

January 16, 2007

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 05000373/2006006;
05000374/2006006

Dear Mr. Crane:

On December 31, 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 January 9, 2007, 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, one NRC-identified finding of very low safety significance was identified. This finding also involved a violation of NRC requirements. However, because the finding associated with this violation was of very low safety significance and because the issue was entered into the licensee's corrective action program, the NRC is treating the issue as a Non-Cited Violation in accordance with Section VI.A.1 of the NRC's Enforcement Policy.

If you contest the subject or severity of the 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 05000373/2006006; 05000374/2006006
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

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,

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 05000373/2006006; 05000374/2006006
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

DOCUMENT NAME:C:\FileNet\ML070170516.wpd

Publicly Available Non-Publicly Available Sensitive Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII	RIII			
NAME	SSheldon:dtp	BBurgess			
DATE	01/16/07	01/16/07			

OFFICIAL RECORD COPY

DISTRIBUTION:

DXC1

TEB

DMS6

RidsNrrDirslrib

GEG

KGO

GLS

DEK

CAA1

LSL (electronic IR's only)

C. Pederson, DRS (hard copy - IR's only)

DRPIII

DRSIII

PLB1

TXN

ROPreports@nrc.gov (inspection reports, final SDP letters, any letter with an IR number)

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-373; 50-374

License Nos: NPF-11; NPF-18

Report No: 05000373/2006006; 05000374/2006006

Licensee: Exelon Generation Company, LLC

Facility: LaSalle County Station, Units 1 and 2

Location: Marseilles, IL 61341

Dates: October 1 through December 31, 2006

Inspectors: D. Kimble, Senior Resident Inspector
D. Eskins, Resident Inspector
T. Ploski, Senior Emergency Preparedness Analyst
F. Ramirez, Region III Reactor Engineer
J. Tapp, Region III Reactor Engineer
J. Yesinowski, Illinois Dept. of Emergency Management

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

Enclosure

SUMMARY OF FINDINGS

IR 05000373/2006006, 05000374/2006006; 10/01/2006 - 12/31/2006; LaSalle County Station, Units 1 & 2; Maintenance Risk Assessments and Emergent Work Control Report.

The inspection was conducted by resident inspectors and regional inspectors. The report covers a 3-month period of baseline resident inspection and a baseline inspection in Emergency Preparedness. One finding and an associated Non-cited Violation of NRC requirements were identified by the inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using NRC 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.

A. Inspector-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. A finding of very low safety significance was identified by inspectors during observation of a scheduled 1A emergency diesel generator (EDG) fast start surveillance. Specifically, the inspectors identified that the licensee's manual operator actions in place to ensure EDG availability during the surveillance testing did not meet the requirements of NUMARC 93-01, Section 11. A non-cited violation of 10 CFR 50.65(a)(4) was also identified for failure to adequately assess and manage the increase in risk that result from the proposed activity.

The performance deficiency identified was associated with the licensee's planning and use of operator manual actions to ensure EDG availability during surveillance testing. Specifically, the licensee's manual restoration actions intended to maintain EDG availability during the surveillance test were not properly captured in written instructions or the licensee's procedures. In addition, the inspectors determined that diagnosis by the on-watch operations crew would have been required to successfully restore the EDG in the event of an emergency start demand. The finding was of more than minor significance in that the licensee failed to adequately implement and manage risk compensatory measures (i.e., the use of operator manual actions to ensure component availability) associated with the EDG surveillance activity. Because the Risk Deficit for the finding was calculated to have been significantly less than 1×10^{-6} , the inspectors concluded that the finding was of very low safety significance (Green) and within the licensee's response band. Corrective actions planned and completed by the licensee included a review of all procedural uses of operator manual actions to ensure component availability during testing to ensure that adequate written restoration instructions exist, as well as other NUMARC 93-01, Section 11, requirements. (Section 1R13.2)

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

Summary of Plant Status

Unit 1

The unit began the inspection period operating at full power. On December 2, 2006, reactor power was reduced to approximately 70 percent to facilitate a control rod pattern adjustment, to perform control rod scram time testing, and to perform control rod channel deformation surveillance activities. Operation at full power resumed later that same day, and 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 October 28, 2006, reactor power was reduced to approximately 71 percent to permit a control rod sequence exchange, to perform control rod scram time testing, and to perform control rod channel deformation surveillance activities. Operation at full power resumed later the same day. On November 25, 2006, reactor power was reduced to approximately 65 percent to support entry into the feedwater heater bay in order to effect repairs on a minor valve leak. The unit returned to full power operation on November 26, 2006. On December 9, 2006, reactor power was reduced to approximately 76 percent to facilitate a control rod pattern adjustment, to perform control rod scram time testing, and to perform control rod channel deformation surveillance activities. Full power operation was resumed on December 10, 2006. Finally, on December 30, 2006, reactor power was reduced to approximately 80 percent to allow for another control rod adjustment. The unit returned to operation at full power later that same day, and continued to operate at or near full power for the remainder of the inspection period.

1. REACTOR SAFETY

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

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors conducted a review of the licensee's preparations for winter conditions to verify that the plant's design features and implementation of procedures were sufficient to protect mitigating systems from the effects of adverse weather. Documentation for selected risk-significant systems was reviewed to ensure that these systems would remain functional when challenged by inclement weather. Cold weather protection, such as heat tracing and area heaters, was verified to be in operation where applicable. The following systems or plant areas were selected for detailed reviews by the inspectors due to their risk significance or susceptibility to cold weather issues:

- Control room and auxiliary electric equipment room ventilation (Control Room Ventilation (VC) and Auxiliary Equipment Room Ventilation (VE)) systems;

- Unit 1 Emergency Diesel Generator ventilation systems; and
- Unit 2 Emergency Diesel Generator ventilation systems.

The inspectors' review of winter weather preparations constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Semiannual Complete System Alignment Verification

a. Inspection Scope

Due to the system's risk significance, the inspectors selected the Unit 1 and 2 vital electric direct current supply and distribution systems for a complete alignment verification. The inspectors conducted physical verifications of the mechanical and electrical equipment lineups, material condition, component labeling, component and equipment cooling, and hangers and supports, and verified supporting system operability to ensure that ancillary equipment or debris did not interfere with equipment operation.

This complete system alignment verification constituted a single inspection sample.

b. Findings

No findings of significance were identified.

.2 Quarterly Partial System Alignment Verifications

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:

- The 'B' train of the VC system during 'A' train maintenance;
- The 'B' train of the VE system during 'A' train maintenance; and
- The Division 1 Emergency Diesel Generator during a Unit 1 and 2 Division 3 planned work window.

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

These partial equipment alignments constituted three inspection samples.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Fire Protection 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 2I2, Unit 1 - high pressure core spray (HPCS) cubicle, elevation 673'4";
- Fire Zone 2I4, Unit 1 - low pressure core spray/reactor core isolation cooling system (LPCS/RCIC) pump cubicle, elevation 673'4";
- Fire Zone 3I2, Unit 2 - HPCS cubicle, elevation 673'4"; and
- Fire Zone 3I4, Unit 2 - LPCS/RCIC pump cubicle, elevation 673'4".

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

These reviews constituted four inspection samples.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Quarterly Observation of Licensed Operator Requalification Training

a. Inspection Scope

The inspectors observed a crew training session during licensed operator requalification training that included operational experience and lessons learned from a recent plant site area emergency, methods available to validate the position of control rods after a scram, and shift emergency director training, including notification and assessment tools and lessons learned. Areas observed by the inspectors included: clarity and formality of communications, timeliness of actions, prioritization of activities, procedural adequacy and implementation, managerial oversight, and emergency plan execution.

The inspectors' observation of this operator training session constituted one 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 and components 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 issue or problem that potentially impacted system work practices, reliability, or common cause failures:

- Unit 1 and 2 main turbine electro-hydraulic control (EHC) system problems and performance;
- Unit 1 and 2 main generator field exciter brush arcing issues; and
- Chronic performance problems with the VC and VE systems.

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 reviews constituted three inspection samples.

b. Findings

No findings of significance were identified.

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

.1 Miscellaneous Quarterly Maintenance Risk Assessments

a. Inspection Scope

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

- Unit 1 EHC and No. 3 main turbine bypass valve issues;
- Unit 2 main steam isolation valve spurious trip signals;
- Unit 1 Division 1 emergency core cooling system corner room ventilation damper hydro-motor issues; and
- Unit 2 heater drain tank level controller 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.

These reviews constituted four inspection samples.

b. Findings

No findings of significance were identified.

.2 Emergency Diesel Generator (EDG) Availability During Surveillance Testing

a. Inspection Scope

The inspectors reviewed and observed the licensee's use of operator manual actions to ensure EDG availability during surveillance testing activities. The licensee's evaluation of plant risk, risk management, scheduling, and configuration control for the scheduled EDG surveillances were assessed against the criteria of 10 CFR 50.65(a)(4), Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants," and Section 11 to the final revision of NUMARC 93-01.

This review constituted a single inspection sample.

b. Findings

Introduction

A finding of very low safety significance (Green) was identified by inspectors during observation of a scheduled 1A EDG fast start surveillance. Specifically, the inspectors identified that the licensee's manual operator actions in place to ensure EDG availability during the surveillance testing did not meet the requirements of NUMARC 93-01, Section 11. A non-cited violation of 10 CFR 50.65(a)(4) was also identified for failure to adequately assess and manage the increase in risk that results from the proposed activity.

Description

On October 18, 2006, inspectors conducting an observation of the 1A EDG fast start surveillance test questioned several members of the on-watch unit staff regarding their use of operator manual actions to maintain EDG availability during the surveillance test. The inspectors identified that the on-watch shift personnel did not have a written set of steps, or a written procedure, specifically identified for restoration of the EDG in the event of an emergency start demand. Further, the inspectors identified that the

on-watch shift personnel essentially planned to diagnose what restoration activities would be taken at the time of an emergency start demand based upon the crew's location within the surveillance test procedure at the time that the emergency start demand occurred.

In parallel with baseline inspection activities, the inspectors were also in the process of conducting Temporary Instruction (TI) 2515/169, "Mitigating Systems Performance Index (MSPI) Verification," (Section 4OA5.1). In the course of reviewing the licensee's operator manual actions to ensure EDG availability for the MSPI, the inspectors also identified that the members of the on-watch operations crew were unaware of the limiting response time for operator manual actions specified in the licensee's MSPI Basis Document. In the case for the LaSalle EDGs, the licensee's MSPI Basis Document lists approximately 6 minutes as the limiting time to restore EDG power to its associated bus under certain accident conditions. Although the inspectors later determined, based upon a review of the operator manual actions that would have been required in the event of an EDG emergency start demand, that the licensee's designated operators would have likely been able to take all their required actions within the specified 6 minute time limit; neither the on-watch operating crew's designated equipment operators nor their supervisors were briefed on this specific EDG restoration parameter before or during the surveillance test.

Analysis

The inspectors determined that there was a performance deficiency associated with the licensee's planning and use of operator manual actions to ensure EDG availability during surveillance testing. Specifically, the licensee's procedures for control of work and use of operator manual actions to ensure component availability referenced the requirements contained in Section 11 of NUMARC 93-01, which, in part, states:

"Systems, structures, or components out of service for testing are considered unavailable, unless the test configuration is automatically overridden by a valid starting signal, or the function can be promptly restored either by an operator in the control room or by a dedicated operator stationed locally for that purpose. Restoration actions must be contained in a written procedure, must be uncomplicated (a single action or a few simple actions), and must not require diagnosis or repair. Credit for a dedicated local operator can be taken only if (s)he is positioned at the proper location throughout the duration of the test for the purpose of restoration of the train should a valid demand occur. The intent of this paragraph is to allow licensees to take credit for restoration actions that are virtually certain to be successful (i.e., probability nearly equal to 1) during accident conditions."

The inspectors determined that the licensee's manual restoration actions intended to maintain EDG availability during the surveillance test were not properly captured in written instructions or the licensee's procedures, and that diagnosis by the on-watch operations crew would have been required to successfully restore the EDG in the event of an emergency start demand.

In accordance with NRC Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," the inspectors determined that the finding was of more than minor significance in that the licensee failed to adequately implement and manage risk compensatory measures (i.e., the use of operator manual actions to ensure component availability) associated with the EDG surveillance activity. Subsequently, the inspectors determined that the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," and conducted a characterization and initial screening. Because the finding was associated with maintenance risk management, this was accomplished using IMC 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process."

Using data from the licensee's Probabilistic Risk Assessment and in consultation with a NRC Region III Senior Reactor Analyst, the inspectors calculated the actual Incremental Core Damage Probability (ICDP) for the finding, conservatively assuming the 1A EDG to have been unavailable for the entire duration of the fast start surveillance test. Inspectors then compared this value with the licensee's assumed ICDP for the duration of the surveillance test, and obtained a Risk Deficit for the finding. Based on the magnitude of the calculated Risk Deficit being significantly less than 1×10^{-6} , the inspectors concluded that the finding was of very low safety significance (Green) and within the licensee's response band.

Enforcement

The Maintenance Rule, 10 CFR 50(a)(4), states that: "Before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety."

Contrary to this requirement, on October 18, 2006, during a fast start surveillance test of the 1A EDG, the licensee failed to adequately assess and manage the increase in risk that resulted from the surveillance activity. Specifically, operator manual actions intended to maintain EDG availability and manage the risk associated with the surveillance test were not properly implemented in accordance with established industry standards and Regulatory Guides.

The licensee entered this issue into their corrective action program (CAP) as Issue Report 548473. Corrective actions planned and completed by the licensee included a review of all procedural uses of operator manual actions to ensure component availability during testing to ensure that adequate written restoration instructions exist, as well as other NUMARC 93-01, Section 11, requirements. Because the licensee has entered the issue into their CAP and the finding is of very low safety significance, this violation of 10 CFR 50(a)(4) is being treated as a non-cited violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000373/2006006-01; 05000374/2006006-01)

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

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

- A technical evaluation of the Unit 2 channel distortion thermal limit penalty;
- A formal operability evaluation for various degraded core standby cooling system (CSCS) globe valves;
- A formal operability evaluation for degraded performance of the Unit 1 No.3 main turbine bypass valve;
- An evaluation of the operability of Unit 2 control rod 30-39, which was declared "slow" in accordance with Technical Specifications; and
- An evaluation of the operability of the 2A EDG and its associated ventilation system following EDG room temperature controller problems.

These 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 five 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.

- 'A' VC compressor post replacement testing;
- 'A' VE compressor post replacement testing; and
- 1A residual heat removal service water (RHRSW) testing following replacement of the pump discharge check valve.

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 and post-maintenance testing activities adequately ensured that the equipment met the

licensing basis, Technical Specifications, and Updated Final Safety Analysis Report (UFSAR) design requirements.

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

b. Findings

No findings of significance were identified.

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:

- 1A EDG fast start surveillance test; and
- Unit 2 oscillation power range monitor calibrations.

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 two inspection samples.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

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

- Quarterly IST for the 2B RHRSW 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 RCS leak detection system functional test.

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 the temporary leak repair modification to the Reactor Core Isolation Cooling steam supply drain pot steam trap outlet valve. 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 inspectors' review of this temporary modification constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors completed a screening review of Revision 20 of the LaSalle County Station Annex of the Exelon Standardized Emergency Plan to determine whether changes identified in this Annex revision may have reduced the effectiveness of the licensee's emergency planning. The screening review of Revision 20 does not constitute approval of the changes and, as such, the changes are subject to future NRC inspection to ensure that the emergency plan continues to meet NRC regulations.

These activities constituted a single inspection sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

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

4OA1 Performance Indicator (PI) Verification (71151)

.1 Data Submission Issue

a. Inspection Scope

The inspectors performed a review of the data submitted by the licensee for the 3rd quarter 2006 performance indicators for any obvious inconsistencies prior to its public release in accordance with IMC 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)

.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 CAP. Additionally, the inspectors verified that the licensee was identifying issues at an appropriate threshold and entering them in the CAP, and verified that problems included in the licensee's CAP 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 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 July 2006 through December 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: Annual Review of Operator Workarounds

Introduction

The inspectors selected operator workarounds for a more in-depth review in accordance with inspection procedure requirements. This annual review of operator workarounds constituted a single inspection sample.

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed plant logs, issue reports, and work requests to verify that the licensee's identification of operator workarounds were complete, accurate, and timely, and that the consideration of extent of condition review, generic implications, common cause, and previous occurrences was adequate.

(2) Findings and Issues

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

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed plant logs, issue reports, and work requests associated with existing operator workarounds, operator challenges, and control room deficiencies. The nature and significance of both individual issues and groups of issues in aggregate with respect to safety, risk, and licensee corrective action procedural requirements were considered. Additionally, the inspectors assessed the licensee's evaluation and disposition of performance issues, evaluation and disposition of operability issues, and application of risk insights for prioritization of issues.

(2) Findings and Issues

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

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed issue reports and work requests associated with existing operator workarounds, operator challenges, and control room deficiencies to determine if the licensee's CAP addressed generic implications. Additionally, the inspectors verified that established corrective actions by the licensee were appropriately focused to correct the problem.

(2) Findings and Issues

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

4OA5 Other

.1 Implementation of TI 2515/169 - MSPI Verification

a. Inspection Scope

The objective of TI 2515/169, "Mitigating Systems Performance Index Verification," was to verify that licensees have correctly implemented the MSPI guidance for reporting unavailability and unreliability of the monitored safety systems. Prior to the April 1, 2006, implementation of MSPI, a team of NRC staff and contractors involved in the development of the index conducted an audit of the licensees' bases documents. On a sampling basis, the team selected key aspects of the index to be inspected to ensure that the licensees followed the MSPI guidelines. The key aspects included: (1) identification of the correct boundaries; (2) selection of the appropriate components; (3) establishment of baseline unavailability and unreliability information; and (4) resolution of concerns with respect to the individual licensee's probabilistic risk assessments. The purpose of this TI was to validate the unavailability and unreliability input data and to verify accuracy of the first reporting results for the 2nd quarter 2006.

The performance of this TI by the inspectors represented a single inspection sample.

b. Issues

- (1) For the sample selected, did the licensee accurately document the baseline planned unavailability hours for the MSPI systems?

No issues were identified.

- (2) For the sample selected, did the licensee accurately document the actual unavailability hours for the MSPI systems?

No issues were identified.

- (3) For the sample selected, did the licensee accurately document the actual unreliability information for each MSPI monitored component?

No issues were identified.

- (4) Did the inspector identify significant errors in the reported data, which resulted in a change to the indicated index color? Describe the actual condition and corrective actions taken by the licensee, including the date when the revised PI information was submitted to the NRC.

No issues were identified.

- (5) Did the inspector identify significant discrepancies in the basis document which resulted in: (1) a change to the system boundary; (2) an addition of a monitored component; or (3) a change in the reported index color? Describe the actual condition and corrective actions taken by the licensee, including the date of when the bases document was revised.

No issues were identified.

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 January 9, 2006. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meeting

An interim exit meeting was conducted via telephone for the baseline emergency preparedness inspection with Mr. R. Bassett on December 20, 2006.

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
R. Chrzanowski, Chemistry Manager
T. Connor, Maintenance Director
R. Ebright, Site Training Director
B. Ginter, Engineering Programs Manager
F. Gogliotti, System Engineering Manager
B. Kapellas, Radiation Protection Manager
S. Marik, Work Management Director
J. Rappeport, Nuclear Oversight Manager
D. Rhodes, Operations Director
J. Rommel, Design Engineering Manager
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

05000373/2006006-01; NCV Operator Manual Actions For Maintaining EDG Availability
05000374/2006006-01 During Surveillance Testing Not Adequately Implemented,
as Required by 10 CFR 50.65(a)(4). (Section 1R13.2)

Closed

05000373/2006006-01; NCV Operator Manual Actions For Maintaining EDG Availability
05000374/2006006-01 During Surveillance Testing Not Adequately Implemented,
as Required by 10 CFR 50.65(a)(4). (Section 1R13.2)

Discussed

None.

LIST OF DOCUMENTS REVIEWED

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

1R01 Adverse Weather

Procedures:

- LOS-ZZ-A2; Preparation for Winter/Summer Operation; Revision 33
- WC-AA-107; Seasonal Readiness; Revision 2

1R04 Equipment Alignment

Issue Reports:

- 500684; B VC Compressor Calculated Oil Pressure > 70 PSIG; 6/16/2006
- 524237; Div 1 125VDC Battery Room Fan D/P Low Alarm; 8/26/2006
- 533475; 2TIC-VX009 Not Controlling Unit 2 Div. 1 SWGR Temperature; 2/09/2005
- 545195; NRC Identified Issues During Plant Walkdown; 10/17/2006
- 558644; Adding water (4 Hours Needs Scheduled in Station Schedule); 11/16/2006
- 558689; Ground Alarm; 11/16/2006
- 559060; Bolt on Panel Is Stripped; 11/16/2006
- 559137; Battery Charger Breaker at Risk for Inadvertent Contact; 11/17/2006
- 559385; NRC Question - has Div 1 125V Battery Room Air Flow Degraded; 11/17/2006
- 562331; Spark Arrester Cap Found Not Installed on Cell #26 of Unit 1; 11/27/2006

Drawings and Prints:

- M-1443, Sheet 1; Control Room HVAC; Revision T
- M-1443, Sheet 2; Control Room HVAC; Revision R
- M-1443, Sheet 3; Auxiliary Electric Equipment Room HVAC; Revision Q
- M-1443, Sheet 4; Auxiliary Electric Equipment Room HVAC; Revision AB
- M-83, Sheet 1; Diesel Generator Auxiliary System; Revision AQ
- M-85, Sheet 1; Diesel Oil System; Revision AC
- M-87, Sheet 2; Core Standby Cooling System Equipment Cooling Water; Revision AK

Procedures:

- LOP-VE-01; Auxiliary Electric Equipment Room HVAC Operation; Revision 32
- LOP-VC-01; Control Room HVAC Operation; Revision 27
- LOP-DG-03M; Unit 0 Diesel Generator Mechanical Checklist; Revision 8
- LOP-DG-03E; Unit 0 Diesel Generator Electrical Checklist; Revision 9

DC Battery Room Air Flow Capacity Test; 10/09/1997

1R05 Fire Protection

LaSalle County Station - Fire Protection Report (FPR)

Procedure:

- LES-DC-106; Safe Shutdown (Appendix R) DC Emergency Light Inspection Sheets; Revision 36

1R11 Licensed Operator Requalification Program

Procedure:

- OP-AB-300-1001; BWR Control Rod Movement Requirements; Revision 3

1R12 Maintenance Effectiveness

Issue Reports:

- 549606; 0A VE Comp Has Low Suction Pressure to Oil Pressure D/P; 10/26/2006
- 551626; Discovered Low D/P on 0VE04CA Compressor after Run-in; 10/31/2006
- 563991; Received 0A VE Cooler Cond Coil Hi D/P Alarm; 12/01/2006
- 569847; PQI Review IDs VC/VE Compressor Actions Not Thorough; 12/15/2006
- 545322; 'A' VC Discharge Valve Manifold Failure; 10/17/2006
- 546076; Crankcase Heaters Wrong Size; 10/19/2006
- 552844; 'B' VC HVAC Compressor Failure to Auto Start; 11/3/2006
- 560450; 'B' VC HVAC Compressor Failed to Shutdown as Required; 11/20/2006
- 560537; Difficulty in Racking Out B VC Compressor Breaker; 11/21/2006
- 561047; 0VC05CB Heaters Require Replacement; 11/22/2006
- 562359; Hot Gas Bypass Valve Intermittently Sticking on 'B' VC; 11/27/2006
- 562578; Historical: 'B' VC Assessment with Hot Gas Valve Degraded; 11/28/2006
- 563995; Received 0A VC Cooler Cond Coil Hi D/P Alarm; 12/1/2006
- 540596; EHC Leak at Water Absorber Cannister; 10/5/2006
- 554523; Actuator History and Performance; 11/7/2006
- 554642; EHC Fluid Leaking from 2A EHC Pump Compensator; 11/7/2006
- 548308; Arcing Noted on Alterex Brush No. 1; 10/24/2006
- 551650; Low Humidity Levels Affecting Unit 1 TG Brushes; 10/31/2006
- 554451; Unit 1 ALTEREX Sparking; 10/7/2006
- 554826; Work Orders Required to Install 4.5 Lb Brush Holders; 11/7/2006
- 555011; Exciter Enclosure Humidifier Not Working; 11/8/2006
- 556128; 19 Hour Observation of Unit 2 ALTEREX Brush and Slip Rings; 11/10/2006
- 570443; ALTEREX Brush No. 2 Arcing; 12/18/2006
- 538514; EHC Pressure Drop During LOS-TG-M4; 10/1/2006

1R13 Maintenance Risk Assessments and Emergent Work Control

Issue Reports:

- 516612; U2 Div 2 CSCS Ventilation Has Inadequate Flow; 8/03/2006
- 547836; Hydro-motor Failure on Damper 1VY04Y; 10/23/2006
- 548236; Failure Analysis of 2TZ-VY024B Hydro-motor for 2VY05Y Damper; 10/23/2006
- 538514; EHC Pressure Drop During LOS-TG-M4; 10/1/2006

- 548473; NRC IDENTIFIED CONCERN – DG Availability Questioned; 10/24/2006
- 542852; Found MS High Flow Switches Out of Tolerance; 10/11/2006
- 568686; 2A SSRDT Normal Drain Valve Failed Closed; 12/13/2006
- 568948; Limit Switch 2HD-2SRDCV-CA-ZSC Needs Adjustment; 12/13/2006

Operations Standing Order:

- S06-017; Expectations for Operators for Maintaining PRA Equipment Available Via Operator Actions; 10/25/2006

Procedure:

- OP-AA-108-106; Equipment Return to Service; Revision 1

Plant Issue Resolution:

- 2006-012; Unit 1 EHC System / Turbine Bypass Valve No. 3; Revision 1

1R15 Operability Evaluations

Operability Evaluations:

- OE 06-001; 0DG006 and Other CSCS-ECW Globe Valves; Revision 2
- OE 06-003; 1B21-MSBPV-3, 1EH02PB; Revision 0

Issue Reports:

- 572916; 2PM01J-B103 (2A EDG HVAC Panel 2PL25J Trouble) Alarm Flashed; 12/25/2006
- 546092; Unit 2 Control Rod 30-39 Declared “Slow” Due to Hydraulic Temperatures > 400 °F; 10/19/2006
- 538514; EHC Pressure Drop During LOS-TG-M4; 10/1/2006

Engineering and Technical Evaluation:

- EC 362660; Evaluation of the LaSalle Unit 2 Channel Distortion Thermal Limit Penalty; Revision 0

Plant Issue Resolution:

- 2006-012; Unit 1 EHC System / Turbine Bypass Valve No. 3; Revision 1

1R19 Post-Maintenance Testing

Procedures:

- LOP-VC-01; Control Room HVAC Operation; Revision 27
- LOS-RH-Q1; Unit 1 A RHRSW System Operability and Inservice Test; Revision 64

Work Orders:

- 941911-01; OP LOS-RH-Q1 U1 A RHRSW Inservice Test Att 1D; 10/25/2006
- 762475-04; OP PMT: RHRSW 1A PP CHK VLV 1E12-F331A- Check per LOS-RH-Q1; 10/25/2006

1R22 Surveillance Testing

Issue Report:

- 556014; >1GPM Difference Between Norm and Alt DWFDS Fill Up Rate; 11/09/2006

Procedures:

- LOS-DG-M2 Attach 1A; 1A Diesel Generator Fast Start; Revision 65
- LOS-PC-321; Unit 1 Drywell Floor Drain Sump Mag Discharge Flow Functional Test; Revision 3
- LTS-200-231; Division 2 RHRSW Balance Test; Revision 6
- LIS-NR-217A; Unit 2 Oscillation Power Range Monitors 'A' and 'E' Calibration; Revision 4
- LIS-RP-208A; Unit 2 Oscillation Power Range Monitor Channels A1 and B1 Response Time Test; Revision 0
- LOS-RH-Q1; RHR (LPCI) and RHRSW Pump and Valve Inservice Test for Modes 1, 2, 3, 4, and 5; Revision 64

Work Orders:

- 914784-01; OP LOS-DG-M2 1A DG Fast Start Att 1A - Fast; 10/18/2006
- 965122-01; IM LIS-PC-321 Unit 1 Drywell Floor Drain Sump Flow Functional; 11/14/2006

1R23 Temporary Plant Modifications

Procedures:

- CC-AA-404; Maintenance Specification: Application Selection, Evaluation and Control of Temporary Leak Repairs; Revision 7

Work Orders:

- 949118-01; 1E51-F039 Temporary Leak Repair; 10/26/2006

1EP4 Emergency Action Level and Emergency Plan Changes

LaSalle Station Annex of the Exelon Standardized Emergency Plan; Revision 20

4OA2 Identification and Resolution of Problems

Operator Workarounds:

- WA 369; ADS Bottle Bank Operability
- WA 370; ADS Bottle Bank Operability
- OC 319; Automatic Drain Traps are Unreliable
- OC 360; Multiple RMCS Trips
- OC 364; Heater Drain System

Procedures:

- OP-AA-102-103; Operator Workaround Program; Revision 1

Approved NSO CR Rounds for Units 1 and 2; 7/24/2006

4OA5 Other

LaSalle County Station MSPI Basis Document; Revision 1

Consolidated Data Entry MSPI Derivation Reports:

- Unit 1 Emergency Alternating Current (AC) Power System; 7/6/2006
- Unit 2 Emergency AC Power System; 7/6/2006
- Unit 1 High Pressure Injection System; 7/6/2006
- Unit 2 High Pressure Injection System; 7/17/2006
- Unit 1 Cooling Water System; 7/19/2006
- Unit 2 Cooling Water System; 7/19/2006
- Unit 1 Heat Removal System; 7/12/2006
- Unit 2 Heat Removal System; 7/12/2006
- Unit 1 Residual Heat Removal System; 7/10/2006
- Unit 2 Residual Heat Removal System; 7/10/2006

LIST OF ACRONYMS USED

AC	Alternating Current
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CSCS	Core Standby Cooling System
DC	Direct Current
DG	Diesel Generator
EDG	Emergency Diesel Generator
EHC	Electro-Hydraulic Control
HPCS	High Pressure Core Spray
ICDP	Incremental Core Damage Probability
IMC	Inspection Manual Chapter
IR	Inspection Report or Issue Report
IST	Inservice Test or Inservice Testing
LPCI	Low Pressure Coolant Injection
MSPI	Mitigating Systems Performance Index
NCV	Non-Cited Violation
NRC	U.S. Nuclear Regulatory Commission
NUMARC	Nuclear Management and Resources Council
PI	Performance Indicator
PMT	Post-Maintenance Testing
RCS	Reactor Coolant System
RHRSW	Residual Heat Removal Service Water
RMCS	Reactor Manual Control System
SDP	Significance Determination Process
UFSAR	Updated Final Safety Analysis Report
VC	Control Room Ventilation
VE	Auxiliary Equipment Room Ventilation