July 12, 2002

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

SUBJECT: LASALLE COUNTY STATION
NRC INSPECTION REPORT 50-373/02-04(DRP);50-374/02-04(DRP)

Dear Mr. Skolds:

On June 30, 2002, the NRC completed an inspection at your LaSalle County Station. The enclosed report presents the results of that inspection. The results of this inspection were discussed on June 28, 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. Specifically, this inspection focused on reactor safety.

Based on the results of this inspection, the inspectors identified three issues of very low safety significance (Green) that were determined to involve violations of NRC requirements. However, because of their very low safety significance and because these issues were entered into your corrective action program, the NRC is treating these issues as a Non-Cited Violations in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these Non-Cited Violations, you should provide a response with a basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at LaSalle County Station.

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Sincerely,

***/RA/***

Bruce L. Burgess, Chief
Branch 2
Division of Reactor Projects

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

Enclosure: Inspection Report 50-373/02-04(DRP);
50-374/02-04(DRP)

cc w/encl: Site Vice President - LaSalle County Station
LaSalle County Station Plant Manager
Regulatory Assurance Manager - LaSalle
Chief Operating Officer
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Senior Vice President - Mid-West Regional
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REGION III

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| Docket Nos: | 50-373, 50-374 |
| License Nos: | NPF-11, NPF-18 |
| Report Nos: | 50-373/02-04(DRP); 50-374/02-04(DRP) |
| Licensee: | Exelon Generation Company |
| Facility: | LaSalle County Station, Units 1 and 2 |
| Location: | 2601 N. 21st Road<br>Marseilles, IL  61341 |
| Dates: | April 1 through June 30, 2002 |
| Inspectors: | E. Duncan, Senior Resident Inspector<br>G. Wilson, Resident Inspector<br>D. Kimble, Resident Inspector - Monticello<br>P. Lougheed, Division of Reactor Safety<br>W. Slawinski, Radiation Protection Specialist<br>G. Wright, Division of Reactor Projects<br>J. Yesinowski, Illinois Department of Nuclear Safety |
| Approved by: | Bruce L. Burgess, Chief<br>Branch 2<br>Division of Reactor Projects |

## SUMMARY OF FINDINGS

IR 05000373/02-04(DRP), IR 05000374/02-04(DRP), on 4/1/02-6/30/02; Exelon; LaSalle County Station, Units 1 & 2; Heat Sink Performance; Post-Maintenance Testing; Non-Routine Evolutions; Radioactive Material Control Program.

This report covers a 13-week routine resident inspection. The inspection was conducted by the LaSalle resident inspectors, the Monticello resident inspector, and two regional specialist inspectors. Three Green findings were identified which were the subject of Non-Cited Violations (NCVs). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609 "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

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

Inspector Identified Findings

- Green. Debris collected on the drywell floor clogged the drywell floor drain sump due to an inadequate sump screen design. This rendered the leakage detection system incapable of identifying increases in unidentified leakage as required by the Technical Specifications.

  The issue was of very low safety significance since other means remained available to detect an increase in unidentified leakage. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the failure to properly review for suitability the drywell floor drain sump screen. (Section 40A3)

- Green. Licensee personnel failed to properly perform a governor adjustment procedure associated with the 1A Emergency Diesel Generator (EDG) which unexpectedly rendered the EDG inoperable.

  The issue was of very low safety significance since the 1A EDG was restored to service within the Technical Specification Allowed Outage Time. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified. (Section 1R19)

**Cornerstone: Public Radiation Safety**

- Green. A Non-Cited Violation of Technical Specification 5.4.1 was identified for the failure to conduct an adequate radiological survey and identify a discrete radioactive particle on an individual that alarmed a portal monitor. The failure caused a discrete radioactive particle to be released from the site undetected.

The finding was determined to be of very low safety significance since the public dose impact from the discrete radioactive particle was not more than 0.005 rem total effective dose equivalent and there were not more than five radioactive material event occurrences during the inspection period. (Section 2PS3)

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 full power until May 17, 2002, when the unit was shutdown for a planned maintenance outage. The outage was completed and Unit 1 was restarted and synchronized to the grid on May 26, 2002. Following power ascension activities, Unit 1 operated at 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 full power until April 9, 2002, when the unit was shut down for a planned maintenance outage. The outage was completed and Unit 2 was restarted and synchronized to the grid on April 24, 2002. Following power ascension activities, Unit 2 operated at 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

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

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors verified that the design features and licensee procedures protecting systems from the effects of hot weather and high winds were adequate. The inspectors reviewed the Updated Final Safety Analysis Report (UFSAR), LaSalle Abnormal Operating Procedures (LOA) TORN-001, “High Winds/Tornado,” Revision 2, and LOA-DIKE-001, “Lake Dike Damage/Failure,” Revision 2, and other related documentation to verify that the plant was adequately protected from the effects of hot weather and high winds. The inspectors reviewed and verified that prescribed operator actions were appropriate to maintain readiness of essential systems to the maximum extent practicable.

The inspectors reviewed the LaSalle Summer 2002 Readiness Plan and verified that the plan assessed potential items that could affect unit operation during the summer. The inspectors verified that scheduled critical maintenance associated with the switchyard was completed and that non-critical maintenance which was not completed was accurately identified.

The inspectors reviewed LaSalle Operating Surveillance (LOS) ZZ-A2, “Preparation for Summer Operations,” completed May 14, 2002, and independently verified that dampers associated with the Emergency Diesel Generator Ventilation, and Essential Switchgear Room Ventilation systems were properly positioned for hot weather conditions.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

During Unit 2 maintenance outage L2P01, the inspectors performed a walkdown of accessible portions of the 2A and 2B Residual Heat Removal (RHR) systems and the Unit 2 “C” and “D” Safety Relief Valves (SRVs) and flowpaths to verify system availability for primary and alternate decay heat removal. This verification was conducted to ensure that sufficient alternate decay heat removal paths were present during maintenance activities to replace the remaining Unit 2 SRVs which had the potential to compromise the availability of the “C” and “D” SRVs.

The inspectors also performed a walkdown of the accessible portions of the 1A RHR system on May 6, 2002, to verify system availability during scheduled maintenance on the 1B and 1C RHR systems.

On May 7, 2002, the inspectors performed a walkdown of the 1B Emergency Diesel Generator (EDG) and the Unit 0 EDG to verify system availability during scheduled maintenance on the 1A EDG.

A walkdown of the Unit 1 Division 2 Core Standby Cooling System (CSCS) was performed by the inspectors on May 13, 2002, to verify system availability during scheduled maintenance on the Unit 1 Division 1 CSCS.

The inspectors reviewed documentation to determine correct system lineup. These documents included plant procedures, such as mechanical and electrical checklists, as well as plant drawings. The inspectors identified any discrepancies between the existing equipment lineup and the correct lineup.

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 2J: Unit 1 Primary Containment
- Fire Zone 3J: Unit 2 Primary Containment
- Fire Zone 3K: Unit 2 Outboard Main Steam Isolation Valve Room
- Fire Zone 5B10: Unit 2 Motor-Driven Reactor Feedwater Pump Room
- Fire Zone 5B7: Unit 1 Hydrogen Seal Oil Units
- Fire Zone 5B8: Unit 2 Hydrogen Seal Oil Units
- Fire Zone 5B9: Unit 1 Motor-Driven Reactor Feedwater Pump 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 also observed. The inspectors verified that extinguishers were located appropriately and that access to the extinguishers was unobstructed. Fire hoses were verified to be installed at their designated 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 was inspected and verified to be properly installed and in good physical condition.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors reviewed the Updated Final Safety Analysis Report (UFSAR) and related flood analysis documentation to identify the design internal flood levels for areas which contained safety-related equipment. The inspectors also reviewed the licensee's internal flooding update to its risk analysis to identify the most risk significant flooding scenarios.

Based on the insights gained from the above reviews, the inspectors selected the Core Standby Cooling System (CSCS) pump rooms, the turbine building condenser pit, the 120-inch de-icing lines, and the Reactor Core Isolation Cooling (RCIC)/Containment Spray (CS)/RHR "A" sump for additional review. The reviews were conducted to independently verify that the licensee's flooding mitigation plans and equipment were consistent with design requirements and risk analysis assumptions. Specifically, the inspectors reviewed the maintenance history for the sump pumps, check valves, and level switches for RHR "A" pump room sump 1RE07 and CSCS sump 1DT02. The inspectors observed penetrations and the condition of penetration sleeve seals below the flood line in the Unit 1 CSCS rooms. In addition, the inspectors observed the general condition of watertight doors including seals, and door position limit switches for the Unit 1 and Unit 2 CSCS rooms and entry into the Unit 2 condenser pit area. Further, the inspector interviewed engineering, operations, and training personnel regarding their knowledge of the most recent Probabilistic Risk Assessment (PRA) insights on internal flooding. The inspectors also reviewed the licensee's assessment of cable pull boxes susceptible to external flooding, including discussions with engineering staff regarding the licensee's ongoing evaluation of NRC Information Notice 2002-012, "Submerged Safety-Related Electrical Cables."

The inspectors also reviewed Work Orders 99253390 and 990023863, which implemented LaSalle Technical Surveillance (LTS) 1000-29, "Watertight Door and Penetration Inspection," on January 25, 2002 and November 13, 2000 for Unit 1 and Unit 2 respectively. The inspectors independently verified that the watertight doors and selected penetrations reviewed in the surveillance were intact. In particular, the inspectors observed the sealing of equipment below the floodline, such as electrical conduits, the presence of holes or unsealed penetrations in floors and walls between flood areas, the adequacy of watertight doors between flood areas, and determined whether sources of potential internal flooding that had not been previously analyzed existed.

The inspectors also reviewed LaSalle Abnormal Operating Procedure (LOA) FLD-001, "Flooding," Revision 4, dated July 14, 2001, and verified that actions prescribed in the procedure could reasonably be used to achieve the desired actions. The inspectors verified that problems related to flooding, including past flooding events, were included in the licensee's corrective action program and were properly identified and prioritized for resolution.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

Biennial Review of Heat Sink Performance

a. Inspection Scope

The inspector reviewed documents associated with the Unit 1 and Unit 2 RHR and High Pressure Core Spray (HPCS) system room coolers. These coolers were selected based on their high Risk Achievement Worth (RAW) in the licensee's probabilistic safety analysis. The inspector reviewed completed surveillance tests and associated calculations, and performed independent calculations to verify that these tests ensured adequate heat transfer capability. The inspector reviewed the documentation to confirm that the test or inspection methodology was consistent with Electrical Power Research Institute (EPRI) standard NP-7552, "Heat Exchanger Performance Monitoring Guidelines." The inspector also reviewed documentation to verify that acceptance criteria were consistent with the design basis values contained in the UFSAR and Technical Specifications. The inspector reviewed documentation to verify that testing instruments were within calibration and discussed the use of these instruments with the system engineer to verify that the instruments were used correctly. The inspector reviewed documentation to verify that the licensee took appropriate actions to verify the physical integrity of the heat exchangers. The inspector also reviewed documentation to verify that the licensee had appropriate controls in place to ensure availability of the ultimate heat sink under adverse conditions.

The inspector reviewed corrective action documents concerning heat exchanger and heat sink performance issues to verify that the licensee had an appropriate threshold for identifying issues. The inspectors also evaluated the effectiveness of these corrective actions, including the engineering justification for operability, when applicable.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

On May 6, 2002, the inspectors observed licensed operator re-qualification training scenario ESG43, "High Pressure Core Spray (HPCS) Water Leg Pump Trip /"A" Control Rod Drive (CRD) Pump Trip With "B" CRD Pump Reduced Capacity/Anticipated Transient Without Scram (ATWS)."

The inspectors verified crew performance in terms of clarity and formality of communication; the ability to take timely and safe actions; 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 group dynamics.

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 structures, systems, and components (SSCs). The following specific activities were reviewed:

- The inspectors reviewed the maintenance risk assessment for work planned during the week of March 31, 2002.

- The inspectors reviewed the maintenance risk assessment for work planned during the week of May 5, 2002.

- The inspectors reviewed the maintenance risk assessment for work planned during the week of May 12, 2002.

- The inspectors reviewed the maintenance risk assessment for work planned during the week of May 19, 2002.

- The inspectors reviewed the maintenance risk assessment for work planned during the week of June 2, 2002.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

.1 Routine Operability Evaluation Review

a. Inspection Scope

The inspectors reviewed selected Operability Evaluations (OEs) and Engineering Changes (ECs) of degraded and non-conforming conditions affecting mitigating systems and barrier integrity 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:

- OE02-08: Unit 1 Drywell Floor Drain
- OE 97052: 2C RHR Injection Line
- OE 02-010: Unit 2 Hydraulic Actuator 2TZ-VD003C For EDG Ventilation Damper 2VD03YA Only Strokes 3.0 Inches Instead of 3.5 Inches
- OE 02-09 Reactor Core Isolation Cooling (RCIC) System Data Collection
- EC 336192: Unit 2 Division 1, 125 Volt Direct Current Battery Cell #21 Charge
- EC 337298 Unit 1A Reactor Recirculation Flow Control Valve

b. Findings

No findings of significance were identified.

.2 (Closed) Unresolved Item 50-373/0203-02(DRP); 50-374/0203-02(DRP): OE 02-06, Unit 1 and Unit 2 Secondary Containment Leakage.

As discussed in NRC Inspection Report 50-373/02-03(DRP); 50-374/02-03(DRP), during the performance of LaSalle Technical Surveillance (LTS) 300-3, “Secondary Containment

Leak Rate Test," pressure in the secondary containment was identified as abnormally low. This occurred with the reactor building ventilation (VR) and Standby Gas Treatment (VG) systems of both units shutdown and with the turbine building ventilation (VT) systems of both units operating. Due to the unexpected condition, the test was aborted and the issue was evaluated under OE 02-06, "Unit 1 and Unit 2 Secondary Containment Leakage," to determine whether the operability of the secondary containment was adversely impacted. The evaluation concluded that based upon historical testing data and walkdowns, the Standby Gas Treatment (VG) system and secondary containment would perform all of their design functions.

Licensee personnel subsequently identified degraded VT system supply ductwork which resulted in a large negative turbine building differential pressure. Although this aided the ability of the VG system to draw down the secondary containment with respect to the atmosphere, this condition threatened the capability of the VG system to draw down the secondary containment to a pressure less than the turbine building pressure. This was important to ensure that air flow was always into the secondary containment for processing.

The inspectors reviewed OE 02-06 which documented that the functions of the Standby Gas Treatment system discussed in the Standard Review Plan (SRP) included the ability to maintain the secondary containment vacuum greater than or equal to -0.25 inches water gauge with respect to atmosphere and maintain the pressure in the secondary containment less than the pressure external to the secondary containment (i.e. negative with respect to adjacent structures such as the turbine building). Unresolved Item 50-373/0203-04(DRP); 50-374/0203-04(DRP)) was opened pending a determination of whether the secondary containment testing acceptance criteria, which did not include a verification of negative pressure with respect to the turbine building, was adequate.

During this inspection period, the inspectors determined that the licensee was only required to meet the surveillance acceptance criteria specified in the Technical Specifications and was therefore not required to verify that the pressure in the secondary containment was negative with respect to the turbine building. As a result, the inspectors concluded that the secondary containment testing acceptance criteria was adequate. The VT system was subsequently repaired. The licensee was considering administrative controls, such as monitoring turbine building pressure, to prevent recurrence of the issue.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors reviewed Operator Workaround (OWA) 338/339 (Unit 1/Unit 2) regarding feedwater heater trips during reactor recirculation pump downshifts to identify any potential adverse impact on the function of mitigating systems or the ability to implement an abnormal or emergency operating procedure.

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:

- WO 99237316-01 Unit 2 Safety Relief Valve Testing Per LTS-500-19
- WO 99263772-01 Inspect 1HS-VY003
- WO 99180664-01 Unit 1 "A" EDG Woodward Governor Adjustments
- WO 00414392-01 Unit 0 EDG Breaker Inspection
- WO 00387494-01 Unit 0 EDG Governor Inspection
- WO 00449604-01 Unit 2B EDG Potentiometer Replacements
- WO 00450211-03 2E51-F080 Failed to Reopen During Routine Cycling

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

Introduction

Work Order (WO) 99180664: 1A EDG Woodward Governor Adjustments

One "Green" finding and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified due to the failure to properly perform LaSalle Electrical Procedure (LEP) DG-105, "Maintenance and Adjustment of Woodward U 8 Governor Shutdown Solenoids," which rendered the EDG inoperable.

Description

On May 8, 2002, the inspectors observed the performance of LEP-DG-105 on the 1A EDG to evaluate the adequacy of post maintenance testing following the cleaning and adjustment of the governor shutdown solenoid. The licensee did not perform the post maintenance testing activity in accordance with the approved written procedure. Step 14 of Attachment A to the procedure was not performed which energizes the shutdown solenoid prior to performing final solenoid adjustments. The failure to perform the step in accordance with the procedure resulted in an unexpected start of the 1A EDG since the associated shutdown circuitry was never energized. The 1A EDG restarted when the oil pressure switches were reset allowing the air start motor pistons to re-engage. The licensee conducted a root cause investigation of the event. The event increased the scheduled unavailability of the 1A EDG.

Analysis

The inspectors reviewed this issue against the guidance contained in Appendix B, "Issue Dispositioning Screening," of Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports." In particular, the inspectors compared this finding to the findings identified in Section 4, "Insignificant Procedure Errors," to Appendix E, "Examples of Minor Issues," of IMC 0612 to determine whether the finding was minor. The inspectors determined that finding had greater safety significance than similar issues described in IMC 0612, Appendix E, Sections 4.a, 4.b, and 4.f. This safety significance was attributed to the fact that the procedural error resulted in a loss of availability of the 1A EDG.

The failure to properly follow LEP-DG-105, "Maintenance and Adjustment of Woodward U 8 Governor Shutdown Solenoids," was a human performance error that resulted in additional unavailability of the 1A EDG, warranting further review in accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)." The inspectors conducted this review utilizing the "SDP Phase 1 Screening Worksheet For IE [Initiating Events], MS [Mitigating Systems], and B [Barrier Integrity] Cornerstones." The inspectors determined that although the unavailability of the 1A EDG was affected, because the loss of the 1A EDG did not exceed the Technical Specification Allowed Outage Time (AOT) and no weather-related impact existed, that the finding was screened as Green.

Enforcement

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions. The failure to properly perform LEP-DG-105 was an example where the requirements of 10 CFR 50, Appendix B, Criterion V, 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 NRC is treating this issue as a Non-Cited Violation (NCV 50-373/0204-02(DRP); 50-374/0204-02(DRP)), in accordance with Section VI.A.1 of the NRC's Enforcement Policy. This issue was entered into the licensee's corrective action program as CR 017346.

1R20 Refueling and Outage Activities (71111.20)

LaSalle Unit 1 and Unit 2 Maintenance Outage Observations

a. Inspection Scope

On April 9, 2002, Unit 2 was shut down for planned maintenance outage L2P01. The outage was completed and Unit 2 was restarted and synchronized to the grid on April 24, 2002. On May 17, 2002, Unit 1 was shut down for planned maintenance outage L1P03. The outage was completed and Unit 1 was restarted and synchronized to the grid on May 26, 2002. The inspectors evaluated L2P01 and L1P03 outage activities to ensure that the licensee considered risk in developing the outage schedule; adhered to administrative risk reduction methodologies developed to control plant configuration; developed mitigation strategies for losses of key safety functions; and adhered to the operating license and Technical Specification requirements that ensured defense-in-depth. The following specific outage-related activities were accomplished:

- Outage Plan Review

The inspectors reviewed the licensee's outage control plan and verified that the licensee had appropriately considered risk, industry experience, and previous site-specific problems. The inspectors also confirmed that contingency plans for losses of key safety functions had been established.

- Monitoring of Shutdown Activities

The inspectors observed portions of the Unit 2 shutdown for Maintenance Outage L2P01 and the Unit 1 shutdown for L1P03 and verified that the plant was operated in accordance with regulatory requirements and plant procedures. In particular, the inspectors verified that cooldown restrictions were followed.

- Licensee Control of Outage Activities

The inspectors verified that the licensee appropriately managed the configuration of equipment during the outage to ensure that a defense-in-depth commensurate with the outage risk plan for key safety functions and applicable Technical Specifications was maintained. The inspectors also verified that outage activities were appropriately managed. In particular, out-of-service activities were reviewed to ensure that tags were properly hung to support the out-of-service. Reactor coolant system instrumentation was verified to be configured to provide adequate indication of reactor vessel pressure, temperature, and level. In addition, the inspectors routinely observed decay heat removal system parameters and verified that decay heat removal systems were functioning properly. The inspectors verified that flow paths, configurations, and alternative means for inventory addition and decay heat removal were consistent with the outage risk plan. The inspectors verified that the licensee maintained secondary containment in accordance with Technical Specifications.

- Monitoring of Heatup and Startup Activities

The inspectors verified that Technical Specifications, license conditions, and other prerequisites, commitments, and administrative procedure prerequisites for mode changes were met prior to changing modes or plant configurations. The inspectors conducted a walkdown of containment prior to restart and verified that debris had not been left which could adversely impact the Emergency Core Cooling System (ECCS) suction strainers.

- Identification and Resolution of Problems

The inspectors verified that the licensee identified problems related to outage activities at an appropriate threshold and entered them into the corrective action program.

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 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:

- LOS-RH-Q3, Attachment 2B, “2B RHR (LPCI) and RHR Service Water Valve Inservice Test for Cold Shutdown or Refuel Condition.”
- LTS-1100-14, “Unit 2 Scram Insertion Times.”
- LOS-RH-Q1, “RHR and RHR Service Water Pump and Valve Inservice Test for Modes 1, 2, 3, 4, and 5" on May 14, 2002.
- LaSalle Instrument Surveillance (LIS) NB-104A, “Unit 1 Reactor Vessel Low Water Level 1 ECCS [Emergency Core Cooling System] Division 1 Initiation and Level 2 RCIC [Reactor Core Isolation Cooling] Initiation Instrument Channels A & C Calibration” on May 16, 2002.
- LTS-300-3, “Secondary Containment Leakage Test,” on May 3, 2002.
- LTS-200-228, “2A DG Flow Balance Test,” on June 19, 2002.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

Temporary Modification 336420 - Seal Weld on 2E12-F009

The inspectors reviewed Temporary Modification 336420 which installed a seal weld on shutdown cooling isolation valve 2E12-F009 to address a body-to-bonnet leak. 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 conducted a walkdown of the temporary modification and compared the installed configuration against the configuration prescribed in the design drawings. A review of Non-Destructive Testing (NDT) examination results was also accomplished.

Temporary Modification 337326 - Repair to 2E22-S001 Heat Exchanger Partition Plate

The inspectors reviewed Temporary Modification 337326 which installed a temporary patch over an erosion hole in the 2B EDG cooler partition plate. 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 repair was accomplished in accordance with American Society of Mechanical Engineers (ASME) Code requirements and that heat exchanger flow had not been adversely impacted.

b. Findings

No findings of significance were identified.

## 2. RADIATION SAFETY

**Cornerstone: Public Radiation Safety**

2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs (71122.03)

.1 Reviews of Radiological Environmental Monitoring Reports and Data

a. Inspection Scope

The inspector reviewed the Annual Radiological Environmental Operating Reports for calendar years 2000 and 2001, and the results of monthly radiological environmental monitoring analyses for the first quarter of 2002. The inspector also reviewed the land use census, changes made to the Offsite Dose Calculation Manual (ODCM), and the results of the inter-laboratory comparison program for 2000 and 2001, that were related to the radiological environmental monitoring program. These reviews were conducted to verify that the radiological environmental monitoring program (REMP) was implemented as required by Technical Specifications and the ODCM, and to verify that any changes did not affect the licensee's ability to monitor the impacts of radioactive effluents on the environment. Additionally, the inspector evaluated the present locations of the environmental monitoring stations and the types of samples collected from each location to determine if they were consistent with the ODCM and NRC guidance in Regulatory Guides 1.21, 4.8 and an associated NRC Branch Technical Position.

b. Findings

No findings of significance were identified.

.2 Walkdowns of the Radiological Environmental Monitoring Stations and Meteorological Tower

a. Inspection Scope

The inspector walked down four of the nine environmental air sample monitoring stations to determine whether they were located as described in the ODCM, to assess equipment material condition and operability, and to verify that monitoring station orientation, vegetation growth control, and equipment configuration allowed for the collection of representative samples. The meteorological tower was also walked down to verify that the tower was sited adequately and that instrumentation was available and installed consistent with Regulatory Guide 1.23. Meteorological data readouts and recording instruments located at the tower and as provided by the plant process computer were verified to be operable and were compared to determine if there were any line loss differences.

b. Findings

No findings of significance were identified.

.3 Reviews of Radiological Environmental Monitoring Equipment Maintenance and Testing

a. Inspection Scope

The inspector selectively reviewed the most recent environmental air sample pump calibration records, the REMP contractor's pump calibration procedures and meteorological tower equipment calibration records for calendar year 2001 and the first quarter of 2002, to verify that the testing program for this equipment was implemented consistent with Technical Specifications and procedural requirements. The most recent calibration records for both the rotameter currently used by the REMP technician to field check air sample pumps and the rotameter standard used to calibrate the field rotameter, were reviewed to verify that instrument certifications met industry standards and had traceability to the National Institute of Standards and Technology. The inspector

discussed air sample pump maintenance practices with the contractor REMP technician to assess the adequacy of the preventive maintenance program for this equipment and to evaluate the technician's knowledge of the program and procedures.

b. Findings

No findings of significance were identified.

.4 Reviews of REMP Sample Collection and Analyses

a. Inspection Scope

The inspector accompanied the contractor REMP technician and observed the individual collect an Illinois River surface water sample and change-out air particulate filters at four environmental air sampling stations. The observations were made to determine whether samples were collected in accordance with the contractor's sampling procedure and to determine if appropriate practices were used to ensure sample integrity. Additionally, the inspector observed the technician complete pump flow and pump vacuum field checks to verify that they were accomplished adequately, consistent with the vendor's procedures. The inspector assessed the analytical detection capabilities of the contract laboratory used by the licensee to analyze its environmental sample, and discussed with radiation protection management its plans to revise the ODCM relative to the laboratory inter-comparison program. The assessment was conducted to determine if the radiological environmental sample analysis and inter-laboratory comparison programs were implemented consistent with the ODCM and industry standards, and to verify that the vendor was capable of performing adequate radiological measurements.

b. Findings

No findings of significance were identified.

.5 Unrestricted Release of Material From Radiologically Controlled Areas (RCAs)

a. Inspection Scope

The inspector evaluated the licensee's procedures and practices for the unrestricted release of material from RCAs and for the survey of personnel leaving the RCA and the site. Specifically, the inspectors reviewed the licensee's personnel survey and unconditional release program to verify that: (1) radiation monitoring instrumentation used to perform surveys for unrestricted release were appropriate; (2) instrument sensitivities were consistent with NRC guidance contained in Inspection and Enforcement Circular 81-07 and Health Physics Positions in NUREG/CR-5569 for both surface contaminated material and material in volumetric form; (3) criteria for survey and unconditional release conformed to NRC requirements; and (4) licensee procedures were technically sound and provided appropriate guidance for survey techniques. The inspector reviewed the licensee's most recent 10 CFR Part 61 analyses and the licensee's assessment of the plant's radionuclide mix to determine if the potential impact of difficult to detect contaminants (such as those that decay by electron capture) was adequately captured in the unrestricted release program.

Additionally, the inspector reviewed the circumstances associated with the inadvertent release of a worker from the site on February 18, 2002, with a discrete radioactive particle clung to the worker's coat. Specifically, the inspector reviewed the licensee's root cause investigation of the incident, station procedures associated with external dose assessment and with assessment of radiologically contaminated personnel, and the incident was discussed with radiation protection staff involved in its follow-up. The inspector also independently calculated the deep dose equivalent which the worker received from the particle to verify the accuracy of the licensee's dose assessment.

b. <u>Findings</u>

<u>Introduction</u>

A Green finding and an associated Non-Cited Violation (NCV) of Technical Specification 5.4.1 were identified for the failure to conduct adequate radiological surveys of a contaminated individual in accordance with station procedures, resulting in the inadvertent release of a discrete radioactive particle from the site.

<u>Description</u>

On February 18, 2002, an electrical maintenance department (EMD) worker wearing an overcoat that was contaminated with a 120,000 disintegration per minute (54 nanocurie) discrete radioactive particle, alarmed the main access facility (MAF) portal radiation monitor as the individual attempted to leave the LaSalle Station. (Station portal monitors employ plastic scintillation detectors that are primarily sensitive to gamma radiation, and are set to alarm at an integrated activity level of 50 nanocuries). The individual contacted the radiation protection (RP) department as required by station procedure and reported the alarm to a radiation protection technician (RPT). The technician used a small article monitor and surveyed the personnel effects that the worker carried in a bag. The monitor did not alarm and the bag was cleared. The two individuals then proceeded back to the MAF portal monitors where the EMD worker and subsequently his overcoat were separately passed through the portal monitor. Although the monitor again alarmed as the worker wore his coat thru the monitor, the coat itself did not cause an alarm as it was hand-held by the RPT and moved past the monitor detectors. The worker then cleared the monitor without wearing the coat and was allowed to leave the site along with his coat and other personal belongings. Since the coat had never been in the RCA according to the worker and the coat did not cause the monitor to alarm when it was separately passed through the monitor by the RPT, the technician assumed the prior monitor alarms were false and no contamination was present on the coat. The coat was not surveyed by the RPT using an appropriate instrument such as a Geiger-Mueller (GM) survey meter, as required by station procedure.

On February 21, 2002, the EMD worker returned to the site wearing the overcoat for the first time since February 18, and immediately proceeded to the MAF portal monitors because the alarms received three days earlier concerned the individual. The monitor again alarmed as the worker passed through it wearing the coat and the problem was reported to the RP department. Radiation protection staff performed a thorough survey of the coat using a portable GM survey meter and identified the discrete radioactive particle located on the lower outside back of the coat. The particle was removed and determined to be comprised primarily of cobalt-60.

Follow-up surveys of those areas where the EMD worker had either worn or stored the coat at the plant between February 18 and February 21, identified no contamination. Similarly, no contamination was identified in the EMD worker's home or vehicle. The licensee's investigation was unable to determine the origin of the particle or how it got onto the worker's coat. The licensee concluded that had a portable GM survey instrument been used to survey the worker and his coat during the initial response to the portal monitor alarm, the particle would have been identified on February 18 and not released off-site.

To assess the total effective dose equivalent (TEDE) received by the individual, the licensee interviewed the individual and determined that the coat had previously been worn to the station and successfully cleared the portal monitors on February 14, and was not brought to the station on February 15, 16 or 17. Consequently, the licensee assumed that the particle was picked-up by the coat on February 18. Based on conservative assumptions of the thicknesses and densities of the coat and the other clothing worn by the worker under the coat (consistent with NUREG/CR-5873) and the amount of time the coat was worn between February 18 and February 21, the licensee calculated an estimated deep dose equivalent to the worker from the particle of approximately 0.5 mrem.

Analysis

This issue represented a performance deficiency associated with the Public Radiation Safety Cornerstone that affected the cornerstone objective because a discrete radioactive particle was inadvertently released into the public domain. Specifically, the survey performed on February 18 was not completed consistent with the licensee's procedure for the assessment of radiologically contaminated personnel and resulted in an occurrence in the licensee's radioactive material control program. Since the procedure, had it been followed, adequately covered this condition, this occurrence could have been prevented. Consequently, the issue represents a finding that is more than minor. Although the discrete radioactive particle produced a TEDE as defined in 10 CFR Part 20, the dose did not exceed one mrem. Therefore, consistent with the Pubic Radiation Safety Significance Determination Process (SDP) for Radioactive Material Control, this finding is not analyzed using the SDP. However, since the finding is greater than minor but not greater than Green, it is dispositioned as a Green Non-SDP Finding of very low safety significance consistent with Manual Chapter 0612.

Enforcement

Technical Specification 5.4.1 requires, in part, that procedures be established, implemented and maintained that cover the activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A, which includes procedures for radiation surveys and contamination controls. Procedure RP-AA-350, "Assessment of Radiologically Contaminated Personnel," requires in Section 5.3 that RPT surveys of individuals that alarm a contamination monitor include surveys of all areas that caused the alarm using a GM or other approved instrument. The failure to survey the EMD worker's coat and other clothing using a hand-held GM survey instrument on February 18, 2002, was a violation of Technical Specification 5.4.1. However, since the licensee documented this issue in its corrective action program (Condition Report and Root Cause Investigation Action Tracking Item No. 96125) and because the violation is of very low safety significance, the violation is being treated as a Non-Cited Violation (NCV 50-373/0204-03; 50-374/0204-03).

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed recent Nuclear Oversight field observations and an audit performed in 2001, and condition reports (CRs) generated in 2001 through April 2002 relative to the REMP and radioactive material control programs. In addition, the inspector reviewed the results of REMP program self-assessments completed in April 2001 and April 2002, including the corrective actions taken for the 2001 self-assessment. These reviews were conducted to determine if the licensee adequately identified individual problems and trends, evaluated contributing causes and extent of condition, and developed corrective actions to prevent recurrence. The inspector also discussed with the radiation protection manager plans to strengthen the radioactive material control program during outages through an enhanced “greeter” initiative, and plans to improve REMP Coordinator transition and change management should future staffing changes occur.

b. Findings

No findings of significance were identified.

## 4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

**Cornerstones: Initiating Events and Barrier Integrity**

.1 Unplanned Scrams Per 7,000 Critical Hours and Scrams With a Loss of Normal Heat Removal Performance Indicator (PI) Review

a. Inspection Scope

The inspectors reviewed Licensee Event Reports (LERs) and operator log entries for Unit 1 and Unit 2 to determine the number of scrams that occurred during the previous four quarters and compared that number to the number in the performance indicator. The inspectors also reviewed licensee Monthly Operating Reports and operator logs to verify the accuracy of the number of critical hours reported. The inspectors also reviewed the licensee’s basis for crediting normal heat removal capability for each of the reported reactor scrams. The inspection was performed utilizing the performance indicator definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, “Regulatory Assessment Indicator Guideline,” Revision 2 dated November 2001.

b. Findings

No findings of significance were identified.

.2 Reactor Coolant System Specific Activity Performance Indicator

a. Inspection Scope

The inspector reviewed the dose equivalent iodine calculation procedure, the reactor coolant system (RCS) specific activity performance indicator procedure and interviewed members of the licensee's chemistry staff involved in the determination and verification of RCS specific activity. The inspector also reviewed the licensee's Unit 1 and Unit 2 chemistry sample analysis results for maximum dose equivalent iodine for the twelve month period beginning May 2001. These reviews were performed to verify that the licensee adequately determined dose equivalent iodine values, and to verify adherence to station procedures and to the guidance contained in Nuclear Energy Institute (NEI) 99-02 relative to assessing and reporting the RCS specific activity performance indicator. Additionally, the inspector observed a chemistry technician collect an RCS sample to verify that the sample was collected properly and discussed with chemistry staff the method used to calculate dose equivalent iodine to verify its adequacy.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

a. Inspection Scope

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 L2000-4349 | Configuration Control Issues |
| • PIF L2000-03778 | Fire Seals |
| • CR 88165 | 0 EDG Tripped on Low Lube Oil Pressure |

Attributes considered during the review of licensee actions 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

No findings of significance were identified.

4OA3 Event Follow-up (71153)

**Cornerstones: Initiating Events and Mitigating Systems**

.1 (Closed) Licensee Event Report (LER) 50-374/02-01: “Transient Increases in Unit 2 Unidentified Leakage Due to Clogged Drywell Floor Drain Sump Screen”

a. Inspection Scope

The inspectors evaluated Licensee Event Report (LER) 50-374/02-01: “Transient Increases in Unit 2 Unidentified Leakage Due to Clogged Drywell Floor Drain Sump Screen.”

b. Findings

Introduction

A finding of very low significance (Green) and an associated NCV of 10 CFR 50, Appendix B, Criterion III, “Design Control” related to a modification performed on the drywell floor drain screen were identified by the inspectors.

Description

On March 16, 2002, the Unit 2 unidentified leakage in the drywell reached 3.0 gallons per minute (gpm) which exceeded the previous days calculation by more than 2.0 gpm, thereby exceeding Technical Specification 3.4.5.d limits for increased unidentified leakage within a 24 hour period. The increase was transient and returned to normal values. Troubleshooting identified that debris collected on the drywell floor from previous maintenance activities had clogged the drywell floor drain screen due to inadequate design and restricted water flow through the floor drain to the drywell floor sump. The licensee redesigned and installed a new floor drain screen cover and initiated a periodic maintenance activity to perform a thorough cleaning of the drywell after each refueling outage to prevent recurrence. The inspectors determined that although the drywell floor drain sump flow monitoring system was inoperable, other multiple independent means for detecting drywell leakage were still available and working as designed. Since there were other redundant systems available for leak detection, this Technical Specification 3.4.5.d violation was determined to be of very low safety significance.

Analysis

The inspectors reviewed this issue against the guidance contained in Appendix B, "Issue Dispositioning Screening," of Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports." In particular, the inspectors compared this finding to the findings identified in Appendix E, "Examples of Minor Issues," of IMC 0612 to determine whether the finding was minor. Following that review, the inspectors concluded that the guidance in Appendix E was not applicable or useful for the specific finding since no examples were provided which involved equipment that was inadvertently rendered inoperable as a direct result of an inadequate design change. As a result, the inspectors compared this performance deficiency to the minor questions contained in Section C, "Minor Questions," to Appendix B of IMC 0612. The inspectors concluded that the issue was more than minor since the finding, if left uncorrected, could become a more significant safety concern. This conclusion was based on the fact that a small reactor coolant system leak would not be detected by the drywell floor drain sump monitoring system because the sump screen was degraded and clogged. Without adequate detection, a small initial leak could become larger and therefore become a more significant concern prior to its detection by other means.

As a result, the inspectors reviewed this issue in accordance with Inspection Manual Chapter (IMC) 0609 "Significance Determination Process (SDP)." The inspectors conducted this review utilizing the "SDP Phase 1 Screening Worksheet For IE [Initiating Events], MS [Mitigating Systems] and B [Barrier Integrity] Cornerstones." The inspectors determined that none of the above cornerstones were directly impacted by this finding, therefore, the issue screened out as Green.

Enforcement

10 CFR 50, Appendix B, Criterion III, "Design Control," requires that measures shall be established for the selection and review for suitability of application of materials, parts, and equipment that are essential to the safety-related functions of structures, systems, and components. The failure to properly review the suitability of the application of the existing drywell floor drain screen cover adversely impacted the response of the drywell floor drain monitoring system. As a result, fine debris collected in the screen and resulted in a significant flow restriction, rendering the drywell floor drain sump monitoring system incapable of detecting small leaks, an essential function of this safety related system. The failure to properly review for suitability the drywell floor drain sump screen was an example where the requirements of 10 CFR 50, Appendix B, Criterion III, were not met and was a violation. However, because of its low safety significance and because it was entered into the corrective action program (CR 99520), the NRC is treating this issue as a Non-Cited Violation (NCV 50-373/0204-01(DRP); 50-374/0204-01(DRP)), in accordance with Section VI.A.1 of the NRC's Enforcement Policy.

4OA6 Meetings

Exit Meeting Summary

The inspectors presented the routine resident inspection results to Mr. G. Barnes and other members of licensee management on June 28, 2002. The results of a biennial heat sink inspection were presented to Mr. G. Barnes and other members of licensee management at the conclusion of that inspection on April 5, 2002. The results of a Radiological Environmental Monitoring Program (REMP) inspection were presented to Mr. G. Barnes and other members of licensee management at the conclusion of that inspection on May 3, 2002. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as Non-Cited Violations (NCVs).

10 CFR 50, Appendix B, Criterion XI, “Test Control,” requires that all testing required to demonstrate that SSCs will perform satisfactorily in service is identified and performed in accordance with written test procedures. On May 22, 2002, licensee personnel identified that Safety Relief Valve (SRV) pressure drop testing conducted in accordance with LTS-500-18 failed to ensure that all required SRV pilot valve seals were tested. This issue was entered into the licensee’s corrective action program as Condition Report (CR) 00104591. Because no actual impact on the operability of the SRVs was identified, this violation is not more than of very low safety significance, and is being treated as a Non-Cited Violation (50-373/0204-04(DRP); 50-374/0204-04(DRP)).

10 CFR 55.53(f)(2), “Conditions of License,” requires that for requalification of senior reactor operators (SROs) limited to fuel handling activities, that one shift of activities under the direction of a qualified SRO must have been completed. On May 7, 2002, licensee personnel identified that SROs limited to fuel handling activities had performed those activities prior to observation of those activities for one shift by a qualified SRO. This item was entered into the licensee’s corrective action program as CR 00106992. Because no actual fuel handling errors occurred, this violation was not more than of very low safety significance, and is being treated as a Non-Cited Violation (50-373/0204-05(DRP); 50-374/0204-05(DRP)).

## KEY POINTS OF CONTACT

Exelon

D. Czufin, Site Engineering Manager
D. Enright, Operations Manager
F. Gogliotti, Design Engineering Supervisor
G. Barnes, Site Vice President
J. Henry, System Engineering Manager
W. Riffer, Regulatory Assurance Manager
M. Schiavoni, Station Manager
C. Wilson, Station Security Manager

## ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

| | | |
|---|---|---|
| 50-373/0204-01;50-374/0204-01 | NCV | Inadequate Drywell Sump Screen Design |
| 50-373/0204-02;50-374/0204-02 | NCV | 1A EDG Governor Adjustment Error |
| 50-373/0204-03;50-374/0204-03 | NCV | Inadequate Radiological Survey |
| 50-373/0204-04;50-374/0204-04 | NCV | Inadequate SRV Testing |
| 50-373/0204-05;50-374/0204-05 | NCV | Inadequate Requalification of Fuel Handling SROs |

Closed

| | | |
|---|---|---|
| 50-373/0204-01;50-374/0204-01 | NCV | Inadequate Drywell Sump Screen Design |
| 50-373/0204-02;50-374/0204-02 | NCV | 1A EDG Governor Adjustment Error |
| 50-373/0204-03;50-374/0204-03 | NCV | Inadequate Radiological Survey |
| 50-373/0204-04;50-374/0204-04 | NCV | Inadequate SRV Testing |
| 50-373/0204-05;50-374/0204-05 | NCV | Inadequate Requalification of Fuel Handling SROs |
| 50-373/0203-02;50-374/0203-02 | URI | Secondary Containment Leakage Measurement |

Discussed

None

LIST OF ACRONYMS USED

| | |
|---|---|
| ACE | Apparent Cause Evaluation |
| ADAMS | Agency Document and Management System |
| AOT | Allowed Outage Time |
| ASME | American Society of Mechanical Engineers |
| ATWS | Anticipated Transient Without Scram |
| B | Barrier Integrity |
| CR | Condition Report |
| CRD | Control Rod Drive |
| CS | Containment Spray |
| CSCS | Core Standby Cooing System |
| DRP | Division of Reactor Projects |
| EC | Engineering Change |
| ECCS | Emergency Core Cooling System |
| EDG | Emergency Diesel Generator |
| EMD | Electrical Maintenance Department |
| EPRI | Electrical Power Research Institute |
| ER | Engineering Request |
| GM | Geiger-Mueller |
| gpm | gallons-per-minute |
| HPCS | High Pressure Core Spray |
| IE | Initiating Events |
| IMC | Inspection Manual Chapter |
| LCP | LaSalle Chemical Procedure |
| LEP | LaSalle Electrical Procedure |
| LER | Licensee Event Report |
| LIS | LaSalle Instrument Surveillance |
| LOA | LaSalle Abnormal Operating Procedure |
| LOS | LaSalle Operating Surveillance |
| LPCI | Low Pressure Coolant Injection |
| LTP | LaSalle Technical Procedure |
| LTS | LaSalle Technical Surveillance |
| MAF | Main Access Facility |
| MS | Mitigating Systems |
| NCV | Non-Cited Violation |
| NDT | Non-Destructive Testing |
| NEI | Nuclear Energy Institute |
| ODCM | Offsite Dose Calculation Manual |
| OE | Operability Evaluation |
| OWA | Operator Work Around |
| PARS | Publicly Available Records |
| PI | Performance Indicator |
| PIF | Problem Identification Form |
| PRA | Probabilistic Risk Analysis |
| RAW | Risk Achievement Worth |
| RCA | Radiologically Controlled Area |
| RCIC | Reactor Core Isolation Cooling |
| RCS | Reactor Coolant System |

| | |
|---|---|
| REMP | Radiological Environmental Monitoring Program |
| RHR | Residual Heat Removal |
| RP | Radiation Protection |
| RPT | Radiation Protection Technician |
| SDP | Significance Determination Process |
| SEAG | Site Engineering Administrative Group |
| SRO | Senior Reactor Operator |
| SRP | Standard Review Plan |
| SRV | Safety Relief Valve |
| SSC | Structure, System, or Component |
| TEDE | Total Effective Dose Equivalent |
| UFSAR | Updated Final Safety Analysis Report |
| WO | Work Order |
| WR | Work Request |
| VG | Standby Gas Treatment |
| VR | Reactor Building Ventilation |
| VT | Turbine Building Ventilation |
| VY | Core Standby Cooling System Equipment Cooling Water System |

LIST OF DOCUMENTS REVIEWED

Adverse Weather Protection

| | | |
|---|---|---|
| LOS-ZZ-A2 | Preparation For Winter/Summer Readiness | Revision 22 |
| LOS-ZZ-A2 | Preparation For Winter/Summer Readiness | May 2002 |
| LOA-DIKE-001 | Lake Dike Damage/Failure | Revision 2 |
| LOA-TORN-001 | High Winds/Tornado | Revision 2 |
| UFSAR | Section 9.2.6.1.2 - Power Generation Design Bases | Revision 14 |
| RegGuide 1.27 | Ultimate Heat Sink For Nuclear Power Plants | January 1976 |
| | LaSalle Station Summer Readiness Duty Team Guide - 2002 | |
| EC 334017 | Revise Maximum Cooling Water Inlet Temperature From the UHS to 102F For CSCS and WS [Service Water], CW [Circulating Water] From 97.5F to 100F | Revision 0 |
| 50.59 Evaluation L-02-0182 | Revise Maximum Cooling Water Inlet Temperature From the UHS to 102F For CSCS and WS [Service Water], CW [Circulating Water] From 97.5F to 100F | Revision 0 |
| Calc 97-200 | VY Cooler Thermal Performance Model - 1(2)VY01A and 1(2)VY02A | Revision A00 |
| Calc 97-195 | Thermal Model of Comed/LaSalle Station Unit 0, 1, and 2 Diesel Generator Jacket Water Coolers | Revision A00 |
| WO 00340260 | 1TIC-VX007 Alarming Before Setpoint in LOR | |
| WO 00331190 | 2TIC-VX007 Alarming Early - 95 Degrees | |

Equipment Alignment

| | | |
|---|---|---|
| LMP-MS-08 | Safety Relief Valve Removal/Replacement | Revision 7 |
| LOP-RH-17 | Alternate Shutdown Cooling | Revision 17 |
| EC 113199 | Replace SRVs Per Procedure LMP-MS-08 | |
| LOP-RH-1AM | U1 A Residual Heat Removal System Mechanical Checklist | Revision 0 |
| LOP-RH-02E | U1 A Residual Heat Removal System Electrical Checklist | Revision 18 |

| | | |
|---|---|---|
| LOP-DG-03M | Unit 0 Diesel Generator Mechanical Checklist | Revision 7 |
| LOP-DG-03E | Unit 0 Diesel Generator Electrical Checklist | Revision 7 |
| LOP-DG-2M | U1 HPCS Diesel Generator Mechanical Checklist | Revision 8 |
| LOP-DG-2E | U1 1B Diesel Generator Electrical Checklist | Revision 9 |
| LOP-RHWS-1BM | Unit 1B RHR Service Water Mechanical Checklist | Revision 1 |
| LOP-RH-01E | Unit 1 RHR Service Water Electrical Checklist | Revision 8 |
| LOP-DG-06M | Unit 1A Diesel Generator Cooling System Mechanical Checklist | Revision 11 |
| LOP-DG-06E | Unit 1A Diesel Generator Cooling System Electrical Checklist | Revision 5 |

Fire Protection

| | | |
|---|---|---|
| Updated Final Safety Analysis Report (UFSAR) | Appendix H | Revision 13 |
| Technical Requirements Manual - Section 3.7.o | Fire Rated Assemblies | Revision 0 |
| Operability Determination OE02-005 | Unsealed Openings (Core Holes) in Floor Slab | Revision 0 |
| Apparent Cause Evaluation 95253 | Bus Duct Seal Deficiencies | |
| Final Safety Analysis Report (FSAR) | Response to NRC Questions | October 1979 |
| NRC Inspection Manual - Chapter 0609 | Significance Determination Process | Appendix F |
| 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 - El. 731’ South Area | |
| Drawing S-1072 | Auxiliary Building Floor Framing Plan - El. 731’ North Area | |
| Condition Report 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 | |

Flood Protection Measures

| | | |
|---|---|---|
| LTS-1000-29 | Watertight Door and Penetration Inspection - Unit 1 | Completed January 12, 2002 |
| LTS-1000-29 | Watertight Door and Penetration Inspection - Unit 2 | Completed November 13, 2000 |
| LTS-1000-3 | Groundwater Level Surveillance | Revision 8 |
| LaSalle Focused Area Self-Assessment | Flood Protection Measures | Completed March 3, 2001 |
| LOP-PF-01 | Closure of Watertight Doors | Revision 4 |
| LOA-FLD-001 | Flooding | Revision 4 |
| LTS-1000-29 | Watertight Door and Penetration Inspection | Revision 8 |
| CR 00082752 | Storm Drain Configuration Control Issues | |
| CR 00104408 | NRC Observation Notes During Inspection of Unit 1 Core Spray Cooling System (CSCS) Room | |
| A/R No. 41953 | Focus Area Self Assessment Plan | March 12, 2001 |
| Drawing M-7 | General Arrangement Main Floor Plan | April 24, 2001 |
| Drawing M-9 | General Arrangement Ground Floor Plan | May 2, 2001 |
| Drawing M-11 | General Arrangement Basement Floor Plan | March 5, 2001 |

| | | |
|---|---|---|
| Drawing M-87 | P&ID Core Standby Cooling System - System Equipment Cooling Water System | January 4, 2001 |
| Drawing M-91 | P&ID RB Equipment Drains | January 12, 2002 |
| Drawing M-104 | P&ID RB Floor Drains | February 8, 1999 |
| Drawing M-105 | P&ID Diesel Bldg. Floor Drains | January 5, 2001 |
| Drawing M-106 | P&ID Diesel/Aux/Turbine & Service Bldg Floor Drains | May 13, 1999 |
| Drawing M-112 | P&ID Waste Water Treatment System | January 5, 1999 |
| Drawing M-151 | P&ID Diesel/Aux/Turbine Bldg Floor Drains | September 24, 2001 |
| Drawing M-1203 | Reactor-Aux Bldg-Diesel Gen. RM. Sleeve Loc. Pl. El. 673'-4" & 663'-0" and 694'-6"& 687'-0" | |
| L02-LTS-1000-29 | Watertight Door & Penetration Inspection | August 9, 2000 |
| L01-LTS-1000-29 | Watertight Door & Penetration Inspection | September 25, 2001 |
| LOA-FLD-001 | Flooding Rev. 4 | July 14, 2001 |
| LOS-ZZ-Q2 | Sump Pump Inspection | March 15, 2001 |
| LTS-1000-3 | Groundwater Level Surveillance | June 22, 1999 |
| LOP-PF-01 | Closure of Water Tight Doors | October 23, 2001 |
| LOS-ZZ-A4 | Sump Inspection | March 21, 1994 |
| LGA-002 | Secondary Containment Control (Emergency Procedure) | |
| 2PM10J A-5-02 | Service Water Low Pressure Annunciator Response | |
| LOA-WS-201 | Loss of Service Water | |
| CR-AR-84907 | Condition Report on 2RE08PA failure during Functional PMT | May 18, 2001 |
| WOP 99253390 01 | Work Order Package for implementation of LTS-1000-29 Rev. 8 for Unit 1 | January 25, 2002 |
| | LaSalle Internal Flooding Risk Insights Gained from 2001 PRA. | |

<u>Heat Sink Performance</u>

| | | |
|---|---|---|
| Calculation L-002457 | LaSalle County Station Ultimate Heat Sink Analysis | Revision 3 |
| Calculation 97-199 | VY Cooler Thermal Performance Model - 1(2)VY03A | Revision B |
| Calculation 97-200 | VY Cooler Thermal Performance Model - 1(2)VY01A and 1(2)VY02A | Revision A |
| Calculation L-001077 | Residual Heat Removal Pumps B & C Cubicle Cooler Ventilation System | Revision 2 |
| Calculation L-001078 | Residual Heat Removal Pump A Cubicle Cooler Ventilation System | Revision 2 |
| Calculation L-001221 | High Pressure Core Spray Pump Cubicle Cooler Ventilation System | Revision 2 |
| Calculation L-001584 | Volume of the Ultimate Heat Sink | Revision 1 |
| CR 98176 | 2B Residual Heat Removal Heat Exchanger Test (L2R08) Results Are Indeterminate | March 5, 2002 |
| CR 98305 | VY Cooler Air Flow Testing Procedure Deficiencies | March 5, 2002 |
| CR 101568 | VY Cooler Coils and Screens Dirty | March 14, 2002 |
| CR 102283 | VY Cooler Calculation Computer Output Contains Program Flags | April 04, 2002 |
| Drawing 28SW404543 | Core Standby Cooling System Equipment Area Cooling Coils (1VY01A, 1VY02A, 2VY01A, 2VY02A) | July 21, 1976 |
| Drawing 28SW404553 | Safety Related Heat Recovery Coils - Core Standby Cooling System Equipment Area Cooling Coils (1VY03A, 2VY03A) | July 21, 1976 |
| ER 9804483 | Evaluate Division 1 Operation with Various Components Out of Service | September 24, 1998 |
| Procedure CY-AA-120-400 | Closed Cooling Water Chemistry | Revision 2 |
| Procedure LCP-110-1 | Chemical Analysis and Corrective Action Schedule | Revision 33 |

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|---|---|---|
| Procedure LCP-830-21 | Circulating/ Service Water Corrosion Monitoring Program | Revision 5 |
| Procedure LCP-830-23 | Monitoring and Adjusting Chemical Feed System Equipment | Revision 1 |
| Procedure LTP-100-5 | Service Water Component Inspection Guideline | Revision 4 |
| Procedure LTS-200-12 | Northwest and Northeast Cubicle Cooler 1(2)VY01A and 1(2)VY04A Flowrate Test | Revision 7 |
| Procedure LTS-200-13 | 1(2)VY02A, Southwest Cubicle Cooler Flowrate Test, Division III | Revision 5 |
| Procedure LTS-200-14 | 1(2)VY03A, Southeast Cubicle Cooler Flowrate Test | Revision 4 |
| Procedure LTS-200-19 | Emergency Core Cooling Systems Cubicle Area Cooler Air Flowrate Test | Revision 7 |
| Procedure LTS-200-27 | 0 Diesel Generator Cooling Water System Flow Test | Revision 6 |
| Specification J-2582 | Design Specification for Heat Exchanger Coils and Cabinets - LaSalle County Station - Unit 1 | March 25, 1975 |
| SEAG 97-000577 | Evaluation of Potential Water Hammer Events Within the Core Standby Cooling System Equipment Cooling Water System | December 4, 1997 |
| SEAG 00-000243 | Evaluation of Measured Air Flowrate Which Is Less than Acceptance Criteria in LTS-200-19 for Room Cooler 1VY04A | June 01, 2000 |
| Surveillance LTP-100-5 | Water to Air, Air Side Heat Exchanger Inspection Report, 1VY-02C | September 1, 1992 |
| Surveillance LTP-100-5 | Water to Air, Air Side Heat Exchanger Inspection Report, 1VY-03C | September 8, 1992 |
| Surveillance LTS-200-13 | Southwest Corner Room Area Cooler Water Flowrate Test 1VY02A | June 3, 1998 |
| Surveillance LTS-200-19 | Water to Air, Air Side Heat Exchanger Inspection Report, 2VY-03A | December 18, 1991 |

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|---|---|---|
| Trend Reports | Air Flow Trends - 1VY01A, 1VY02A, 1VY03A, 2VY01A, 2VY02A, 2VY03A | March 29, 2002 |
| Trend Reports | Differential Pressure Trends - 1VY01A, 1VY02A, 1VY03A, 2VY01A, 2VY02A, 2VY03A | March 29, 2002 |
| WO 99059404 01 | Air Side Flowrate Test 2VY03A | May 24, 2001 |
| WO 99059406 01 | Air Side Flowrate Test 2VY02A | June 6, 2001 |
| WO 99164043 01 | Heat Exchanger Water Flowrate Test 1VY03A | August 9, 2001 |
| WO 99210556 01 | Heat Exchanger Water Flowrate Test 2VY02A | March 5, 2002 |
| WO 99220041 01 | Southwest Corner Room Cooler Air Side Flowrate Test 1VY02A | March 13, 2002 |
| WO 99221980 01 | Air Side Flowrate Test 1VY03A | March 14, 2002 |
| WO 00371879 01 | LOS-DG-Q3 Unit 2 High Pressure Core Spray Diesel Generator Cooling Water Pump | December 14, 2001 |
| WO 00377105 01 | LOS-DG-Q1 0 Diesel Generator Cooling Water Pump | December 28, 2001 |
| WO 00390649 01 | LOS-DG-Q3 Unit 2 High Pressure Core Spray Diesel Generator Cooling Water Pump | February 8, 2002 |
| WO 00393941 01 | LOS-DG-Q1 0 Diesel Generator Cooling Water Pump | February 18, 2002 |
| WR 950036092 01 | Air Side Flowrate Test 2VY03A | February 19, 1999 |
| WR 950054677 01 | Unit 2 Northwest Cubicle Area Cooler Air Side Flowrate Test 2VY01A | February 11, 1999 |
| WR 950105880 01 | Southeast Area Cooler Water Flowrate Test 2VY03A | January 06, 1999 |
| WR 960064305 01 | Air Side Flowrate Test 2VY02A | January 11, 1999 |
| WR 970091697 01 | Unit 1 Northwest Cubicle Area Cooler Air Side Flowrate Test 1VY01A | June 22, 1998 |
| WR 980058487 01 | Southwest Corner Room Area Cooler Water Flowrate Test 1VY02A | October 20, 2000 |

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|---|---|---|
| WR 980060965 01 | Heat Exchanger Water Flowrate Test 1VY03A | September 30, 1999 |
| WR 980063945 01 | Air Side Flowrate Test 1VY03A | April10, 2000 |
| WR 980066356 01 | Unit 1 Northwest Cubicle Area Cooler Air Side Flowrate Test 1VY01A | April 21, 2000 |
| WR 980080278 01 | Unit 2 Northwest Cubicle Area Cooler Water Side Flowrate Test 2VY01A | January 31, 1999 |
| WR 980135489 01 | Unit 1 Northwest Cubicle Area Cooler Water Side Flowrate Test 1VY01A | October 5, 1999 |
| WR 990018659 01 | Core Standby Cooling System Pond Sediment Deposition Check | May 18, 1999 |
| WR 990052824 01 | Core Standby Cooling System Pond Sediment Deposition Check | January 22, 2001 |
| WR 990059400 01 | Unit 2 Northwest Cubicle Area Cooler Air Side Flowrate Test 2VY01A | April 20, 2001 |
| WR 990059401 01 | Heat Exchanger Water Flowrate Test 2VY02A | March 10, 2000 |
| WR 990059402 01 | Unit 2 Northwest Cubicle Area Cooler Water Side Flowrate Test 2VY01A | April 23, 2001 |
| WR 990059405 01 | Southeast Area Cooler Water Flowrate Test 2VY03A | January 05, 2001 |
| WR 990098661 01 | Southwest Corner Room Cooler Air Side Flowrate Test 1VY02A | April 4, 2000 |
| WR 990166167 01 | Unit 1 Northwest Cubicle Area Cooler Water Side Flowrate Test 1VY01A | April 23, 2001 |

<u>Operator Licensing Requalification</u>

| | | |
|---|---|---|
| | Licensed Operator Requalification Scenario Guide ESG 43 | Revision 0 |
| LGA - 010 | Failure to SCRAM | Revision 3 |
| LGA - 001 | RPV Control | Revision 3 |
| EP-AA-111 | Emergency Classification and Protective Action Recommendations | Revision 3 |

Maintenance Risk Assessment and Emergent Work Evaluation

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

Operability Evaluations

| | | |
|---|---|---|
| EC 336192 | Battery Equalize Charge at 2.5 VDC Per Cell | |
| SEAG 02-00081 | Application of 2.5 Volts Per Cell Charging Criteria | March 28, 2002 |
| VETIP J-0150 | | |
| LEP-DC-01 | Individual Equalizing Cell Charge for Station Batteries | Revision 7 |
| CR 00101955 | Formal Documentation Not Obtained For Change to LEP-DC-01 | |
| LEP-DC-01 | Unit 2 Division 1, 125 VDC Battery Cell #21 Data | March 26, 2002 |
| WO 0421426 | Unit 2 Division 1, 125 VDC, Battery Cell #21 Charge | March 26, 2002 |
| S&L Specification J-2583 | Atmospheric Cleanup Filter Units For The LaSalle County Station Units 1 & 2 | |
| OE02-08 | Unit 1 Drywell Floor Drain | Revision 0 |
| WO 990213169 | 1RF08M - Inspect Screen | January 19, 2002 |
| WO 990012582 | 1RF08M - Inspect Screen | November 11, 1999 |
| WO 990209213 | 2RF08M - Inspect Screen | November 21, 2000 |
| OE97052 | 2C RHR Injection Line | March 28, 1997 |
| CR 00109991 | Damper Actuator 2TZ-VD003C Does Not Achieve Full Stroke | May 30, 2002 |
| OE02-09 | Unit 1 RCIC Data Collection | June 7, 2002 |
| EC 000337298 | Operation of 1A RR FCV on LVDT | May 25, 2002 |

Operator Workarounds

| | | |
|---|---|---|
| OWA338/339 | Feedwater Heater Trips During Reactor Recirculation Pump Downshift | March 6, 2002 |

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|---|---|---|
| LOP-RR-08 | Changing Reactor Recirculation Pump Speed From Fast to Slow Speed | Revision 27 |
| LGP-2-1 | Normal Unit Shutdown | Revision 61 |
| ATM 36429 | Root Cause Evaluation of the Feedwater Temperature Transient During Unit 1 RR Pump Downshift | November 28, 2000 |

Post-Maintenance Testing

| | | |
|---|---|---|
| LTS-500-19 | Unit 2 Main Steam Safety Relief Valve Operability | Revision 5 |
| WO 99237316 | Unit 2 Main Steam Safety Relief Valve Testing | |
| WO 99180664 | Unit “1A” EDG Woodward Governor Adjustments | April 26, 2002 |
| CR 107346 | Step 14 of LEP-DG-105 Not Performed | May 8, 2002 |
| WO 00414392 | “0” EDG Inspect Breaker | April 18, 2002 |
| WO 00387494 | “0” EDG Governor Inspection | April 17, 2002 |
| LOS-DG-M1 | 0 Diesel Generator Operability Test | Revision 46 |
| WO 00449604 | 2B Diesel Generator Potentiometer Replacements | May 30, 2002 |
| WO 00450211-03 | 2E51-F080 Valve Did Not Reopen During Cycling | June 3, 2002 |
| LEP-EQ-114 | Westinghouse 250 VDC MCC Equipment Parts Replacement For EQ Requirements or Repair | Revision 8 |
| CR 00110348 | 2E51-F080 Failed To Open | June 3, 2002 |
| VETIP J-0157 | Instruction Manual for Motor-Operated Potentiometer (Return-To-Center) | November 1984 |

Refueling and Outage Activities

| | | |
|---|---|---|
| OU-LA-104 | Shutdown Safety Management Program | Revision 2 |
| LTP-1500-2 | Alternate Decay Heat Removal Lineup Capabilities | Revision 2 |
| L2P01 Shutdown Safety Management Program | | Revision 0 |
| EC 336113 | SRVs As Alternate Decay Heat Removal | April 1, 2002 |
| Crane Technical Paper #410 | Flow of Fluids Through Valves, Fittings and Pipes | 1988 |
| LOP-RH-14 | Alternate Shutdown Cooling | Revision 17 |

| | | |
|---|---|---|
| Kenny Manta Industrial Services Letter | Evaluation of Level 1 Coating - LaSalle Station LST01 | April 18, 2002 |
| Kenny Manta Industrial Services Letter | Evaluation of the LaSalle Station Unit 2 Drywell Floor Coating | February 5, 1999 |
| Kenny Manta Industrial Services Letter | Evaluation of Level 1 Coatings at LaSalle Station (L2R08) | November 14, 2000 |
| | L2P01 Drywell Cleanup Project Plan | |
| LOP-DW-01 | Drywell Closeout | Revision 33 |
| LOP-DW-01 | Drywell Closeout - Documentation | April 23, 2002 |
| LGP-1-S1 | Startup Checklist | Revision 51 |
| LGP-1-1 | Reactor Startup | |
| EC 336572 | Upgrade Drywell Floor Drain 2RF08M Screen | Revision 0 |
| EC 336572 | Upgrade Drywell Floor Drain 2RF08M Screen | Revision 1 |
| L1P03 Shutdown Safety Management Program | | Revision 0 |
| AR 00088182 | Failure of Division 3 Temperature Controller to Maintain Temperature | December 27, 2001 |
| CR 00106992 | Limited SROs Do Not Properly Maintain Active Status | May 7, 2002 |

Surveillance Testing

| | | |
|---|---|---|
| LOS-RH-Q3 Att. 2B | RHR (LPCI) and RHRSW Valve Inservice Test For Cold Shutdown or Refuel Condition | Revision 35 |
| LTS-1100-4 | Scram Insertion Times | Revision 20 |
| LTS-1100-4 | Scram Insertion Times | April 24, 2002 |
| LTS-300-3 | Secondary Containment Leak Rate Test | Revision 16 |
| LTS-300-3 | Secondary Containment Leak Rate Test | May 3, 2002 |
| LOS-RH-Q1 | RHR and RHR Service Water Pump and Valve Inservice Test for Modes 1, 2, 3, 4, and 5 | Revision 49 |
| LIS-NB-104A | Unit 1 Reactor Vessel Low Water Level 1 ECCS Division 1 Initiation and Level 2 RCIC Initiation Instrument Channels A & C Calibration | Revision 11 |

| | | |
|---|---|---|
| CR 00108062 | Maintenance Work Around - EDG Reverse Power K32X Relay | April 8, 2002 |
| ACE 102854 | Unit 1A Emergency Diesel Generator Lockout Due to Bumped Relay | April 9, 2002 |
| LTS-200-228 | 2A DG Flow Balance Test | Revision 3 |

Temporary Plant Modifications

| | | |
|---|---|---|
| EC 336420 | Temporary Repair of the 2E12-F009 Valve to Eliminate Pressure Seal Gasket Leakage (Seal Welding of Bonnet) | Revision 0 |
| WO00430503-03 | Install Temporary Repair of the 2E12-F009 Isolation Valve | April 12, 2002 |
| 50.59 L02-0156 | Temporary Repair of the 2E12-F009 Valve to Eliminate Pressure Seal Gasket Leakage | April 13, 2002 |
| EC 336699 | Evaluation of the 2E12-F009 Seal Weld Leak | |
| VT Report E02-163 | 2E12-F009 Inboard Shutdown Cooling Valve | April 21, 2002 |
| EC 337326 | Temporary repair to 2E22-S001 Heat Exchanger Plate | May 28, 2002 |
| WO00448732 | Installation of TMOD EC 337326 | May 29, 2002 |

Performance Indicator Verification

| | | |
|---|---|---|
| | Monthly Performance Indicator Packages for Unplanned SCRAMS | January 2001-March 2002 |
| | Monthly Performance Indicator Packages for SCRAMS with a loss of Normal Heat Sink | January 2001-March 2002 |
| | Monthly Operating Reports | January 2001-March 2002 |

Identification and Resolution of Problems

| | | |
|---|---|---|
| PIF L2000-4349 | Configuration Control Issues | August 30, 2001 |
| PIF/CR L2000-03023 | High Differential Pressure Alarm | May 9, 2000 |

| | | |
|---|---|---|
| PIF/CR L2000-06843 | Extent of Condition - HVAC Filter Discrepancies | November 26, 2000 |
| Root Cause AD-AA-106 | Installation of HVAC Pre-Filters Different Than Described in UFSAR | Revision 1 |
| LS-AA-125-1004 | Effectiveness Review for HVAC Pre-Filters Different Than Described in UFSAR | April 18, 2002 |
| CR 110032 | 2B EDG KVAR Output was Abnormal | May 31, 2002 |
| L2001-05813 | Failed R3 Potentiometer | October 10, 2001 |
| CR 88165 | 0 EDG Trip On Low Lube Oil Pressure | December 26, 2001 |

Event Followup

| | | |
|---|---|---|
| WR 990209213-01 | 2RF08M - Inspect Drywell Floor Drain Screen | November 21, 2000 |
| WR 990012582-01 | 1RF08M - Inspect Drywell Floor Drain Screen | November 11, 1999 |
| WO 990213169 | 1RF08M - Inspect Drywell Floor Drain Screen | January 19, 2002 |
| | L2P01 Drywell Cleanup Project Plan | |
| CHRON 307434 | LaSalle ComEd SEC Calculation R-M-1044 | April 11, 1995 |
| Calc. R-M-1044 | Debris Screen Equivalent Area to Drain Pipe | April 12, 1995 |
| LER 50-374/02-01 | Transient Increases in Unit 2 Unidentified Leakage Due to Clogged Drywell Floor Drain Sump Screen | |

Cross-Cutting Issues

| | | |
|---|---|---|
| CR 00108062 | Maintenance Work Around - DG Reverse Power K32X Relay | April 8, 2002 |
| Dwg. M-137 | Reactor Building Equipment Drain System | Sheet 4 |