



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

August 8, 2011

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

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2,
NRC INTEGRATED INSPECTION REPORT
05000373/2011003; 05000374/2011003

Dear Mr. Pacilio:

On June 30, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your LaSalle County Station, Units 1 and 2. The enclosed report documents the results of this inspection, which were discussed on July 13, 2011, with the Plant Manager, Mr. Peter Karaba, and other members of your staff.

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

Based on the results of this inspection, one Severity Level IV violation of NRC requirements was identified. However, because of the very low safety significance, and because the issue was entered into your corrective action program, the NRC is treating the issue as a non-cited violation (NCV) in accordance with Section 2.3.2 of the NRC Enforcement Policy. Additionally, a licensee-identified violation, which was determined to be of very low safety significance, is listed in this report.

If you contest the subject or severity of this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the LaSalle County Station. In addition, if you disagree with the cross-cutting aspect assigned to any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III, and the NRC Resident Inspector at the 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, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Kenneth Riemer, Chief
Branch 2
Division of Reactor Projects

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

Enclosures: Inspection Report 05000373/2011003; 05000374/2011003
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000373/2011003; 05000374/2011003

Licensee: Exelon Generation Company, LLC

Facility: LaSalle County Station, Units 1 and 2

Location: Marseilles, IL

Dates: April 1, 2011, through June 30, 2011

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Branch 2
Division of Reactor Projects

Enclosure

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SUMMARY OF FINDINGS

IR 05000373/2011-003, 05000374/2011-003; 4/1/2011 – 6/30/2011; LaSalle County Station, Units 1 & 2; Operability Evaluations.

This report covers a three-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors.

One Severity Level (SL) IV violation was identified by the inspectors. The finding was considered an NCV of NRC regulations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP); the cross-cutting aspects are determined using IMC 0310, "Components Within the Cross-Cutting Areas." Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Other Findings

- SL IV. A Severity Level IV NCV of 10 CFR 50.72(b)(3)(v) and 10 CFR 50.73(a)(2)(v) was identified by the inspectors for the licensee's failure to report an event or condition that could have prevented the fulfillment of the residual heat removal shutdown cooling safety function, which is relied upon to remove residual heat from the reactor. Specifically, when attempting to place the Unit 1 shutdown cooling system in service, the common suction valve unexpectedly closed and caused a complete isolation of the system. The licensee entered this issue into its Corrective Action Program (CAP) as Issue Report (IR) 1244457, and, at the time of this report, was in the process of conducting an apparent cause evaluation to determine the causes of the occurrence and to develop corrective actions.

The inspectors determined that the finding should be evaluated using the traditional enforcement process, since the failure to make a required report to the NRC had the potential to impact the agency's ability to perform its regulatory function. The finding was considered to be Severity Level IV, in accordance with the NRC Enforcement Policy. Because this violation did not affect the Reactor Oversight Process cornerstones, a cross-cutting aspect was not assigned. (Section 1R15)

B. Licensee-Identified Violations

Violations of very low safety significance that were identified by the licensee have been reviewed by inspectors. Corrective actions planned or taken 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 May 21, 2011, power was reduced to approximately 65 percent for control rod pattern adjustments, sequence exchange, settle testing, and scram timing. Unit 1 was restored to 100 percent power on May 22, 2011, where it remained for the rest of the inspection period.

Unit 2

The unit began the inspection period operating at full power. On April 26, 2011, the power was reduced to 79 percent due to the failure of the 24A heater emergency drain controller. Following repairs, the unit was restored to full power the next day. On May 5, 2011, power was reduced to approximately 60 percent to perform power suppression testing to identify and suppress a fuel leak that was previously identified. Following power suppression testing and the insertion of two rods for leak suppression, the unit was restored to full power on May 9, 2011. On May 27, 2011, power was reduced to 80 percent for turbine control valve #1 response time testing (RTT). Unit 2 was returned to full power that same day, where it remained for the rest of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Readiness of Offsite and Alternate AC Power Systems

a. Inspection Scope

The inspectors verified that plant features and procedures for operation and continued availability of offsite and alternate alternating current (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:

- 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.

Documents reviewed are listed in the Attachment to this report. The inspectors also reviewed Corrective Action Program (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.

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.

.2 Summer Seasonal Readiness Preparations

a. Inspection Scope

The inspectors performed a review of the licensee's preparations for summer weather for selected systems, including conditions that could lead to an extended drought.

During the inspection, the inspectors focused on plant-specific design features and the licensee's procedures used to mitigate or respond to adverse weather conditions. 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. Specific documents reviewed during this inspection are listed in the Attachment to this report. 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. The inspectors' reviews focused specifically on the following plant systems:

- alternate AC power system;
- core standby cooling system; and
- control room ventilation and auxiliary electrical equipment room ventilation (VE).

This inspection constituted one seasonal adverse weather sample as defined in IP 71111.01-05.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

.1 Quarterly Partial System Walkdowns

a. Inspection Scope

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

- Unit 2 reactor core isolation cooling (RCIC) with high pressure core spray (HPCS) out-of-service;
- Division I diesel generator (DG); and
- 2A residual heat removal (RHR) with 2B RHR out-of-service.

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, Technical Specification (TS) requirements, outstanding work orders (WOs), condition 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 three partial system walkdown samples as defined in IP 71111.04-05.

b. Findings

No findings were identified.

.2 Semiannual Complete System Walkdown

a. Inspection Scope

Between May 23 and June 3, 2011, the inspectors performed a complete system alignment inspection of the Unit 2 RCIC system with alternate suction path to verify the functional capability of the system. Specifically, the Unit 2 condensate storage tank was isolated for repairs and RCIC's suction was from the suppression pool. 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)

.1 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:

- Unit 2 Division 2 RHR service water (SW) pump room (fire zone 8C4);
- Unit 2 Division 1 RHR SW pump room (fire zone 8C5);
- Unit 1 HPCS room (fire zone 2H2); and
- Unit 1 Division 2 DG room (fire zone 7B2).

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 four quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings were identified.

.2 Annual Fire Protection Drill Observation (71111.05A)

a. Inspection Scope

On June 11, 2011, the inspectors observed a fire brigade activation in the Unit 2 turbine building at 735' elevation that involved a simulated switchgear fire. 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.

1R06 Flooding (71111.06)

.1 Internal Flooding

a. Inspection Scope

The inspectors reviewed selected risk-important plant design features and licensee procedures intended to protect the plant and its safety-related equipment from internal flooding events. The inspectors reviewed flood analyses and design documents, including the UFSAR, engineering calculations, and abnormal operating procedures to identify licensee commitments. The specific documents reviewed are listed in the Attachment to this report. In addition, the inspectors reviewed licensee drawings to identify areas and equipment that may be affected by internal flooding caused by the failure or misalignment of nearby sources of water, such as the fire suppression or the circulating water systems. The inspectors also reviewed the licensee's CAP documents with respect to past flood-related items identified in the CAP to verify the adequacy of the corrective actions. The inspectors performed a walkdown of the lake screen house

to assess the adequacy of watertight doors and verify drains and sumps were clear of debris and were operable, and that the licensee complied with its commitments.

This inspection constituted one internal flooding sample as defined in IP 71111.06-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program (71111.11)

.1 Resident Inspector Quarterly Review (71111.11Q)

a. Inspection Scope

On May 28, 2011, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator requalification examinations 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 sample as defined in IP 71111.11.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

.1 Routine Quarterly Evaluations (71111.12Q)

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk-significant systems:

- reactor protection system (RPS); and
- containment air monitoring system.

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 (SSCs)/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 systems. 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 two quarterly maintenance effectiveness sample as defined in IP 71111.12-05.

b. Findings

No findings were identified.

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

.1 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:

- emergent work on Unit 2 turbine bypass valve and A ventilation and electrical equipment (VE) oil temperature the week of April 18, 2011;
- adverse weather effects on scheduled maintenance work the week of April 11, 2011;
- yellow risk during a Unit 2 Division III work window the week of May, 9 2011; and
- emergent yellow risk on both units the week of May 23, 2011.

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.

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

b. Findings

No findings were identified.

1R15 Operability Evaluations (71111.15)

.1 (Closed) URI 05000374/2011002-04, "Potential Failure to Make a Non-Emergency Event Notification to the NRC Following a Loss of Shutdown Cooling Safety Function on Unit 1"

a. Inspection Scope

The inspectors reviewed unresolved item (URI) 05000374/2011002-04. During the previous inspection quarter (1Q2011), during a routine review of items entered in the licensee's CAP, the inspectors identified a CAP item documenting the unexpected closure of the shutdown cooling common suction valve during the performance of procedure LOP-RH-07, "Shutdown Cooling System Startup, Operation and Transfer." The inspectors verified that the plant was in a stable, shutdown condition and that the safety-related method of decay heat removal through the RHR system was restored.

The inspectors' review of this issue focused on the implementation of NRC reportability regulations and guidelines, and in the appropriateness of the corrective actions implemented as a result of a previous Unit 1 loss of shutdown cooling event in July 2009 (reference Inspection Report 05000373/2009004). In addition to interviewing licensee staff, the inspectors reviewed various documents such as control room logs, ARs and operating procedures. Additionally, the inspectors consulted NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," Revision 2, which contains the NRC's staff position on reporting of nuclear events. Additional documents reviewed are listed in the Attachment to this report.

This review constituted one sample as defined in IP 71111-15.

b. Findings

Failure to Make a Non-Emergency Event Notification to the NRC Following a Loss of Shutdown Cooling Safety Function on Unit 1

Introduction: The inspectors identified a Severity Level IV NCV of 10 CFR 50.72(b)(3)(v), "Immediate Notification Requirements for Operating Nuclear Power Reactors," and 50.73(a)(2)(v), "Licensee Event Report System." Specifically, the licensee failed to make a non-emergency eight-hour notification to the NRC and subsequently failed to submit the required 60-day Licensee Event Report (LER) following the loss of safety function of a system which was required to remove residual heat from the reactor.

Description: On February 2, 2011, Unit 1 was in hot shutdown (Mode 3), with reactor vessel pressure less than the RHR cut-in permissive pressure, following an unexpected scram that occurred the previous day. The control room operators were in the process of placing the "B" train of shutdown cooling in operation in accordance with plant procedure LOP-RH-07, "Shutdown Cooling System Startup, Operation and Transfer." At 4:57 p.m., when the "B" RHR pump was started, the initial flow conditions caused the unexpected closure of the shutdown cooling common pump suction valve, 1E12-F009, due to a sensed high-flow condition. This common suction valve is a containment isolation valve and is designed to prevent a loss-of-coolant accident outside of containment due to a leak in the RHR system. If a higher than expected flow is sensed in the common suction piping, a control relay will cause a closure of the 1E12-F009 valve to stop the potential interfacing system loss-of-coolant accident. The closure of this common suction valve resulted in the "B" RHR pump tripping and a complete isolation of the shutdown cooling system. Since both "A" and "B" RHR pumps could not be started (pump lockout) due to the unanticipated closure of the common suction valve, the licensee declared both trains of shutdown cooling inoperable and entered the LCO Condition A for TS 3.4.9, "RHR Shutdown Cooling – Hot Shutdown," which requires, in part, the immediate initiation of actions to restore the RHR shutdown cooling subsystem to operable status.

In order to respond to unplanned suction valve isolations during this evolution (based upon previous operating experience), the licensee had previously proceduralized the installation of jumpers to bypass the relays that could cause the reactor pressure vessel high pressure/high flow isolation to occur. Following the closure of valve 1E12-F009 and the complete isolation of shutdown cooling at 4:57 p.m., at 5:52 p.m., the equipment operators installed jumpers to bypass the containment isolation in accordance with LOP-RH-07, Attachment A, "Defeating Shutdown Cooling High Flow Isolation in Modes 2 or 3." Subsequently, at 6:01 p.m., the "B" RHR pump was started. The jumpers were removed at 6:03 p.m. At 7:14 p.m., the operators placed the "B" train of shutdown cooling in operation and commenced reactor cooldown.

The licensee reviewed the event for 10 CFR 50.72 reportability, but determined that it was not reportable since the closure of 1E12-F009 was considered spurious and it occurred during initial system alignment and startup, i.e., before the system was in operation. The licensee also considers shutdown cooling (SDC), a manually actuated system, and the lineup of RHR SDC, including the system restoration steps in the attachment to install the jumpers, a planned evolution. Additionally, when addressing the closure of 1E12-F009, the control room logs document that both reactor recirculation

pumps were in operation and that reactor heat was being removed by the main condenser by using the turbine bypass valves, auxiliary steam systems and main steam line drains. As such, this event was not characterized by the licensee as an event or condition that could have prevented the fulfillment of a safety function.

The inspectors consulted NUREG-1022, Revision 2, "Event Report Guidelines 10 CFR 50.72 and 50.73," which is considered the NRC staff's position on the reporting of nuclear events. The NUREG-1022 guidance states, in part, that "if a single RHR suction line valve should fail in such a way that RHR cooling cannot be initiated, the event would be reportable." The closing of the common RHR shutdown cooling isolation valve, 1E12-F009, represented this scenario in that the reasonable expectation for SDC to successfully be manually aligned was lost. Additionally, NUREG-1022 states that "the event must be reported regardless of whether or not an alternate system could have been used to perform the system's safety function," i.e., no credit can be given for the alternate means of decay heat removal that were available at the time. Further, the inspectors determined that the attachment to install the jumpers would not be considered a part of the planned system alignment evolution because the attachment exists only to address the unanticipated failure of the system and contains only system recovery actions on a contingency basis.

When the SDC system isolation occurred, LOP-RH-07 directed the operators to Attachment A, where the instructions are provided to verify that there are no leaks in the system by walking down the entire RHR SDC system piping. Attachment A continues with instructions to install the relay jumpers. Finally it provides instructions to reset the isolation signal. After this attachment is complete, the operator can return to the main part of the procedure and proceed with attempting to re-start the pump. Based on this series of required procedure steps, the inspectors concluded that the shutdown cooling safety function was lost from 4:57 p.m. to 5:52 p.m. (55 minutes), which is the time it took between when the isolation occurred and when the jumpers were installed to temporarily remove the degraded or non-conforming condition.

At the time the isolation occurred, even though the system was not required to be in operation per TS 3.4.9, it was required to be Operable because the unit was in the mode and conditions of applicability. Specifically, TS 3.4.9 states that two RHR shutdown cooling subsystems shall be Operable, and, with no recirculation pump in operation, at least one RHR SDC subsystem shall be in operation. This condition is applicable in Mode 3 with reactor vessel pressure less than the RHR cut-in permissive pressure. Furthermore, the Operability definition in TS states, in part, that "a system, subsystem, division, component, or device shall be Operable or have Operability when it is capable of performing its specified safety function." As a result, per the operability definition in TS, upon being declared inoperable, the SDC system was deemed incapable of performing its specified safety function. Furthermore, LOP-RH-07, prior to starting an RHR pump as part of the SDC system line up provides a step cautioning operators that if a spurious isolation were to occur, Attachment A, which provides instructions on how to install jumpers, should be referenced. In addition to that caution, before the step to start the pump, there is a note in the procedure that states "ENS notification required if spurious isolation occurs."

In addition to the reportability aspect, the inspectors reviewed the corrective actions completed by the licensee as a result of the loss of shutdown cooling event that occurred in July 2009. The inspectors evaluated whether there was any relation between the two

events and whether the recent event occurred as a result of a failure to implement corrective actions from the previous event. The inspectors determined that the two events, although similar (the closure of 1E12-F009 completely isolated SDC), had different originating causes. In July 2009, degraded material conditions of the relay caused the isolation of 1E12-F009. In February 2011, the unexpected isolation was caused by the sensed high flow signal by the relay. The inspectors concluded that the most recent event was not associated with a corrective action to prevent recurrence from July 2009. Additionally, through the inspectors' review of history of the common suction valve, a trend of isolations that would demonstrate preceding failures was not identified.

Analysis: The inspectors determined that a failure to make a required non-emergency report to the NRC as required by 10 CFR 50.72 (b)(3)(v) and to submit an LER as required by 50.73(a)(2)(v) was a performance deficiency warranting further evaluation. Using the guidance in IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," the inspectors determined that the finding should be evaluated using the traditional enforcement process, since the failure to make a required report to the NRC had the potential to impact the agency's ability to perform its regulatory function. Specifically, the failure to report a safety system functional failure could impact NRC performance indicator (PI) data and the NRC's ability to respond to significant events in a timely manner. Using the violation examples in the Enforcement Policy in Section 6.9 "Inaccurate and Incomplete Information or Failure to Make a Report" the finding was determined to be a SL IV violation that resulted in no, or relatively inappreciable, safety consequences. Because this was processed through the traditional enforcement process and had no Reactor Oversight Process aspects, there is no cross-cutting aspect associated with the violation.

Enforcement: Title 10 CFR 50.72 (b)(3)(v), "Eight hour reports" states, in part, that the licensee shall notify the NRC Operations Center via the Emergency Notification System (ENS) of any event or condition that at the time of discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to: remove residual heat. Title 10 CFR 50.73(a)(2)(v), "Licensee Event Report System" states, in part, that the licensee shall submit an LER within 60 days for any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to: remove residual heat.

Contrary to the above requirements:

- As of 12:57 a.m. on February 3, the licensee failed to make the required eight-hour notification via the ENS of an event, which occurred at 4:57 p.m. on February 2, 2011, that could have prevented the fulfillment of the safety function of a system needed to remove residual heat from the reactor. Specifically, the licensee failed to report that an isolation valve for the Unit 1 RHR SDC system unexpectedly closed, which resulted in a complete isolation of the SDC system.
- As of April 6, 2011, the licensee failed to submit a required 60-day LER following the discovery of an event that occurred on February 2, 2011, where the fulfillment of the safety function of a system needed to remove residual heat from the reactor could have been prevented. Specifically, an isolation valve for the Unit 1 RHR SDC system unexpectedly closed which resulted in a complete isolation of the SDC system.

Because the licensee entered this issue into its CAP as Issue Report (IR) 1244457, the issue is being treated as a SL IV NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000373/2011003-01).

This URI is considered closed.

.2 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following issues:

- VE system performance issues;
- stand-by liquid control (SBLC) solution tank concentration nearing limits of acceptable region;
- Unit 1 Division II DG frequency relay issues;
- Unit 1 HPCS water leg pump performance issues; and
- loss of Unit 1 Division I annunciator system.

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 TS 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

(URI) Potential Failure to Follow Work Instructions and the Maintenance Process for Activities Affecting Quality

Introduction: The inspectors identified a URI associated with the potential failure to follow work instructions and maintenance process associated with activities affecting quality. Specifically, following work on the Unit 1 SBLC system, the inspectors found several programmatic inconsistencies with the methods to return the system to an operable status and processes to perform post-maintenance testing (PMT) of the system. This item remains unresolved pending further review by the NRC staff.

Description: On June 22, 2011, following planned maintenance and diagnostic valve testing of the Unit 1 A SBLC storage tank outlet valve (1C41-F001A), operations and maintenance personnel were in the process of performing PMT on the SBLC system. Following the diagnostic valve testing on 1C41-F001A the valve is cycled open and

closed to verify the position indications are working properly. The solution tank, which contains water with sodium pentaborate in solution, is normally isolated from the rest of the SBLC system by this valve. Opening 1C41-F001A creates the potential for transferring clean water to the solution tank and diluting the concentration of sodium pentaborate in it. This in turn could potentially place the solution tank concentration outside the TS-specified value. To account for instances like this one, TS SR 3.1.7.5 requires that the tank be sampled every time water is added to the tank.

After performing diagnostic valve testing on 1C41-F001A and cycling the valve to test the position switch, the maintenance package work instructions, as part of the PMT to restore SBLC to operable status, included a final step to notify the chemistry department to sample the solution tank. This sample would ensure that the concentration in the tank was maintained within TS-specified value. Instead of notifying chemistry, operations personnel measured the level in the solution tank before and after cycling 1C41-F001A. Because there was no change in level, operations personnel eliminated the step requiring the notification of chemistry to take the sample and recorded in the control room logs that there was no level change. Following a successful run of the A train of SBLC, the system was returned to service that same day. On June 28, 2011, the inspectors raised the question of the appropriateness of this decision to not sample the concentration of the tank following work on 1C41-F001A and if it was in accordance with their process. The licensee subsequently sampled the concentration of the solution tank and the results were satisfactory.

When the inspectors looked further into the licensee's process for returning SBLC to service following diagnostic valve testing on this valve, they found several inconsistencies with the process. The inspectors compiled the maintenance history for these valves for both units going back 3 testing cycles for each. These valves are diagnostic-tested every 6 years. The inspectors found that the method for performing PMT and returning SBLC to an operable status was inconsistent throughout the years. For example, the last time 1C41-F001A was tested in September 2005, the SBLC head tank was isolated as part of the maintenance work. Since the head tank is considered the driver that would push clean water into the solution tank when 1C41-F001A is open, the work instructions did not even include a step to notify chemistry to sample the tank. The isolation of the tank as part of the clearance order was deemed enough for operations personnel to conclude that clean water wasn't going to change the concentration of the solution tank. In a separate instance in March 2002, following diagnostic valve testing, chemistry was notified as specified in the work instructions but the sample was taken greater than 24 hours following the test.

In addition, the inspectors noted that if a maintenance package is going to be changed (as in the case where instead of notifying chemistry, the lack of difference in level was taken as acceptable), procedure MA-AA-716-010, "Maintenance Planning" specifies that for work package revisions, a screening of the change should be performed and documented. The inspectors could not find verification that this screening was performed or documented in accordance with the maintenance planning procedure.

The inspectors will review this issue to determine if the several inconsistencies identified with the PMT process of SBLC following diagnostic valve testing of 1C41-F001A constituted a performance deficiency. The inspectors also will engage plant personnel to ensure that the licensee is implementing the Maintenance Planning guidelines and

PMT methods consistently for this system. A URI is opened pending further review by the NRC staff. (URI 05000373/2011003-02 and 05000374/2011003-02).

1R18 Plant Modifications (71111.18)

.1 Plant Modifications

a. Inspection Scope

The inspectors reviewed the following modification:

- drywell sump Hi-Hi level alarm re-wiring (Temporary).

The inspectors reviewed the configuration changes and associated 10 CFR 50.59 safety evaluation screening against the design basis, the UFSAR, and the TS, as applicable, to verify that the modification did not affect the operability or availability of the affected system. The inspectors, as applicable, observed ongoing and completed work activities to ensure that the modifications were installed as directed and consistent with the design control documents; the modifications operated as expected; post-modification testing adequately demonstrated continued system operability, availability, and reliability; and that operation of the modifications did not impact the operability of any interfacing systems. As applicable, the inspectors verified that relevant procedure, design, and licensing documents were properly updated. Lastly, the inspectors discussed the plant modification with operations, engineering, and training personnel to ensure that the individuals were aware of how the operation with the plant modification in place could impact overall plant performance. Documents reviewed in the course of this inspection are listed in the Attachment to this report.

This inspection constituted one temporary modification sample as defined in IP 71111.18-05.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

.1 Post-Maintenance Testing

a. Inspection Scope

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

- Unit 2 RHR SW flow verification test;
- B.5.b portable fire pump run following yearly checks;
- Unit 2 "A" RHR pump run following Division I work window;
- B diesel fire pump run after maintenance;
- Unit 1 low pressure core spray (LPCS) pump run following maintenance; and
- Unit 1 A SBLC system run after maintenance.

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 PMT 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 six PMT samples as defined in IP 71111.19-05.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

.1 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:

- LOS-SC-Q1, Unit 1 SBLC pump quarterly run (Routine);
- LOS-CS-Q1, Units 1 and 2 secondary containment damper test (Routine);
- LOS-DG-M2, Unit 1 A DG idle start (Routine);
- LOS-LP-Q1, Unit 2 LPCS pump quarterly run (Routine); and
- LOS-RH-Q1 Unit 2 A RHR pump quarterly run (IST).

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

- did preconditioning occur;
- were the effects of the testing adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- were acceptance criteria 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 USAR, 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 (IST) 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 and one IST 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)

.1 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 Alert and Notification System (ANS) in the LaSalle County Station's plume pathway Emergency Planning Zone. The inspectors reviewed monthly trend reports and the daily and monthly operability records from January 2009 through March 2011. 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 alert and notification system inspection constituted one sample as defined in IP 71114.02-05.

b. Findings

No findings were identified.

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

.1 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) activation to augment the on shift staff as well as the provisions for maintaining the station's ERO qualification and team lists. The inspectors reviewed reports and a sample of corrective action program records of unannounced off-hour augmentation tests and pager test, which were conducted between January 2009 and April 2011, 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 23 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 emergency response organization augmentation testing inspection constituted one sample as defined in IP 71114.03-05.

b. Findings

No findings were identified.

1EP5 Correction of Emergency Preparedness Weaknesses (71114.05)

.1 Correction of Emergency Preparedness Weaknesses

a. Inspection Scope

The inspectors reviewed the Nuclear Oversight (NOS) staff's 2009, 2010, and 2011 audits of the LaSalle County Station's emergency preparedness program to determine that the independent assessments met the requirements of 10 CFR 50.54(t).

The inspectors also reviewed samples of corrective action program records associated with the 2010 biennial exercise, as well as various EP drills conducted in 2009, 2010, and 2011, 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 station's EP program and activities to determine whether corrective actions were completed in

accordance with the site's corrective action program. Documents reviewed are listed in the Attachment to this report.

This correction of emergency preparedness weaknesses and deficiencies inspection constituted one sample as defined in IP 71114.05-05.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

40A1 Performance Indicator Verification (71151)

.1 Reactor Coolant System Leakage

a. Inspection Scope

The inspectors sampled licensee submittals for the reactor coolant system (RCS) Leakage performance indicator (PI) for Units 1 and 2 for the period from the second quarter 2010 through the first quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, were used. The inspectors reviewed the licensee's operator logs, RCS leakage tracking data, IRs, event reports and NRC Integrated Inspection Reports for the period of April 2010 through March 2011 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 RCS leakage samples as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Drill/Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance (DEP) PI for the period from the first quarter 2010 through first quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI 99-02, Revision 6, were used. 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 2010 biennial exercise, and performance during other drills. Specific documents reviewed are described in the Attachment to this report.

This inspection constitutes one drill/exercise performance sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

.3 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors sampled licensee submittals for the ERO Drill Participation PI for the period from the first quarter 2010 through first quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI 99-02, Revision 6, 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; performance during the 2010 biennial exercise and other drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Specific documents reviewed are described in the Attachment to this report.

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

b. Findings

No findings were identified.

.4 Alert and Notification System Reliability

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System PI for the period from the first quarter 2010 through first quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI 99-02, Revision 6, 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. Specific documents reviewed are described in the Attachment to this report.

This inspection constitutes one alert and notification system 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

.1 Routine Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that 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.

.2 Daily Corrective Action Program 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 condition 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.

.3 Semiannual Trend Review

a. Inspection Scope

The inspectors performed a review of 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 six month period of October 2010 through March 2011, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside 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.

4OA5 Other Activities

.1 (Closed) NRC Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event"

The inspectors assessed the activities and actions taken by the licensee to assess its readiness to respond to an event similar to the Fukushima Daiichi nuclear plant fuel damage event. This included (1) an assessment of the licensee's capability to mitigate conditions that may result from beyond design basis events, with a particular emphasis on strategies related to the spent fuel pool, as required by NRC Security Order Section B.5.b issued February 25, 2002, as committed to in severe accident management guidelines (SAMGs), and as required by 10 CFR 50.54(hh); (2) an assessment of the licensee's capability to mitigate station blackout conditions, as required by 10 CFR 50.63 and station design bases; (3) an assessment of the licensee's capability to mitigate internal and external flooding events, as required by station design bases; and (4) an assessment of the thoroughness of the walkdowns and inspections of important equipment needed to mitigate fire and flood events, which were performed by the licensee to identify any potential loss of function of this equipment during seismic events possible for the site.

Inspection Report 05000373/2011010; 05000374/2011010 (ML111320393) documented detailed results of this inspection activity. Following issuance of the report, the inspectors conducted detailed followup on selected issues.

.2 (Closed) NRC Temporary Instruction 2515/184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)"

On May 27, 2011, the inspectors completed a review of the licensee's SAMGs, implemented as a voluntary industry initiative in the 1990's, to determine (1) whether the SAMGs were available and updated, (2) whether the licensee had procedures and processes in place to control and update its SAMGs, (3) the nature and extent of the licensee's training of personnel on the use of SAMGs, and (4) licensee personnel's familiarity with SAMG implementation.

The results of this review were provided to the NRC task force chartered by the Executive Director for Operations to conduct a near-term evaluation of the need for agency actions following the Fukushima Daiichi fuel damage event in Japan. Plant-specific results for LaSalle Station were provided as an Enclosure to a Memorandum to the Chief, Reactor Inspection Branch, Division of Inspection and Regional Support, dated June 1, 2011, (ML111520396).

.3 (Closed) Unresolved Item (URI) 05000373/2005006-02; 05000374/2005006-02: "Post-Fire Safe Shutdown Circuit Analysis not Consistent with RIS 2004-003"

a. Inspection Scope

During the 2005 triennial fire protection inspection, the NRC identified a URI concerning the licensee's Post-Fire Safe Shutdown (SSD) circuit analysis not being consistent with NRC Regulatory Issue Summary (RIS) 2004-003, Revision 1, "Risk-Informed Approach for Post-Fire Safe Shutdown Circuit Inspection." Specifically, the licensee's post-fire SSD circuit analysis considered only single instead of multiple fire-induced spurious actuations of SSD components.

Subsequent to the inspection in 2005, two specific aspects of fire-induced circuit cable faults were addressed by the NRC. The first issue involved fire-induced single circuit cable faults and associated operator manual actions. NRC Enforcement Guidance Memorandum (EGM) 07-004, "Enforcement Discretion for Post-Fire Manual Actions used as Compensatory Measures for Fire Induced Circuit Failures," authorized enforcement discretion for such non-compliance issues until March 6, 2009.

The second issue involved fire-induced multiple circuit cable faults and associated operator manual actions. NRC EGM 09-002, "Enforcement Discretion for Fire-Induced Circuit Faults," dated May 14, 2009, authorized enforcement discretion for such non-compliance issues, provided that licensees identified the non-compliances, entered them into their CAP, and instituted appropriate compensatory measures until the issues were corrected, within the six months period following a planned revision to Regulatory Guide (RG) 1.189, "Fire Protection for Nuclear Power Plants." RG 1.189, Revision 2, issued in October 2009 provided a method acceptable to the NRC to evaluate and resolve multiple fire-induced circuit faults. After the six-month period for identification of non-compliances, the EGM further authorized enforcement discretion for an additional 30-month period, for the licensee to resolve the identified multiple fire-induced circuit fault issues.

The EGM 07-004, EGM 09-002 and RG 1.189, Revision 2, provided adequate technical guidance and an acceptable time table to evaluate and resolve the non-compliances identified during the six months including the issue of fire-induced cable faults tracked by

this URI. The adequacy of licensee actions to address these issues will continue to be reviewed within the framework of the NRC's reactor oversight process, which includes the triennial fire protection team inspections and problem identification and resolution inspections. Therefore, URI 05000373/2005006-02; 05000374/2005006-02 is no longer necessary to track this issue and is closed.

The inspectors' review of this issue was considered to be a part of the original inspection effort, and as such did not constitute any additional inspection samples.

4OA6 Management Meetings

.1 Exit Meeting Summary

On July 13, 2011, the inspectors presented the inspection results to Mr. Peter Karaba 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.

.2 Interim Exit Meetings

Interim exits were conducted for:

- The results of the review of Unresolved Item 05000373/2005006-02; 05000374/2005006-02 concerning the licensee's post-fire SSD circuit analysis failure to consider multiple fire-induced spurious actuations of SSD components were discussed with Mr. T. Simpkin on April 14, 2011;
- The results of the Emergency Preparedness program inspection with Mr. D. Rhoades conducted at the site on July 1, 2011.

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 violation of very low significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy, for being dispositioned as an NCV.

Technical Specification 3.3.1.1 "RPS Instrumentation" Surveillance Requirement (SR) 3.3.1.1.17 requires the licensee to verify the RPS response time is within limits. Additionally, TS 3.3.4.1 "End-of-Cycle – Recirculation Pump Trip (EOC-RPT)," SR 3.3.4.1.5 requires the licensee to verify the EOC-RPT system response time is within limits. Both SRs have a frequency of 24 months on a staggered basis. Contrary to the previously mentioned requirements, on May 20, 2011, the licensee discovered that they failed to perform a PMT on the Unit 2 Turbine Control Valve fast closure pressure switch, 2C71-K8A. Specifically, following the replacement of 2C71-K8A during L2R13, the RTT for RPS input and EOC-RPT, were not performed. As a result, the licensee was in violation of TS 3.3.1.1 and TS 3.3.4.1.5 until a downpower was performed to complete the RTT. This finding was assigned a very low safety significance because of channel redundancy and because both protective functions would have still been accomplished. The licensee entered this issue into their CAP as IR 1221750 and performed a root

cause evaluation. Additional corrective actions include revising the Work Package Quality Checklist to prompt a TS review and developing a procedure for personnel to ensure appropriate PMTs are provided for outage WOs on TS-related components.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D. Rhoades, Site Vice President
P. Karaba, Plant Manager
J. Houston, Regulatory Assurance
J. Kutches, Manager of Projects
K. Hedgspeth, RP Manager
B. Maze, ISFSI Project Manager
J. Fiesel, Maintenance Director
S. Shields, Regulatory Assurance
T. Simpkin, Regulatory Assurance Manager
J. Washko, Operations Director
J. Vergara, Regulatory Assurance
W. Trafton, Work Management Director
J. Bauer, Site Training Director
K. Lyons, Chemistry Manager
C. Wilson, Station Security Manager

Nuclear Regulatory Commission

K. Riemer, Chief, Reactor Projects Branch 2
H. Peterson, Chief, Reactor Safety Operations Branch
R. C. Daley, Chief, Reactor Safety Engineering Branch 3

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

| | | |
|--|-----|---|
| 05000373/2011003-01 | NCV | Failure to Make a Non-Emergency Event Notification to the NRC and Submit Required LER Following a Loss of Shutdown Cooling Safety Function on Unit 1 (Section 1R15) |
| 05000373/2011003-02 05000374/2011003-02 | URI | Potential Failure to Follow Work Instructions and Maintenance Process Associated with Activities Affecting the Stand-by Liquid Control (SBLC) System (Section 1R15) |

Closed

| | | |
|---|-----|---|
| 05000373/2011003-01 | NCV | Failure to Make a Non-Emergency Event Notification to the NRC and Submit Required LER Following a Loss of Shutdown Cooling Safety Function on Unit 1 (Section 1R15) |
| 05000374/2011002-04 | URI | Potential Failure to Make a Non-Emergency Event Notification to the NRC Following a Loss of Shutdown Cooling Safety Function on Unit 1 (Section 1R15) |
| 05000373/2005006-02; 05000374/2005006-02 | URI | Post-Fire Safe Shutdown Circuit Analysis not Consistent with RIS 2004-003. (Section 4OA5.3) |
| 2515/183 | TI | Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event (Section 4OA5.1) |
| 2515/184 | TI | Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs) (Section 4OA5.2) |

Discussed

None

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-402-005; Extreme Heat Implementation Plan – LaSalle; Rev 15
- LOA-Grid-001; Low Grid Voltage; Rev. 11
- LOS-ZZ-A2; Preparation for Winter/Summer Operation; Rev. 40
- OP-AA-108-107-1001; Station Response to Grid Capacity Conditions; Rev. 3
- OP-AA-108-107-1002; Interface Procedure Between ComEd/Peco and Exelon Generation (Nuclear/Power) for Transmission Operations; Rev. 5
- OP-LA-101-111-1002; LaSalle Operations Philosophy Handbook, Section 4.18, Main Generator Voltage Changes; Rev. 33
- WC-AA-101; Online Work Control Process; Rev. 18
- WC-AA-8000; Interface Procedure Between ComEd/Peco and Exelon Generation (Nuclear/Power) for Construction and Maintenance Activities; Rev. 5
- WS-AA-107; Seasonal Readiness; Rev. 9

Issue Reports:

- 1100950; Unit 2 Predicted Switchyard Voltage Low; 8/12/2010
- 1139694; Switchyard Voltage Above Schedule Upper Limit; 11/12/2010

Miscellaneous:

- ATI 1153174-16; Management Directed Assessment of Summer Readiness; 5/25/2011
- LOP-DG-03E; Unit 0 Diesel Generator Electrical Checklist; Rev. 9
- LOP-DG-03M; Unit 0 Diesel Generator Mechanical Checklist; Rev. 8
- LOP-DG-08M; Unit 0 Diesel Generator Cooling System Mechanical Checklist; Rev. 22
- LOP-DO-03M; Unit 0 Diesel Generator Fuel Oil Transfer System Mechanical Checklist; Rev. 9

1R04 Equipment Alignment

Procedures:

- LLP-2010-05; Isolate, Drain, Inspect, and Refill of Unit 2 CY Tank; Rev. 2
- OP-AA-108-103; Locked Equipment Program; Rev. 2

Issue Reports:

- 1223545; NRC Communicated 2 Potential Issues-U-2 RCIC; 6/1/2011

Miscellaneous:

- LOP-CY-02M; Unit 2 Cycled Condensate Storage and Transfer System Mechanical Checklist; Rev. 8
- LOP-RI-02E; Unit 2 Reactor Core Isolation Cooling System Electrical Checklist; Rev. 14
- LOP-RI-02M; Unit 2 Reactor Core Isolation Cooling System Mechanical Checklist; Rev. 20
- LOS-RI-M1; Reactor Core Isolation Cooling System Inservice Test in Modes 1, 2, & 3; Rev. 17

1R05 Fire Protection

Procedures:

- DBD-LS-M11; Flood Protection, Flooding Assessment; Rev. B

Issue Reports:

- 1228104; Local FP Siren Did Not Function; 6/13/2011
- 1228121; 2FP01E Hot Spots Identified in Conjunction with PM SURV; 6/13/2011
- 1231550; Lesson Learned from Unannounced Fire Drill; 6/22/2011

Miscellaneous:

- 11-Q2-06; Fire Drill Record U2' TB 735' Switchgear 232A-102C; 6/11/2011
- Fire Brigade Members Qualifications Listings; 6/13/2011
- FZ5B4 LaSalle County Generating Station Pre-Fire Plan; Rev. 0

1R06 Flooding

Miscellaneous:

- NUREG-0800; 3.6.2 Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping; Rev. 1

1R11 Licensed Operator Regualification Program

Procedures:

- Evaluated Regualification Scenario; 5/5/2011

1R12 Maintenance Effectiveness

Issue Reports:

- 1187829; RPS Maintenance Rule Performance Criteria Exceeded; 3/15/2011
- 1171105; 1C71-S003F Would Not Trip with Trip Signal Input; 2/4/2011
- 1171116; 1C71-S003E Would Not Trip with Trip Signal Input; 2/4/2011
- 1172171; 1C71-S003C Would Not Trip with Trip Signal Input; 2/7/2011

Miscellaneous:

- RPS a(1) Determination; 4/6/2011

1R13 Maintenance Risk Assessments and Emergent Work Control

Procedures:

- LOA-TORN-001; High Winds / Tornado; Rev. 12
- OP-AA-108-111-1001; Severe Weather and Natural Disaster Guidelines; Rev. 5

Issue Reports:

- 1205087; Revision to LOP-VE-01/VC01; 4/20/2011
- 1205311; Assist Ops in Identifying EHC Leak U2; 4/19/2011
- 1205332; Reactor Water Cleanup Isolated on High Diff Flow; 4/20/2011
- 1208204; Unit 2 RR Seal Response to Transient; 4/27/2011
- 1210441; Increase in XE-133 Activity in U-2 Offgas System; 5/1/2011
- 1210533; Elevated Off Gas Post Treatment Radiation Readings – Unit 2; 5/1/2011
- 1213089; Inst. OOT, 2C34-N009B-PT2, LEFM FWB Press 2, Trend Code B3
- 1213478; Received RR_Loop_Divergence PPC Alarm on U2; 5/9/2011

- 1220294; LaSalle Station is Under a Tornado Watch; 5/25/2011
- 1220583; LaSalle Station is Under a Tornado Watch; 5/25/2011
- 1220676; LOA-TORN-001 Entry and Unplanned On Line Risk; 5/25/2011

Charts/Graphs:

- Computer Trend of Point C302, MWT; 5/6/2011 – 5/9/2011

Miscellaneous:

- NUMARC 9301 Section 11; Assessment of Risk Resulting from Performance of Maintenance Activities; 2/22/2000
- Log Entries Report; 4/20/2011
- Shift Staffing Report; 4/21/2011
- LaSalle Operator Log; 5/7/2011 – 5/9/2011
- LaSalle Operator Log; 5/11/2011

1R15 Operability Evaluations

Procedures:

- CR 1140568-02; Apparent Cause Evaluation: Inadequate Design Analysis for Mounting of the SBLC Test Tank; 11/15/2010
- EC 372866; Provide Concurrence with the Proposed Sealant Guidelines from CMO; Rev. 000
- LOA-AN-101; Loss of Annunciators; Rev 15
- LOS-AA-S101; Unit 1 Shiftly Surveillance; Rev. 70
- LOS-AA-S101; Unit 1 Shiftly Surveillance; Rev. 72

Issue Reports:

- 1091780; SBLC Concentration Nearing the Limit of the Acceptable Region; 7/18/2010
- 1113470; Followup to IR 1091219 on SBLC Head Tank; 9/15/2010
- 1119912; Wrong Value Logged for U-2 Sodium Pentaborate Concentration; 9/30/2010
- 1127449; EOP Boron Calc's Basis Assumption needs to be Reevaluated; 12/30/1998
- 1129223; 2N62-R902B Gauge Broke/Stuck; 10/21/2010
- 1129757; CDBI: SBLC Solution Tank Scaffold; 10/22/2010
- 1129847; Seismic Mounting of the SBLC Test Tank – CDBI Question; 10/22/2010
- 1129956; Insufficient Detail in 50.59 Summaries in NRC Updates; 10/23/2010
- 1130414; PMID Inadvertently Retired for DG Storage Tank RM Sump; 10/25/2010
- 1131668; Design Analysis 030015 (EMD) Re: SBLC Test Tank; 10/27/2010
- 1132019; Update Re: Design Analysis 030015 (EMD) & SBLC Test Tank; 10/28/2010
- 1142018; U-2 SBLC Low Level Alarm; 11/18/2010
- 1151368; SBLC Low Tank Level Alarm; 12/12/2010
- 1153930; Op Eval 10-003 Corrective Action Added w/o Change to Op Eval; 12/17/2010
- 1155084; U-2 SBLC Indication; 12/22/2010
- 1158119; Loss of Div 1 Visual Annunciator Power; 1/3/2011
- 1158226; TS/TRM/ODCM Operability on LOA-AN-101/201; 1/4/2011
- 1187254; U-1 SBLC Tank Solution Level; 3/14/2011
- 1187794; During Trending of Pump Flow Data 2C41-C001A at 42 GPM; 3/15/2011
- 1197440; OA VE Compressor tripped on Low Oil Pressure; 4/4/2011
- 1200697; SBLC Solution Tank Concentration/Level Unacceptable; 4/11/2011
- 1210566; Unit 1 HPCS Water Leg Pump Degradation; 5/2/2011
- 1212007; 1C41-R601 Indications; 5/5/2011
- 1216241; A AEER HVAC Compressor Cycling every 90 Min; 5/15/2011
- 1217081; WO to Remove "A" VE LLSV's as Forensic Evidence for EACE; 5/17/2011

- 1217221; Alternate Storage Location Inventory Inaccurate; 5/16/2011
- 1218267; Standby Liquid Control Tank Sodium Pentaborate Near Limits; 5/20/2011
- 1229801; Found the Flag up on 1A DG Frequency Relay; 6/17/2011
- 1233182; 2E12-N512B Would Not Reset on its Own; 6/27/2011
- 1233208; Fatigue Assessment; 6/26/2011

Drawings:

- 105D4657-2; Standby Liquid Control System; Reissue Date: 4/22/1977
- 1E-1-4000QB; Relaying & Metering Diagram Standby Diesel Generator "1A"; Rev. T
- 1E-1-4009AG; Schematic Diagram Diesel Generator "1A" Generator/Engine Control System "DG" Part 7; Rev. O

Event Reports:

- EN 46372; Standby Liquid Control System Test Tank Seismic Analysis Faulty; 10/28/2010
- IR 1114536; Event Report: Reactor Building Crane Tripped the Breaker while Lowering Cask to Hi-Storm; 9/2010
- IR 1129847/1131668/1132019; Human Performance Issue : During CDBI inspection, errors and omissions were identified with Design Analysis 030015(EMD); undated
- LER 2009-001-00/ Docket 05000-458; River Bend Station - Unit 1, Standby Liquid Control System Inoperable Greater than Allowable Outage Time; 1/14/2009
- LER 2010-003-00; Cover Letter; 12/21/2010

Miscellaneous:

- AT 1140568-02; Apparent Cause Evaluation, Inadequate Design Analysis for Mounting of the Standby Liquid Control (SBLC) Test Tank; 2/10/2011
- CY-LA-130-9020; Training Document: Sodium Pentaborate concentration Utilizing the DL 5.X Mettler Titrator; Rev. 0
- Edit Performance Criteria for Annunciator; 6/17/2011
- HPCS Water Leg Pumps Pressure Trending; June 2011
- LSCS-UFSAR 9.3; SBLC System Design Bases; Rev. 13
- Morning Report, LaSalle Station; 10/28/2010
- OE10-004/IR 1131668/1132019/1129847; Operability Evaluation Standby Liquid Control (SBLC) Test Tank;
- Operations Log; 10/27/2010 0:05 – 10/28/2010 6:07
- Performance Monitoring – Condition Monitoring for Annunciator; 6/2009 – 3/2011
- Scoping and Risk Significance – Scoping for Annunciator; 6/17/2011
- Systems Engineer Notebook, Visual Annunciator Grounds Notes; 4/2006 – 2/2007
- TS 3.1.7-1; Technical Specifications Reactivity Control Systems SLC; undated
- Vendor Manual for Sequential Events Recorder SER 4100 series; undated

1R18 Plant Modifications

Procedures:

- EC 372038; Revise Drawings Associated with CSCS Room Cooler 2VY03A; Rev. 0
- EC 384246; Rewire defeated DWED Sump Hi-Hi Alarm; Rev. 0

Work Orders:

- 1415632; Repair Leak on 2B RHR Cooler Inlet; 4/26/2011

Drawings:

- M-134; P&ID Core Standby Cooling System – Cooling Water; Rev. N

1R19 Post-Maintenance Testing

Procedures:

- EN-AA-103; Environmental Review; Rev.4
- LEP-EQ-127; I.T.T. Hydramotor Damper Actuator AH-91 and NH-91 Inspection, Repair, and Rebuilding; Rev. 19
- LOP-FP-002; Fire Protection Diesel Startup and Shutdown; Rev. 12
- LOS-RH-Q1; RHR (LPCI) and RHR Service Water Pump and Valve Inservice Test for Modes 1,2,3,4 and 5; Rev. 76
- LOS-RH-SR1; RHR Service Water Flow Verification Test, Attachment B; Rev. 11
- LOS-SC-Q1; SBLC Pump Operability/Inservice Test and Explosive Valve Continuity Check; Rev. 32
- LOS-SC-R1; SBLC System Injection Test and Inservice Test for Valves; Rev. 30
- LOS-SY-SR1; B.5.b Mitigating Strategies Equipment Surveillance; Rev. 4
- MA-AA-716-010; Maintenance Planning; Rev. 17

Issue Reports:

- 1113470; Followup to IR 1091219 on SBLC Head tank; 9/15/2010
- 1231892; 1C41-D305 External Leakage 8 DPM; 6/22/2011
- 1231919; NRC Question: Sock/Fine Filter Not Installed in a WF Drain; 6/22/2011
- 1234657; NRC Question Concerning SBLC Sampling; 6/29/2011
- 1235644; NRC ID: B.5.b – PDFP Annual Surveillance Review; 7/1/2011

Work Orders:

- 1231737; Work Order Completion Data; 5/25/2011
- 1231737-01; Replace Hydramotor for 2VY01Y; 3/18/2010
- 1231737-02; Replace Hydramotor for 2VY01Y; 5/20/2010
- 1269237; Perform MOV Inspection and Votes Test; 6/23/2011
- 1298691; Perform LES-GM-109 for 1C41C001A @ MCC 135Y-1/84 (1AP75E); 6/23/2011
- 1350436-01; Annual B.5.b Diesel Pump PM's; 6/24/2011
- 1357483-01; Clean/INSP 2E12C002B Pump Seal Cooler; 6/27/2011
- 1357483-05; RHR Service Water Flow Verification Test, Attachment B; 6/27/2011
- 1416934-01; LOS-RH-Q1 2A RHR WS Operability and Inservice Test; 5/23/2011
- 1441813-01; LOS-SC-M1 1A SBLC Pump Monthly ATT 1A; 6/21/2011
- 657141-01; Perform MOV Inspection and Votes Test; 8/29/2005

Miscellaneous:

- 1 C41-F001A Votes Test; 6/13/2000
- 1 C41-F001A Votes; SBLC Instructional Notes for Performing Functional Test/ Valve Cycle; 2005
- 1 C41-F001B; SBLC Instructional Notes for Performing Functional Test/ Valve Cycle; 7/2011
- 1C41-F001A; Work Package PMT Notes for Performing Functional Test SBLC; 6/22/2011
- AD-AA-101-1002; Writer's Guide for Procedures and T&RM; Rev. 15
- AD-AA-101-1004; Requesting Procedure and T&RM Changes; Rev. 3
- HU-AA-104-101; Procedure Use and Adherence; Rev. 4
- LaSalle Operational Risk Systems Matrix; Rev 7
- LOS-LP-Q1; Tech Spec Surveillance of Unit 1 LPCS Run LOS-LP-Q1 ATT1A; 6/22/2011
- LOS-SC-Q1; Tech Spec Surveillance; 1A SBLC Pump Quarterly LOS-SC-Q1 Att. 1A; 6/22/2011

- LOS-SC-Q1; Unit 1, A SBLC Pump and Motor Operated Valve operability/Inservice Test and Explosive Valve Continuity Check; Rev. 32
- Operator Log Entries; 6/21/2011 – 7/1/2011
- RM-11-102; Control of Documents; Rev. 6
- SC-1; Training Document for Standby Liquid Control System; 1/15/2001

1R22 Surveillance Testing

Procedures:

- LOP-VR-01; Reactor Building Ventilation System Startup and Operation; Rev. 44
- LOP-VR-02; Reactor Building Ventilation System Shutdown; Rev. 35
- LOS-CS-Q1; U1 and U2 Secondary Containment Damper Operability Test; Rev. 33
- LOS-SC0Q1; SBLC Pump Operability/Inservice Test and Explosive Valve Continuity Check; Rev. 32

Issue Reports:

- 1216079; Tip Shear Valve Closed/Circuit Abnormal Alarm; 5/14/2011

Work Orders:

- 1407258-01 LOS-SC-Q1 1B SBLC Pump Quarterly Att 1B; 5/13/2011

Miscellaneous:

- Log Entries Report; 5/16/ - 5/17/2011
- LOS-DG-M2; Tech Spec Surveillance of Unit 1A Diesel Generator LOS-DG-M2 ATT 1A-IDLE; 6/19/2011

40A1 Performance Indicator Verification

Issue Reports:

- 1187434; 2B DG Cylinder #1 Kiene Test Valve Loose During LOS-DG-M#; 3/14/2011

Working Documents:

- LOP-DG-02; Diesel Generator Start and Run Logs, Attachment E; various dates 8/2010 thru 3/2011

Miscellaneous:

- LA-AA-2100; Monthly Data Elements for NRC Reactor Coolant System (RCS) Leakage; 4/2010 through 3/2011
- MSPI and WANO Reporting for Emergency AC Power; Monthly Reports for 7/2010 – 3/2011
- Unit 1 System Engineer Trending Notes, Dry Well Drain Flow Data (LOS-AA-S101); 4/2010 through 3/2011
- Unit 2 System Engineer Trending Notes, Dry Well Drain Flow Data (LOS-AA-S101); 4/2010 through 3/2011

40A2 Identification and Resolution of Problems

Issue Reports:

- 1127924; 2A RT Pump Inadvertently Tripped Off; 10/19/2010
- 1153973; Lower Motor Bearing Sight Glass Broke Off; 12/17/2010
- 1220797; Indications of Small Rise in DWFD Inputs; 5/23/2011

Action Requests Resulting from NRC/IEMA Inspection:

- 1154700; Spent Channels Erroneously Loaded into U-2 Channel Rack; 12/21/2010
- 1208125; NRC Identified: Emergency Lighting Question during SBO; 4/26/2011
- 1208127; NRC Identified: Door 259 Open Alarm Intermittent; 4/26/2011
- 1211348; NRC Identified – B.5.b Submittal Document has Error; 5/3/2011
- 1211838; NRC Identified - Enhancement to LOS SY 004; 5/4/2011
- 1211841; EP: Detail in Letters of Agreement with Offsite Agencies; 5/4/2011
- 1211951; NRC Identified - Inaccurate Information in INPO IER Submittal; 5/4/2011
- 1223387; Fast Charge Light Lit 1-14 (Non-App R); 6/1/2011
- 1223545; NRC Communicated 2 Potential Issues-U-2 RCIC; 6/1/2011
- 1230184; NRC Identified HPCS Door Incorrectly Designated Watertight; 6/17/2011
- 1231919; NRC Question: Sock/Fine Filter Not Installed in a WF Drain; 6/22/2011
- 1234657; NRC Question Concerning SBLC Sampling; 6/29/2011
- 1235644; NRC Id: B.5.B – PDFP Annual Surveillance Review; 7/1/2011

Work Orders:

- 1127924-12; Perform ACE. Validate latest revision of LS-AA-125-1003; 11/11/2010

Miscellaneous:

- Apparent Cause Evaluation List; 10/1/2010 – 6/20/2011
- Common Cause Analysis List; 10/1/2011 – 6/21/2011
- Crew Clock Resets; 10/1/2010 – 6/21/2011
- Expanded Prompt Investigations List; 10/1/2010 – 5/25/2011
- Human Performance Review Board List; 10/1/2010 – 6/20/2011
- Operators Log; 11/5/2010 – 5/11/2011
- Prompt Investigations List; 10/1/2010 – 5/25/2011
- Quick Human Performance Investigations List; 10/1/2010 – 6/21/2011
- Root Cause Evaluation List; 10/1/2010 – 6/30/2011

40A3 Followup of Events and Notices of Enforcement Discretion

Issue Reports:

- 1169946; LaSalle Unit 1 Scram 2-1-11; 2/2/2011
- 1169954; 1A CW Pump Tripped During U-1 MPT Trip and Scram; 2/2/2011
- 1171486; U1 VR Trip During 2-1-11 Scram; 2/5/2011

Miscellaneous:

- LER 2011-001-00; Automatic Reactor Scram Due to Main Power Transformer “C” Phase Electrical Fault; 3/25/2011
- Root Cause Investigation Report; LaSalle Unit 1 Scram 2-1-11; 3/10/11

40A5 Other Activities

Miscellaneous:

- EP-AA-125-1003; Overall ERO Participation (R.EP.02a) and Stability (EPPI.02c) Monthly Data Reporting Elements; 5/18/2011 (TI184)
- Memorandum from K. Rusley, Emergency Preparedness Manager to D. Enright, Site Vice President: LaSalle 2007 SAM G Drill Report; 12/19/2007 (TI184)

4OA7 Licensee-Identified Violations

Issue Reports:

- 1221750; Missed PMT For U2 Instrument 2C71-N005A; 2/26/2011

Miscellaneous:

- LaSalle Station; Human Performance Alert Technical Human Performance: Missed Post-Maintenance Testing (PMT) For U2 Instrument 2C71-N005A Due to Inadequate Decision Making;

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 |
| CY | Cycled Condensate |
| DEP | Drill/Exercise Performance |
| DG | Diesel Generator |
| DRP | Division of Reactor Projects |
| EGM | Enforcement Guidance Memorandum |
| ENS | Emergency Notification System |
| EP | Emergency Preparedness |
| ERO | Emergency Response Organization |
| HPCS | High Pressure Core Spray |
| IMC | Inspection Manual Chapter |
| IP | Inspection Procedure |
| IR | Issue Report |
| IST | Inservice Testing |
| LER | Licensee Event Report |
| LPCS | Low Pressure Core Spray |
| NCV | Non-Cited Violation |
| NEI | Nuclear Energy Institute |
| NRC | U.S. Nuclear Regulatory Commission |
| NOS | Nuclear Oversight |
| PARS | Publicly Available Records System |
| PI | Performance Indicator |
| PMT | Post-Maintenance Testing |
| RCIC | Reactor Core Isolation Cooling |
| RCS | Reactor Coolant System |
| RG | Regulatory Guide |
| RIS | Regulatory Issue Summary |
| RHR | Residual Heat Removal |
| RPS | Reactor Protection System |
| RTT | Response Time Testing |
| SAMG | Severe Accident Management Guideline |
| SBLC | Standby Liquid Control |
| SDC | Shutdown Cooling |
| SDP | Significance Determination Process |
| SR | Surveillance Requirement |
| SSD | Safe Shutdown |
| SSC | Structure, System, and Component |
| SW | Service Water |
| TS | Technical Specification |
| TSO | Transmission System Operator |
| UFSAR | Updated Final Safety Analysis Report |
| URI | Unresolved Item |
| VC | Control Room Ventilation System |
| VE | Auxiliary Electrical Equipment Room Ventilation |
| WO | Work Order |

M. Pacilio

-2-

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Sincerely,

/RA/

Kenneth Riemer, Chief
Branch 2
Division of Reactor Projects

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

Enclosures: Inspection Report 05000373/2011003; 05000374/2011003
w/Attachment: Supplemental Information

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Letter to M. Pacilio from K. Riemer dated August 8, 2011

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2,
NRC INTEGRATED INSPECTION REPORT
05000373/2011003; 05000374/2011003

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