

July 18, 2006

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2
NRC INTEGRATED INSPECTION REPORT 05000373/2006004;
05000374/2006004

Dear Mr. Crane:

On June 30, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your LaSalle County Station, Units 1 and 2. The enclosed report documents the results of this inspection, which were discussed on July 13, 2006, with the Site Vice President, Ms. Susan Landahl, 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, no findings were identified. However, three licensee-identified violations of very low safety significance are listed in Section 4OA7 of this report. Because of the very low safety significance of these violations and because they have been entered into your corrective action program, the NRC is treating these violations as Non-Cited Violations consistent with Section VI.A.1 of the NRC Enforcement Policy.

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

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

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 05000373/2006004; 05000374/2006004
w/Attachment: Supplemental Information

cc w/encl: Site Vice President - LaSalle County Station
LaSalle County Station Plant Manager
Regulatory Assurance Manager - LaSalle County Station
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional
Operating Group
Vice President - Mid-West Operations Support
Vice President - Licensing and Regulatory Affairs
Director Licensing - Mid-West Regional
Operating Group
Manager Licensing - Clinton and LaSalle
Senior Counsel, Nuclear, Mid-West Regional
Operating Group
Document Control Desk - Licensing
Assistant Attorney General
Illinois Emergency Management Agency
State Liaison Officer
Chairman, Illinois Commerce Commission

C. Crane

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Senior Counsel, Nuclear, Mid-West Regional
Operating Group
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Assistant Attorney General
Illinois Emergency Management Agency
State Liaison Officer
Chairman, Illinois Commerce Commission

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 05000373; 05000374

License Nos: NPF-11; NPF-18

Report No: 05000373/2006004; 05000374/2006004

Licensee: Exelon Generation Company, LLC

Facility: LaSalle County Station, Units 1 and 2

Location: 2601 N. 21st Road
Marseilles, IL 61341

Dates: April 1 through June 30, 2006

Inspectors: D. Kimble, Senior Resident Inspector
D. Eskins, Resident Inspector
N. Shah, Region III Project Engineer
S. Sheldon, Region III Reactor Engineer
J. Yesinowski, Illinois Dept. of Emergency Management

Observers: J. Tapp, Inspector-in-Training

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

Enclosure

SUMMARY OF FINDINGS

IR 05000373/2006004, 05000374/2006004; 04/01/2006 - 06/30/2006; LaSalle County Station, Units 1 & 2; Quarterly Integrated Inspection Report.

The inspection was conducted by resident inspectors and regional inspectors. The report covers a 3-month period of resident baseline inspection. No findings were identified in any cornerstones. 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.

A. Inspector-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

Violations of very low safety significance that were identified by the licensee have been reviewed by inspectors. Corrective actions planned or taken by the licensee have been entered into the licensee's 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

The unit began the inspection period operating at full power. On May 18, 2006, power was reduced to approximately 64 percent to conduct power suppression testing and 1B turbine-driven reactor feed pump maintenance. The unit returned to full power on May 22, 2006, with control rods 46-31 and 50-31 fully inserted to locally suppress core power in the area of a suspected minor fuel defect. The unit continued to operate at or near full power for the remainder of the inspection period.

Unit 2

The unit began the inspection period operating at full power. On April 15, 2006, power was reduced to approximately 70 percent to perform control rod surveillance tests and fuel channel deformation testing. Operation at full power was resumed later that day. On May 28, 2006, power was reduced to approximately 75 percent to conduct minor repairs to the heater drain system, control rod surveillance testing, a control rod sequence exchange, and fuel channel deformation testing. Again, the unit returned to operation at full power later that day, and continued operating at or near full power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Summer Seasonal Readiness Preparations

a. Inspection Scope

The inspectors performed a walkdown of the licensee's preparations for summer weather for selected systems, including conditions that could lead to loss of off-site power and conditions that could result from high temperatures. During the inspection, the inspectors focused on plant specific design features and the licensee's procedures used to mitigate or respond to adverse weather conditions. Additionally, the inspectors reviewed the Updated Final Safety Analysis Report (UFSAR) and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures. The inspectors' reviews focused specifically on the following plant systems:

- Emergency diesel generator (EDG) ventilation systems;
- Core standby cooling systems (CSCS); and
- The Unit 1 & 2 ultimate heat sink.

This review constituted a single inspection sample.

b. Findings

No findings of significance were identified.

2. Readiness For Impending Adverse Weather Condition – Tornado Watch

a. Inspection Scope

The inspectors performed an assessment of the licensee's preparations for adverse weather, including conditions that could lead to loss of off-site power and other conditions that could result from high winds or tornado-generated missiles. The licensee's procedures and preparations during a tornado watch in LaSalle County on May 24, 2006, were reviewed by the inspectors and were verified to be adequate. During the inspection, the inspectors focused on plant specific design features and the licensee's procedures used to respond to specified adverse weather conditions. Additionally, the inspectors reviewed the UFSAR and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures.

This review constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed a partial walkdown of the following equipment trains to verify operability and proper equipment lineup. These systems were selected based upon risk significance, plant configuration, system work or testing, or inoperable or degraded conditions:

- Unit 1 Division 1 and Division 3 switchgear rooms and EDG rooms during maintenance on the Division 2 EDG; and
- Unit 2 high pressure core spray (HPCS) during maintenance on the Unit 2 reactor core isolation cooling system.

The inspectors verified the position of critical redundant equipment and looked for any discrepancies between the existing equipment lineup and the required lineup.

These reviews constituted two partial equipment alignment inspection samples.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Fire Zone Inspections

a. Inspection Scope

The inspectors walked down the following risk significant areas looking for any fire protection issues. The inspectors selected areas containing systems, structures, or components that the licensee identified as important to reactor safety:

- Fire Zone 2G, Unit 1 reactor building, elevation 710'6";
- Fire Zone 3F, Unit 2 reactor building, elevation 740'0";
- Fire Zone 3G, Unit 2 reactor building, elevation 710'6";
- Fire Zone 7B1, Unit 1 HPCS EDG room, elevation 710'6";
- Fire Zone 7B2, Unit 1 Division 2 EDG room, elevation 710'6";
- Fire Zone 7B3, Unit 1 Division 1 EDG room, elevation 710'6";
- Fire Zone 8B1, Unit 2 HPCS EDG room, elevation 710'6"; and
- Fire Zone 8B2, Unit 2 Division 2 EDG room, elevation 710'6".

The inspectors reviewed the control of transient combustibles and ignition sources, fire detection equipment, manual suppression capabilities, passive suppression capabilities, automatic suppression capabilities, barriers to fire propagation, and any contingency fire watches that were in effect.

These reviews constituted eight quarterly fire protection inspection samples.

b. Findings

No findings of significance were identified.

.2 Annual Fire Drill Observation

a. Inspection Scope

To evaluate the readiness of licensee personnel to fight fires, the inspectors observed the response of the site's fire brigade to an unannounced, simulated lube oil fire in the Unit 2 motor-driven reactor feed pump room. The following aspects of the response were reviewed:

- Use of protective clothing and self-contained breathing apparatus;
- Use of fire hoses to demonstrate the capability to reach all necessary fire hazard locations without flow constrictions;
- Testing of hose nozzle patterns prior to entering the fire area;
- Entry into the fire area in a controlled manner;
- Presence of sufficient fire fighting equipment at the scene for the fire brigade to properly perform their fire fighting duties;
- Effectiveness and clarity of the fire brigade leader's directions;
- Efficiency and effectiveness of radio communications between plant operators and fire brigade members;

- Checking for fire victims and fire propagation into other plant areas; and
- Effectiveness of simulated smoke removal operations.

The inspectors' review of this annual fire drill constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

.1 Annual External Flooding Review

a. Inspection Scope

The inspectors reviewed the licensee's flooding mitigation plans and equipment to determine consistency with design requirements and the risk analysis assumptions related to seasonal external flooding. As discussed in NRC Inspection Report 05000373/2003003; 05000374/2003003, design basis documentation indicated that LaSalle was classified as a "dry" site since external flooding was not a threat to the plant. This was based on the top of the LaSalle dike being at the 710 foot elevation and the plant grade being at 710 feet, 6 inches. Probable maximum flooding is at an elevation of 704 feet, 4 inches. As a result, the inspectors focused on changes made to the facility over the past year that might affect the site's "dry" classification, especially changes such as jersey barriers added as part of recent external security measures. Walkdowns and reviews performed considered design measures, seals, drain systems, contingency equipment condition and availability of temporary equipment and barriers, performance and surveillance tests, procedural adequacy, and compensatory measures.

This annual external flooding review constituted a single inspection sample.

b. Findings

No findings of significance were identified.

.2 Semiannual Internal Flooding Review

a. Inspection Scope

The inspectors reviewed the licensee's flooding mitigation plans and equipment to determine consistency with design requirements and the risk analysis assumptions related to internal flooding. The following specific plant areas particularly susceptible to internal flooding were inspected:

- Unit 1 and Unit 2 turbine, reactor and auxiliary building general areas below 700' elevation; and
- Unit 1 and Unit 2 CSCS rooms.

Walkdowns and reviews performed considered design measures, seals, drain systems, contingency equipment condition and availability of temporary equipment and barriers, performance and surveillance tests, procedural adequacy, and compensatory measures.

This semiannual internal flooding review constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

The inspectors observed a training crew during an evaluated simulator scenario and reviewed licensed operator performance in mitigating the consequences of events. The scenario included multiple equipment and instrumentation failures, and the transient resulted in a complex loss of coolant accident with a General Emergency declaration. Areas observed by the inspectors included: clarity and formality of communications, timeliness of actions, prioritization of activities, procedural adequacy and implementation, control board manipulations, managerial oversight, emergency plan execution, and group dynamics.

This quarterly licensed operator training observation constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed the licensee's handling of performance issues and the associated implementation of the Maintenance Rule (10 CFR 50.65) to evaluate maintenance effectiveness for the selected systems. The following systems were selected based on being designated as risk significant under the Maintenance Rule, being in the increased monitoring (Maintenance Rule category a(1)) group, or due to an inspector-identified issue or problem that potentially impacted system work practices, reliability, or common cause failures:

- Unit 1 and Unit 2 CSCS throttle valve failure issues;
- Unit 1 and Unit 2 thermal power instrumentation; and
- Unit 1 and Unit 2 control rod drive performance issues.

The inspectors review included verification of the licensee's categorization of specific issues including evaluation of the performance criteria, appropriate work practices,

identification of common cause errors, extent of condition, and trending of key parameters. Additionally, the inspectors reviewed the licensee's implementation of the Maintenance Rule requirements, including a review of scoping, goal-setting, performance monitoring, short-term and long-term corrective actions, functional failure determinations associated with the condition reports reviewed, and current equipment performance status.

These maintenance effectiveness reviews constituted three inspection samples.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed and observed emergent work, preventive maintenance, or planning for risk significant maintenance activities. The inspectors observed maintenance or planning for the following activities or risk significant systems undergoing scheduled or emergent maintenance:

- Unit 2 Division 3 EDG cooling water pump and HPCS pump room cooler heat exchanger maintenance;
- Common EDG cylinder oil leak troubleshooting and repairs;
- Common EDG cooling water throttle valve stem disk separation troubleshooting and repair;
- Unit 2 Division 2 emergency core cooling system water leg pump trips and header low pressure alarms;
- Unit 1 reactor feedwater flow transmitter calibration issues; and
- 'B' control room ventilation (VC) system compressor issues.

The inspectors also reviewed the licensee's evaluation of plant risk, risk management, scheduling, and configuration control for these activities in coordination with other scheduled risk significant work. The inspectors verified that the licensee's control of activities considered assessment of baseline and cumulative risk, management of plant configuration, control of maintenance, and external impacts on risk. In-plant activities were reviewed to ensure that the risk assessment of maintenance or emergent work was complete and adequate, and that the assessment included an evaluation of external factors. Additionally, the inspectors verified that the licensee entered the appropriate risk category for the evolutions.

The inspectors' reviews of these issues constituted six inspection samples.

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-Routine Plant Evolutions and Events (71111.14)

a. Inspection Scope

The inspectors performed several hours of control room observation to evaluate operator performance during the following planned power reductions:

- Unit 1 power reduction to approximately 64 percent on May 18 - 22, 2006, to facilitate suppression testing to locate a suspected fuel cladding defect; and
- Unit 2 power reduction to approximately 75 percent and fuel channel distortion testing on May 28, 2006.

The inspectors reviewed operator logs and plant computer data to determine how the unit responded and to verify that operator actions were appropriate and consistent with operator training and plant procedures. The licensee's testing strategy, planned recovery actions, procedures, reactivity manipulation briefings, and contingency plans were also reviewed by the inspectors to identify any personnel performance issues. In addition, the inspectors verified that any problems encountered during the non-routine evolutions were identified by the licensee, and appropriately entered into the corrective action program.

The observation of these non-routine evolutions by the inspectors constituted two inspection samples.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the technical adequacy of the following operability evaluations to determine the impact on Technical Specifications, the significance of the evaluations, and to ensure that adequate justifications were documented:

- OE 06-001, Revision 0, operability evaluation of the 0DG006 and other CSCS globe valves following a stem-disk separation;
- Stem wear evaluation on open cycle cooler outlet valves; and
- OE 06-002, Revision 0, operability evaluation of the instrument nitrogen systems and automatic depressurization system (ADS).

Operability evaluations were selected based upon the relationship of the safety-related system, structure, or component to risk.

The inspectors' review of these operability evaluations and issues constituted three inspection samples.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors selected the following post-maintenance activities for review. Activities were selected based upon the structure, system, or component's ability to impact risk:

- Restoration of Unit 2 control rod 06-35 after scram solenoid position valve (SSPV) fuse replacement and rod position indication system (RPIS) repairs;
- Testing of Unit 1 feedwater flow transmitters after troubleshooting and calibration;
- Observation of the Unit 0 station air compressor loaded test run following repair and rebuild; and
- 'B' VC compressor testing following repair and replacement work activities.

The inspectors verified by witnessing the test or reviewing the test data that post-maintenance testing activities were adequate for the above maintenance activities. The inspectors' reviews included, but were not limited to, integration of testing activities, applicability of acceptance criteria, test equipment calibration and control, procedural use and compliance, control of temporary modifications or jumpers required for test performance, documentation of test data, Technical Specification applicability, system restoration, and evaluation of test data. Also, the inspectors verified that maintenance, repair, and post-maintenance testing activities adequately ensured that the equipment met the licensing basis, Technical Specifications, and UFSAR design requirements.

The inspectors' review of these post maintenance testing activities constituted four inspection samples.

b. Findings

No findings of significance were identified. One unresolved item (URI) was identified.

On June 7, 2006, at approximately 1:18 p.m., control room operators received a 'B' control room refrigeration unit trouble alarm due to a trip of the 'B' VC compressor on high oil temperature. Operations personnel declared the 'B' VC compressor inoperable and entered Technical Specification Required Action A.1 to restore the 'B' VC subsystem to an operable status within 30 days. Following repairs, the 'B' VC compressor was tested and subsequently declared operable on June 9, 2006, at 3:40 a.m.

A little over a day after having been declared operable, the 'B' VC compressor indicated oil pressure experienced a significant step drop from 125 psig to 95 psig at 5:33 a.m. on June 10, 2006. Control room operators, who were monitoring compressor parameters closely, determined that the component was stable and capable of performing its designed safety function, despite the degraded oil pressure. Later that day, however,

the 'B' VC compressor was again removed from service and declared inoperable at 3:05 p.m., following a recommendation by plant maintenance and engineering personnel that the oil pressure regulator be disassembled and inspected. Maintenance personnel subsequently discovered that the oil pressure regulator was being held open by a small piece of debris that had lodged within it. At 8:05 a.m. on June 12, 2006, the 'B' VC compressor was again declared operable following post-maintenance testing.

Less than an hour later, at 9:03 a.m., engineering and maintenance personnel recommended removing the 'B' VC compressor from service due to oil pressure oscillations. Despite the degraded conditions noted, operations personnel still maintained that the compressor was operable. On June 13, 2006, at 1:00 a.m., the 'B' VC compressor was tagged out and rendered inoperable for additional troubleshooting and corrective maintenance. The following day, due to continuing issues with compressor performance, the licensee made the decision to replace the 'B' VC compressor in its entirety. On June 16, 2006, at 1:15 a.m., the 'B' VC compressor was declared operable following post-replacement testing, and all applicable Technical Specification action statements were exited.

The licensee has entered this issue into their corrective action program as Issue Reports (IRs) 497654, 498720, 498762, and 498966. A root cause investigation to examine the circumstances surrounding the issue was initiated by the licensee, with a planned completion for early in the 3rd Quarter of 2006. The adequacy of the licensee's multiple 'B' VC compressor operability determinations during the period of June 7, 2006, through June 16, 2006, as well as the appropriateness of their 'B' VC compressor post-maintenance tests, remain unresolved pending the inspectors' review of the licensee's root cause report. (URI 05000373/2006004-01; 05000374/2006004-01)

1R22 Surveillance Testing (71111.22)

.1 General Surveillance Tests

a. Inspection Scope

The inspectors selected the following general surveillance test activities for review. Activities were selected based upon risk significance and the potential risk impact from an unidentified deficiency or performance degradation that a system, structure, or component could impose on the unit if the condition were left unresolved:

- Unit 2 Division 3 EDG overspeed trip testing;
- Unit 1 Division 2 residual heat removal (RHR) heat exchanger tube-side differential pressure testing;
- Unit 1 and Unit 2 secondary containment integrated leak rate test; and
- Unit 2 control rod/fuel assembly channel distortion tests.

The inspectors observed the performance of surveillance testing activities, including reviews for preconditioning, integration of testing activities, applicability of acceptance criteria, test equipment calibration and control, procedural use, control of temporary

modifications or jumpers required for test performance, documentation of test data, Technical Specification applicability, impact of testing relative to performance indicator reporting, and evaluation of test data.

The review of these general surveillance activities by the inspectors constituted four inspection samples.

b. Findings

No findings of significance were identified.

.2 Inservice Testing (IST) Required by the American Society of Mechanical Engineers (ASME) Operations and Maintenance Code

a. Inspection Scope

Based on the relatively high risk significance of the system, the inspectors selected the following ASME Operations and Maintenance Code pump IST activity for review:

- Quarterly IST for the '0' EDG cooling water pump

The inspectors observed the performance of the test, including reviews for preconditioning, applicability of acceptance criteria, test equipment calibration and control, procedural use, documentation of test data, Technical Specification applicability, compliance with 10 CFR 50.55a, "Codes and Standards," impact of testing relative to performance indicator reporting, and evaluation of the test data.

The review of this IST quarterly pump surveillance constituted a single inspection sample.

b. Findings

No findings of significance were identified.

.3 Reactor Coolant System (RCS) Leak Detection System Testing

a. Inspection Scope

The following RCS leak detection system testing activity was selected by the inspectors for review:

- Unit 1 drywell floor drain sump (DWFDS) flow recorder functional testing

The inspectors observed the performance of the testing activity, including reviews for preconditioning, integration of the testing activities with other plant work, applicability of acceptance criteria, test equipment calibration and control, procedural use, documentation of test data, Technical Specification applicability, and evaluation of test data.

The review of this RCS leak detection system test by the inspectors constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed temporary modification “Temporary Keep Fill for Unit 2 Division 2 RHR System Discharge Lines.” The inspectors reviewed the safety screening, design documents, UFSAR, and applicable Technical Specifications to determine that the temporary modification was consistent with modification documents, drawings and procedures. The inspectors also reviewed the post-installation test results to confirm that tests were satisfactory and that the actual impact of the temporary modification on the permanent system and interfacing systems were adequately verified.

The review of this temporary modification by the inspectors constituted a single inspection sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

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

.1 Data Submission

a. Inspection Scope

The inspectors performed a review of the data submitted by the licensee for the 1st Quarter 2006 performance indicators for any obvious inconsistencies prior to its public release in accordance with Inspection Manual Chapter 0608, “Performance Indicator Program.”

This review was performed as part of the inspectors’ normal plant status activities and, as such, did not constitute a separate inspection sample.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

Cornerstone: Initiating Events, Mitigating Systems, and Barrier Integrity

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

As part of the various baseline inspection procedures conducted during the period, the inspectors verified that the licensee entered the problems identified during the inspection into their corrective action program. Additionally, the inspectors verified that the licensee was identifying issues at an appropriate threshold and entering them in the corrective action program, and verified that problems included in the licensee's corrective action program were properly addressed for resolution. Attributes reviewed included: the complete and accurate identification of the problem; that timeliness was commensurate with the safety significance; that evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue.

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

b. Findings

No findings of significance were identified.

.2 Daily Corrective Action Program (CAP) Reviews

a. Inspection Scope

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

These daily reviews did not constitute any additional inspection samples. Instead, by procedure they were considered part of the inspectors' daily plant status monitoring activities.

b. Findings

No findings of significance were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the 6 month period of January 2006 through June 2006, although some examples expanded beyond those dates where the scope of the trend warranted.

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

This review by the inspectors constituted a single semi-annual trend inspection sample.

b. Findings and Issues

No findings of significance were identified. No issues were identified.

.4 Selected Issue Follow-up Inspection: Installation and Control of Refuel Floor Crane Bay Opening Tarpaulins Used to Restrict the Spread of Radioactive Contamination

Introduction

On March 14, 2006, inspectors identified issues associated with the licensee's use of tarpaulins to temporarily cover overhead crane bay access hatch openings on the refuel floor as a contamination control measure. Specifically, the inspectors identified that the Operations Department was largely unaware of the installation of the tarpaulins and their procedurally required actions to be taken to remove the tarpaulins in the event of certain design basis accidents. Under certain accident conditions, licensee analyses governing the use and application of the tarpaulins required their removal to permit reactor building/secondary containment temperatures to remain within analyzed limits, and the Operations Department was procedurally designated to inform refuel floor personnel of the need to remove the tarpaulins.

As the inspectors continued their review of the issue, they identified that refuel floor management personnel were cognizant of the requirements to remove the tarpaulins under the specified conditions. This fact lead the inspectors to conclude that the issue of the Operations Department being largely unaware of their responsibilities regarding the tarpaulins was of minor significance.

On April 10, 2006, inspectors questioned the licensee about the installation of the tarpaulins during refuel floor decontamination activities the week earlier. During this questioning, it was discovered that the tarpaulins had been installed on April 5, 2006, without using the applicable plant procedure governing their use, LRP-1470-14, "ALARA Engineering Contamination Control Applications (Installation/Removal of Refuel Floor Temporary Equipment Hatch Covers)."

The inspectors' review of this issue constituted a single inspection sample.

a. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed the related CAP documents associated with the refuel floor tarpaulin procedural issues. The intent of this review was to determine if the CAP actions effectively addressed the causal factors for the issue.

(2) Issues

In response to the inspectors' questions on April 10, 2006, the licensee formulated an operability assessment that determined that a sufficient air gap had existed between the tarpaulins and the refuel floor. This air gap was, by calculations performed by the licensee's engineering staff, large enough so that reactor building/secondary containment temperatures during certain design basis events would not have challenged the licensee's analysis limits. As a result, the inspectors determined that the licensee's failure to install the refuel floor tarpaulins in accordance with established plant procedures constituted a violation of Technical Specification 5.4.1.a and the provisions of Appendix A of Regulatory Guide 1.33, Revision 2. This violation was considered to be of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC Enforcement Policy.

CAP actions to address the original issue identified in March 2006, consisted primarily of an assignment to review the governing plant procedure, LRP-1470-14, and revise it as necessary. This action was given an allowed completion date of May 17, 2006, and was in progress at the time of the April 2006 issue. However, it appears that no short-term corrective actions were established, nor did the licensee adequately anticipate that the tarpaulins would be potentially used again before the procedure revision could take place.

Following the issue in April 2006, the licensee took more rigorous corrective action. The issue was the subject of an apparent cause evaluation, which generated several follow-on corrective actions. Among these actions, the licensee performed an assessment of the operations knowledge gap regarding the use of the tarpaulins and created a formal training action to close it. Additionally, a coordinated effort between radiation protection and engineering was established to attempt to eliminate the compensatory actions procedurally required when using the tarpaulins.

4OA3 Event Follow-up (71153)

Cornerstones: Initiating Events, Mitigating Systems, and Emergency Preparedness

- .1 (Closed) Licensee Event Report (LER) 05000373/2006-001-00: Three Control Rods Fail to Indicate Fully Inserted Following Automatic Reactor Scram.

(Closed) URI 05000373/2006009-01: Failure of Unit 1 Control Rod 38-43 to Fully Insert During an Initial Scram of February 20, 2006.

On February 20, 2006, three control rods failed to insert to position 00 following an automatic reactor scram due to a main turbine electro-hydraulic control system malfunction. The control room operating crew appropriately entered the procedure for an anticipated transient without scram, LGA-010, "Failure to Scram," and declared a Site Area Emergency in accordance with the station's emergency plan. Just prior to the event, control room operators had removed the main generator from the grid for the purpose of beginning a scheduled refueling outage. This event was discussed in detail in Section 4OA3.1 of NRC Integrated Inspection Report 05000373/2006003; 05000374/2006003 (ADAMS Accession No. ML061240042), and NRC Special Inspection Report 05000373/2006009 (ADAMS Accession No. ML060820574).

The three control rods stopped at intermediate positions that were not adjacent to any limit switches used by the control rod position indication system (RPIS). Based on traces from the source range neutron monitoring instruments, control rod 38-43 was determined to have been between position 06 and 16, with a most probable position of 12, while control rods 26-15 and 34-47 were most likely between positions 00 and 01.

These three control rods were part of a population that had been tested during the operating cycle for potential fuel channel distortion in accordance with plant procedures and fuel vendor recommendations. The testing involved the measurement of control rod settle times, scram times, and continuous full insertion times. During the testing, control rod 38-43 failed to settle and was experiencing increased scram times as early as October 2005; however, it continued to pass all requisite tests required for operability.

During the subsequent refueling outage, the fuel assemblies and control blades associated with control cells 26-15, 38-43 and 34-47 were removed and visually inspected. Two fuel assemblies in control cell 38-43 had visible channel distortion, which was confirmed by field measurements. In addition, indications of control blade to fuel channel contact on the fuel assemblies and control blades for control cells 26-15 and 34-47 were also observed. Rub marks were observed on the control blades consistent with channel interaction; however, no damage to these components was identified.

The licensee's root cause evaluation for the event concluded that as a result of the contact between the control blade and the fuel channels, the friction between these two components increased. This adversely affected the ability of the control rod drive mechanisms to drive their associated control blades into the core. The lower than

nominal reactor pressure at the time of the scram, 864 psig verses a nominal 1000 psig at full reactor power, also resulted in less driving force through the control rod drive mechanism.

Corrective actions taken by the licensee included reconfiguring the Unit 1 core during the scheduled refueling to either discharge the fuel assemblies that would have been susceptible to channel bowing in the next operating cycle or place them in non-control cell locations, re-channeling other potentially susceptible fuel assemblies prior to reinstallation in the core, planned early testing for suspect fuel assemblies at 80 percent of the fuel vendors' anticipated susceptibility point on both Unit 1 and Unit 2, and revision of the fuel channel distortion surveillance procedure for both units to incorporate the lessons learned from this event. The event was entered into the licensee's corrective action program as IR 455968.

Because there was no licensee performance deficiency associated with this event, there were no findings of significance identified by the inspectors. Similarly, the inspectors identified no violations of regulatory requirements during this event review.

The inspectors' review and closure of this LER constituted a single inspection sample.

.2 Inadvertent Actuation of the 1B Emergency Diesel Generator

On March 4, 2006, with Unit 1 shutdown for a scheduled refueling outage, instrument maintenance technicians were installing a Barton level instrument for reactor vessel level indicator 1B21-R452A as part of a system modification. At 5:12 a.m., intermittent reactor vessel water low level alarms received in the main control room resulted in the automatic start of the 1B HPCS EDG. However, because the HPCS pump control switch was in pull-to-lock, the pump did not start and did not inject water into the reactor vessel.

A licensee investigation determined that the 1B EDG had auto-started approximately 15 minutes after the instrument maintenance technicians had completed work and placed the 1B21-R452A indicator into service. Based on the 15 minute time delay and the lack of instrument ringing, the apparent cause was determined to be an air bubble that was introduced during the modification and then migrated to the level transmitter, resulting in an invalid low level signal and an auto-start of the 1B EDG. Further, the licensee's apparent cause evaluation identified that during other similar instrument maintenance activities, associated trips that could be caused as a result of the maintenance activity were bypassed wherever possible to preclude inadvertent actuation of safety systems and components. In this case, however, maintenance planners who created the work package failed to incorporate the appropriate precautions, limitations, and special configurations for the work.

The inspectors determined that the failure of the licensee's maintenance planners to have properly incorporated the appropriate precautions, limitations, and special configurations for the work into the work package for this activity represented a licensee-identified violation of very low safety significance. The details of this violation are discussed in Section 4OA7 of this report. Corrective actions taken by the licensee included development and promulgation of Maintenance Work Planning Manager

expectations regarding independent verification reviews of work packages written against plant modifications and/or packages that were copied from older work orders, as well as the incorporation of the lessons learned from this event into a site specific work planners' guide being developed. The licensee had entered this issue into their corrective action program as IR 461952.

The inspectors' review of this event constituted a single inspection sample.

4OA5 Other

.1 Review of Institute of Nuclear Power Operations (INPO) Report

The inspectors completed a review of the final report for the INPO November 2005 site evaluation, transmitted to the licensee on April 5, 2006.

This review did not constitute an inspection sample.

.2 (Closed) URI 05000373/2006009-02: Inaccurate Control Rod Position Indication Provided to Control Room Operators Following a Unit 1 Reactor Scram on February 20, 2006.

As discussed in Section 4OA3.1 of this report, following an automatic reactor scram on February 20, 2006, three control rods failed to insert to position 00. Numerous anomalies associated with the position indication for these three control rods were observed by the control room operating crew, and complicated their response to the event. At the center of this issue were the anomalous control rod positions provided to the operating crew by the rod worth minimizer (RWM).

On October 19, 1994, LaSalle Unit 2 experienced a reactor scram in which nine control rods failed to indicate full-in for approximately 2 minutes following the scram. A subsequent investigation by the licensee identified that this was due to the rods being inserted beyond the full-in limit switch for the given control rod position indication instrumentation string. In this situation, the RPIS essentially "lost track" of the control rod's position. As a corrective action for this issue, the licensee performed a modification to the RWM known as the "Scram Capture" modification.

In simplest terms, the Scram Capture modification changed the RWM's serial receiver card electronically programmable read only memory (EPROM) integrated circuit chip to filter out blank control rod data. Thus, in a situation like that which occurred on Unit 2 on October 19, 1994, control rods going to the over travel insert position beyond the full-in limit switch would indicate their last good position of 00 on the RWM. However, during the licensee's investigation into the events associated with the February 20, 2006, Unit 1 scram, the licensee discovered that the original source code for the RWM contained programming that overwrote all serial memory card control rod positions with 00 upon reinitialization of the RWM. This original source code when combined with the filtering effect of the Scram Capture modification caused erroneous 00 indications to be displayed on the RWM following reinitialization by control room operators as they responded to the scram and event on February 20, 2006.

The licensee tested the Scram Capture modification following the 1994 scram on Unit 2 by inserting specific bit pattern words into the RPIS data stream and validating that the data captured by the serial receiver card reflected only valid rod positions as programmed into the EPROM chip. Another portion of the same modification test validated that the scram detection logic on the card worked properly to place the serial receiver card into the scram capture mode of operation. The remaining modification tests were designed to ensure that the RWM would properly sequence control rods during startup and insert appropriate control rod blocks, as required by Technical Specifications. No testing following the modification was performed to determine the effects of modification on the RWM reinitialization sequence.

The inspectors determined that the failure of the licensee to properly incorporate the actual method of operation of the RWM, during reinitialization and while in Scram Capture mode of operation, into applicable plant procedures represented a licensee-identified violation of very low safety significance. The details of this violation are discussed in Section 4OA7 of this report. Corrective actions taken by the licensee included revisions to RWM system training and the criteria for reinitialization, as well as a modification to the plant process computer scram timing module. The modification permits the computer to be used by control room operators in a post-scram scenario to accurately and quickly determine individual control rod position. The licensee had entered this issue into their corrective action program as IRs 461952 and 465107.

The inspectors' review of this material and closure of the URI was considered a follow-up to the original inspection activity, and as such did not constitute an independent inspection sample.

.3 (Closed) URI 05000373/2006003-03; 05000374/2006003-03: Operability and Calculational Issues Associated with the Failure to Install Procedurally Required Temporary Seismic Supports During L1R11 CSCS Valve Replacement Work.

During the licensee's Unit 1 L1R11 refueling outage, a large scale manual valve replacement project was undertaken for the CSCS Division 1 subsystem. Portions of the project affected both units due to the common nature of some of the Division 1 piping. The licensee had requested and received a Technical Specification amendment from the NRC staff to facilitate the work. One of the provisions associated with the granting of this amendment was that the licensee would, throughout the entire valve replacement project, maintain the seismic qualification of the CSCS piping systems.

From March 4, 2006, through March 10, 2006, the licensee worked the portion of the project designated to replace the 1&2 DG032 manual valves. These valves were the last isolations for each unit's Division 1 room cooler CSCS discharge piping, and required the installation of temporary line stop plugs to prevent lake water from running back through the CSCS discharge piping and flooding out the lower elevations of both reactor buildings. Additionally, temporary seismic supports were required in the work packages for each valve's replacement, since the CSCS discharge piping was no longer fully supported once each line was severed to accomplish the replacement of the valves.

On March 10, 2006, a licensee work control supervisor identified that the required temporary seismic supports had not been installed during the replacement of 1&2 DG032 during work package closeout. Since by this point, the 1&2 DG032 valves had been replaced and the CSCS piping restored to normal, there was no immediate operability issue and no Technical Specification Required Actions were entered. The licensee did enter the issue into their corrective action program as IR 464917, and performed an evaluation for past operability. On March 11, 2006, the licensee made an 8-hour non-emergency report (ENS 42405) notifying the NRC Operations Center of the existence of the potentially unanalyzed condition for both units. The licensee retracted ENS 42405 on March 14, 2006, after having completed calculations that indicated that the CSCS piping remained seismically supported even without the requisite temporary supports installed.

The licensee's piping calculations were reviewed in detail by the LaSalle resident inspectors and Region III mechanical engineering inspectors. After several clarifying questions were satisfactorily answered, the inspectors determined that there were no significant issues with the licensee's calculations, and that the failure of the licensee to have properly installed the temporary seismic supports for the valve replacement project represented a licensee-identified violation of very low safety significance. The details of this violation are discussed in Section 4OA7 of this report. Corrective actions taken by the licensee included revisions to work control procedures removing the option for marking work package steps as "N/A" in the field by craft personnel, a requirement for all contractor supervisors to attend work package training prior to the next refuel outage, and a review of technical human performance behaviors and communications techniques for all engineering personnel, work control personnel, and craft supervisors.

The inspectors' review of this material and closure of the URI was considered a follow-up to the original inspection activity, and as such did not constitute an independent inspection sample.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to the Site Vice President, Ms. Susan Landahl, and other members of licensee management on July 13, 2006. 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

Cornerstones: Initiating Events and Mitigating Systems

The following violations of very low 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.

- Section 4.8.5 of licensee procedure MA-AA-716-010, "Maintenance Planning," Revision 7, states: "If the maintenance activity to be performed has the potential to initiate an Engineered Safeguard Function or undesired equipment actuation, plan the appropriate precautions, limitation, and/or special configurations for each maintenance activity." Further, Criterion V of 10 CFR 50, Appendix B, "Instructions, Procedures, and Drawings," states, in part, that: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

As discussed in Section 4OA3.2 of this report, contrary to these requirements the licensee's maintenance planners failed to incorporate the applicable precautions, limitations, and special configurations into work instructions for the installation of a reactor water level transmitter on Unit 1 on March 4, 2006, and in so doing left the 1B EDG vulnerable to an inadvertent automatic actuation. The inspectors determined this violation to be of very low safety significance because the Unit 1 HPCS pump was in pull-to-lock at the time of the actuation signal, and no injection into the reactor vessel occurred.

- Section 4.z of Appendix A of Regulatory Guide 1.33, Revision 2, requires that the licensee prepare adequate instructions for the operation of the RWM. Further, Technical Specification 5.4.1.a requires that written procedures be established, implemented, and maintained in accordance with the provisions of Appendix A of Regulatory Guide 1.33, Revision 2.

As discussed in Section 4OA5.2 of this report, contrary to these requirements the licensee failed to incorporate the actual method of operation of the RWM, during reinitialization and while in Scram Capture mode of operation, into applicable plant operating procedures, and in so doing created a situation whereby the control room operators' Unit 1 scram response on February 20, 2006, was unnecessarily complicated. The inspectors determined this violation to be of very low safety significance because the failure to incorporate the appropriate operational detail into plant procedures for the RWM did not result in the actual loss of any safety functions for any risk significant or Technical Specification equipment.

- The licensee's engineering change (EC 356370) specified the installation of temporary seismic supports during valve replacement work on CSCS lines 1DG23B-6" and 2DG23B-6". These temporary seismic supports were required to have been installed in accordance with work orders (WOs) 00826042-02 on Unit 1, and 00826044-02 on Unit 1. Further, Criterion V of 10 CFR 50, Appendix B, "Instructions, Procedures, and Drawings," states, in part, that: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

As discussed in Section 4OA5.3 of this report, contrary to these requirements the licensee conducted valve replacement work on CSCS lines 1DG23B-6" and 2DG23B-6" from March 4, 2006, through March 10, 2006, without the

procedurally required temporary seismic supports in place. The inspectors determined the violation to be of more than minor significance in that if left uncorrected it would constitute a potentially more significant safety concern for upcoming CSCS valve replacement work scheduled for future refuel outages. However, the violation was also determined to be of very low safety significance, because the licensee was able to demonstrate through calculations that, in this case, the associated CSCS piping remained seismically qualified even without the procedurally required temporary supports.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

S. Landahl, Site Vice President
D. Enright, Plant Manager
J. Bashor, Site Engineering Director
R. Bassett, Emergency Preparedness Manager
T. Connor, Maintenance Director
L. Coyle, Operations Director
R. Ebright, Site Training Director
F. Gogliotti, System Engineering Manager
B. Kapellas, Radiation Protection Manager
H. Madronero, Engineering Programs Manager
J. Rapoport, Nuclear Oversight Manager
D. Rhodes, Work Management Director
T. Simpkin, Regulatory Assurance Manager
H. Vinyard, Shift Operations Superintendent
C. Wilson, Station Security Manager

Nuclear Regulatory Commission

B. Burgess, Chief, Reactor Projects Branch 2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000373/2006004-01; URI Adequacy of 'B' VC Compressor Operability
05000374/2006004-01 Determinations and Post-Maintenance Tests
(Section 1R19)

Closed

05000373/2006-001-00 LER Three Control Rods Fail to Indicate Fully Inserted
Following Automatic Reactor Scram (Section 4OA3.1)

05000373/2006009-01 URI Failure of Unit 1 Control Rod 38-43 to Fully Insert During
an Initial Scram of February 20, 2006 (Section 4OA3.1)

05000373/2006009-02 URI Inaccurate Control Rod Position Indication Provided to
Control Room Operators Following a Unit 1 Reactor Scram
on February 20, 2006 (Sections 4OA5.2 and 4OA7)

05000373/2006003-03; URI Operability and Computational Issues Associated with the
05000374/2006003-03 Failure to Install Procedurally Required Temporary Seismic
Supports During L1R11 CSCS Valve Replacement Work
(Sections 4OA5.3 and 4OA7)

Discussed

None.

LIST OF DOCUMENTS REVIEWED

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

1R01 Adverse Weather

Procedures:

- LOA-TORN-001; High Winds/Tornado; Revision 6
- LOS-ZZ-A2, Attachment B; Summer Operations Preparations; Revisions 31 and 32
- WC-AA-107; Seasonal Readiness; Revision 2

LaSalle Station Summer Readiness Duty Team Guide; Revision 2006

1R04 Equipment Alignment

Drawings and Prints:

- M-87, Sheet 1; Unit 1 Core Standby Cooling System Equipment Cooling Water System; Revision AT
- M-87, Sheet 2; Unit 1 Core Standby Cooling System Equipment Cooling Water System; Revision AK
- M-87, Sheet 3; Unit 1 Core Standby Cooling System Equipment Cooling Water System; Revision M
- M-94, Unit 1 Low Pressure Core Spray; Revision AL
- M-95, Unit 1 High Pressure Core Spray; Revision AM
- M-96, Sheet 1; Unit 1 Residual Heat Removal System; Revision AW
- M-96, Sheet 2; Unit 1 Residual Heat Removal System; Revision AU
- M-96, Sheet 3; Unit 1 Residual Heat Removal System; Revision AQ
- M-96, Sheet 4; Unit 1 Residual Heat Removal System; Revision AD
- M-141, Unit 2 High Pressure Core Spray; Revision AP

1R05 Fire Protection

LaSalle County Station - Fire Protection Report

Issue Reports:

- 433516; CO2 Nozzle Failure; 12/13/2005
- 481677; Door 393 Bottom Latch is Broke (NRC Identified); 4/21/2006
- 481684; Door 406 Found Unlatched (NRC Identified); 4/21/2006
- 482254; Rounds EO Found Door 393 Slightly Ajar; 4/23/2006
- 489300; Items Identified During Fire Drill 06-Q2-02; 5/11/2006

Fire Drill Scenario No. 60; Unit 2 Motor Driven Reactor Feed Pump; 12/17/2002

1R06 Flood Protection Measures

Issue Reports:

- 091564; Embedded Conduits Not Sealed Per Design Drawings; 1/20/2002
- 334882; NRC Questioned Testing Method; 2/16/2005
- 461031; Containment Room Watertight Door Alarm Did Not Actuate; 1/1/2006
- 461038; Containment Room Watertight Door Alarm Did Not Actuate; 1/2/2006
- 461043; Containment Room Watertight Door Alarm Did Not Actuate; 1/2/2006
- 493950; NRC Identified UFSAR/Procedure Clarifications Required; 5/26/2006

Procedures:

- LES-LS-01; Inspection of Magnetrols and Capacity Check for Sumps in Flood Control Zone and Other Related Sumps; Revision 13
- LS-PSA-013; LaSalle Probabilistic Risk Assessment Summary Document; Revision 5

Work Orders:

- 584938-01; Inspection of Magnetrol and Sump Capacity Check for the Turbine Condensate Pit Floor Drain Sump (2LS-TF013); 1/15/2005
- 99264434-01; Inspection of Magnetrol and Sump Capacity Check for the Service Water Reactor Building Sump (2LS-RE026); 5/16/2003
- 680482-01; Inspection of Magnetrol and Sump Capacity Check for the 'A' Residual Heat Removal Pump Room Sump Level Switch (1LS-RE027); 8/31/2005
- 535849-01; Inspection of Magnetrol and Sump Capacity Check for the 'A' and 'B' Residual Heat Removal Service Water Pump Room Sump Level Switch (2LS-DT018); 5/17/2005
- 564329-01; Inspection of Magnetrol and Sump Capacity Check for the 'C' and 'D' Residual Service Water Pump Sump Level Switch (1LS-DT017); 6/4/2005
- 721809-01; Watertight Door and Penetration Inspection—Unit 1; 3/1/2006
- 703845-01; 1LS-CW031 Condenser Pit Level Switch Operability Check; 1/29/2006
- 703846-01; 1LS-CW032 Condenser Pit Level Switch Operability Check, 1/29/2006

Engineering Changes

- 336779; September 11 Interim Security Modifications; 6/20/2002

1R11 Licensed Operator Requalification Program

Issue Report:

- 502160; NRC Identified Outdated Simulator Work Request Book in Briefing Room; 6/21/2006
- ESG 71; Licensed Operator Requalification Scenario Guide; Revision 1

1R12 Maintenance Effectiveness

Issue Reports:

- 114125; 1A DG Cooling Water Flow Adjustment Req'd During LOS-DG-Q2; 7/02/2002
- 125606; 0DG Heat Exchanger Cooling Water Flow Higher than Required; 10/02/2002
- 249743; 0 DG Cooler Outlet Throttle Valve Packing Blown Out; 9/02/2004
- 257389; Found Stem Scored and Eroded on 0DG006; 9/27/2004
- 480279; 2DG024 Valve Position Needs to be Verified; 3/12/2006

- 480987; 2FC045B Stem and Disc Separation; 4/20/2006
- 482656; Degradation of Valve Internals Identified When Disassembled; 4/24/2006
- 486078; Valve 0DG006 Packing Leak was Discovered During Pump Run; 5/03/2006
- 486098; Throttled Position Causing Excess Packing Wear; 5/03/2006

1R13 Maintenance Risk Assessments and Emergent Work Control

Drawing:

- W9624715; 8"- 150# Weld Ends Carbon Steel Globe Valve; Revision D

Issue Reports:

- 325231; U1 SW [Service Water] Cubicle Area Cooler Flow Low During LOS-DG-Q3 Att A5; 4/15/2005
- 477112; Boroscope Inspection Found Accumulation of Macrofoulants; 4/10/2006
- 477141; Incorrect Breaker Mag. Setting; 4/10/2006
- 477345; Water Leg Pump Removed from 2E22-C003 Needs to be Rebuilt; 4/11/2006
- 477521; Equipment Storage May Not be in Accordance with LAP-100-56; 4/11/2006
- 482656; Degradation of Valve Internals Identified When Disassembled; 4/24/2006
- 483323; '0' DG Oil Leak at #1 Cylinder Under Top Deck Area; 4/26/2006
- 488901; LIP-FW-501 Required Adjusting Feedwater Flow Computer Points; 5/10/2006
- 498992; Perform Recalibration of Feedwater Inlet Flow Loop Xmtrs; 6/12/2006
- 481097; Adverse Trend of LaSalle Unit 1 CRDM [Control Rod Drive Mechanism] Withdrawal Stall Flows; 4/20/2006
- 489715; FME Found in 1C34-N002A D/P Transmitter; 5/12/2006
- 489633; LIP-FW-501 Instructions Are Not Correct; 5/12/2006

Procedure:

- LIP-FW-501; Unit 1 Reactor Feedwater Inlet Flow Calibration; Revision 12

1R14 Operator Performance During Non-Routine Plant Evolutions and Events

Issue Reports:

- 494439; LOS-RD-SR7 Channel Interference Monitoring Results; 5/28/2006
- 493591; Control Rod 50-31 Will Exceed the End-of-Life Criteria During L1C12; 5/25/2006
- 487936; LaSalle County Unit 1 Cycle 12 Cycle Management Tracking; 5/8/2006

Procedures:

- NF-AB-431; Power Suppression Testing; Revision 4
- LGP-3-1; Power Changes; Revision 38
- LOS-RD-SR7; Channel Interference Monitoring; Revision 6

1R15 Operability Evaluations

Issue Reports:

- 442006; Low Flow on Cooler 2VY02A During LOS-DG-Q3; 1/13/2006
- 451664; Low Flow Issue on Unit-1 Division III VY Cooler, 1VY02A; 1/13/2006
- 482656; Degradation of Valve Internals Identified When Disassembled; 4/24/2006
- 500023; Potentially Nonconservative Technical Specification; 6/14/2006

Operability Evaluations:

- OE 06-001; Valve 0DG006 and Potentially Other CSCS-ECW Globe Valves; Revision 0
- Stem Wear Observed on Division 1 DG Cooler Outlet Throttle Valve 0DG006; 5/31/06
- OE 06-002; Instrument Nitrogen and Safety Relief Valves 1(2)B21-F013C, D, E, S, and U; Revision 0

Standing Order 06-010; ADS Operability and Bottle Change Out Awareness; 6/14/2006

1R19 Post-Maintenance Testing

Issue Reports:

- 480315; Chattering Sound Heard While Attempting Cover Removal; 4/18/2006
- 481515; Lost RPIS for HCU 06-35; 4/21/2006
- 484046; SSPV Fuse Box Cover Clips Either Loose or Missing; 4/27/2006
- 498992; Perform Recalibration of Feedwater Inlet Flow Loop Transmitters; 6/12/2006
- 497654; 0B VC Compressor Tripped; 6/7/2006
- 498720; 'B' VC Compressor Step Change in Oil Pressure; 6/10/2006
- 498762; Small Particle Found in 'B' VC Compressor Oil Regulator; 6/10/2006
- 498966; 0VC05CB Repetitive Maintenance; 6/12/2006

Procedures:

- LIP-FW-501; Unit 1 Reactor Feedwater Inlet Flow Calibration; Revision 12
- LMP-SA-01; Disassembly and Assembly of Service Air Compressor; Revision 11

Work Orders:

- 866457; 0SA01C, Repair/Rebuild Compressor

Control Room Narrative Logs; June 7, 2006 through June 19, 2006

1R22 Surveillance Testing

Issue Reports:

- 478525; Documentation of Issue with 2B Diesel Generator Exciter; 4/13/2006
- 480195; NRC Identified Loose Stem Protector Cap on 1E12-F014B; 4/18/2006
- 487315; Secondary Cont. Leak Rate Test Requires RCIC/RWCU Isolation; 5/05/2006
- 488246; Before Smoke Test Not Performed Per LEP-AP-102 Att. 15; 5/09/2006
- 488325; LOP-VR-02 Data; 5/09/2006
- 488327; LOP-VR-02 Att. C Record Time U2 VR Shutdown; 5/09/2006
- 488466; Unit 1 VR Supply and Exhaust Flow Indications Degraded; 5/09/2006
- 488480; U1 and U2 VR [Secondary Containment Ventilation] Flows Outside LOP-VR-01 Normal Range; 5/09/2006
- 490216; DWFDS Flow Recorder Indicates Flow with DWFDS Pumps Shutdown; 5/15/2006

Procedures:

- LMS-DG-01; Main Emergency Diesel Unit Surveillances; Revision 37
- LTS-200-3; RHR Heat Exchanger Tubeside DP Test; Revision 5
- LTS-300-3; Secondary Containment Leak Rate Test; Revision 19

- LOS-RD-SR7; Channel Interference Monitoring; Revision 6
- LOS-DG-Q1; 0 Diesel Generator Auxiliaries Inservice Test; Revision 43
- ER-AA-321; Administrative Requirements for Inservice Testing; Revision 6

Work Orders:

- 750694-01; ES LTS-200-3 1B RHR HT Exchanger Tubeside DP Test; 4/18/2006
- 727706-01; ES LTS-300-3 Secondary Containment Leak Rate Test; 5/09/2006
- 890400-01; OP LOS-CS-Q1 U1 Sec Cont (VR) Dampers Att 1A; 5/09/2006
- 844124-01; LOS-RD-SR7, Unit 2 Channel Distortion Test; 4/15/2006

Engineering Evaluation:

- EC 359904; IST Pump Evaluation for 0DG01P Per ER-AA-321, Attachment 4; Revision 0

1R23 Temporary Plant Modifications

Issue Reports:

- 485497; 2E12-C003 Div 2 RHR Water Leg Pump Thermal Overload Trip; 5/02/2006
- 485757; Delay in Applying Keep Filled Rig Due to Piping Requirements; 5/02/2006

Procedures:

- LOP-RH-24; Temporary Fill for A,B & C RHR System Discharge Lines; Revision 6
- LOR-2H13-P601-B306; RHR Pump 2B Discharge Pressure Low; Revision 3

4OA2 Identification and Resolution of Problems

Issue Reports:

- 477006; NRC Identified Refuel Floor Hatch Tarps Installed Per RWP; 4/10/2006
- 466702; NRC Identified - LRP-1470-14 Requirements and SBGT Operability; 3/15/2006

Procedure:

- LRP-1470-14; ALARA Engineering Contamination Control Applications (Installation/Removal of Refuel Floor Temporary Equipment Hatch Covers); Revisions 1 and 2

4OA3 Event Follow-up

Issue Reports:

- 455968; Three Rods Failed to Indicate Full-In Following a Scram; 2/20/2006
- 461952; Inadvertent Start of Unit 1 HPCS DG; 3/6/2006

Procedure:

- MA-AA-716-010; Maintenance Planning; Revision 7

LIST OF ACRONYMS USED

ADS	Automatic Depressurization System
ASME	American Society of Mechanical Engineers
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CSCS	Core Standby Cooling System
DWFDS	Drywell Floor Drain Sump
EDG	Emergency Diesel Generator
EPROM	Electrically Programmable Read Only Memory
HPCS	High Pressure Core Spray
INPO	Institute of Nuclear Power Operations
IR	Inspection Report or Issue Report
IST	Inservice Testing
LER	Licensee Event Report
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
OE	Operability Evaluation
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RPIS	Rod Position Indication System
RWM	Rod Worth Minimizer
SSPV	Scram Solenoid Position Valve
UFSAR	Updated Final Safety Analysis Report
URI	Unresolved Item
VC	Control Room Ventilation
WO	Work Order