October 25, 2002

Mr. John L. Skolds, President
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2
USNRC INTEGRATED INSPECTION REPORT 50-373/02-05; 50-374/02-05

Dear Mr. Skolds:

On September 30, 2002, the U.S. Nuclear Regulatory Commission (USNRC) completed an integrated inspection at your LaSalle County Station, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on September 27, 2002, with Mr. G. Barnes 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, the inspectors identified one issue of very low safety significance (Green) that was determined to involve a violation of USNRC requirements. However, because of its very low safety significance and because it was entered into your corrective action program, the USNRC is treating this issue as a Non-Cited Violation in accordance with Section VI.A.1 of the USNRC's Enforcement Policy. If you contest the subject or severity of a Non-Cited Violation, you should provide a response within 30 days of the date of this inspection report, with a 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, 801 Warrenville Road, Lisle, IL 60532-4351; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at LaSalle County Station.

In response to the terrorist attacks on September 11, 2001 the USNRC issued an Order and several threat advisories to commercial power reactors to strengthen licensees' capabilities and readiness to respond to a potential attack. The USNRC established a deadline of September 1, 2002 for licensees to complete modifications and process upgrades required by the order. In order to confirm compliance with this order, the USNRC issued Temporary Instruction 2515/148 and over the next year, the USNRC will inspect each licensee in accordance with this Temporary Instruction. The USNRC continues to monitor overall security controls and may issue additional temporary instructions or require additional inspections should conditions warrant.

In accordance with 10 CFR 2.790 of the USNRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the USNRC Public Document Room or from the Publicly Available Records (PARS) component of USNRC's document system (ADAMS). ADAMS is accessible from the USNRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

***/RA by Geoffrey Wright Acting for/***

Bruce Burgess, Chief
Branch 2
Division of Reactor Projects

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

Enclosure: Inspection Report 50-373/02-05;
50-374/02-05

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REGION III

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|---|---|
| Docket Nos: | 50-373, 50-374 |
| License Nos: | NPF-11, NPF-18 |
| Report No: | 50-373/02-05; 50-374/02-05 |
| Licensee: | Exelon Generation Company |
| Facility: | LaSalle County Station, Units 1 and 2 |
| Location: | 2601 N. 21st Road<br>Marseilles, IL 61341 |
| Dates: | July 1 through September 30, 2002 |
| Inspectors: | E. Duncan, Senior Resident Inspector<br>G. Wilson, Resident Inspector<br>C. Brown, Clinton Station Resident Inspector<br>D. E. Funk, Physical Security Inspector<br>D. Smith, Dresden Station Senior Resident Inspector<br>D. Schrum, Reactor Engineer<br>W. Slawinski, Senior Radiation Specialist<br>K. Walton, Reactor Engineer<br>D. Wrona, Reactor Engineer<br>J. Yesinowski, Illinois Department of Nuclear Safety |
| Approved by: | Bruce Burgess, Chief<br>Branch 2<br>Division of Reactor Projects |

## SUMMARY OF FINDINGS

IR 05000373-02-05, 05000374-02-05; Exelon; on 07/01-09/30/02, LaSalle County Station; Units 1 & 2. Fire Protection, Identification and Resolution of Problems.

This report covers a 3-month period of baseline resident inspection and announced baseline inspections on radiation protection and security. The inspection was conducted by Region III inspectors and the LaSalle, Dresden, and Clinton resident inspectors. One Green finding and two associated Non-Cited Violations were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after USNRC management review. The USNRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. Inspection Findings

**Cornerstone: Mitigating Systems**

- Green. The inspectors identified dried paint on the side of a safety-related switchgear bus duct which led to the identification of openings between the Unit 1 and Unit 2 Division 1 and Division 2 Essential Switchgear Rooms. These openings compromised the 3-hour fire protection barrier separating the two fire zones.

  The issue was of very low safety significance since it was not likely that redundant safe shutdown equipment would be significantly impacted. A Non-Cited Violation of License Condition 25 concerning the LaSalle Unit 1 and Unit 2 Fire Protection Program was identified. (Section 1R05)

  A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was also identified due to the failure to take adequate corrective action to address a similar issue that occurred in June 2000. (Section 4OA2)

### B. Licensee-Identified Violations

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

## REPORT DETAILS

### Summary of Plant Status:

Unit 1 operated at or near full power until August 18, when power was reduced to about 50 percent to isolate the "B" heater string to address indications of 14B low pressure feedwater heater tube leakage. The problem was resolved and the unit was returned to full power on August 23. Unit 1 operated at full power until August 25 when power was reduced to about 82 percent to address a leaking electro-hydraulic line associated with the #1 turbine control valve (TCV). The TCV was repaired and the unit was returned to full power later that day. Unit 1 operated at full power until August 26, when power was reduced to about 82 percent to address an unexpected closure of the #1 turbine control valve. The problem was repaired and the unit was returned to full power on August 27. Unit 1 operated at or near full power for the remainder of the inspection period, except for power reductions to perform maintenance, pre-planned surveillance testing activities, and rod pattern adjustments.

Unit 2 operated at or near full power until August 23 when power was reduced to about 23 percent to perform power suppression testing to identify leaking fuel rods. Testing was completed and the unit was returned to full power on August 27. Unit 2 operated at or near full power for the remainder of the inspection period, except for power reductions to perform maintenance, pre-planned surveillance testing activities, and rod pattern adjustments.

### 1. REACTOR SAFETY

**Cornerstone: Initiating Events, Mitigating Systems, and Barrier Integrity**

1R04 Equipment Alignment (71111.04)

.1 Partial Walkdowns

a. Inspection Scope

The inspectors performed partial walkdowns of accessible portions of trains of risk-significant mitigating systems equipment during times when the trains were of increased importance due to the redundant trains or other related equipment being unavailable. The inspectors utilized the valve and electric breaker checklists listed at the end of this report to verify that the components were properly positioned and that support systems were lined up as needed. The inspectors also examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors reviewed outstanding work orders and condition reports (CRs) associated with the trains to verify that those documents did not reveal issues that could affect train function. The inspectors used the information in the appropriate sections of the Updated Final Safety Analysis Report (UFSAR) to determine the functional requirements of the systems.

The inspectors verified the alignment of the following trains:

- On July 9, 2002, the inspectors performed a walkdown of the accessible portions of the 2B and 2C Residual Heat Removal (RHR) systems to verify system availability during scheduled maintenance on the 2A RHR and Unit 2 Low Pressure Core Spray (LPCS) systems.

- On July 23, 2002, the inspectors performed a walkdown of the Unit 1 and Unit 2 Station Air Compressors (SACs) to verify system availability during scheduled maintenance on the Unit 0 SAC.

- On August 12, 2002, the inspectors performed a walkdown of the accessible portions of the Unit 1 High Pressure Core Spray (HPCS) system to verify system operability during scheduled surveillance testing of the Unit 1 Reactor Core Isolation Cooling (RCIC) system.

- On August 28, 2002, the inspectors performed a walkdown of the accessible portions of the Unit 2 Standby Gas Treatment (SBGT) system to verify system operability during scheduled maintenance on the Unit 1 Standby Gas Treatment system.

b. Findings

No findings of significance were identified.

.2 Complete Walkdown

a. Inspection Scope

The inspectors performed a complete walkdown of accessible portions of the Unit 1 and Unit 2 Reactor Core Isolation Cooling (RCIC) systems to verify system operability. This system was selected because it was considered both safety-significant and risk-significant in the licensee's probabilistic risk assessment.

The inspection consisted of the following activities:

- a review of plant procedures (including selected abnormal and emergency procedures), drawings, and the UFSAR to identify proper system alignment;
- a review of outstanding or completed temporary and permanent modifications to the system;
- a review of control room operator log entries; and
- an electrical and mechanical walkdown of the system to verify proper alignment, component accessibility, availability, and current condition.

The inspectors also reviewed selected issues documented in Condition Reports (CRs), to determine if they had been properly addressed in the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors walked down the following risk significant areas to identify any fire protection degradations:

- Fire Zone 1: Refueling Floor
- Fire Zone 7C5: Unit 1 Division 2 Core Standby Cooling System (CSCS) Room
- Fire Zone 7C6: Unit 1 Division 1 CSCS Room
- Fire Zone 4C2: Auxiliary Building - Main Floor
- Fire Zone 4C3: Auxiliary Building - Elevation 768'
- Fire Zone 3B1: Unit 2 Reactor Building - Elevation 820'
- Fire Zone 4F3: Auxiliary Building - Ground Floor
- Fire Zone 5D6: Turbine Building Clean and Dirty Oil Tank Room
- Fire Zone 3I6: Unit 2 Reactor Building Drain Tank Room
- Fire Zone 3C: Unit 2 Reactor Building - Elevation 807'
- Fire Zone 3I1: Unit 2 Reactor Building - Elevation 673'
- Fire Zone 5A3: Turbine Building Operating Floor and Heater Bay
- Fire Zone 5B5: Turbine Building - Unit 1 Elevation 731'
- Fire Zone 5B6: Turbine Building - Unit 2 Elevation 731'
- Fire Zone 5D5: Turbine Building Upper Basement Area
- Fire Zone 5C11: Turbine Building - Ground Floor General Area

The inspectors also conducted a routine walkdown of the Unit 1 Division 1 Essential Switchgear Room.

Emphasis was placed on control of transient combustibles and ignition sources; the material condition, operational lineup, and operational effectiveness of the fire protection systems, equipment, and features; and the material condition and operational status of fire barriers used to prevent fire damage or fire propagation.

In particular, the inspectors verified that all observed transient combustibles were being controlled in accordance with the licensee's administrative control procedures. In addition, the inspectors observed the physical condition of fire suppression devices, such as overhead sprinklers, and verified that any observed deficiencies did not impact the operational effectiveness of the system. The physical condition of portable fire fighting equipment, such as portable fire extinguishers, was observed. The inspectors also observed that extinguishers were located appropriately and that access to the extinguishers was unobstructed. Fire hoses were verified to be installed at appropriate locations and the physical condition of the hoses was verified to be satisfactory and access unobstructed. The physical condition of passive fire protection features such as fire doors, ventilation system fire dampers, fire barriers, fire zone penetration seals, and

fire retardant structural steel coatings were inspected and verified to be properly installed and in good physical condition.

b. Findings

Introduction

One "Green" finding and an associated Non-Cited Violation of License Condition 25 concerning the LaSalle Unit 1 and Unit 2 Fire Protection Program was identified when dried paint was found on the side of a safety-related switchgear bus duct which led to the identification of openings between the Unit 1 and Unit 2, Division 1 and Division 2 Essential Switchgear Rooms. A Non-Cited Violation of 10 CFR 50, Appendix B, "Corrective Action," was also identified due to the failure to take adequate corrective action to address a similar issue identified in June 2000 (Section 4OA2).

Description

During a routine walkdown of the Unit 1 Division 1 Essential Switchgear Room (Fire Zone 4F1), the inspectors identified dried paint on the side of a bus duct which communicated between the Unit 1 Division 1 and Unit 1 Division 2 Essential Switchgear Rooms. Following questions regarding the origin of the paint, licensee personnel identified that external bus duct fire seals between the Unit 1 Division 1 and Unit 1 Division 2 Essential Switchgear Rooms were missing.

The Unit 1 Division 2 Essential Switchgear Room (Fire Zone 4E3) is located directly above the Unit 1 Division 1 Essential Switchgear Room. The missing seals potentially compromised the 3-hour external fire barrier between the two fire zones. As a result, the bus duct seals were declared inoperable and hourly fire watches were established in accordance with Technical Requirement Manual (TRM) 3.7.o. Additional walkdowns identified a similar condition on Unit 2. The issue was entered into the licensee's corrective action program as Condition Report (CR) 00095253.

As discussed in USNRC Inspection Report 50-373/00-11(DRP); 50-374/00-11(DRP) in July 2000, the inspectors identified an open corehole in the overhead of the Unit 1 Division 1 Essential Switchgear Room that was not sealed with any fire retardant material. Subsequently, licensee personnel discovered a second open corehole. Both open coreholes compromised the 3-hour fire rating between the two safety-related switchgear rooms.

Also, as discussed in Section 4OA2 of this report, during recent extent of condition reviews of inaccessible areas as a result of the inspector's identification of the missing exterior bus duct seals, licensee personnel identified two Unit 2 open coreholes which were not properly sealed. Both of these unsealed Unit 2 openings were in similar locations as the unsealed Unit 1 openings identified above.

During this inspection period, licensee personnel completed a root cause investigation regarding the circumstances which led to the most recent material condition issues, and assessed the collective risk of all these issues utilizing Appendix F, "Determining Potential Risk Significance of Fire Protection and Post-Fire Safe Shutdown Inspection

Findings," of Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." The following discussion presents the results of those reviews and the results of the inspectors' review of this issue. A review of the corrective actions to address a similar issue documented in Problem Identification Form (PIF) L2000-03778 and PIF L2000-03839 was performed and is discussed in Section 4OA2 of this report.

Analysis - Fire Scenario

Based on these fire barrier degradations, the inspectors postulated a Bus 241Y fire in the Unit 2 Division 1 Essential Switchgear Room initiated by either transient combustibles or a fault on Bus 241Y which propagated to the cable trays over Bus 241Y, resulting in the complete loss of Unit 2 Division 1 alternating current (AC) power. The fire was initially postulated to have sufficient thermal energy to potentially affect the breaker cubicles immediately above the open coreholes. However, based upon fire analysis modeling results, it is not believed that the combustible loading of the overhead cables was sufficient to create a hot gas layer of sufficient temperature to have a significant temperature-based impact on Division 2 equipment. A similar type scenario with similar results could also be postulated for Unit 1. As a conservative measure, an SDP Phase 2 analysis was performed.

Significance Determination Process Review

The inspectors, in conjunction with Region III fire protection and probabilistic risk assessment experts, assessed the issue utilizing the Significance Determination Process (SDP) as provided in Inspection Manual Chapter 0609, Appendix F. Because the missing bus duct seals represented a degradation of a defense-in-depth fire protection element and compromised the 3-hour fire barrier separation requirements for redundant safe shutdown trains, a Phase 2 SDP analysis was performed.

A fire in the Division 1 switchgear room could potentially cause a reactor trip and a loss of 4160V AC Bus 241Y. Therefore, two SDP worksheets, Transients (TRAN) and Loss of 4160V AC Bus 241Y (LAC1), were used to evaluate the finding. Mitigation capabilities were evaluated assuming all Division 1 cables and the Division 2 "B" RHR breaker were damaged. This was a conservative assumption since the fire analysis demonstrated that the temperature at the ceiling of the Division 1 Essential Switchgear Room would be below the damage temperature for any power cable in the Division 2 Essential Switchgear Room. Damage to the "B" RHR pump cubicles was assumed to be limited and actions to expeditiously replace the "B" RHR pump motor breaker with the "C" RHR pump motor breaker was credited. Since other Division 2 redundant safe shutdown equipment remained available to mitigate the consequences of a fire in the Division 1 Essential Switchgear Room, this finding screened out as Green. Other factors which primarily contributed to this result included the following:

- Since the fire modeling showed that temperatures required for breaker damage could not to be achieved, a moderate fire barrier degradation was assumed.

- Since there was no automatic suppression features in the Unit 1 and Unit 2 Division 1 and Division 2 Essential Switchgear Rooms, no credit for automatic

fire suppression was given. However, the effectiveness of the fire brigade resulted in maximum credit for manual fire suppression and detection.

- Based upon historical data, the transient combustible loading in the Unit 1 and Unit 2 Division 1 and Division 2 Essential Switchgear Rooms was assumed to be relatively small.

- Fire ignition frequencies of 7.93E-3 per year for a switchgear fire (per the licensee's IPEEE) and 5.9E-4 per year for a transient combustible fire (EPRI methodology) were utilized.

Enforcement

License Condition 25 for LaSalle Unit 1 and Unit 2 required that the fire protection program be implemented and maintained in accordance with the LaSalle Updated Final Safety Analysis Report (UFSAR) and NUREG-0519, "Safety Evaluation Report Related to the Operation of LaSalle County Station Units 1 and 2." As noted below, the UFSAR and NUREG-0519 required that the Unit 1, Division 1 and Unit 1, Division 2 Essential Switchgear Rooms be separated by a fire barrier having a 3-hour rating:

UFSAR Section H.3.4.14, "Unit 1, Division 2 Essential Switchgear Room - Fire Zone 4E3,"
UFSAR Section H.3.4.16, "Unit 1, Division 1 Essential Switchgear Room - Fire Zone 4F1,"
NUREG-0519 Section 9.5.2.1, "Fire Barriers and Penetrations."

The missing bus duct seals between the Unit 1 and Unit 2, Division 1 and Division 2 Essential Switchgear Rooms were an example where the 3-hour fire barrier requirement of License Condition 25 for LaSalle Unit 1 and Unit 2 was not met and was a violation. However, because of its low safety significance and because it was entered into the corrective action program, the USNRC is treating this issue as a Non-Cited Violation (NCV 50-373/0205-01(DRP); 50-374/0205-01(DRP)), in accordance with Section VI.A.1 of the USNRC's Enforcement Policy. The issue was entered into the licensee's corrective action program as Condition Report (CR) 95253.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

On July 8, 2002, the inspectors observed an operating crew during a re-qualification examination on the simulator using Scenario ESG44, "Reactor Core Isolation Cooling (RCIC) Water Leg Pump Trip/"B" Reactor Recirculation (RR) Flow Control Valve (FCV) Fails Closed/ Heater Drain Transient/SCRAM - 4 Rod ATWS (Anticipated Transient Without Scram)/Failure of "B" Turbine Driven Reactor Feed Pump (TDRFP) to Trip."

The inspectors verified crew performance in terms of clarity and formality of communication; the ability to take timely action in the safe direction; the prioritizing, interpreting, and verifying of alarms; the correct use and implementation of procedures, including alarm response procedures; timely control board operation and manipulation,

including high-risk operator actions; the oversight and direction by the shift manager, including the ability to identify and implement appropriate Technical Specification actions such as reporting and emergency plan actions and notifications; and the group dynamics.

Crew performance in these areas was compared to licensee management expectations and guidelines as presented in the following documents:

- OP-AA-101-111, "Rules and Responsibilities of On-Shift Personnel," Revision 0;
- OP-AA-103-102, "Watchstanding Practices," Revision 0;
- OP-AA-103-103, "Operation of Plant Equipment," Revision 0;
- OP-AA-103-104, "Reactivity Management Controls," Revision 0; and
- OP-AA-104-101, "Communications," Revision 0.

The inspectors verified that the crew completed the critical tasks listed in the above guidelines. The inspectors also compared simulator configurations with actual control board configurations. For any weaknesses identified, the inspectors observed the licensee evaluators to verify that they also noted the issues and discussed them in the critique at the end of the session.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the maintenance rule requirements, including a review of scoping, goal-setting, and performance monitoring, short-term and long-term corrective actions, and current equipment performance status. The systems selected for inspection were all classified as risk significant by the licensee's maintenance rule program. The systems evaluated were:

- Heater Drain System (HD)
- Reactor Core Isolation Cooling (RCIC) System
- Circulating Water (CW) System
- Residual Heat Removal Service Water (RHRSW) System

The inspectors independently verified the licensee's implementation of maintenance rule requirements for these systems by verifying that these systems were properly scoped within the maintenance rule; that all failed structures, systems, or components (SSCs) were properly categorized and classified as (a)(1) or (a)(2); that performance criteria for SSCs classified as (a)(2) were appropriate; and that the goals and corrective actions for SSCs classified as (a)(1) were appropriate. The inspectors also verified that issues were identified at an appropriate threshold and entered in the corrective action program.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk, scheduling, configuration control, and performance of maintenance associated with planned and emergent work activities and verified that scheduled and emergent work activities were adequately managed. In particular, the inspectors reviewed the licensee's program for conducting maintenance risk safety assessments and verified that the licensee's planning, risk management tools, and the assessment and management of online risk was adequate. The inspectors also verified that licensee actions to address increased online risk during these periods, such as establishing compensatory actions, minimizing the duration of the activity, obtaining appropriate management approval, and informing appropriate plant staff, were accomplished when online risk was increased due to maintenance on risk-significant SSCs. The following specific activities were reviewed:

- Maintenance risk assessment for work planned during the week of July 7, 2002.
- Maintenance risk assessment for work planned during the week of July 21, 2002.
- Maintenance risk assessment for work planned during the week of August 11, 2002.
- Maintenance risk assessment for work planned during the week of August 25, 2002.
- Maintenance risk assessment for work planned during the week of September 15, 2002.

b. Findings

No findings of significance were identified.

1R14 Non-Routine Evolutions (71111.14)

.1 Loss of Unit 1 14B Low Pressure Feedwater Heater

a. Inspection Scope

The inspectors reviewed the circumstances surrounding the loss of the Unit 1 14B low pressure feedwater heater on August 18, 2002 and the ensuing plant downpower and operator response. In particular, the inspectors verified that operator response was appropriate to the event and in accordance with procedures and training. The inspectors reviewed the licensee's plans, procedures, briefings, and contingency plans associated with the restoration of the heater and the return of Unit 1 to full power.

b. Findings

No findings of significance were identified.

.2 Unit 2 Power Suppression Testing

a. Inspection Scope

On August 23, 2002, Unit 2 reactor power was reduced to about 60 percent to conduct power suppression testing. The inspectors observed various aspects of this testing, including rod insertions and withdrawals, sampling of offgas to identify suspected leaking fuel rods, and power ascension.

b. Findings

No findings of significance were identified.

.3 Unit 1 Turbine Control Valve Slow Closure

a. Inspection Scope

The inspectors observed the licensee's response to an unexpected Unit 1 #1 turbine control valve closure which occurred on August 27, 2002. In particular, the inspectors reviewed the licensee's troubleshooting plan, observed post-maintenance testing activities, and reviewed root cause evaluation results and conclusions.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed selected Operability Evaluations (OEs) and Engineering Changes (ECs) of degraded and non-conforming conditions to ensure that operability was properly justified and the component or system remained available, such that no unrecognized increase in risk had occurred. The following evaluations were reviewed:

- OE02-05 Unit 1 and Unit 2 Unsealed Openings in Floor Slab
- EC337814 "O" Emergency Diesel Generator (EDG) Loss Of Lube Oil
- OE02-011 OA Diesel Fire Pump Engine Cooling
- OE02-002 Dry Tubes for Unit 1 Source Range Monitor (SRM) "B" and Intermediate Range Monitor (IRM) "G"
- OE01-20 2A Emergency Diesel Generator (EDG) Cylinder Exhaust Temperature Differences Exceed Recommended Value
- OE02-004 Unit 1 Main Steam Isolation Valve Limit Switch Temperatures

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed and observed the following post-maintenance testing activities involving risk significant equipment:

- WO99046557 Thermal Overload Replacement on LPCS Suction Valve
- WO99271263 Residual Heat Removal Service Water (RHRSW) 2E12-F445 Check Valve Inspection and Repair
- WO00454582 Replace Reactor Feedwater Line “B” Flow Transmitter
- WO00426541 Clean Air Side of 1VY03A Cooling Coil
- WO00418199 Unit 1 Standby Gas Treatment System Motor Welds
- WO99010045 Perform VT-2 Examination of 2DG023 and 2DG024
- WO00355600 Disassemble, Inspect, and Repair ‘0' EDG Cooler

During post-maintenance testing observations, the inspectors verified that the test was adequate for the scope of the maintenance work which had been performed, and that the testing acceptance criteria was clear and demonstrated operational readiness consistent with the design and licensing basis documents. The inspectors also verified that the impact of the testing had been properly characterized during the pre-job briefing; the test was performed as written and all testing prerequisites were satisfied; and that the test data was complete, appropriately verified, and met the requirements of the testing procedure. Following the completion of the test, the inspectors verified that the test equipment was removed, and that the equipment was returned to a condition in which it could perform its safety function.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed surveillance testing on risk-significant equipment and verified that the SSCs selected were capable of performing their intended safety function and that the surveillance tests satisfied the requirements contained in Technical Specifications, the Updated Final Safety Analysis Report (UFSAR), and licensee procedures. During surveillance testing observations, the inspectors verified that the test was adequate to demonstrate operational readiness consistent with design and licensing basis documents, and that the testing acceptance criteria was clear. The inspectors also verified that the impact of the testing had been properly characterized during the pre-job briefing; the test was performed as written and all testing prerequisites were satisfied; the test data was complete, appropriately verified, and met

the requirements of the testing procedure; and that the test equipment range and accuracy was consistent with the application, and the calibration was current. Following the completion of the test, the inspectors verified that the test equipment was removed, and that the equipment was returned to a condition in which it could perform its safety function.

The following surveillance testing activities were observed:

- LaSalle Operating Surveillance (LOS) DG-Q2, Attachment 1A, "1A DG Auxiliaries Inservice Test"
- LOS-LP-Q1, Attachment 1A, "LPCS System Inservice Test"
- LaSalle Electrical Surveillance (LES) EQ-112, "Inspection and Minor Maintenance of Environmentally Qualified Limitorque Valve Operators"
- LOS-RH-Q1, Attachment 2C, "RHR System Operability and Surveillance Test"
- LaSalle Technical Surveillance (LTS) 200-29, "1B Emergency Diesel Generator (EDG) Flow Balance Test"
- LES-DC-106, "Safe Shutdown (Appendix R) DC Emergency Light Inspection"
- LES-VG-01, "Heater Coil Performance Test for Standby Gas Treatment System"
- LOS-DC-Q2, Attachment 2A, "Battery Readings For Safety-Related 250 VDC and Division 1, 2, and 3, 125 VDC Batteries"
- LTS-400-17, "Control Room and Auxiliary Electric Equipment Room HVAC [Heating, Ventilation, and Air Conditioning] Isolation Damper Surveillance Smoke and Radiation Detection"
- LOS-RI-Q5, Attachment 1A, "Reactor Core Isolation Cooling (RCIC) System Pump Operability, Valve Inservice Tests in Modes 1, 2, and 3 and Cold Quick Start"

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

.1 Temporary Modification 2-0058-02: Jumper Cell 23 Of Unit 2 Div 2 125 VDC Battery

The inspectors reviewed Temporary Modification 2-0058-02 which installed a temporary jumper from cell 22 to cell 24, removing cell 23, on the Unit 2 Division 2, 125 VDC battery. The cell was removed due to a failure to maintain individual cell voltage above minimum limits. The inspectors reviewed the associated 10 CFR 50.59 safety evaluation against the system design basis documentation, including the UFSAR, and verified that the temporary modification had no adverse impact on safety. The inspectors also verified that the jumper installation was accomplished in accordance with LaSalle Electrical Procedure (LEP) DC-114, "Installing Jumper Around Cell in Division 1, 2, and 3, 125 Volt Battery," and that battery had not been adversely impacted.

.2 Temporary Modification 338092: Unit 2 Division 2 125 VDC Temporary Battery Cell

The inspectors reviewed Temporary Modification 338092 which installed a temporary battery cell into the Unit 2 Division 2, 125 VDC battery. The inspectors reviewed the associated 10 CFR 50.59 safety evaluation against the system design basis documentation, including the UFSAR, and verified that the temporary modification had no adverse impact on safety. In particular, the inspectors verified that the increased resistance as a result of the length of jumper cable utilized for the temporary modification did not impact the capability of the battery to perform its design function.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114-06)

a. Inspection Scope

The inspectors evaluated the adequacy of the licensee's conduct of drills and critique of performance through the observation of emergency preparedness exercise SEG 02C4-02 on August 7, 2002 and August 14, 2002. The inspectors reviewed the exercise scenario to identify the timing and location of classification, notification, and protective action measure activities, and for licensee expectations and response. The inspectors verified that these actions were accomplished in a timely manner.

b. Findings

No findings of significance were identified.

## 2. RADIATION SAFETY

**Cornerstone: Occupational Radiation Safety**

2OS1 Access Controls For Radiologically Significant Areas(71121.01)

.1 Plant Walkdowns and Radiological Boundary Verification

a. Inspection Scope

The inspector conducted walkdowns of the radiologically protected area to verify the adequacy of radiological area boundaries and postings. Specifically, the inspector walked down several radiologically significant work area boundaries (high and locked high radiation areas) in the Unit 1 and Unit 2 Reactor Buildings and the Radwaste Building to determine if these areas and selected radiation areas were properly posted and controlled in accordance with 10 CFR Part 20, licensee procedures, and Technical Specifications. The inspector challenged access control boundaries to verify that locked high radiation area (LHRA) access was properly controlled, including the adequacy of chain/padlock contingencies used on several LHRA doors in the Radwaste Building.

The inspector also reviewed the radiological conditions of work areas within those radiation and high radiation areas walked down to assess radiological housekeeping and contamination controls.

b. Findings

No findings of significance were identified.

.2 High Risk Significant, High Radiation Area, and Very High Radiation Area Access Controls

a. Inspection Scope

The inspector reviewed the licensee's procedures, radiation protection (RP) job standards and RP practices for the control of access to radiologically significant areas (high, locked high, and very high radiation areas) and assessed compliance with the licensee's Technical Specifications, procedures and the requirements of 10 CFR 20.1601 and 20.1602. In particular, the inspector evaluated the licensee's control of keys to LHRAs and very high radiation areas (VHRAs), the use of access control guards to control entry into such areas, and the licensee's methods for independently verifying proper closure and latching of LHRA doors upon area egress. The inspector reviewed key issuance/tracking logs for May 2002 - July 2002 and key inventory verification records for July 2002 to verify the adequacy of accountability practices and documentation. The inspector also reviewed the interface between RP and plant operations staff to assess procedure development, procedure adherence, and communication protocols relevant to plant operations that could impact radiological conditions. Additionally, the inspector reviewed a LHRA access control problem that occurred in the Off Gas Building on February 11, 2002, and assessed the adequacy of the licensee's problem identification, extent of condition evaluation and corrective actions.

b. Findings

No findings of significance were identified.

.3 Review of Radiologically Significant Work Practices

a. Inspection Scope

The inspector reviewed the licensee's procedures, RP job standards and RP practices for at power and initial entries into the drywell, and for traversing in-core probe (TIP) area access to determine the adequacy of the radiological controls and hazards assessment associated with such entries. Work instructions provided in radiation work permits (RWPs) and in high level activity briefings/worksheets used for drywell entries were also reviewed and their implementation discussed with RP management to determine their adequacy relative to industry practices and USNRC Information Notices. Additionally, the inspector reviewed the licensee's response to recent fuel leakage problems to determine if the licensee adequately evaluated the radiological impact of fuel degradation, including the potential for transuranic material, and implemented the

necessary radiological work controls. The inspector also reviewed the licensee's procedure and practices for dosimetry placement, use of multiple dosimetry and for extremity monitoring for work in high radiation areas having significant dose gradients for compliance with the requirements of 10 CFR 20.1201(c) and applicable Regulatory Guides.

b. Findings

No findings of significance were identified.

.4 Job-In-Progress Reviews

a. Inspection Scope

The inspector reviewed radiological work and/or as-low-as-is-reasonably-achievable (ALARA) plans, discussed work execution with involved RP staff and observed work area access controls/posting for two activities that took place in high or locked high radiation areas during the inspection. The review was performed to verify the adequacy of surveys and radiological controls, to review radiation worker and radiation protection technician practices and to assess overall radiological work performance.

b. Findings

No findings of significance were identified.

.5 Control of Non-Fuel Materials Stored in the Spent Fuel Pools

a. Inspection Scope

The inspector reviewed the licensee's programmatic controls and practices for the underwater storage of highly activated or contaminated materials (non-fuel) in the spent fuel or other storage pools. Radiation protection and fuel handling procedures were reviewed, involved staff were interviewed, the most recent inventory record for the spent fuel pools was reviewed and a walkdown of the refuel floor was conducted. The inspector assessed the adequacy of the administrative and physical controls for underwater storage of non-fuel materials for consistency with the licensee's procedures and with Regulatory Guide 8.38, Information Notice 90-33, and applicable Health Physics Positions described in NUREG/CR-5569.

b. Findings

No findings of significance were identified.

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed an RP self-assessment, Nuclear Oversight field observation reports, the condition report (CR) database, and a variety of individual CRs related to

radiation worker performance in radiologically significant areas and radiological access controls generated between September 2001 and July 2002. The inspector evaluated the effectiveness of the self-assessment process to identify, characterize, and prioritize individual problems and repetitive issues and trends, and to implement corrective actions to achieve lasting results. The inspector also evaluated the adequacy of LHRA door lock contingencies (chain/padlock) which have been used for an extended period of time on over 50 LHRA doors, and discussed corrective action timeliness and extent of condition deficiencies with station and RP management.

b. Findings

No findings of significance were identified.

## 3. SAFEGUARDS

### Cornerstone: Physical Protection (PP)

3PP1 Access Authorization (AA) Program (Behavior Observation Only) (IP 71130-01)

a. Inspection Scope

The inspector interviewed five supervisors and five non-supervisors (both licensee and contractor employees) to determine their knowledge level and practice of implementing the licensee's behavior observation program responsibilities. Selected procedures pertaining to the Behavior Observation Program and associated training activities were also reviewed. Also licensee fitness-for-duty semi-annual test results were reviewed. In addition, the inspector reviewed a sample of licensee self-assessments, audits, and security logged events. The inspector also interviewed security managers to evaluate their knowledge and use of the licensee's corrective action system.

b. Findings

No findings of significance were identified.

3PP2 Access Control (Identification, Authorization and Search of Personnel, Packages, and Vehicles) (IP 71130.02)

a. Inspection Scope

The inspector reviewed the licensee's protected area access control testing and maintenance procedures. The inspector observed licensee testing of all access control equipment to determine if testing and maintenance practices were performance based. On two occasions, during peak ingress periods, the inspector observed in-processing search of personnel, packages, and vehicles to determine if search practices were conducted in accordance with regulatory requirements. Interviews were conducted and records were reviewed to verify that security staffing levels were consistently and appropriately implemented. Also the inspector reviewed the licensee's process for limiting access to only authorized personnel to the protected area and vital equipment

by a sample review of access authorization lists and actual vital area entries. The inspector reviewed the licensee's program to control hard-keys and computer input of security-related personnel data.

b. Findings

No findings of significance were identified.

3PP3 Response to Contingency Events (71130.03)

The Office of Homeland Security (OHS) developed a Homeland Security Advisory System (HSAS) to disseminate information regarding the risk of terrorist attacks. The HSAS implements five color-coded threat conditions with a description of corresponding actions at each level. USNRC Regulatory Information Summary (RIS) 2002-12a, dated August 19, 2002, "NRC Threat Advisory and Protective Measures System," discusses the HSAS and provides additional information on protective measures to licensees.

a. Inspection Scope

On September 10, 2002, the USNRC issued a Safeguards Advisory to reactor licensees to implement the protective measures described in RIS 2002-12a in response to the Federal government declaration of threat level "Orange." Subsequently, on September 24, 2002, the OHS downgraded the national security threat condition to "Yellow" and a corresponding reduction in the risk of a terrorist threat.

The inspector interviewed licensee personnel and security staff, observed the conduct of security operations, and assessed licensee implementation of the threat level "Orange" protective measures. Inspection results were communicated to the region and headquarters security staff for further evaluation.

b. Findings

No findings of significance were identified.

3PP4 Security Plan Changes (71130.04)

a. Inspection Scope

The inspector reviewed Revision 67 (dated March 25, 2002) to the LaSalle Nuclear Power Station Physical Security Plan to verify that the changes did not decrease the effectiveness of the security plan. The referenced revisions were submitted in accordance with 10 CFR 50.54(p).

b. Findings

No findings of significance were identified.

## 4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

**Cornerstone: Mitigating Systems, Barrier Integrity, Public Radiation Safety, Physical Protection**

.1 Mitigating Systems and Barrier Integrity Performance Indicator Verification - 2nd Quarter 2002

a. Inspection Scope

The inspectors reviewed Licensee Event Reports (LERs), licensee memoranda, plant logs, and USNRC inspection reports to verify the following performance indicators for 2nd quarter of 2002.

- Safety System Functional Failures;
- Safety System Unavailability, High Pressure Injection;
- Reactor Coolant System Leakage.

The inspectors verified that the licensee accurately reported performance as defined by the applicable revision of Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline."

b. Findings

No findings of significance were identified.

.2 Mitigating Systems Performance Indicator Verification - 3rd Quarter 2002

The inspectors reviewed Licensee Event Reports (LERs), licensee memoranda, plant logs, and USNRC inspection reports to verify the following performance indicator for 3rd quarter of 2002.

- Safety System Unavailability, Emergency AC Power.

b. Findings

No findings of significance were identified.

.3 Public Radiation Safety Performance Indicator Verification - 2nd Quarter 2002

a. Inspection Scope

The inspector reviewed licensee data associated with the RETS/ODCM performance indicator to determine if the indicator was adequately assessed and reported consistent with industry guidelines in NEI 99-02, Revision 2. To evaluate and validate the performance indicator, the inspector reviewed the licensee's condition report (CR)

database and selected CRs generated between September 2001 and July 2002 to identify any potential occurrences that were not recognized by the licensee. The inspector evaluated the methodology used to calculate dose from effluents and reviewed gaseous and liquid effluent release data and associated offsite dose calculation results for selected periods between September 2001 and July 2002. The inspector also reviewed monthly performance indicator verification records generated as required by LS-AA-2150, "Monthly Performance Indicator Data Elements for RETS/ODCM Radiological Effluent Occurrences," for the period May 2001 through July 2002.

b. Findings

No findings of significance were identified.

.4 Physical Protection Performance Indicators Verification

a. Inspection Scope

The inspector verified the data for the Physical Protection Performance Indicators (PI) pertaining to Fitness-For-Duty Personnel Reliability, Personnel Screening Program, and Protected Area Security Equipment. Specifically, a sample of plant reports related to security events, security shift activity logs, fitness-for-duty reports, and other applicable security records were reviewed for the period between July 2001 and August 2002.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

a. Inspection Scope

During this inspection, the inspectors reviewed corrective actions associated with the following Problem Identification Forms (PIFs) and Condition Reports (CRs) to verify the effectiveness of the licensee's corrective actions:

- PIF L2000-03778: Unsealed Penetrations in the Unit 1 Division 2 Essential Switchgear Rooms.
- CR L2001-00350: Check Valves 1(2)E12-F445 Fail To Fully Seat Due to Scale and Debris Accumulation.

Attributes considered during the review of licensee actions to address the issues discussed above included the following:

- Complete and accurate identification of the problem in a timely manner commensurate with its significance and ease of discovery.

- Evaluations and disposition of performance issues associated with maintenance effectiveness.

- Evaluation and disposition of reportability issues.

- Consideration of extent of condition, generic implications, common cause, and previous occurrences.

- Classification and prioritization of the resolution of the problem commensurate with its safety significance.

- Identification of root cause and contributing causes of the problem.

- Identification of corrective actions which are appropriately focused to correct the problem.

- Completion of corrective actions in a timely manner commensurate with the safety significance of the issue.

b. Findings

PIF L2000-03778

Introduction

One Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure to adequately address unsealed openings between the Unit 1 Division 1 and Unit 1 Division 2 Essential Switchgear Rooms.

Description

During this inspection, the inspectors reviewed the licensee's corrective actions to address two previously identified unsealed 2.75-inch diameter core holes between the Unit 1 Division 1 and Unit 1 Division 2 Essential Switchgear Rooms, one which the inspector identified on July 5, 2000 was documented in Problem Identification Form (PIF) L2000-03778, and another which was identified during subsequent licensee walkdowns and documented in PIF L2000-03839. These nonconformances compromised the 3-hour external fire rating between the Unit 1 Division 1 and Division 2 Essential Switchgear Rooms.

As part of the immediate corrective actions, the corebores were sealed on July 18, 2000, in accordance with site design drawings under Action Request (AR) 990099133 and AR 990099442. In addition, an evaluation was conducted to demonstrate that with the degraded condition, the plant would be able to safely shutdown and maintain shutdown conditions with a postulated design basis fire in the Unit 1 Division 1 Essential Switchgear Room.

To address the extent of condition of the problem, a plan was developed which included walkdowns of both accessible and inaccessible areas of the auxiliary building. An

accessible area was defined as “an area that could be entered during power operations without challenging the operation of the plant, rendering a plant system or component inoperable, creating a personnel safety hazard, and or challenging As-Low-As-Reasonably-Achievable (ALARA) principles.” Core holes located inside energized panels were considered inaccessible. A walkdown of accessible areas of the auxiliary building was completed. Subsequently, a decision was made to not perform a walkdown of inaccessible areas. This decision was based on the fact that all readily accessible core holes located in fire rated assemblies protecting areas containing safety-related equipment had been inspected which accounted for about 90 percent of all core holes installed and that only one additional unsealed opening had been discovered.

On January 16, 2002, Effectiveness Review Action Tracking Item 81976 was closed which documented that the corrective actions taken to address the unsealed corebores were effective to prevent recurrence.

As discussed in Section 1R05 of this report, during a routine walkdown of the Unit 1 Division 1 Essential Switchgear Room, the inspectors identified dried paint on the side of a bus duct which led to the identification of missing exterior bus duct seals. This compromised the 3-hour external fire rating between the Unit 1 Division 1 and Division 2 Switchgear Rooms.

During the extent of condition reviews of inaccessible areas directed as a result of the inspectors identification of the missing exterior bus duct seals, licensee personnel identified two open core holes which were not properly sealed. Both were in areas considered inaccessible during the initial review. Specifically, one was located in the rear of Essential Switchgear 242Y cubicle 10 (2B Residual Heat Removal pump). The second was located in the rear of Essential Switchgear 252 cubicle 7 (2B Reactor Recirculation pump). Both of these unsealed Unit 2 openings were in similar locations as the unsealed Unit 1 openings identified by the inspectors in July 2000.

Licensee personnel conducted a root cause investigation (AR 102054) to investigate the ineffective extent of condition reviews and ineffective corrective actions associated with the unsealed fire rated assembly openings that had been identified in July 2000.

The licensee’s root cause investigation identified a flawed decision making process that resulted in an insufficient extent of condition scope as the cause of all unsealed penetrations not being identified in 2000. In particular, the root cause report documented that because 1) two unsealed core holes associated with inaccessible areas had been found while only one unsealed core hole had been found in the accessible areas, 2) only 10 percent of core holes are in inaccessible areas, and 3) the inaccessible areas had not been inspected, it would be expected that unsealed core holes would have a higher probability of being located in inaccessible areas than accessible areas. All unsealed core holes discovered subsequent to the extent of condition review were found in inaccessible areas. The licensee concluded that, had the inaccessible areas not been excluded from the extent of condition review, it was likely that all of the unsealed core holes would have been discovered as part of the extent of condition walkdowns. The report documented that the root cause for the failure to identify the missing external fire seals earlier was the fact that these seals were

inadvertently omitted from the periodic fire seal inspection conducted in accordance with LTS-1000-31, “Inspection of Bus Duct Seals on Units 1 & 2.”

The inspectors reviewed the subject root cause report, and conducted independent interviews and followup with licensee personnel. The following issues were identified:

- Missed Opportunity to Identify Missing External Bus Duct Seals
- Determination of Motor Control Center (MCC) Breaker Cubicle Accessibility

The inspectors determined that licensee personnel had missed an opportunity to identify that the external fire seals were missing during their extent of condition review following the discovery of open core holes in July 2000. Specifically, had a comprehensive review of all fire barriers, including bus duct seals, that were designed to be sealed in accordance with design drawings been conducted in response to the July 2000 findings, the missing external seals could have been identified much earlier.

The inspectors reviewed the licensee’s determination that the MCC breaker cubicles were inaccessible and identified that this conclusion failed to include important technical input from the auxiliary power system engineer and was based on only limited input from operations and the fire protection system engineer. A conversation with the auxiliary power system engineer revealed that opening backpanels for breakers associated with 6.9 kilovolt (kV) and 4160 volt (V) switchgear would not incur any potential for a transient or scram and these areas were therefore accessible. The completion of maintenance activities to seal the open core holes in July 2000, which required that the MCC breaker cubicle panels associated with the open holes be opened, also supported this conclusion.

Analysis

As discussed in Section 1R05, the inspectors assessed the issue utilizing the Significance Determination Process (SDP) as provided in Inspection Manual Chapter 0609, Appendix F, and the finding screened out as Green. The inspectors concluded that the licensee’s deferral of additional extent of conditions reviews was not appropriate and therefore the corrective action was inadequate.

Enforcement

10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” requires that measures be established to assure that conditions adverse to quality, such as defective material and equipment, and nonconformances are promptly identified and corrected. The failure to identify Unit 2 unsealed core holes as part of the corrective action to address unsealed core holes between the Unit 1 Division 1 and Unit 1 Division 2 Essential Switchgear Rooms identified on July 5, 2000 and documented in PIF L2000-03778 and PIF L2000-03839 was an example where the requirements of 10 CFR 50, Appendix B, Criterion XVI were not met and was a violation. However, because of its low safety significance and because it was entered into the corrective action program, the USNRC is treating this issue as a Non-Cited Violation (NCV 50-373/0205-02(DRP); 50-374/0205-02(DRP)), in accordance with Section VI.A.1 of the USNRC’s Enforcement

Policy. The issue was entered into the licensee's corrective action program as Condition Report (CR) 095253.

4OA3 Event Followup (71153)

.1 (Closed) Licensee Event Report (LER) 50-374/02-02, Revision 0: Loss of Voltage Control on the 2B EDG [Emergency Diesel Generator] Due to Failure of the Voltage Regulator Range Potentiometer R3.

On May 30, 2002, during post-maintenance testing of the 2B EDG, the EDG operated normally for about 15 minutes, then reactive load began to vary erratically. The EDG was subsequently unloaded and shutdown. Licensee personnel conducted a root cause investigation and determined that a voltage regulator potentiometer had failed.

Since the EDG was out of service when the failure occurred and the EDG was restored to operable status within the Limiting Condition for Operation (LCO) Allowed Outage Time (AOT), the safety significance of the event was minimal.

This issue was entered into the licensee's corrective action program as Action Tracking Item (ATI) 110032-17. This LER is closed.

4OA5 Other Activities

.1 Completion of Appendix A to TI 2515/148, Rev 1

The inspector completed the pre-inspection audit for interim compensatory measures at nuclear power plants, dated September 13, 2002.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Mr. G. Barnes and other members of licensee management at the conclusion of the inspection on September 27, 2002. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

Interim exits were conducted for:

- Radiation Protection inspection with Mr. G. Barnes on August 9, 2002.
- Safeguards inspection with Mr. G. Barnes on September 20, 2002.

4OA7 Licensee Identified Violations

The following violations of very low significance were identified by the licensee and are violations of USNRC requirements which meets the criteria of Section VI of the USNRC Enforcement Manual, NUREG-1600, for being dispositioned as NCVs.

**Cornerstone: Mitigating Systems**

Technical Specification Surveillance Requirement 3.8.1.6 requires that every 92 days each required fuel oil transfer system operates to automatically transfer fuel oil from storage tanks to the day tank. On August 12, 2002, licensee personnel identified that since May 2001, none of the automatic fuel oil transfer systems associated with the emergency diesel generators had been verified as required. This issue was entered into the licensee's corrective action program as CR 00119063. Because the licensee was able to demonstrate that the fuel oil transfer system could satisfy the surveillance testing requirements following identification of the issue, this violation is not more than of very low safety significance, and is being treated as a Non-Cited Violation (50-373/0205-03(DRP); 50-374/0205-03(DRP)).

Technical Specification Surveillance Requirement 3.8.7.1 requires that correct breaker alignments and voltage to required alternating current (AC) and direct current (DC) electrical power distribution systems be verified every 7 days. On August 18, 2002, licensee personnel identified that the Unit 2 bus voltage for 480-volt safety-related bus 236Y had not been consistently verified every 7 days since March 17, 2002. This issue was entered into the licensee's corrective action program as CR 00119654. Because the licensee was able to demonstrate that actual Unit 2 236Y bus voltage was adequate, this violation is not more than of very low safety significance, and is being treated as a Non-Cited Violation (50-374/0205-05(DRP)).

**Cornerstone: Barrier Integrity**

Technical Specification Surveillance Requirement 3.4.12.1 requires that reactor steam dome pressure be verified to be less than or equal to 1020 pounds per square inch gauge (psig) every 12 hours. On August 16, 2002, licensee personnel identified that since July 25, 2002, Unit 2 steam dome pressure had only been verified every 24 hours instead of every 12 hours as required. This issue was entered into the licensee's corrective action program as CR 00119654. Because the licensee was able to demonstrate that actual Unit 2 steam dome pressure never exceeded the 1020 psig requirement, this violation is not more than of very low safety significance, and is being treated as a Non-Cited Violation (50-374/0205-04(DRP)).

## KEY POINTS OF CONTACT

Licensee
G. Barnes, Site Vice President
M. Schiavoni, Station Manager
D. Czufin, Site Engineering Manager
D. Enright, Operations Manager
B. Finlay, Midwest ROG Security Manager
F. Gogliotti, Design Engineering Supervisor
G. Kaegi, Regulatory Assurance Manager
C. Wilson, Station Security Manager

Nuclear Regulatory Commission
W. Macon, Project Manager, NRR

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

| | | |
|---|---|---|
| 50-373/374/0205-01 | NCV | Essential Switchgear Room Degraded Fire Barriers |
| 50-373/374/0205-02 | NCV | Inadequate Corrective Actions to Address Degraded Fire Barriers |
| 50-373/374/0205-03 | NCV | Failure to Meet TS 3.8.1.6 Surveillance Requirement |
| 50-374/0205-04 | NCV | Failure to Meet TS 3.4.12.1 Surveillance Requirement |
| 50-374/0205-05 | NCV | Failure to Meet TS 3.8.7.1 Surveillance Requirement |

Closed

| | | |
|---|---|---|
| 50-373/374/0205-01 | NCV | Essential Switchgear Room Degraded Fire Barriers |
| 50-373/374/0205-02 | NCV | Inadequate Corrective Actions to Address Degraded Fire Barriers |
| 50-373/374/0205-03 | NCV | Failure to Meet TS 3.8.1.6 Surveillance Requirement |
| 50-374/0205-04 | NCV | Failure to Meet TS 3.4.12.1 Surveillance Requirement |
| 50-374/0205-05 | NCV | Failure to Meet TS 3.8.7.1 Surveillance Requirement |
| 50-374/02-02 | LER | Loss of Voltage Control on the 2B Emergency Diesel Generator |

Discussed

None

## LIST OF ACRONYMS USED

| | |
|---|---|
| AC | Alternating Current |
| ACE | Apparent Cause Evaluation |
| ALARA | As-Low-As-Is-Reasonably-Achievable |
| AOT | Allowed Outage Time |
| AR | Action Request |
| AT | Action Tracking |
| ATI | Action Tracking Item |
| CFR | Code of Federal Regulations |
| CR | Condition Report |
| CSCS | Core Standby Cooling System |
| CW | Circulating Water |
| DC | Direct Current |
| DCP | Design Change Package |
| DG | Diesel Generator |
| DRP | Division of Reactor Projects |
| DRS | Division of Reactor Safety |
| EC | Engineering Change |
| EDG | Emergency Diesel Generator |
| EPRI | Electric Power Research Institute |
| ER | Engineering Request |
| FCV | Flow Control Valve |
| FSAR | Final Safety Analysis Report |
| HD | Heater Drain |
| HPCS | High Pressure Core Spray |
| HSAS | Homeland Security Advisory System |
| HVAC | Heating, Ventilation, and Air Conditioning |
| IMC | Inspection Manual Chapter |
| IPEEE | Individual Plant External Events Evaluation |
| IRM | Intermediate Range Monitor |
| IR | Inspection Report |
| IST | Inservice Testing |
| kV | Kilovolt |
| LCO | Limiting Condition for Operation |
| LEP | LaSalle Electrical Procedure |
| LER | Licensee Event Report |
| LES | LaSalle Electrical Surveillance |
| LHRA | Locked High Radiation Area |
| LIP | LaSalle Instrument Maintenance Procedure |
| LMS | LaSalle Mechanical Surveillance |
| LOP | LaSalle Operating Procedure |
| LOS | LaSalle Operating Surveillance |
| LPCI | Low Pressure Coolant Injection |
| LPCS | Low Pressure Core Spray |
| LTS | LaSalle Technical Surveillance |
| MCC | Motor Control Center |
| MSIV | Main Steam Isolation Valve |

## LIST OF ACRONYMS USED

| | |
|---|---|
| NCV | Non-Cited Violation |
| NEI | Nuclear Energy Institute |
| NRC | Nuclear Regulatory Commission |
| ODCM | Offsite Dose Calculation Manual |
| OE | Operability Evaluation |
| OHS | Office of Homeland Security |
| P&ID | Piping and Instrumentation Drawing |
| PARS | Publicly Available Records |
| PIF | Problem Identification Form |
| psig | pounds per square inch gauge |
| RCIC | Reactor Core Isolation Cooling |
| RETS | Radiological Effluent Technical Specification |
| RHR | Residual Heat Removal |
| RHRSW | Residual Heat Removal Service Water |
| RIS | Regulatory Information Summary |
| RP | Radiation Protection |
| RR | Reactor Recirculation |
| RWP | Radiation Work Permit |
| SAC | Station Air Compressor |
| SBGT | Standby Gas Treatment |
| SDP | Significance Determination Process |
| SRM | Source Range Monitor |
| SSC | Structure, System, or Component |
| TCV | Turbine Control Valve |
| TDRFP | Turbine-Driven Reactor Feedwater Pump |
| TIP | Traversing Incore Probe |
| TRM | Technical Requirement Manual |
| UFSAR | Updated Final Safety Analysis Report |
| USNRC | United States Nuclear Regulatory Commission |
| V | Volt |
| VDC | Volts Direct Current |
| VHRA | Very High Radiation Area |
| WO | Work Order |
| WR | Work Request |

## LIST OF DOCUMENTS REVIEWED

Equipment Alignment

| | | |
|---|---|---|
| LOP-RH-04E | Unit 2 Residual Heat Removal System Electrical Checklist | Revision 13 |
| LOP-RH-2BM | Unit 2 “B” Residual Heat Removal System Mechanical Checklist | Revision 0 |
| LOP-RH-2CM | Unit 2 “C” Residual Heat Removal System Mechanical Checklist | Revision 0 |
| LOP-RH-11 | Standby Operation for the Low Pressure Coolant Injection System | Revision 23 |
| LOP-SA-01E | Unit 1 and Unit 0 Service Air System Electrical Checklist | Revision 6 |
| LOP-SA-01M | Unit 1 and Unit 0 Service Air System Mechanical Checklist | Revision 11 |
| LOP-SA-02E | Unit 2 Service Air System Electrical Checklist | Revision 6 |
| LOP-SA-02M | Unit 2 Service Air Line-Up Mechanical Checklist | Revision 5 |
| LOP-RI-01E | Unit 1 RCIC Electrical Checklist | Revision 11 |
| LOP-RI-01M | Unit 1 RCIC Mechanical Checklist | Revision 15 |
| LOP-RI-02E | Unit 2 RCIC Electrical Checklist | Revision 14 |
| LOP-RI-02M | Unit 2 RCIC Mechanical Checklist | Revision 17 |
| LOP-HP-01E | Unit 1 HPCS Electrical Checklist | Revision 10 |
| LOP-HP-01M | Unit 1 HPCS Mechanical Checklist | Revision 15 |
| UFSAR | Section 5.4.6, RCIC System | Revision 13 |
| Drawing M-101 | P&ID Unit - 1 RCIC System | Revision AL |
| Drawing M-147 | P& ID Unit - 2 RCIC System | Revision AH |
| LOP-RI-02 | Operation of the RCIC System for Level Control | Revision 27 |
| LOP-RI-05 | Preparation for Standby Operation of the RCIC System | Revision 24 |
| L-02-0246 | RCIC Piping Reroute to Feedwater, EC 334499 (Unit 1) and EC 334503(U2) | Revision 0 |
| EC 334499(U1)<br>EC 334503(U2) | RCIC Piping Reroute to Feedwater | Revision 00 |
| Drawing M-91 | P&ID Reactor Building Equipment Drains | January 12, 2002 |

| | | |
|---|---|---|
| J-0010 | RCIC Pump (Pump No. 210013/210014) - Vendor Manual | |
| J-0092 | Installation Manual for RCIC Turbine - Vendor Manual | |
| J-0093 | Terry RCIC Turbine Controls Guide - Vendor Manual | |
| LOP-VG-01E | Unit 2 Standby Gas Treatment Electrical Checklist | Revision 6 |
| LOP-VG-01M | Unit 2 Standby Gas Treatment Mechanical Checklist | Revision 7 |

Fire Protection

| | | |
|---|---|---|
| UFSAR | Appendix H | Revision 13 |
| TRM - Section 3.7.o | Fire Rated Assemblies | Revision 0 |
| OE02-005 | Unsealed Openings in Floor Slab | Revision 0 |
| ACE 95253 | Bus Duct Seal Deficiencies | |
| FSAR | Response to NRC Questions | October 1979 |
| LTS-1000-31 | Inspection of Bus Duct Seals on Unit 1 and Unit 2 | Revision 7 |
| Drawing NP-8-E-SE-01 | Bus Duct Penetration | Tech-Sil Inc. |
| Drawing 1E-1-3639 | Non-Segregated Bus Duct - Auxiliary Building Sections | Revision G |
| Drawing 1E-1-3641/3644 | Non-Segregated Bus Duct - Auxiliary Building Elevation 731’ | Revision 2 |
| Drawing S-572 | Auxiliary Building Floor Framing Plan - Elevation 731’ South Area | |
| Drawing S-1072 | Auxiliary Building Floor Framing Plan - Elevation 731’ North Area | |
| CR 095253 | Potential Bus Duct Fire Seal Deficiencies Discovered By NRC | |
| Risk Significance Determination | Bus Duct Seal Deficiencies at LaSalle | April 5, 2002 |
| EC 335434 | Evaluate Bus Duct Breeches Between Division 1&2 Switchgear Rooms | |
| Procedure CC-AA-201 | Plant Barrier Control Program | Revision 3 |
| WO99111623 | Mechanical Fire Penetration Inspection | January 28, 2002 |
| LMS-FP-22 | Fire Damper Visual Inspection | Revision 4 |

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|---|---|---|
| Work Order 99261751 | Fire Damper Visual Inspection | July 8, 2002 |
| Work Order 99261755 | Fire Damper Visual Inspection | June 25, 2002 |
| Work Order 99261762 | Fire Damper Visual Inspection | May 29, 2002 |
| Work Order 99261756 | Fire Damper Visual Inspection | May 2, 2002 |
| Work Order 99261752 | Fire Damper Visual Inspection | May 5, 2002 |
| Work Order 99261757 | Fire Damper Visual Inspection | April 29, 2002 |
| Work Order 99261767 | Fire Damper Visual Inspection | March 28, 2002 |
| Work Order 99261754 | Fire Damper Visual Inspection | March 28, 2002 |
| Work Order 99261765 | Fire Damper Visual Inspection | March 21, 2002 |
| Work Order 99261764 | Fire Damper Visual Inspection | March 15, 2002 |
| Work Order 99261753 | Fire Damper Visual Inspection | March 6, 2002 |
| Work Order 99261761 | Fire Damper Visual Inspection | February 27, 2002 |
| Work Order 99261760 | Fire Damper Visual Inspection | February 21, 2002 |
| Work Order 99261758 | Fire Damper Visual Inspection | February 14, 2002 |
| Work Order 99011491 | Fire Damper Visual Inspection | March 27, 2001 |
| Work Order 98013097 | Fire Damper Visual Inspection | October 12, 2000 |
| | List of 2002 TRMs Items Impaired | August 21, 2002 |
| | List of 2002 Non TRMs Items Impaired | August 21, 2002 |
| | List of 2002 Transient Combustibles | August 21, 2002 |
| | List of Plant PBI(s) | August 20, 2002 |
| WR 00066274 | Repair Deficiencies in Fire Rated Block Walls | September 25, 2002 |

Operator Licensing Requalification

| | | |
|---|---|---|
| ESG 44 | RCIC Trip/B RR FCV Failure/Feedwater Heater Isolation/ATWS | Revision 0 |
| LGA-001 | RPV Control | Revision 3 |
| LGA-010 | Failure to Scram | Revision 3 |
| OP-AA-101-111 | Rules and Responsibilities of On-Shift Personnel | Revision 0 |

| | | |
|---|---|---|
| OP-AA-103-102 | Watchstanding Practices | Revision 0 |
| OP-AA-103-103 | Operation of Plant Equipment | Revision 0 |
| OP-AA-103-104 | Reactivity Management Controls | Revision 0 |
| OP-AA-104-101 | Communications | Revision 0 |

Maintenance Rule Implementation

| | | |
|---|---|---|
| Functional Failure and Availability Data | Heater Drain System (HD) | July 2001-<br>June 2002 |
| Functional Failure and Availability Data | RCIC System | July 2001-<br>June 2002 |
| Functional Failure and Availability Data | Circulating Water System | July 2001-<br>June 2002 |
| ACE 114758 | Fisher Positioners | July 10, 2002 |
| L2001-04795 | 2HD0026D Stem Disc Separation | August 21, 2001 |
| CR 112372 | 1B Moisture Separator Reheater Drain Valve Controller Erratic | June 9, 2002 |
| | Control Room Logs | August 2000-<br>August 2002 |
| | Maintenance Work Order Backlog - RCIC System | |
| | Maintenance Rule (a)(1) Action Plan for Circulating Water System | August 19, 2002 |
| LOS-RH-Q1 | RHR(LPCI) and RHR Service Water Pump and Valve Inservice Test For Modes 1, 2, 3, 4, and 5 | Revision 50 |
| | Maintenance Rule Expert Panel Scoping Determination | RCIC System |
| Functional Failure and Availability Data | Residual Heat Removal Service Water System | July 2001-<br>June 2002 |
| | Maintenance Rule Expert Panel Scoping Determination | Heater Drain System |
| | Maintenance Rule Expert Panel Scoping Determination | Circulating Water System |

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|---|---|---|
| | Maintenance Rule Expert Panel Scoping Determination | RHRSW System |
| P&ID M-87 | Core Standby Cooling System | |
| AT 00043413-02 | Root Cause Evaluation Report - Keepfill Checkvalve Failures | March 9, 2001 |
| AR 00039491 | L2000-06806 1B RHRSW Low Pressure | |
| AR 00039721 | L2000-06826 Check Valve Dirty | |
| AR 0040916 | L2000-07332 1E12-F451, 1B RHRSW Normal Keep-Filled Check Valve | |
| AR 00043413 | L2001-00350 2B RHRSW Keep Fill System Failure | |
| AR 00086826 | U-2 Division 2 RHRSW Low Pressure Alarm After Securing System | |
| AR 00094431 | Unit 1 Division 2 RHRSW Low Pressure Alarm | |
| AR 00094916 | 1E12-F448 RHRSW Normal Keep Fill Check Failed Seat Leak Test | |
| AR 00105512 | 2B RHRSW Low Pressure After Securing Both RHRSW Pumps | |
| AR 00107498 | RHRSW Normal Keep Filled Check Valve Leaks By Again | |
| AR 00107719 | Division 2 RHRSW Normal Keep Fill Check Valve Leakby | |
| AR 00114158 | 1B RHRSW Low Header Pressure Alarm | |
| AR 00112720 | 2 ‘B’ RHRSW Low Pressure Alarm | |
| AT 00109060-03 | Common Cause Analysis Report - Keepfill Check Valve Failures | May 22, 2002 |

Maintenance Risk Assessment and Emergent Work Evaluation

| | |
|---|---|
| LaSalle 7-Day Look-Ahead Schedule | Various |

Personnel Performance During Nonroutine Plant Evolutions

| | | |
|---|---|---|
| EC 338471 | Evaluation of Power Level For Restoring a Low Pressure Feedwater Heater to Service and For Steady State Operation With a Low Pressure Feedwater Heater String Out Of Service | Revision 0 |
| CR 119722 | Loss of 14B Low Pressure Heater on High Level | August 18, 2002 |
| | Prompt Investigation Report - CR 119722: Loss of 14B Low Pressure Heater on High Level | August 21, 2002 |
| MA-AA-716-004 | Complex Troubleshooting Plan - CR 119722 | Revision 0 |
| LOA-HD-101 | Heater Drain System Trouble | Revision 7 |
| LOP-HD-04 | Removal and Restoration of a Low Pressure Heater String During Normal Power Operations | Revision 16 |
| CR 00120058 | Initial Troubleshooting of 14B Low Pressure Heater Trip | August 22, 2002 |
| WO00478657-01 | Disassemble and Inspect EHC Line From Below #1 Turbine Control Valve Accumulator | August 25, 2002 |
| WO00478657-02 | Repair EHC Fluid Leak On #1 TCV Accumulator | August 26, 2002 |
| Dwg 114E2388 | Accumulator and Control Manifold Installation | |
| CR 00120773 | #1 Turbine Control Valve Strainer Plugged | August 27, 2002 |

Operability Evaluations

| | | |
|---|---|---|
| OE02-005 | Unit 1 and Unit 2 Unsealed Openings in Floor Slab | |
| EC337814 | “0” EDG Loss Of Lube Oil | July 5, 2002 |
| OE02-011 | OA Diesel Fire Pump Engine Cooling | July 17, 2002 |
| OE02-002 | Dry Tubes for Unit 1 SRM B & IRM G | January 20, 2002 |
| EC 334907 | Indications Observed in the In-Core Dry Tubes | Revision 0 |
| OE02-004 | Unit 1 MSIV Limit Switch Temperatures | Revision 0 |
| OE01-020 | 2A Emergency Diesel Generator - 2DG01K | Revision 0 |

Post-Maintenance Testing

| | | |
|---|---|---|
| WO99046557 | Thermal Overload Replacement for LPCS Suction Valve | July 9, 2002 |
| WO99271263 | Residual Heat Removal Service Water (RHRSW) 2E12-F445 Check Valve Inspection and Repair | July 16, 2002 |
| LOS-RH-Q1 | Unit 2 B Residual Heat Removal Service Water System Operability and Inservice Test | Revision 50 |
| WO00454582 | Replace Reactor Feedwater Line “B” Flow Transmitter | August 26, 2002 |
| LIP-FW-501 | Unit 1 Reactor Feedwater Inlet Flow Calibration | August 26, 2002 |
| CR 00120269 | Loss of B Feedwater Header Flow Signal | August 22, 2002 |
| CR 00120515 | “B” Feedwater Header Flow Failed Upscale | August 26, 2002 |
| WO00426541 | 1VY03A Clean Air Side of 1VY03A Cooling Coil | August 26, 2002 |
| WO00355600 | Heat Exchanger Inspection Data Sheet - Unit ‘0' Emergency Diesel Generator | September 3, 2002 |
| LTS-600-19 | Corbicula and Zebra Mussel Inspection | Revision 5 |
| ER-AA-340-1002 | Service Water Heat Exchanger Inspection Guidance | Revision 0 |
| ER-AA-340-1002, Att. A | Heat Exchanger Inspection Data Sheet for 0DG01A | Revision 0 |
| ER-AA-335-015 | VT-2 Visual Examination | Revision 1 |
| CC-AA-309 | Minimum Wall Evaluation for Line 1DG018A in Subsystem 1CS-64 | Attachment 1 |
| NES-MS-03.1 | Piping Minimum Wall Thickness Calculation | Revision 2 |
| H00012361 | 1VG02C/Unit 1 VG Train: Various Maintenance | |
| H00012225 | 1VY03C/B&C RHR PMP Rm Fan/Cooler: 1VY03A Cleaning Air Side | |

Surveillance Testing

| | | |
|---|---|---|
| LOS-DG-Q2 Att. 1A | 1A DG Auxiliaries Inservice Test | Revision 29 |
| LOS-DG-Q2 Att. 1A | 1A DG Auxiliaries Inservice Test | July 2, 2002 |
| LOS-LP-Q1 Att. 1A | LPCS System Inservice Test | July 9, 2002 |

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|---|---|---|
| LES-EQ-112 | Inspection and Minor Maintenance of Environmentally Qualified Limitorque Operators | July 17, 2002 |
| LOS-RH-Q5 | RHR (LPCI) and RHR Service Water Pump and Valve Inservice Test for Modes 1,2,3,4, and 5 | Revision 50 |
| | LaSalle IST Surveillance Acceptance Criteria Manual | Revision 5 |
| UFSAR Section 5.4 | Residual Heat Removal (RHR) System | Revision 13 |
| Drawing M-142, | Unit 2 RHR System | Revision AU |
| LES-VG-01 | Heater Coil Performance Test For Standby Gas Treatment System | August 28, 2002 |
| LES-DC-06 | Safe Shutdown (Appendix R) DC Emergency Lighting Inspections | August 27, 2002 |
| MA-AA-723-350 | Emergency Lighting Battery Pack Quarterly Inspections | |
| LTS-200-29 | 1B DG Flow Balance Test, Division III | Revision 4 |
| CR 00120008 | Service Water Cubicle Area Cooler 1VY02A As-Found Cooling Water Flow Minimum | |
| L-002404 | CSCS Cooling Water System “Road Map” Calculation | Revision 2 |
| Calculation 97-200 | VY Cooler Thermal Performance Model - 1(2)VY01A and 1(2)VY02A | Revision A |
| Calculation L-00121 | HPCS Pump Cubicle Cooler Ventilation System | Revision 2 |
| Calculation 97-197 | Thermal Model of Comed/LaSalle Station Unit 1 and 2 HPCS Diesel Generator Coolers | Revision A |
| Calculation L-1355 | LaSalle County Station CSCS Hydraulic Model | Revision 4 |
| WO00385371 | Safe Shutdown (Appendix R) DC Emergency Lighting Pack Quarterly | February 13, 2002 |
| WO0331533 | Safe Shutdown (Appendix R) DC Emergency Lighting Pack Quarterly | September 4, 2001 |
| WO0035657 | Safe Shutdown (Appendix R) DC Emergency Lighting Pack Quarterly | October 28, 2001 |
| WO0040931 | Safe Shutdown (Appendix R) DC Emergency Lighting Pack Quarterly | May 25, 2002 |
| LOS-RI-Q5 Attachment 1A | RCIC System Pump Operability, Valve Inservice Tests in Modes 1, 2, and 3 and Cold Quick Start | Revision 16 |

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|---|---|---|
| LTS-400-17 | Control Room and Auxiliary Electric Equipment Room HVAC Isolation Damper Surveillance Smoke and Radiation Detection | Revision 13 |
| LTS-400-17 | Control Room and Auxiliary Electric Equipment Room HVAC Isolation Damper Surveillance Smoke and Radiation Detection | May 1, 2000 |
| LOP-VE-01 | Auxiliary Electric Equipment Room HVAC Operation | Revision 21 |
| LOP-VC-01 | Control Room HVAC Operation | Revision 19 |
| LTS-400-17 | Control Room and Auxiliary Electric Equipment Room HVAC Isolation Damper Surveillance Smoke and Radiation Detection | September 27, 2002 |

Temporary Plant Modifications

| | | |
|---|---|---|
| WO 99138152 | 2DC14E Contingency Jumper Failed Cell Unit 2 Division 2 Battery | April 23, 2002 |
| LEP-DC-114 | Installing Jumper Around Cell in 125 VDC Battery | Revision 0 |
| LES-DC-101B | Division 2 125 Volt Battery Inspection for Units 1 and 2 | Revision 8 |
| L-002749 | Unit 1 and 2 125VDC Battery Analysis for 57 of 58 Cells | May 11, 2002 |
| 50.59 Review | 50.59 Review for LEP-DC-114 | May 30, 2001 |
| AR 00116217 | Unit 2, Division 2, 125 VDC Battery Cell #23 Low Individual Cell Voltage (ICV) | July 18, 2002 |
| D36 | 125 VDC and 250 VDC Battery Intercell Connector Resistance | Revision 1 |
| EC 338092 | Bypass a Degraded Cell by a Temporary Cell in Unit 2, Division II, 125 VDC Battery 2DC14E | Revision 0 |
| EC 338092 | Bypass a Degraded Cell by a Temporary Cell in Unit 2, Division II, 125 VDC Battery 2DC14E | Revision 1 |
| LEP-DC-104 | Installation of Division 2 Batteries | Revision 2 |
| DCP 338092 | Jumper a Degraded Cell of Unit 2, Division II, 125 VDC Battery 2DC14E | Revision 0 |
| LES-DC-101B | Division II 125 Volt Battery Inspection for Unit 1 and 2 | |
| UFSAR | Section 8.3.2.1.1, Class 1E DC Power System | Revision 14 |

Drill Evaluation

| | | |
|---|---|---|
| SEG 02C4-02 | General Station Emergency Procedure Scenario | July 29, 2002 |
| EP-AA-125-1002 | Emergency Response Organization Performance Indicators Guidance | Revision 0 |
| SEG 02C4-02 | General Station Emergency Procures Scenario | August 15, 2002 |

Access Authorization (AA) Program

| | | |
|---|---|---|
| SY-AA-102 | Exelon's Nuclear Fitness-for-Duty Program | Revision 5 |
| SY-AA-102-201 | Call-Outs for Unscheduled Work | Revision 3 |
| SY-AA-102-203 | FFD Follow-up Testing | Revision 3 |
| SY-AA-102-205 | Fitness-for-Duty (FFD) Appeal | Revision 2 |
| SY-AA-102-221 | Processing Fitness-for-Duty Allegations | Revision 1 |
| SY-AA-103-512 | Continual Behavioral Observation Program | Revision 3 |
| TQ-AA-118 | Nuclear General Employee Training-N-GET | Revision 3 |
| Security Event Reports | | September 2001 - September 2002 |
| | LaSalle Semi-Annual Fitness-for-Duty Report Second Period - 2001 | February 6, 2002 |
| | LaSalle Semi-Annual FFD Report First Period - 2002 | August 28, 2002 |

Access Control

| | | |
|---|---|---|
| SY-AA-101-112 | Searching Personnel and Packages | Revision 5 |
| SY-AA-101-115 | Controlling Gates | Revision 2 |
| SY-AA-101-117 | Processing Visitors and Vehicles | Revision 5 |
| SY-AA-101-119 | Control of Receiving Warehouse | Revision 2 |
| SY-AA-101-120 | Control of Security Keys and Cores | Revision 1 |
| SY-AA-101-122 | Testing Security Equipment | Revision 5 |

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|---|---|---|
| SY-AA-101-123 | Searching Vehicles and Cargo/Material | Revision 6 |
| SY-AA-103-511 | Request for Unescorted Access | Revision 7 |
| SY-AA-103-514 | Fabrication of Security Badges | Revision 6 |
| SY-AA-103-518 | Out Processing of Personnel (Employee and Contractor) | Revision 4 |
| LS-AA-125 | Corrective Action Program (CAP) Procedure | Revision 2 |
| In-Processing Report | LaSalle Station Outage LIR09 | January 11, 2002 |
| 1st Quarter 2002 Focus Self-Assessment Report | Access Authorization, Access Control and Security Plan Changes | January 28 - February 1, 2002 |
| 3rd Quarter 2002 Focus Self-Assessment Report | Access Authorization, Access Control and Security Plan Changes | August 19 - 23, 2002 |
| Nuclear Oversight Continuous Assessment Report | NOA -LS-02-1Q | January - March, 2002 |
| Nuclear Oversight Continuous Assessment Report | NOA -LS-02-2Q | April - June, 2002 |
| Security Event Reports | | September, 2001 - September, 2002 |

Performance Indicator Verification

| | |
|---|---|
| Unit 1 and Unit 2 Operator Logs | Various |
| HPCS Monthly Unavailability Data Sheets | April 2001 Through June 2002 |
| Safety System Functional Failure Data Sheets | April 2001 Through June 2002 |
| Reactor Coolant System Leakage Data Sheets | April 2001 Through June 2002 |
| Emergency AC Unavailability Data Sheets | April 2001 Through June 2002 |
| Unit 1 and Unit 2 Licensee Event Reports | April 2001 Through June 2002 |
| FFD Personal Reliability, Personnel Screening, and Security Equipment Performance Indicator Data | Third Quarter 2001 through Second Quarter 2002 |
| Security Event Reports | September, 2001 - September, 2002 |

Identification and Resolution of Problems

| | | |
|---|---|---|
| CR L2000-03778 | Unsealed Penetration in the Floor of the Unit 1 Division 2 Switchgear Room | July 7, 2000 |
| CR L2000-03839 | Unsealed Corebore in the Floor of the Unit 1 Division 2 Switchgear Room | July 11, 2000 |
| WR 99099133 | Replace Firestop in Unsealed Penetration in the Floor of the Unit 1 Division 2 Switchgear Room | |
| WR 99099442 | Replace Firestop in Unsealed Penetration in the Floor of the Unit 1 Division 2 Switchgear Room | |
| ATM 31811-14 | Apparent Cause Evaluation (ACE) - Unsealed Penetrations in the Floor of the Unit 1 Division 2 Switchgear Room | July 28, 2000 |
| SDP Evaluation, Revision 1 | Assessment of Unsealed Penetrations in the Unit 1 Division 2 Switchgear Room Floor | August 3, 2000 |
| AR 81976 | Effectiveness Review - Unsealed Penetrations in the Floor of the Unit 1 Division 2 Switchgear Room | |
| CR 098204 | Large Box of Construction Era Spare Parts Found in 4 kV Switchgear | March 7, 2002 |
| CR 102383 | Spare Parts and Containers of Paint and Grease in DC Panel | April 4, 2002 |
| CR L2000-05128 | NRC Identified: Degraded Grounding Strap Seals in Diesel Generator Rooms | September 13, 2000 |
| CR L2000-06022 | Unsealed Core Hole in Fire Barrier Floor | October 26, 2000 |
| CR 095253 | Potential Bus Duct Fire Seal Deficiencies Discovered By NRC | February 14, 2002 |
| CR 095455 | Unsealed Openings Found in Fire Rated Barriers | February 15, 2002 |
| A/R 96004 | Extent of Condition Review For Fire Penetration Seals | |
| LTS-1000-31 | Inspection of Bus Duct Seals on Units 1 & 2 | Revision 7 |
| LTS-1000-29 | Water Tight Door and Penetration Inspection | Revision 8 |
| LTS-1000-40 | Mechanical Fire Penetration Inspections | Revision 5 |
| LTS-1000-41 | Electrical Fire Penetration Inspections | Revision 7 |
| LTS-1000-42 | Fire Assembly Integrity Inspection | Revision 7 |

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|---|---|---|
| L1999-04533 | Failure to Identify Need for 50.59 | September 29, 1999 |
| AR 00030261 | L2000-03178, Closure of Actions Related to PIF L1999-04280 | July 2, 2001 |
| AR 00016802 | L1999-04533, Failure to Identify Need for 50.59 | March 8, 2000 |
| CR L2000-06806 | 1B RHR Service Water Low Pressure Condition | November 27, 2000 |
| CR L2000-06826 | 1E12-F445 Check Valve Dirty | November 30, 2000 |
| CR L2000-07332 | 1E12-F451 1B RHR Service Water Check Valve Failed | December 22, 2000 |
| ER 01-0001 | Operability Determination 1E12-F445 Check Valve | Revision 1 |
| ER 01-0001 | Operability Determination 1E12-F445 Check Valve | Revision 2 |
| ER 01-0002 | Operability Determination 1E12-F445 Check Valve | Revision 1 |
| AT 000443413 | Root Cause Report - Unit 1 and 2 RHR Service Water Keep Fill Check Valve Not Seating | March 9, 2001 |
| AR 00086826 | Unit 2 Division 2 RHRSW Low Pressure Alarm | December 15, 2001 |
| AR 00094431 | Unit 1 Division 2 RHRSW Low Pressure Alarm | February 8, 2002 |
| AR 00094916 | 1E12-F448 RHRSW Keep Fill Check Valve Failed | February 13, 2002 |
| AR 00105512 | 2B RHRSW Low Pressure Alarm | April 26, 2002 |
| AR 00107719 | Division 2 RHRSW Keep Fill Check Valve Leakby | May 10, 2002 |
| AR 00112720 | 2B RHRSW Low Pressure Alarm | June 21, 2002 |
| AR 00114158 | 1B RHRSW Low Pressure Alarm | July 2, 2002 |
| AR 00109060 | Common Cause Analysis - Check Valve Failures | July 12, 2002 |
| L-002720 | Evaluation of the RHRSW Keep Fill Surveillance | Revision 0 |

Other

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|---|---|---|
| EC 0000338175 | Operation of the Reactor Recirculation Pumps With Seal Pressures Less Than 200 Psig or Greater Than 800 Psig | Revision 0 |