4/4/2012
- NOSA-LSA-13-03; LaSalle County Station Emergency Preparedness Audit Report; 4/24/2013

2RS1 Radiological Hazard Assessment and Exposure Controls

Procedures:

- RP-AA-203; Exposure Control and Authorization; Rev. 3
- RP-AA-300; Radiological Survey Program; Rev. 10
- RP-AA-301; Radiological Air Sampling Program; Rev. 5
- RP-AA-302; Determination of Alpha Levels and Monitoring; Rev. 4
- RP-AA-350; Personnel Contamination Monitoring, Decontamination and Reporting; Rev. 10
- RP-AA-376; Radiological Posting, Labeling and Marking; Rev. 6
- RP-AA-460-001; Implementation of VHRA; Rev. 4

Action Requests:

- 1516985; No RP Support at 4-Line (RCA Egress Area)
- 1517087; Safety Issue: No Radiation Protection Support at the 4-Line
- 1496300; RP Technician Not Provided for RP Instrument Program
- 1498915; RP Technician Not Provided for RP Instrument Program
- 1503215; RP Technician Not Provided for RP Instrument Program
- 1518971; Lack of RPT Resources Affecting RWP Program
- 1526721; Work for 1CP-014 Did Not Start as Scheduled Due to Not Enough Staffing

Miscellaneous:

- National Source Tracking System; Confirmatory Form 2012 Annual Inventory Reconciliation; NPF-11; 1/5/2012
- National Source Tracking System; Confirmatory Form 2013 Annual Inventory Reconciliation; NPF-11; 1/3/2013

## 2RS7 Radiological Environmental Monitoring Program

### Procedures:

- CY-LA-170-301; Radiological Environmental Monitoring Program; Rev. 5
- CY-AA-170-1000; Radiological Environmental Monitoring Program and Meteorological Program Implementation; Rev. 7
- ER-AA-5400; Buried Piping and Raw Water Corrosion Program Guide; Rev. 5
- LS-AA-125-1001; Tritium Leakage Root Cause Investigation from Cycled Condensate Storage Environmental Inc., Midwest Lab.; Sampling Procedures Manual; Rev. 15
- LaSalle County Station NPF-11 and NPF-18; 2012 Annual Radioactive Effluent Release Report; 4/26/2013
- LaSalle County Station NPF-11 and NPF-18; 2012 Annual Radiological Environmental Operating Report; 5/15/2013
- Murray and Trettel Inc.: 2012 Annual Report on Meteorological Monitoring Program at LaSalle Co. Nuclear Power Station; 4/2/2013
- Murray and Trettel Inc.: LaSalle Co. Station Meteorological Monitoring Tower Wind Study, Specifically on the Impact of Wind Turbines at the LaSalle County Area; 6/4/2009
- NUPIC Audit of Teledyne Brown Eng. Environmental Services; 3/7/2011
- Tank Berm Positive Analysis for Tritium; 8/12/2010

### Action Requests:

- 0746224; Review MET Data After Completion of the Wind Mill Project; X/Q and D/Q Data Comparison
- 1320401; RGPP Update to Groundwater Tritium Plume Monitoring Info
- 1327972; REMP L-08 Air Sampler Low Timer Reading from February 2 to 9, 2012
- 1341734; REMP L-3 and L-11 Air Samplers Low Timer Readings; February 23 to March 1, 2012
- 1359773; REMP L-07; Low Timer Reading
- 1360764; REMP-Dosimeter L-05-1 Missing During April 19, 2012 Weekly Check
- 1494405; REMP; Fixed Air Sampler OSLD Re-orientation
- 1494410; REMP- Relocation of Fixed Air Samplers
- 1521223; REMP-Air Sampler Low Timer Reading on April 18 to 25<sup>th</sup> 2013

### Miscellaneous:

- PI Data Elements from January 2012 through April 2013

## 4OA1 Performance Indicator Verification

### Procedures:

- EP-AA-125-1002; Drill and Exercise Performance Data; 7/2012 – 3/2013
- EP-AA-125-1003; Key ERO Participation and Stability Monthly Data; 7/2012 – 3/2013
- LOS-AA-S101; Unit 1 Shiftly Surveillance; Rev. 85
- LS-AA-2110; Monthly Data Elements for ERO Drill Participation; 9/2012 – 3/2013
- LS-AA-2120; Monthly Data Elements for NRC Drill/Exercise Performance; 7/2012 – 3/2013
- LS-AA-2130; Monthly Data Elements for NRC ANS Reliability; 7/2012 – 3/2013
- LS-AA-2150; Monthly Data Elements for RETS/ODCM Radiological Effluent Occurrences; Rev. 5

Action Requests:

- 1366602; EP 2012 FASA Deficiency for DEP NARS Form Not Found
- 1469023; Single ANS Siren Failure
- 1457631; EP NRC PI Data Incorrect for November 2012

Miscellaneous:

- LaSalle Monthly Siren Availability Reports; 7/2012 – 3/2013
- LS-AA-2100; Monthly Data Elements for NRC RCS Leakage; 4/2012, 5/2012, 6/2012, 7/2012, 8/2012, 9/2012, 10/2012, 11/2012, 12/2012, 1/2013, 2/2013, and 3/2013
- PI Data Elements from January 2012 through April 2013
- Reactor Coolant System Leakage, 1Q/2013 Performance Indicators, LaSalle 1; 4/2011 – 3/2013
- Reactor Coolant System Leakage, 1Q/2013 Performance Indicators, LaSalle 2; 4/2011 – 3/2013

4OA2 Identification and Resolution of Problems

Procedures:

- CC-AA-304; Component Classification; Rev. 5
- ER-AA-200; Component Classification, Attachment 1; Rev. 0
- LOS-CS-Q1; Secondary Containment Damper Operability Test; Rev. 33
- LOS-CS-M1; Secondary Containment Integrity; Rev. 25

Action Requests:

- 1457376; TBCCW Seeping Water
- 1457379; Pipe Rusted Through and Leaking Water 1DPS
- 1460814; Minor Leak Upstream of 0FP192
- 1463592; Pinhole Leak Found On Intermediate Fire Jockey Pump Recirc
- 1464084; 1WT01T Leak Has Gone From 1 DPM to 12 DPM
- 1470866; 2B DG Cooling Water Pump Strainer Leak With Pump Running
- 1472256; 2B DG HX Leaking Worse Than Last Identified
- 1473941; Pin Hole Leak In Weld -2C CD Pump
- 1504542; Thru Wall Leak on 1G33-F042 Valve Body
- 1504607; 1G33-F042 Valve Body Leak
- 1507432; Leak Identified On 1E51-F076
- 1516895; Through Wall Steam Leak On 1RI07B-2 Pipe

Action Requests Resulting from NRC/IEMA Inspection:

- 1496398; IEMA Question Scheduling 1E12-N500 Sensing Line Flushing
- 1496422; NRC Identified – Plastic Cover on Shaft is Cracked and Loose
- 1496464; NRC Identified – Mineral Deposits on Floor Drain
- 1502219; IEMA Question on Shielding Documentation
- 1502229; IEMA Question on ARM MRFF Criteria
- 1502322; IEMA Question on PMT Documentation
- 1509992; IEMA Questions Min Wall Issues
- 1511084; IEMA Questions On Seismic Monitor INOP and Station Response
- 1524174; Oil Leak from LPCS Motor Bearing Cooler 2E21-C001
- 1527139; IEMA Question on Watertight Door Operability Guidance
- 1527466; NRC ID: No Discussion of LPCS In RCIC Turbine Leak IR1482883
- 1528201; Enhancement to LFP-800-70, Hi-Trac Loading Operations
- 1528205; Enhancement to LFP-800-71, MPC Processing

- 1533242; NRC Observations on LFP-800-8

Working Documents:

- WO 1481753-01; LOS-CS-MS Reactor Bldg Doors Sec Conmt Att. A; 11/17/2011
- WO 1520610-01; LOS-CS-M1 Reactor Bldg Doors Sec Conmt Att. A; 4/8/2012

Event Notification:

- EN 48317; Malfunction of the Secondary Containment Door Interlock; 9/18/2012
- LER 2013-001-00; Secondary Containment Inoperable Due to Interlock Doors Open; 4/26/2013

Miscellaneous:

- AR 1414490; Equipment Apparent Cause Evaluation, Unit 2 RB 761' Interlock Allows Both Doors to be Open; 9/18/2012
- AR 1481207; Equipment Apparent Cause Evaluation, Secondary Containment Door Interlock Failure; 2/28/2013
- Calc. No. MMED-047065; Parts Classification – Generic Project Position; Rev. 8
- Exelon Response to NRC Questions Regarding Secondary Containment Doors; 6/18/2013
- Equipment Status DR226, RB Building, 710' Elevation, undated
- Equipment Status DR507, undated
- Emergent PORC 13-007; EACE – Secondary Containment Door Interlock Failure; 4/17/2013
- LSCS-UFSAR 3.2-2; System Quality Group Classifications; Rev. 13
- LSCS-UFSAR Table 3.2-1; Equipment Classification Comments; Rev. 18
- LSCS-UFSAR 6.2-3; Secondary Containment Functional Design; Rev. 18
- Predefines by System / ETN / Due Date (Secondary Containment); 5/9/2013

4OA5 Other Activities

Procedures:

- LFP-800-2; Reactor Building Overhead Crane Cask Mode of Operation for Shipping Casks; Rev. 9
- LFP-800-7; Dry Cask Storage Special Lifting Device Annual Testing; Rev. 2
- LFP-800-8; Spent Fuel Cask Contingency Actions; Rev. 7
- LFP-800-63; HI-STORM Inspection; Rev. 2
- LFP-800-68; HI-TRAC Preparation; Rev. 1
- LFP-800-69; HI-TRAC Movement Within the Reactor Building; Rev. 12
- LFP-800-70; HI-TRAC Loading Operations; Rev. 6
- LFP-800-71; MPC Processing; Rev. 6
- LFP-800-72; HI-STORM Processing; Rev. 2
- LFP-800-79; MPC Alternate Cooling; Rev. 3
- LFP-800-81; DCS Campaign Preparations and Restoration; Rev. 0
- LFP-800-82; MPC Unloading Operations; Rev. 2
- RP-AA-376; Radiological Postings, Labeling, and Markings; Rev. 6

Action Requests:

- 1135563; LaSalle DCS Cask 1 Lessons Learned; 11/02/2010
- 1216094; Missed HI-STORM SR Frequency; 05/14/2011
- 1231967; RBOC Crane Repairs and PMT from IR1231840; 06/25/2011
- 1310289; Independent Spent Fuel Storage Installation Audit; 11/07/2012
- 1434866; NOS ID'D M&TE Documented for DCS; 11/02/2012
- 1523297; DRP Identified During Removal of MPC from Cask Well; 06/10/2013



- 1528205; Enhancement of LFP-800-71, MPC Processing; 06/21/2013
- 1123826; RB Crane Magnetorque Circuit Found Wired Incorrectly; 10/06/2010
- 1233351; Reactor Building Crane 90-Day (Annual) Inspection Results; 06/27/2011
- 1383310; Minor Degradation Found During ISFSI Pad/Cask Inspection; 06/26/2012
- 1509698; Replacement of Nylock Nuts on Lift Yoke with Lock Wire; 05/02/2013
- 1517788; HI-TRAC Pool Lid Found Contaminated During MPC Download; 05/24/2013
- 1528028; Dry Cask Storage, MPC Download Slings DLF Documentation; 06/24/2013
- 1528201; Enhancement to LFP-800-70, HI-TRAC Loading Operations; 06/21/2013
- 1529053; Enhancement to LTS-800-01 ISFSI Inspection Procedure; 06/26/2013

Calculations:

- EC 384369; Dry Cask Storage Project Independent Spent Fuel Storage Installation (ISFSI) Pad SASSI Seismic Soil Structure Interaction Analysis; Rev. 0
- EC 385523; Install HERMITS on the LPT and on the Decontamination Pit Grillage and Install HI-TRAC HERMIT Platform on Elevation 710'-6"; Rev. 2
- EC 393786; Dry Cask Storage Project ISFSI Pad Seismic Soil Structure Interaction Analysis to Address NRC Observations per AR01434552; Rev. 1
- L-003708; Fuel Selection Package LAS-0003 for MPC-68-250 Rev. 1; Rev. 0
- L-003709; Fuel Selection Package LAS-0004 for MPC-68-249 Rev. 1; Rev. 0
- L-003710; Fuel Selection Package LAS-0005 for MPC-68-251 Rev. 1; Rev. 0
- L-003711; Fuel Selection Package LAS-0006 for MPC-68-252 Rev. 1; Rev. 0
- L-003712; Fuel Selection Package LAS-0008 for MPC-68-280 Rev. 2; Rev. 0

Working Documents:

- WO 1469087; Refuel Floor Crane Inspection Prior to Refuel Outage; 06/13/12
- WO 1545461; Dry Cask Storage MPC Lift Cleat Inspection; 03/19/ 2013
- WO 1549523; Dry Cask Storage HI-TRAC Trunnion Inspection; 03/19/ 2013
- WO 1565590; Dry Cask Storage HI-STORM Lift Bracket Inspection; 03/19/ 2013
- WO 1565591; Dry Cask Storage Lift Yoke Assembly Inspection; 03/19/ 2013
- WO 1602014; [Reactor Building Crane] 90-Day Inspection; 03/04/2013
- WO 1636895; Reactor Building Crane MM Crane Beam and Hoist Monthly Inspection; 05/01/2013

Miscellaneous:

- 72.48 Screenings and Evaluations:
- 72.48-14; Update Revision to Calculations L-003382; Rev. 0
- 72.48-15; Dry Cask Storage ISFSI SASSI Analysis; Rev. 0
- 72.48-17; Using a HI-TRAC stacked with MPC Lids as a Test Load for the Reactor Building Crane; Rev. 0
- 72.48-18; Install HERMITs on the LPT and on the Decon Pit Grillage and Install HI-TRAC Hermit Platform on EL 710'-6"; Rev. 0
- 72.48-22; L2R13 Fuel Characterization and Classification Update; Rev. 0
- 72.48-23; Fuel Data for LaSalle Dry Cask Storage; Rev. 0
- 72.48-24; Spent Fuel Cask Contingency Actions; Rev. 5
- 72.48-27; LaSalle Unit 1 Cycle 14 Fuel Characterization and Classification Update; Rev. 0
- 72.48-28; LaSalle 2013 Dry Cask Storage Fuel Selection Documentation; Rev. 0
- 72.48-29; ECOs, SMDRs, & 72.48 Review Revision Affecting MPC Serial Numbers 278, 315, and 310; Rev. 0
- 72.48-38; HI-TRAC/MPC 252 Flushing and Decontamination; Rev. 0
- Apparent Cause Report 1516861; Individual Received Dose Rate Alarm; 05/22/2013
- Inspection of the ISFSI Pads and Casks per LTS-800-01; 06/29/2012

- ISFSI Pre-NRC Inspection / 2013 Spent Fuel Loading Campaign Readiness Assessment; 03/27/2013
- ISFSI Radiation Survey Data Sheet; 11/1/2010
- ISFSI Radiation Survey Data Sheet; 11/13/2010
- ISFSI Radiation Survey Data Sheet; 02/09/2011
- ISFSI Radiation Survey Data Sheet; 06/14/2011
- ISFSI Radiation Survey Data Sheet; 06/29/2011
- ISFSI Radiation Survey Data Sheet; 06/3/2013
- ISFSI Radiation Survey Data Sheet; 11/23/2013
- ISFSI Worker Qualification Report; 06/07/2013
- LaSalle County Power Station, Units 1 and 2, 10 CFR 72.212 Evaluation Report; Rev. 2
- NOSA-LAS-12-1; Independent Spent Fuel Storage Installation Audit; 11/07/2012
- Report No. 904302-250-1; Report of Nondestructive Examination – Lid to Shell/MPC 250; 06/05/2013
- Report No. 904302-252-1; Report of Nondestructive Examination – Lid to Shell/MPC 252; 05/22/2013

## LIST OF ACRONYMS USED

AC	Alternating Current
ADAMS	Agencywide Document Access Management System
ANS	Alert and Notification System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
DEP	Drill/Exercise Participation
DG	Diesel Generator
DRP	Division of Reactor Projects
EACE	Equipment Apparent Cause Evaluation
EP	Emergency Preparedness
ERO	Emergency Response Organization
HPCS	High Pressure Core Spray
ICDP	Incremental Core Damage Probability
ILERP	Incremental Large Early Releaser Probability
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report
ISFSI	Independent Spent Fuel Storage Installation
IST	Inservice Testing
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LOOP	Loss of Offsite Power
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
PI	Performance Indicator
PMT	Post-Maintenance Test
psig	Pounds Per Square Inch Gauge
RCIC	Reactor Core Isolation Cooling
RCS	Reactor Coolant System
REMP	Radiation Environmental Monitoring Program
RETS	Radiological Effluent Technical Specifications
RHR	Residual Heat Removal
SDP	Significance Determination Process
SR	Surveillance Requirement
SW	Service Water
TS	Technical Specification
TSO	Transmission System Operator
UFSAR	Updated Final Safety Analysis Report
URI	Unresolved Item
WO	Work Order

M. Pacilio

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Sincerely,

**/RA/**

Michael Kunowski, Chief  
Branch 5  
Division of Reactor Projects

Docket Nos. 50-373, 50-374, and 72-070  
License Nos. NPF-11 and NPF-18

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INSPECTION REPORT; 05000373/2013003; 05000374/2013003

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