October 24, 2005

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 05000373/2005004;
05000374/2005004

Dear Mr. Crane:

On September 30, 2005, 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 October 13, 2005, 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, two findings of very low safety significance were identified by the NRC. Both of these findings also involved violations of NRC requirements. However, because the findings associated with these violations were of very low safety significance and because the issues were entered into the licensee's corrective action program, the NRC is treating these issues as Non-Cited Violations in accordance with Section VI.A.1 of the NRC's Enforcement Policy. Additionally, one licensee identified violation is listed in Section 4OA7 of this report.

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 05000373/2005004; 05000374/2005004
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
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-373; 50-374
License Nos:	NPF-11; NPF-18
Report No:	05000373/2005004; 05000374/2005004
Licensee:	Exelon Generation Company, LLC
Facility:	LaSalle County Station, Units 1 and 2
Location:	2601 N. 21st Road Marseilles, IL 61341
Dates:	July 1 through September 30, 2005
Inspectors:	D. Kimble, Senior Resident Inspector D. Eskins, Resident Inspector J. Cassidy, Radiation Protection Inspector G. Gibbs, Regional Reactor Projects Inspector D. Melendez, Acting Resident Inspector – Dresden Station M. Mitchell, Radiation Protection Inspector D. Smith, Senior Resident Inspector – Dresden Station J. Yesinowski, Illinois Dept. of Emergency Management
Approved by:	Bruce L. Burgess, Chief Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000373/2005004, 05000374/2005004; 07/01/2005 - 09/30/2005; LaSalle County Station, Units 1 & 2; Radioactive Material Processing and Transportation and Identification and Resolution of Problems Report.

The inspection was conducted by resident inspectors and regional inspectors. The report covers a 3-month period of baseline resident inspection, and an announced baseline inspection in radiation protection. Two findings of very low safety significance (Green) were identified, each with an associated Non-Cited Violation. 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: Barrier Integrity

- Green. The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation (NCV) during a review of the maintenance and performance history surrounding the 1E51-F028 reactor core isolation cooling (RCIC) containment isolation check valve. The licensee failed to effectively diagnose and correct a recurring performance problem with the valve sticking open following a failed local leak rate test (LLRT) on September 10, 2004. This failure to effectively diagnose and correct a degraded and nonconforming condition was determined to constitute a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action.”

  The performance deficiency with this issue was a failure on the part of the licensee to have properly diagnosed the 1E51-F028 degraded condition and to have effectively enacted repairs in September 2004. The finding was of more than minor significance in that it had a direct impact on a barrier integrity cornerstone objective. Specifically, the licensee’s failure to properly diagnose and effectively correct a degraded condition with the 1E51-F028 containment isolation check valve resulted in a subsequent failure on April 7, 2005, which occurred with the unit operating at power in a condition where the valve was required to be operable. Because the finding did not represent a degradation of the radiological barrier function provided for the control room, auxiliary building, reactor building, or the standby gas treatment (SBGT) system, and did not represent a degradation of the smoke or toxic gas barrier function for the control room, and did not represent an actual open pathway in the physical integrity of the primary containment or involve an actual reduction in defense-in-depth for the atmospheric pressure control or hydrogen control functions of the primary containment, it was determined to be of very low safety significance. Corrective actions planned by the licensee include: replacement of the entire 1(2)E51-F028 check valves on both units during refuel outages in 2006 and 2007 with swing

check valves; and modifications to the 1(2)E51-F028 check valve line slopes to eliminate low spots and water collection within the check valve bodies during refuel outages in 2006 and 2007. The finding was determined to involve the cross-cutting aspect of problem identification and resolution. (Section 4OA2.3)

Cornerstone: Public Radiation Safety

- Green. The inspectors identified a finding and associated NCV of 10 CFR 71.12 (currently § 71.17) for the failure to comply with the Certificate of Compliance (CoC) for a Type B shipping cask. During preparation of the NAC International Legal Weight Truck (NAC-LWT) cask for shipment of failed fuel pins, the licensee followed the procedures provided by the contractor when placing a previously unused inner cask liner into service. However, the licensee did not ensure that the components of the shipping cask, including the liner, had been qualified for use in accordance with the CoC. As a result, during the loading process free water was entrained in the liner and was not detected until the cask and liner were opened upon receipt of the package. The finding was entered into the licensee's corrective action program.

  The issue was more than minor because it was associated with the Plant Facilities/Equipment and Instruments attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials. The issue represents a finding of very low safety significance because it did not involve exceeding a radiation limit nor was there a breach of the package during transit. A Non-Cited Violation of general license granted by 10 CFR 71.12 (currently § 71.17) was identified for the failure to obtain objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source, and examination of products on delivery. Corrective actions following the identification of the problem include development of a governing procedure to address corporate, station, and vendor roles and responsibilities as well as other shipping considerations (e.g., reporting requirements, use of qualified package) prior to future irradiated fuel shipments. (Section 2PS2.4)

B. Licensee-Identified Violation

A violation of very low safety significance that was identified by the licensee has been reviewed by inspectors. Corrective actions planned or taken by the licensee have been entered into the licensee's corrective action program. The violation 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 July 30, 2005, power was reduced to approximately 70 percent to perform a control rod sequence exchange, control rod surveillance testing and conduct repairs to the heater drain system. The unit returned to operation at full power on July 31, 2005. On September 4, 2005, power was reduced to approximately 60 percent to permit a control rod sequence exchange and control rod surveillance testing. Return to full power was delayed due to a stuck control valve on the 1A turbine driven reactor feed pump (TDRFP) turbine. Repairs to the turbine control system were completed and the unit returned to full power on September 7, 2005. The unit operated 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 July 3, 2005, power was reduced to approximately 70 percent to conduct repairs to the heater drain system. The unit returned to operation at full power that same day. On September 3, 2005, power was reduced to approximately 60 percent to permit a control rod sequence exchange and control rod surveillance testing. The unit was returned to full power on the same day. On September 27, 2005, power was reduced to approximately 60 percent to repair a leak in the 'A' main steam reheater system. The unit was returned to full power on the same day, and continued operating 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

1R04 Equipment Alignment (71111.04)

.1 Quarterly Partial System Alignment Verifications

a. Inspection Scope

The inspectors performed partial walkdowns 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 High Pressure Core Spray (HPCS), Emergency Diesel Generators (EDGs), and emergency power distribution systems during Unit 1 Reactor Core Isolation Cooling (RCIC) system inoperability;
- Unit 2 HPCS, EDGs, and emergency power distribution systems during Unit 2 RCIC system inoperability; and

- Unit 1 Division 1 Core Standby Cooling System (CSCS) during emergent repairs to a through wall leak in the Unit 1 Division 2 Residual Heat Removal Service Water (RHRSW) system piping.

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 alignment verifications constituted three inspection samples.

b. Findings

No findings of significance were identified.

.2 Semiannual Complete System Alignment Verification

a. Inspection Scope

Due to the system's risk significance, the inspectors selected the Unit 1 and Unit 2 Residual Heat Removal (RHR) systems for a complete walkdown. The inspectors walked down the system to verify mechanical and electrical equipment lineups, component labeling, component lubrication, component and equipment cooling, hangers and supports, operability of support systems, and to ensure that ancillary equipment or debris did not interfere with equipment operation. The inspectors reviewed any outstanding design issues, including temporary modifications, operator workarounds, and items tracked by the engineering department. The inspectors reviewed outstanding maintenance work requests on the system and deficiencies that could affect the ability of the system to perform its functions. The inspectors also reviewed selected issue reports (IRs) to determine if they had been properly addressed in the licensee's corrective action program (CAP). The inspectors used the documents listed in the Attachment to accomplish the objectives of the inspection procedure.

The inspectors' review of RHR systems alignment constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors walked down the following risk significant areas 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 7C4, Unit 1 HPCS diesel pump room, elevation 674'0";
- Fire zone 7C5, Unit 1 Division 2 - RHRSW pump room, elevation 674'0";
- Fire zone 7C6, Unit 1 Division 1 - RHRSW pump room, elevation 674'0";

- Fire zone 5C11, turbine building ground floor general area, common and Unit 1 station air compressor (SAC) cubicle, elevation 710'6"; and
- Fire zone 5C11, turbine building ground floor general area, Unit 2 SAC cubicle, 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 five inspection samples.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspectors reviewed the licensee's execution of biofouling controls per Section 02.01 of NRC Inspection Procedure (IP) 71111.07 to verify that commitments made per the licensee's Generic Letter (GL) 89-13 program were being met and that acceptance criteria meeting industry standards for a chemical treatment system were utilized. The inspectors reviewed the licensee's service water chemistry program including monitored parameters, sample frequencies, program goals, and limits. Methods used by the licensee to control heat exchanger scale, corrosion, microbiological activity, and silting were inspected.

This review constituted one 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 failures, and resulted in a Site Area Emergency. 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.

The inspectors' observation of this simulator scenario 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 several selected systems and components. The following systems/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 identified issue or problem that potentially impacted system work practices, reliability, or common cause failures:

- Unit 1 and Unit 2 RCIC;
- Unit 1 and Unit 2 feedwater and feedwater heaters; and
- 'A' train auxiliary electric equipment room ventilation (VE) compressor.

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 represented 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:

- RCIC system temperature qualification issues;
- 'A' VE system failures due to debris;
- 13B feedwater heater leak repairs;
- Ultimate heat sink high temperature problems;

- Unit 1 secondary containment inboard exhaust isolation damper, 1VR05YA, failure to indicate closed; and
- 1B EDG trip/problems during 24-hour test run.

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)

.1 Operator Response to Loss of Speed Control for the 1A TDRFP

a. Inspection Scope

The inspectors performed several hours of continuous control room observation to evaluate operator performance in coping with a stuck turbine control valve for the 1A TDRFP. 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 troubleshooting, repair 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 evolution were identified by the licensee, and appropriately entered into the corrective action program.

The observation of this non-routine evolution by the inspectors constituted a single inspection sample.

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:

- Unit 1 Division 1 RHR pump room elevated temperatures;
- Unit 1 'A' main steam isolation valve (MSIV) limit switch operability following exposure to higher than equipment qualification (EQ) calculated temperatures (OE 02-04);
- Unit 1 and Unit 2 RCIC systems operability during station blackout (SBO) (OE 05-06);
- Unit 1 and Unit 2 RCIC operability with reduced net positive suction head (OE 05-05);
- Unit 1 drywell floor drain sump (DWFDS) alternate leak detection system operability following intermittent errors in flow rate indications; and
- 13B feedwater heater operation with reduced shell wall thickness.

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

These reviews constituted six 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:

- 2C RHR pump post-maintenance testing after modifications to the minimum flow valve timing circuit during the week ending August 6th;
- 'A' VE system post-maintenance testing during the week ending July 30th following compressor repairs necessitated by introduction of debris into the system;
- Unit 2 standby gas treatment (VG) system operability test following filter replacement during the week ending August 6th;
- Unit 1 secondary containment isolation damper testing after damper limit switch repairs;
- 'A' VE system compressor confidence run after compressor repair and rebuild during the week ending September 10th;
- 1A TDRFP speed control system testing after repairs for a stuck turbine control valve during the week ending September 10th;

- Unit 1 station air compressor (SAC) operational testing following control panel modification during the week ending September 24th;
- 1B EDG voltage regulator repairs/replacement during the week ending August 27th; and
- Unit 1 Division 3 battery charger capacity testing following maintenance during the week ending September 17th.

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 tests constituted nine inspection samples.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors selected the following 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:

- 1B EDG idle start;
- Unit 2 HPCS system inservice test;
- Unit 1 secondary containment dampers operability test;
- Unit 1 Division 3 battery charger capacity test; and
- Unit 1 and Unit 2 drywell leak detection gaseous monitors setpoint determinations.

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.

These reviews constituted five inspection samples.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed temporary modification "Determination of Approximate Uncertainty of Ultimate Heat Sink (UHS) Temp Measurement by Alternate Methodology." 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 plant modification constituted a single inspection sample.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors reviewed an off-year emergency preparedness exercise to evaluate drill conduct and the adequacy of the licensee's critique of performance to identify weaknesses and deficiencies. The selected exercise provided input to the Drill/Exercise and Emergency Response Organization Drill Participation NRC Performance Indicators. The inspectors observed the pre-exercise briefs, classification of events, protective action recommendation development, notifications to off-site agencies, and the post-exercise critique. Observations were compared to the licensee's critique observations and corrective action program entries. The inspectors verified that there were no discrepancies between observed performance and performance indicator reported statistics. The simulator scenario observed resulted in alert, site area emergency, and general emergency classifications.

This emergency preparedness drill observation constituted a single inspection sample.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstones: Occupational Radiation Safety and Public Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 Plant Walkdowns

a. Inspection Scope

The inspectors reviewed the radiological conditions of work areas within radiation areas and high radiation areas in the Auxiliary and Radwaste Buildings. The inspectors performed walkdowns of these areas using an NRC survey meter and reviewed licensee controls to determine if the controls (i.e., surveys, postings, and barricades) were adequate to meet the requirements of 10 CFR 20 and the licensee's Technical Specifications.

This review represented one inspection sample.

b. Findings

No findings of significance were identified.

.2 High Risk Significant, High Dose Rate High Radiation Area (HRA) and Very High Radiation Area (VHRA) Controls

a. Inspection Scope

The inspectors held discussions with the Radiation Protection (RP) Manager concerning high dose rate HRA and VHRA controls and procedures, including procedural changes that had occurred since the last inspection, in order to verify that any procedure modifications did not substantially reduce the effectiveness and level of worker protection.

The inspectors discussed with RP supervisors the controls that were in place for special areas that had the potential to become very high radiation areas during certain plant operations, to determine if these plant operations required communication beforehand with the RP group, so as to allow corresponding timely actions to properly post and control the radiation hazards.

The inspectors conducted plant walkdowns to verify the posting and locking of entrances to high dose rate HRAs and VHRAs.

These reviews represented three inspection samples.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

.1 Radioactive Waste System Inspection Planning

a. Inspection Scope

The inspectors reviewed the liquid and solid radioactive waste system description in the UFSAR for information on the types and amounts of radioactive waste (radwaste) generated and disposed. The inspectors reviewed the scope of the licensee's audit program with regard to radioactive material processing and transportation programs to verify that it met the requirements of 10 CFR 20.1101(c).

This review represented one inspection sample.

b. Findings

No findings of significance were identified.

.2 Walkdown of Radioactive Waste Systems

a. Inspection Scope

The inspectors reviewed the liquid and solid radioactive waste system description in the UFSAR and the most recent information regarding the types and amounts of radioactive waste generated and disposed. The inspectors performed walkdowns of the liquid and solid radwaste processing systems to verify that the systems agreed with the descriptions in the UFSAR and the Process Control Program and to assess the material condition and operability of the systems. The inspectors reviewed changes to the waste processing system to verify the changes were reviewed and documented in accordance with 10 CFR 50.59 and to assess the impact of the changes on radiation dose to members of the public.

The inspectors reviewed the current processes for transferring waste resins into transportation containers to determine if appropriate waste stream mixing and/or sampling procedures were utilized. The inspectors also reviewed the methodologies for waste concentration averaging to determine if representative samples of the waste product were provided for the purposes of waste classification in accordance with 10 CFR 61.55. During this inspection, the licensee was not conducting waste processing.

These reviews represented one inspection sample.

b. Findings

No findings of significance were identified.

.3 Waste Characterization and Classification

a. Inspection Scope

The inspectors reviewed the licensee's radiochemical sample analysis results for each of the licensee's waste streams, including dry active waste, resins, and filters. The inspectors also reviewed the licensee's use of scaling factors to quantify difficult-to-measure radionuclides (e.g., pure alpha or beta emitting radionuclides). The reviews were conducted to verify that the licensee's program assured compliance with 10 CFR 61.55 and 10 CFR 61.56, as required by Appendix G of 10 CFR 20. The inspectors also reviewed the licensee's waste characterization and classification program to ensure that the waste stream composition data accounted for changing operational parameters, and thus remained valid between the annual sample analysis updates.

These reviews represented one inspection sample.

b. Findings

No findings of significance were identified.

.4 Shipment Preparation

a. Inspection Scope

The inspectors reviewed shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness for a 2003 damaged fuel pin shipment. The inspectors reviewed the requirements of the applicable transport cask Certificate of Compliance (CoC) to determine if they were met and verified that the receiving licensee was authorized to receive the shipment package. The inspectors reviewed the licensee's procedures for cask loading and closure to determine if they were consistent with the vendor's approved procedures. The inspectors did not observe radiation worker practices, as no packages were in process or preparation for shipping. The inspectors verified that the workers had adequate skills through training and experience to accomplish each task and that the licensee had adequate supervision oversight to determine if the shippers were knowledgeable of the shipping regulations and whether shipping personnel demonstrate adequate skills to accomplish the package preparation requirements for public transport with respect to NRC Bulletin 79-19 and 49 CFR 172, Subpart H. The inspectors reviewed the training records provided to personnel responsible for the conduct of radioactive waste processing and radioactive shipment preparation activities. The review was conducted to verify that the licensee's training program provided training consistent with NRC and Department of Transportation (DOT) requirements.

These reviews represented one inspection sample.

b. Findings

Introduction

A finding of very low safety significance (Green) and an associated NCV were identified for the failure to comply with the Certificate of Compliance (CoC) for a Type B shipping cask. Specifically, neither the licensee nor its vendor qualified the inner liner of the shipping cask, as required by the CoC. This resulted in free water entrained in a NAC-LWT shipping cask contrary to the CoC for the cask during a shipment of failed fuel.

Description

On October 6, 2003, LaSalle County Station shipped several failed fuel pins to Studsvik Nuclear AB Hotcell Facility in Studsvik Sweden. The Studsvik facility was contracted to examine the fuel pins to assess the cause of fuel failures at LaSalle County Station and Quad Cities Nuclear Power Station in 2001 and 2002. The shipment contained five failed pins, discharged from LaSalle County Station Unit 2 mid-cycle in October 2002, and a single non-failed pin.

The licensee hired a vendor to provide the shipping cask and prepare the package for shipping. The cask proposed by the vendor for the shipment was not licensed to ship this type of failed fuel from a light water power reactor. The vendor requested and received a revision to the CoC from the NRC for this use prior to the shipment.

The fuel pins were loaded into the cask's inner liner or canister and the canister cover was sealed in accordance with the torque specifications. Water was then removed from canister by vendor personnel, with licensee oversight, using the vendor's vacuum drying procedures. This work was conducted in the Spent Fuel Pool using vendor procedures and with LaSalle County Station personnel oversight.

The canister was placed in the shipping cask, closed, drained, and evacuated according to the vendor's cask use procedure that was adopted and proceduralized by the licensee. Radiological surveys were conducted before the loaded cask was released from LaSalle County Station. The result of this survey established that the cask was free from removable contamination when it left LaSalle County Station. The cask was then transported to the Studsvik facility.

When the cask was opened at the Studsvik hot cell facility a small amount of water (estimated to have been 5 to 10 centiliters) came out from the cask opening. This water was reported as relatively clean. When the inner sealed liner or canister lid was opened additional water was identified. This water was described as highly contaminated with radioactive material. Studsvik personnel also reported that the pins were found in good condition and the flow holes appeared to be unobstructed.

In total, approximately 1.5 to 2 liters of water were removed from the inner canister after opening in Sweden. A technical assessment by the vendor and confirmed by the licensee indicated that this amount of water did not introduce additional concerns for

criticality. The conditions of the CoC limit the amount of water in the canister to reduce the potential for high internal pressures if the liquid were to flash to steam.

LaSalle County Station issued a timely report to the NRC in accordance with 10 CFR 71.95 documenting the presence of water in the shipping cask. Further review by the NRC identified that certain provision of the CoC had not been met by either the licensee or the vendor. Specifically, the inner liner had not been qualified as required by the CoC.

Analysis

The performance deficiency associated with the planning and execution of these work activities was the failure to obtain and review objective evidence of quality furnished by the contractor or subcontractor required by the general license in accordance with 49 CFR 71.12 (currently § 71.17). The presence of water within the shipping package was outside the conditions specified in the CoC that must be followed by the general licensee. The finding, which is under the Public Radiation Safety Cornerstone, does not involve the application of traditional enforcement because it did not result in actual safety consequences, did not have the potential to impact the NRC's regulatory function and was not the result of any willful actions. The finding was of more than minor significance as it was associated with the Public Radiation Safety cornerstone attribute of Plant Facilities/Equipment and Instruments, and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials. Therefore, the issue was evaluated using the Significance Determination Process (SDP).

The inspectors determined that the finding did not involve exceeding a radiation limit or a breach of the package during transit. The finding involved a CoC noncompliance with a minor contents deficiency. It was determined to be a minor contents deficiency because the limitation for water in the canister was not associated with the water as a moderator, but rather with the increase in internal pressure within the canister that could have been caused by that quantity of water flashing into steam. In addition, the quantity of water found in the cask would not have challenged the integrity of the cask via pressure build-up. As a result, the inspectors determined that the finding was of very low safety significance (Green), and within the licensee's response band.

Enforcement

In accordance with the provisions of 10 CFR 71.12 (currently § 71.17), LaSalle County Station was granted a general license to use the NAC-LWT 9225, an NRC approved package. 10 CFR 71.12(c)(2) requires the general licensee to comply with the terms and conditions of the license, certificate, or other approval, as applicable, and the applicable requirements of subparts A, G, and H of the part.

Contrary to the above, prior to loading and use of the NAC-LWT 9225 cask, LaSalle County Station failed to obtain objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source, and examination of products on delivery. This resulted in the licensee using package components that were not qualified in accordance with the CoC, and that led to water being entrained in

the package, contrary to the limitations of the package. The licensee entered the issue into their corrective action program as IR 282150. The associated violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000373/2005004-01; 05000374/2005004-01)

.5 Shipping Records

a. Inspection Scope

The inspectors reviewed six non-exempted package shipment manifests completed in years 2002 and 2005 to verify compliance with NRC and DOT requirements (i.e., 10 CFR 20 and 71, and 49 CFR 172 and 173). The licensee did not have any non-exempt package preparation or shipping underway during the inspection.

These reviews represented one inspection sample.

b. Findings

No findings of significance were identified.

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed condition reports, audits, and self-assessments that addressed radioactive waste and radioactive materials shipping program deficiencies since the last inspection, to verify that the licensee had effectively implemented the corrective action program and that problems were identified, characterized, prioritized and corrected. The inspectors also verified that the licensee's self-assessment program was capable of identifying repetitive deficiencies or significant individual deficiencies in problem identification and resolution.

The inspectors also reviewed corrective action reports from the radioactive material and shipping programs since the previous inspection, interviewed staff and reviewed documents to determine if the following activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NRC NCVs tracked in the corrective action program; and
- Implementation/consideration of risk significant operational experience.

These reviews represented one inspection sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

Cornerstones: Public Radiation Safety and Occupational Radiation Safety

.1 Radiation Safety Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed Licensee Event Reports (LERs), licensee data reported to the NRC, plant logs, and NRC inspection reports to verify the following performance indicators for the period of July 2004 through July 2005:

- Occupational Exposure Control Effectiveness
- RETS/ODCM Radiological Effluent Occurrence

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

The review of these NRC Performance Indicators represented two inspection samples.

b. Findings

No findings of significance were identified.

.2 Data Submission Issue

a. Inspection Scope

The inspectors performed a review of the data submitted by the licensee for the 2nd Quarter 2005 performance indicators for any obvious inconsistencies prior to its public release in accordance with IMC 0608, "Performance Indicator Program."

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

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

.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.

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 Selected Issue Follow-up Inspection: RCIC Barometric Condenser Vacuum Pump Inboard Containment Isolation Discharge Check Valve (1E51-F028) Repeat Failures

Introduction

During the most recent Unit 1 refueling outage (L1R10) in January – February 2004, the as-found Type C local leak rate test (LLRT) performed on RCIC system containment isolation check valve 1E51-F028 in accordance with 10 CFR 50, Appendix J, failed. Subsequent corrective action performed by the licensee consisted of component maintenance in which the valve was disassembled, internal parts cleaned and inspected, and the valve reassembled. Inspection of the valve internals during this maintenance activity revealed a buildup of corrosion products on the valve internals that were probably responsible for internal binding and the check valve's disc being stuck in the open position. A Type C LLRT performed following the valve's reassembly as a post-maintenance test yielded satisfactory results.

On August 2, 2004, the licensee identified that previous LLRTs performed on RCIC system containment isolation check valves 1(2)E51-F028 to satisfy the requirements of 10 CFR 50, Appendix J, were invalid. During a routine review, the licensee had determined that a head correction calculation used to establish test pressure was in error, and that the test pressure that both the Unit 1 and Unit 2 F028 valves had been subjected to during their last refueling outage, testing was outside the specified value and nonconservative. The licensee immediately declared the 1(2)E51-F028 check valves inoperable, and shut and deenergized the companion 1(2)E51-F069 motor-operated containment isolation valves for that containment penetration on each unit to comply with Technical Specifications.

On September 9-10, 2004, the licensee performed LLRTs on both units' RCIC F028 check valves in series attempts to restore the valves to an operable status. The Unit 2 E51-F028 check valve was tested satisfactorily and the Unit 2 RCIC system was returned to a normal alignment with the 2E51-F069 motor-operated valve (MOV) energized and open. The Unit 1 E51-F028 check valve was determined during its LLRT to be stuck open, and disassembly and repair were required. On September 17, 2004, the licensee disassembled the 1E51-F028 containment isolation check valve. Licensee maintenance personnel, as well as inspectors observing the work activity, noted a significant amount of corrosion product buildup inside the valve, to the extent that maintenance technicians had to twist the valve's plug repeatedly in order to facilitate its removal. The corrosion product buildup was cleaned up in accordance with licensee maintenance procedures for check valve overhauls, and the valve's plug and operating spring were replaced. Later that day, the licensee performed a LLRT on the 1E51-F028 check valve and obtained satisfactory results. The 1E51-F028 check valve was declared operable, and the Unit 1 RCIC system was subsequently returned to a normal alignment with the 1E51-F069 MOV energized and open.

Inspectors following up on the 1E51-F028 LLRT failure identified other similar failures of the component over the past several years. In each case, it appeared that the licensee performed fairly similar corrective actions to clean up the valve internals, obtain satisfactory LLRT results, and return the valve to service. The licensee did not,

however, diagnose the underlying cause of the corrosion product buildup until after the September 9, 2004, online test failure.

In an equipment apparent cause evaluation (EACE 253839) completed by the licensee in October 2004, engineering and maintenance personnel examining the issue found that the carbon steel disc of the check valve was corroding, and that the buildup of corrosion products over time was causing the valve disc to bind and stick in the open position. Contributing to the buildup of corrosion products was an unexpected accumulation of moisture within the body of the check valve. Investigation by licensee personnel revealed that the check valve line is sloped slightly towards the valve, thus promoting moisture retention in the check valve. Additionally, the licensee's investigation identified that a ball float valve in the RCIC barometric condenser vacuum tank air discharge separator may have been faulty. The faulty ball float valve was believed to have permitted the discharge of vacuum pump seal water into the 1E51-F028 line along with intended non-condensable gases from the barometric condenser.

The issue was documented as a finding of very low safety significance (Green) with an associated NCV against Criterion XVI of 10 CFR 50, Appendix B, in Section 1R12.2 of NRC Inspection Report 05000373/2004005; 05000374/2004005. As part of the corrective action for the issue, the licensee planned a mid-cycle LLRT of the 1E51-F028 check valve in the spring of 2005 as an assurance of the component's operability. Although the licensee's engineering staff had full confidence in the corrective actions taken in September 2004 to restore the component's leak tightness, licensee management and key members of the operations staff believed that an additional LLRT in the middle of the current Unit 1 cycle was a prudent measure.

On April 7, 2005, the additional LLRT for 1E51-F028 was performed. As with previous LLRTs, test pressure could not be achieved and it was determined that the 1E51-F028 containment isolation check valve was stuck open. The licensee immediately declared the valve inoperable, and shut the companion 1E51-F069 motor-operated containment isolation valve to comply with plant Technical Specifications. The licensee has continued to maintain the 1E51-F069 containment isolation valve closed under administrative controls, with plans to perform permanent repairs to the system during the upcoming Unit 1 refuel outage in early 2006 (L1R11).

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed the licensee's CAP entries and actions associated with this issue to verify that the identification of the problems by the licensee were complete, accurate, and timely, and that the consideration of extent-of-condition review, generic implications, common cause, and previous occurrences were adequate.

(2) Issues

In general, the licensee's CAP efforts have been semi-successful at identifying the cause of the 1E51-F028 check valve failures. Unlike the Unit 2 valve, 2E51-F028, the Unit 1 component, 1E51-F028, is situated in a line sloped to cause accumulation of moisture in the valve body. Following the September 2004 LLRT failure, the licensee correctly identified this issue and the need for it to be ultimately repaired. However, at this point the licensee's engineering staff failed to identify the rapid rate at which corrosion products build up in the valve, or the true susceptibility this particular check valve design has to becoming fouled by a rather small amount of corrosion product grit or debris. The licensee's engineering staff was confident that the valve would be capable of operating without issue for the remainder of the Unit 1 cycle following the repairs made in September 2004.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

In reviewing the licensee's CAP entries and actions associated with this issue, the inspectors considered 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) Issues

As discussed in the previous section, following the September 2004 LLRT failure the licensee's engineering staff believed that permanent repairs to the 1E51-F028 deficiencies, such as correction of the line slope, etc., could be deferred until the next refueling outage. This assessment represented a failure on the part of the licensee's staff to properly prioritize the necessary repairs for 1E51-F028, or to fully evaluate the problems associated with the valve's performance.

Following the April 2005 LLRT failure, the licensee conducted a root cause evaluation into the issue. As discussed in the supplemental licensee event report (LER) for the LLRT failure (05000373/2005-002-001), the root cause investigation determined that the 1E51-F028 plunger-type check valve selected for the application is highly susceptible to internal corrosion and binding. This type of valve was considered the best option for the installation at the time of plant construction, but has since been replaced by swing-check designs in similar installations across the industry due to corrosion product binding and sticking issues.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed multiple related CAP documents associated with the 1E51-F028 LLRT failures. The intent of this review was to determine if the CAP actions addressed generic implications, and to verify that corrective actions were appropriately focused to correct the problem.

(2) Findings

Introduction

A finding of very low safety significance (Green) was identified by the inspectors. The inspectors determined that following the September 2004 1E51-F028 LLRT failure that the licensee had failed to take effective corrective action for the condition, such that in April 2005 an additional failure and condition prohibited by Technical Specifications was identified. An associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was also identified by the inspectors.

Description

As discussed in the Issue History section above, following the September 10, 2004, LLRT failure the licensee performed corrective maintenance on the 1E51-F028 RCIC barometric condenser vacuum pump discharge containment isolation check valve. This corrective maintenance involved the clean up of corrosion product buildup within the valve body and the replacement of the valve's plug and operating spring. Additionally, a mid-cycle LLRT of the check valve was planned for the spring of 2005, as an added measure of assurance that the valve would remain operable for the remainder of the Unit 1 operating cycle.

On April 7, 2005, the additional LLRT for 1E51-F028 was performed. Again, as described in the Issue History section above, the test failed and the licensee had to declare 1E51-F028 inoperable and isolate the containment penetration to meet Technical Specification requirements.

Analysis

The inspectors determined that there was a performance deficiency associated with the corrective actions taken by the licensee. Specifically, the inspectors determined that the licensee's engineering and maintenance staffs had failed to take effective corrective actions following the September 2004 1E51-F028 LLRT failure, as evidenced by a subsequent similar failure on April 7, 2005. The systems involved, RCIC and containment isolation, were classified as safety-related and subject to the requirements of 10 CFR 50, Appendix B, yet deficiencies and nonconformances associated with 1E51-F028 were not promptly identified or corrected.

The objective of the Barrier Integrity Cornerstone of Reactor Safety is to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radio nuclide releases caused by accidents or events. A key attribute of this objective is the reliability of systems, structures, and components (SSCs) associated with containment isolation. 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 it had a direct impact on this cornerstone objective. Specifically, the licensee's failure to properly diagnose and effectively correct a degraded condition with the 1E51-F028 containment isolation check valve resulted in a

subsequent failure, which occurred with the unit operating at power in a condition where the valve was required to be operable to meet a Technical Specification Limiting Condition of Operation (LCO).

The inspectors determined that the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," and conducted a Phase 1 characterization and initial screening. Because the finding did not represent a degradation of the radiological barrier function provided for the control room, auxiliary building, reactor building, or the standby gas treatment (SBGT) system, and did not represent a degradation of the smoke or toxic gas barrier function for the control room, and did not represent an actual open pathway in the physical integrity of the primary containment or involve an actual reduction in defense-in-depth for the atmospheric pressure control or hydrogen control functions of the primary containment, the inspectors determined it to be of very low safety significance (Green) and within the licensee's response band.

Enforcement

Table 3.2-1 of the licensee's Updated Final Safety Analysis Report (UFSAR) indicates that the 1E51-F028 containment isolation check valve is subject to the requirements of 10 CFR 50, Appendix B. Criterion XVI, "Corrective Action," of this appendix states, in part, that: "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected." Contrary to this requirement, the licensee failed to adequately correct nonconformances associated with the 1E51-F028 containment isolation check valve following a September 2004 LLRT failure. As a result of this failure on the part of the licensee's engineering and maintenance staffs, the same nonconformances yielded an additional failure of the 1E51-F028 check valve in April 2005, when the valve was required to be operable to meet a Technical Specification LCO.

The licensee had entered this issue into their corrective action program as IR 322203. Corrective actions planned by the licensee include: replacement of the entire 1(2)E51-F028 check valves on both units during refuel outages in 2006 and 2007 with swing check valves; and modifications to the 1(2)E51-F028 check valve line slopes to eliminate low spots and water collection within the check valve bodies during refuel outages in 2006 and 2007. Because the licensee has entered the issue into their corrective action program and the finding is of very low safety significance, this violation of 10 CFR 50, Appendix B, Criterion XVI is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000373/2005004-02)

4OA3 Event Follow-up (71153)

Cornerstone: Barrier Integrity

.1 (Closed) Licensee Event Reports 05000373/2005-002-00 and 05000373/2005-002-01: RCIC Barometric Condenser Vacuum Pump Discharge Check Valve 1E51-F028 Failed Local Leak Rate Test.

On April 7, 2005, during a local leak rate test for 1E51-F028, site engineering personnel identified that the containment isolation valve was stuck open. Upon discovery, the licensee declared the valve inoperable and shut the companion motor-operated containment isolation valve, 1E51-F069, in that penetration to comply with Technical Specification requirements. Subsequent CAP reviews by the licensee's staff determined that the valve had been, in all probability, stuck open for some time and in excess of the time limits specified in Technical Specification 3.6.1.3, Condition A.

In reviewing this event, the inspectors determined that the stuck open 1E51-F028 containment isolation check valve during Unit 1 power operation constituted a licensee-identified violation of regulatory requirements that is of very low safety significance. The details of this violation are discussed in Section 4OA7 of this report. The licensee had entered this issue into their CAP as IR 322203. Corrective actions planned and completed by the licensee are described in Section 4OA2.3 of this report, which contains a detailed write up and analysis of the issue.

The review and closure of this LER and its supplement constituted a single inspection sample.

4OA5 Other

Cornerstones: Initiating Events, Mitigating Systems, and Public Radiation Safety

.1 Operational Readiness of Offsite Power (Temporary Instruction 2515/163)

The objective of Temporary Instruction (TI) 2515/163, "Operational Readiness of Offsite Power," was to confirm, through inspections and interviews, the operational readiness of offsite power (OSP) systems in accordance with NRC requirements. The inspectors reviewed licensee procedures and discussed the attributes identified in TI 2515/163 with licensee personnel during the 2nd Quarter of 2005. The results of the inspectors' review were forwarded to Office of Nuclear Reactor Regulation (NRR) for additional review and evaluation.

Following review and evaluation by the NRR staff, several follow-up questions were sent back to the inspectors for discussion with licensee personnel. The results of the inspectors' review and discussion of the follow-up questions, performed during the 3rd Quarter of 2005, were again forwarded NRR for evaluation.

The completion of this TI was documented in NRC Inspection Report (IR) 05000373/2005003; 05000374/2005003, and represented one inspection sample. The follow-up questions the inspectors discussed with licensee personnel during this

inspection period were considered a part of the original inspection sample, and did not constitute an additional inspection sample for this TI.

.2 Transportation of Reactor Control Rod Drives in Type A Packages (TI 2515/161)

a. Inspection Scope

Through inspection and interviews of cognizant personnel, the inspectors examined site specific records pertaining to the licensee's use of DOT Specification 7A, Type A, packaging for the shipment of control rod drive mechanisms for the period between 2002 and the present. The inspectors examined records for the purpose of determining the licensee's compliance with DOT transportation requirements contained in 49 FR 173.412 and 173.415. The inspectors determined that the licensee had undergone refueling activities between January 1, 2002, and the present; and that they had shipped irradiated control rod drives in DOT Specification 7A, Type A, packaging.

b. Findings and Observations

No findings of significance were identified.

Under 10 CFR 71.5, the NRC requires that licensees comply with all applicable rules and regulations of the DOT when transporting Class 7 materials. DOT regulations contained in 49 CFR 173.415(a) require that the shipper of a Specification 7A package have available complete documentation of tests and an engineering evaluation or comparative data showing that the construction methods, packaging design, and materials of construction comply with Specification 7A. Contrary to this requirement, the licensee shipped Class 7 materials (i.e., control rod drives) in Specification 7A packaging in the years 2002 through 2005 without having available documentation supporting the Specification 7A classification of the package. This issue constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC Enforcement Policy. The inspectors reviewed the documentation files for the seven irradiated control rod drive shipments made by the licensee in 2002 through 2005. In each instance, the licensee utilized a Specification 7A packaging. Review of these files, together with discussions with licensee personnel and management, indicated that the licensee did not have available complete documentation of tests and an engineering evaluation or comparative data showing that the construction methods, packaging design, and materials of construction complied with Specification 7A, as required under 49 CFR 173.415(a) for shipments in 2002 and 2003.

The licensee reused DOT Specification 7A packaging from General Electric, which was utilized to transport refurbished control rod drives to the licensee in support of refueling outages. These packages were reloaded with used control rod drives, which were then transported offsite. A review of these shipments indicated that no packages contained more than four used control rod drives, that the package gross weight did not exceed 7200 pounds, and that all other requirements for the transport of Class 7 material, as specified in 49 CFR 100 through 49 CFR 177 were met.

This issue was screened in accordance with Manual Chapter 0612, Power Reactor Inspection Reports, Appendix B, “Issue Screening,” and determined to constitute a performance deficiency. Specifically, the licensee did not meet a requirement under 49 CFR 173.415(a). The issue is not subject to traditional enforcement, in that it did not involve an actual safety consequence, did not have the potential to impact the NRC’s ability to perform its regulatory function, and had no willful aspects. The inspectors determined that the issue was of minor safety significance in that it could not be reasonably viewed as a precursor to a more significant event; would not become a more significant safety concern if left uncorrected; was not related to a performance indicator; did not affect the public radiation cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain as the result of routine civilian nuclear reactor operation; and did not relate to maintenance risk assessment or risk management. The licensee initiated actions to determine if other Specification 7A packaging was utilized without having the appropriate support documentation available. To determine if any additional shipments of irradiated control rod drives were made in the same Specification 7A packaging in earlier years, the licensee has contacted the package vendor and obtained the required support documentation. The licensee entered this matter into their corrective action program as IR 230559.

The inspectors completion of this TI represented a single 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 October 13, 2005. 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 was conducted for a periodic Access Control and Radioactive Material Processing and Transportation inspection with the Site Vice President, Ms. Susan Landahl, and other members of the licensee's staff on September 16, 2005.

4OA7 Licensee-Identified Violation

Cornerstone: Barrier Integrity

The following violation of very low significance was identified by the licensee and is a violation of NRC requirements that meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a Non-Cited Violation.

- Technical Specification 3.6.1.3, requires that primary containment isolation valves (PCIVs) be operable whenever a unit is operating in Modes 1, 2, or 3. Contrary to the requirements of Technical Specification 3.6.1.3, from September 2004 to April 2005, the licensee operated Unit 1 in Mode 1 with an inoperable PCIV, specifically the stuck open 1E51-F028 check valve, for a period in excess of the 4-hour allowed outage time permitted by Condition A of that specification.

  The inspectors determined the violation to be of very low safety significance and within the licensee's response band because the companion containment isolation valve in the same penetration, 1E51-F069, was always available and operable, and thus, no open pathway between the primary containment interior and the environment was ever present. The licensee had entered the issue into their corrective action system as IR 322203. A detailed discussion of this issue is documented in Sections 4OA2.3 and 4OA3.1 of this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

S. Landahl, Site Vice President
D. Enright, Plant Manager
R. Bassett, Emergency Preparedness Manager
T. Connor, Maintenance Director
L. Coyle, Operations Director
D. Czufin, Site Engineering Director
R. Ebright, Site Training Director
F. Gogliotti, System Engineering Manager
B. Kapellas, Radiation Protection Manager
S. Marik, Shift Operations Superintendent
J. Rappeport, Nuclear Oversight Manager (Acting)
D. Rhodes, Work Management Director
T. Simpkin, Regulatory Assurance Manager
C. Wilson, Station Security Manager

Nuclear Regulatory Commission

B. Burgess, Chief, Reactor Projects Branch 2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000373/2005004-01; 05000374/2005004-01	NCV	Failure to Obtain Evidence of Quality Furnished by a Contractor Resulting in Violation of the Certificate of Compliance for a Cask During a Shipment of Failed Fuel (Section 2PS2.4)
05000373/2005004-02	NCV	Failure to Perform Effective Corrective Action on Degraded/Nonconforming Unit 1 RCIC F028 Containment Isolation Check Valve (Section 4OA2.3)

Closed

05000373/2005004-01; 05000374/2005004-01	NCV	Failure to Obtain Evidence of Quality Furnished by a Contractor Resulting in Violation of the Certificate of Compliance for a Cask During a Shipment of Failed Fuel (Section 2PS2.4)
05000373/2005004-02	NCV	Failure to Perform Effective Corrective Action on Degraded/Nonconforming Unit 1 RCIC F028 Containment Isolation Check Valve (Section 4OA2.3)
05000373/2005-002-00	LER	RCIC Barometric Condenser Vacuum Pump Discharge Check Valve 1E51-F028 Failed Local Leak Rate Test (Section 4OA3.1)
05000373/2005-002-01	LER	RCIC Barometric Condenser Vacuum Pump Discharge Check Valve 1E51-F028 Failed Local Leak Rate Test (Section 4OA3.1)

Discussed

None.

LIST OF DOCUMENTS REVIEWED

1R04 Equipment Alignment

Issue Reports:
- 299765; Unit 2 NOS ID's Ops Not Performing First Check IAW HU-AA-101; 2/10/2005
- 303387; Unit 2 Inconsistent Direction Between C/O 31625 and LLP-2004-011; 2/13/2005
- 315991; Unit 2 Shutdown Cooling System Warming Waived per LOP-RH-07; 3/14/2005
- 322189; Unit 2 U2 RCIC Suction Pressure High; 4/07/2005
- 332391; Unit 2 2E12-N022C-SV Leaks by Seat; 5/05/2005
- 344114; Unit 2 Incorrect Procedure Rev Identified During Operator Aid Audit; 6/15/2005
- 344945; Unit 1 Hi Humidity in Unit 1 "A" RHR Pump Room; 6/17/2005
- 351316; Unit 1 Investigating RBET Inputs from 1A RT HX; 7/08/2005
- 376305; Small Leak on 1RH90AB, Division 2 RHRSW Strainer Backwash Line; 9/21/2005

Procedures:
- LOP-HP-01E; Unit 1 HPCS Electrical Checklist; Revision 10
- LOP-HP-01E; Unit 1 HPCS Mechanical Checklist; Revision 15
- LOP-HP-01E; Unit 2 HPCS Electrical Checklist; Revision 5
- LOP-HP-01E; Unit 2 HPCS Mechanical Checklist; Revision 15
- LOP-RH-01E; Unit 1 RHR Service Water System Electrical Checklist; Revision 8
- LOP-RH-03E; Unit 2 RHR Service Water System Electrical Checklist; Revision 6
- LOP-RH-02E; Unit 1 RHR System Electrical Checklist; Revision 18
- LOP-RH-04E; Unit 2 RHR System Electrical Checklist; Revision 14
- LOP-RH-11; Preparation for Standby Operation of the LPCI System; Revision 23
- LOP-RH-1AM; Unit 1 'A' RHR System Mechanical Checklist; Revision 1
- LOP-RH-1BM; Unit 1 'B' RHR System Mechanical Checklist; Revision 1
- LOP-RH-1CM; Unit 1 'C' RHR System Mechanical Checklist; Revision 0
- LOP-RH-2AM; Unit 2 'A' RHR System Mechanical Checklist; Revision 0
- LOP-RH-2BM; Unit 2 'B' RHR System Mechanical Checklist; Revision 0
- LOP-RH-2CM; Unit 2 'C' RHR System Mechanical Checklist; Revision 0
- LOP-RHWS-1AM; Unit 1 'A' RHRSW System Mechanical Checklist; Revision 1
- LOP-RHWS-1BM; Unit 1 'B' RHRSW System Mechanical Checklist; Revision 3
- LOP-RHWS-2AM; Unit 2 'A' RHRSW System Mechanical Checklist; Revision 1
- LOP-RHWS-2BM; Unit 2 'B' RHRSW System Mechanical Checklist; Revision 3

Work Orders:
- 082934-01; Investigating RBEDT Inputs from 1A RT HX; 7/13/2005
- 832174-01; 1E12-F064B Went Closed Immediately Upon Start of 1B RHR Pump; 7/25/2005

1R05 Fire Protection

LaSalle County Station - Fire Protection Report (FPR)

1R07 Heat Sink Performance

GL 89-13 Program Basis Document; Revision 0

Issue Reports:
- 263535; GL 89-13 Commitment Changes are Required; 10/06/2004

Procedures:
- CY-AA-120-410; Circulating/ Service Water Chemistry; Revision 0

1R11 Licensed Operator Requalification Program

ESG-68; Dynamic Simulator Scenario Guide; Revision 0

1R12 Maintenance Effectiveness

Engineering Changes/Evaluations:
- EC 356547; Calculation for Structural Capacity (Pressure Capacity) for Degraded Heater 1CB03AB; Revision 0

Issue Reports:
- 355984; 'A' VE Compressor Tripped; 07/23/2005
- 355986; 'A' VE Compressor Tripped; 07/23/2005
- 356038; Solenoid Valve Failed to Close when VE Fans were Swapped; 07/28/2005
- 356583; Unusual Noise Heard Coming From 0VE04CA; 07/25/2005

Operability Evaluations:
- OE05-005; RCIC Pump 1(2)E51-C001; Revision 0

Procedures:
- LEP-GM-182; Refrigerant Pump Down, Evacuation, And Charging of Reciprocating HVAC Equipment; Revision 7
- LES-GM-111; Preventive Maintenance Inspection of Reciprocating HVAC Equipment and Associated Filters; Revision 8
- LEP-GM-189; Remove Oil from Piston Type Compressors; Revision 1
- LEP-GM-191; Add Oil to Piston Refrigeration Machines with Hand Pump; Revision 0

Root Cause Reports:
- 261835; Main Control Room and Auxiliary Electric Equipment Room Ventilation Compressors Trip Due to Foreign Material Introduced into the System Following Maintenance; 11/09/2004

Work Orders:
- 00831917; 0VE04CA Tripped on High Oil Temperature; 9/7/2005

1R13 Maintenance Risk Assessments and Emergent Work Control

Engineering Changes/Evaluations:
- EC 336218; Determination of Approximate Uncertainty of CW Inlet Temp; Revision 0
- EC 344271; Determination of Approximate Uncertainty of UHS Temp Measurement by Alternate Methodology; Revision 0
- EC 354788; Assessment of High Lake Temperature (Summer Readiness 2005) - Input for NOED TS SR 3.7.3.1; Revision 0
- EC 356067; Evaluation of PPC UHS Temperature Offset; Revision 0
- EC 356326; Compute RCIC Room Temperature for SBO Conditions; Revision 0
- EC 356547; Calculation for Structural Capacity (Pressure Capacity) for Degraded Heater 1CB03AB; Revision 0

EPRI NP-6895; Guidelines for the Safety Classification of Systems, Components, and Parts Used in Nuclear Power Plant Applications (NCIG-17); 2/1991

Issue Reports:
- 116183; Thermal Model Temperature Predictions are Excessively High; 7/19/2002
- 234950; Summer Readiness - Loss of UHS Thermal Margin; 7/7/2004
- 239576; U-1/ U-2 CW Inlet Temperature Discrepancies Identified; 7/23/2004
- 260671; Obtain Lake Temperatures Using Installed Wells; 8/14/2004
- 353163; RCIC Electronic Governor Module does not Meet SBO Qualifications; 07/14/2005
- 354260; Station Position on SBO Function Impact on RCIC TS 3.5.3; 07/23/2005
- 356583; Unusual Noise Heard Coming From 0VE04CA; 07/25/2005
- 355986; 'A' VE Compressor Tripped; 07/23/2005
- 356038; Solenoid Valve Failed to Close when VE Fans were Swapped; 07/28/2005
- 355984; 'A' VE Compressor Tripped; 07/23/2005
- 360803; Ultimate Heat Sink Temperature > 97.5 F - Evaluate Impact; 8/8/2005
- 363172; 1VR05YA Shows Dual Indication when Taken to Close; 8/15/2005
- 364619; Procedural Guidance for Securing a Diesel Generator W/O CWP; 8/18/2005
- 364534; Trip of SAT Feed Breaker to Bus 143; 8/18/2005
- 364664; Troubleshoot 1B DG Overcurrent Relay; 8/18/2005
- 365121; 1B DG Ventilation Outside Air Damper Failed Closed; 8/20/2005
- 379779; Blown Fuse Improperly Identified During 8/18/05 1B DG Event; 9/29/2005
- L2001-00715; Ultimate Heat Sink Limitations in I.T.S.; 2/5/2001

LaSalle Summer Readiness Plan 2005

Procedures:
- EN-LA-402-0005; Extreme Heat Implementation Plan - LaSalle; Revision 5
- LEP-GM-182; Refrigerant Pump Down, Evacuation, and Charging of Reciprocating HVAC Equipment; Revision 7
- LEP-GM-189; Remove Oil from Piston Type Compressors; Revision 1
- LEP-GM-191; Add Oil to Piston Refrigeration Machines with Hand Pump; Revision 0
- LES-GM-111; Preventive Maintenance Inspection of Reciprocating HVAC Equipment and Associated Filters; Revision 8
- LOA-CW-101; Unit 1 Circulating Water Abnormal; Revision 11
- LOS-AA-S101; Unit 1 Shiftly Surveillance; Revision 32

Work Orders:
- 00831917; 0VE04CA Tripped on High Oil Temperature
- 810226-01; OP LOS-CS-Q1 U1 Sec Cont (VR) Dampers Att 1A

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

Issue Reports:
- 370006; 1A TDRFP Control Valve Problems During 9/4/5 Load Drop; 9/04/2005
- 371103; Auto Transfer Sequence for FRV to TDRFP Failed; 9/07/2005

Procedures:
- LIP-FW-512A; Unit 1 TDRFP 1A Control Valve/ Actuator System Calibration; Revision 14
- LOP-RL-01; Operation of the Reactor Water Level Control System; Revision 18
- LOP-FW-05; Shutdown of the Turbine Driven Reactor Feed Pump; Revision 24
- LOS-FW-SR1; Turbine Feedwater Pump Surveillance; Revision 17

1R15 Operability Evaluations

Issue Reports:
- 093984; Temperature Indication for MSIV Limit Switch Reading High; 2/3/2002
- 236085; Unit 00 Errors in Analysis Affecting Maximum Anticipated CSCS RM Temperature; 7/14/2005
- 313793; 2TE-VP115 For 2D Inbd MSIV Limit Sw Metal Temp Ind High; 3/17/2005
- 344945; Unit 1 Hi Humidity in Unit 1 “A” RHR Pump Room; 6/17/2005
- 351316; Unit 1 Investigating RBEDT Inputs from 1A RT HX; 7/08/2005
- 359811; 1TE-VP115 Reading High; 8/4/2005
- 353163; RCIC Electronic Governor Module does not Meet SBO Qualifications; 07/14/2005
- 354260; Station Position on SBO Function Impact on RCIC TS 3.5.3; 07/23/2005
- 355933; NRC Identifies Inadequate Operability Documented in Station Log; 07/22/2005
- 353233; Unexplained DWFDS Discharge Flow Increase (1UR-RF002, Pen 2); 07/14/2005

Operability Evaluations:
- OE02-004; Higher than EQ Evaluated Temperatures on MSIV Isolation Valve Limit Switches; Revision 2
- OE05-005; RCIC Pump 1(2)E51-C001; Revision 0
- OE04-006; Unit 1 & 2 Maximum CSCS Pump Room Temperatures Without VY Ventilation in Operation Exceeded Design Limits; Revision 2

Engineering Changes/Evaluations:
- EC 356326; Compute RCIC Room Temperature for SBO Conditions; Revision 0
- EC 356547; Calculation for Structural Capacity (Pressure Capacity) for Degraded Heater 1CB03AB; Revision 0

1R19 Post-Maintenance Testing

Issue Reports:
- 170785; 2FR-VG009 Needs Higher Priority for Replacement; 8/08/2003
- 173561; Charcoal Density; 8/28/2003
- 180225; Unit 2 OOT Flow Transmitter 2FT-VG009 Trend Code B4; 10/08/2005
- 217799; Unit 2 Loop Seal Sightglass Needs Cleaned; 4/29/2004
- 238254; Unit 2 LOS-VG-M1 10 Hour Run Limitation; 7/22/2004
- 262186; Unit 2 U-2 VG Flow Recorder Reads 600 CFM; 10/10/2004
- 363172; 1VR05YA Shows Dual Indication when Taken to Close; 8/15/2005
- 369810; A VE Compressor Trip on High Oil Temperature; 9/02/2005
- 370006; 1A TDRFP Control Valve Problems During 9/4/5 Load Drop; 9/04/2005
- 371103; Auto Transfer Sequence for FRV to TDRFP Failed; 9/07/2005
- 373238; LES-DC-103C Procedure Discrepancy; 9/14/2005
- 377502; LST-2005-013 Could Not Start 1SA01C From MCR; 9/24/2005
- 377511; LOP-SA-02 Changes Required; 9/24/2005
- 377588; Unit 1 SAC May Not Start in Cold Weather Conditions; 9/30/2005
- 378219; LST 2005-013 Unit 1 SAC Remote Functional Testing Results; 9/26/2005

Procedures:
- LEP-GM-182; Refrigerant Pump Down, Evacuation, And Charging of Reciprocating HVAC Equipment; Revision 7
- LEP-GM-189; Remove Oil from Piston Type Compressors; Revision 1
- LEP-GM-191; Add Oil to Piston Refrigeration Machines with Hand Pump; Revision 0
- LES-DC-103C; Division III Battery Charger Capacity Test; Revision 11
- LES-GM-111; Preventive Maintenance Inspection of Reciprocating HVAC Equipment and Associated Filters; Revision 8
- LIP-FW-512A; Unit 1 TDRFP 1A Control Valve/ Actuator System Calibration; Revision 14
- LOP-FW-05; Shutdown of the Turbine Driven Reactor Feed Pump; Revision 24
- LOP-RH-02; Venting the Residual Heat Removal System (RHR); Revision 8
- LOP-RL-01; Operation of the Reactor Water Level Control System; Revision 18
- LOP-SA-01; Station Air Compressor System Startup with No Station Air Compressors Running; Revision 10
- LOP-SA-02; Station Air Compressor Startup and Shutdown Accelerated 9/23/2005; Revision 18
- LOS-CS-Q1; Secondary Containment Damper Operability Test Unit 1; Revision 28
- LOS-DG-R1B; 1B Diesel Generator Twenty-Four Hour Run Surveillance; Revision 6
- LOS-FW-SR1; Turbine Feedwater Pump Surveillance; Revision 17
- LOS-RH-Q1; RHR (LPCI) and RHR Service Water Pump and Valve Inservice Test for Modes 1,2,3,4 and 5; Revision 59
- LOS-VG-M1; Standby Gas Treatment System Operability Test and Inservice Test of 1(2)VG001 and 1(2)VG003; Revision 29

Work Orders:
- 609343-13; OP Perform LOP-SA-01/02 To Satisfy Mod Testing; 9/21/2005
- 00831917; 0VE04CA Tripped on High Oil Temperature
- 629433-01; EM Perform Div-3 Battery Charger Capacity Test per LES-DC-1; 9/13/2005
- 750308-01; EM “A” VE Chiller Contingency Repairs

- 810226-01; OP LOS-CS-Q1 U1 Sec Cont (VR) Dampers Att 1A
- 828511; OP LOS-VG-M1 2A U2 SBGT; 8/04/2005

1R22 Surveillance Testing

Issue Reports:
- 363172; 1VR05YA Shows Dual Indication when Taken to Close; 8/15/2005
- 373238; LES-DC-103C Procedure Discrepancy; 9/14/2005

Procedures:
- LES-DC-103C; Division III Battery Charger Capacity Test; Revision 11
- LIS-PC-106A; Unit 1 Primary Containment Panel 1PL75J Air Particulate and Noble Gas Monitor Calibration; Revision 8
- LOS-CS-Q1; Secondary Containment Damper Operability Test Unit 1; Revision 28
- LOS-DG-M3; 1B DG Idle Start; Revision 61
- LOS-HP-Q1; HPCS Inservice Test; Revision 52
- LRP-5800-3; Radiation Monitoring Alarm/Trip Setpoint Determination; Revision 10
- LST-2005-009; Procedure for Obtaining VY Cooler Pressure Data; Revision 0

Work Orders:
- 629433-01; EM Perform Div-3 Battery Charger Capacity Test per LES-DC-103C; 9/13/2005
- 802523-01; OP LOS-HP-Q1 U2 HPCS Pump Run Att 2A; 7/13/2005
- 810226-01; OP LOS-CS-Q1 U1 Sec Cont (VR) Dampers Att 1A
- 821368-01; OP LOS-DG-M3 U1 HPCS DG Surv Att 1B-Idle; 7/13/2005

1R23 Temporary Plant Modifications

Engineering Changes/Evaluations:
- EC 336218; Determination of Approximate Uncertainty of CW Inlet Temp; Revision 0
- EC 344271; Determination of Approximate Uncertainty of UHS Temp Measurement by Alternate Methodology; Revision 0

Issue Reports:
- 260671; Obtain Lake Temperatures Using Installed Wells; 8/14/2004

Work Orders:
- 00743852-01; Obtain Lake Temperatures Using Installed Wells; 7/1/2005

1EP6 Drill Evaluation

Exercise Nuclear Accident Reporting System and Event Notification Forms; 9/14/2005

Exelon Nuclear Emergency Plan; LaSalle Station Annexes; Revision 18

LaSalle 2005 Off-Year Exercise Guide; 9/14/2005

Issue Reports:
- 373597; During Training ENS Notification Time Enhancement; 9/14/2005
- 373599; ALARA Opportunity Not Utilized During Annual GSEP Drill; 9/14/2005

2OS1 Access Controls For Radiologically Significant Areas

Issue Reports:
- 282812; Evaluate the Effectiveness of the Whole Body Monitor Alarm Reduction Plan; 5/9/2005
- 322293-05; Check-in Self-assessment Report Radiation Protection Support for L2R10; 6/17/2005
- 346856; Lack of Documented Control for Stored Sources; 6/22/2005
- 348970; Failure to Document High Airborne Conditions; 6/30/2005
- 345885; Some Out of Tolerance Survey Instruments Are Not Evaluated; 6/20/2005
- 351324; Inadequate AT Closure Documentation for Radiation Protection ATS; 7/8/2005

2PS2 Radioactive Material Processing and Transportation

Packaging Inspection Checklists:
- DOT 7A Type A Shipment No. LM05-38
- DOT 7A Type A Shipment No. LM05-37
- DOT 7A Type A Shipment No. LM04-28
- DOT 7A Type A Shipment No. LM03-35
- DOT 7A Type A Shipment No. LM02-18
- DOT 7A Type A Shipment No. LM02-17
- DOT 7A Type A Shipment No. LM04-27

Issue Reports:
- 282150; Spent Fuel Shipment Not in Compliance with Cask Certificate; 12/13/2004
- 181035; Final Assessment Documentation - Shipping Procedures; 10/15/2003
- 127477; Procedure Discrepancy RP-AA-605, RP-LA-605-1001; 10/15/2002
- 127988; Radioactive Waste Manifest Software Error; 10/18/2002
- 188140; Inaccurate Shipping Container Certificate of Compliance; 11/25/2003
- 197417; CRD Shipping Container Has Broken Shield Hinge; 1/5/2004
- 187582; Two Exclusive Use Vehicles Left Site Without Required Surveys; 11/20/2003
- 268307; Reclassification of Waste; 10/29/2004
- 321356; Former Waste Stream Chosen for Classification; 4/5/2005
- 297971; Radwaste Shipping Software Bug Identified; 2/4/2005
- 281057-02; Spent Fuel Shipment Not in Compliance with Cask Certificate Due to the Presence of Free Water; ½7/2005

CoC 9225; Model NAC-LWT, Package USA/9225/B/(U)F-85; Revision 36

LM03-141; Irradiated Fuel Pin Shipment; 10/6/2003

LWOS-029; Radioactive Waste Shipment-Resins; 7/19/2005

RP-LA-605-1001; 10 CFR 61 2002 and 2003 Resin Batch Waste Stream Sampling

CAR 04-01; NAC Root Cause Analysis, Exelon LaSalle October 2003 LWT Shipment to Studsvik; 1/5/2005

10 CFR 71.95 Report; Presence of Water in Shipping Cask; 2/7/2005

4OA1 Performance Indicator Verification

AT 215729-05; Focused Area Self-Assessment: RETS Liquid and Gaseous Effluents and Performance Indicator Validation; 3/30/2005

LS-AA-2140; Monthly Data Elements for NRC Occupational Exposure Control Effectiveness; July 2004 through July 2005

4OA2 Identification and Resolution of Problems

Procedures:
- MA-AA-733-1001; Guidance for Check Valve General Visual Inspection; Revision 3

Condition Reports:
- 195254; L1R10 LLRT on 1E51-F028 Exceed Alarm Limit; 1/15/2004
- 241004; Incorrect Pressure Head Calculations Result in Leak Rate Test; 8/02/2004
- 253839; 1E51-F028 Check Valve Local Leak Rate Failure; 9/09/2004
- 256534; NRC Questions Related to RCIC LLRTs Performed Sep. 2004; 9/23/2004
- 322203; 1E51-F028 Valve Failed Local Leak Rate Test; 4/7/2005

Work Orders:
- 960008424-01; Failed to Close LLRT LTS-100-38 Leakage > 30 SCFM; 2/14/1996
- 970085284-01; 1E51-F028, Correct Valve Seat “Leak-By” (Failed LLRT); 11/16/1997
- 990013455-01; RCIC CNDSR Vacuum Pump Dsch Check Valve; 11/03/1999
- 990247031-01; RCIC CNDSR Vacuum Pump Dsch Check Valve; 1/11/2002
- 99071698-01; MM Disassemble and Repair Check Valve; ½2/2004
- 99284182-01; L1R09C Contingency to Repair Valve is Local Leak Rate Fails; 9/17/2004

Maintenance and Performance History of 1E51-F028; 1996 to 2004

4OA3 Event Follow-up

Procedures:
- MA-AA-733-1001; Guidance for Check Valve General Visual Inspection; Revision 3

Condition Reports:
- 195254; L1R10 LLRT on 1E51-F028 Exceed Alarm Limit; 1/15/2004
- 241004; Incorrect Pressure Head Calculations Result in Leak Rate Test; 8/02/2004
- 253839; 1E51-F028 Check Valve Local Leak Rate Failure; 9/09/2004
- 256534; NRC Questions Related to RCIC LLRTs Performed Sep. 2004; 9/23/2004
- 322203; 1E51-F028 Valve Failed Local Leak Rate Test; 4/7/2005

Work Orders:
- 960008424-01; Failed to Close LLRT LTS-100-38 Leakage > 30 SCFM; 2/14/1996
- 970085284-01; 1E51-F028, Correct Valve Seat “Leak-By” (Failed LLRT); 11/16/1997
- 990013455-01; RCIC CNDSR Vacuum Pump Dsch Check Valve; 11/03/1999
- 990247031-01; RCIC CNDSR Vacuum Pump Dsch Check Valve; 1/11/2002
- 99071698-01; MM Disassemble and Repair Check Valve; ½2/2004
- 99284182-01; L1R09C Contingency to Repair Valve is Local Leak Rate Fails; 9/17/2004

Maintenance and Performance History of 1E51-F028; 1996 to 2004

LIST OF ACRONYMS USED

CAP	Corrective Action Program
CFR	Code of Federal Regulations
CoC	Certificate of Compliance
CSCS	Core Standby Cooling System
DOT	Department of Transportation
DRP	Division of Reactor Projects
DWFDS	Drywell Floor Drain Sump
EACE	Equipment Apparent Cause Evaluation
EDG	Emergency Diesel Generator
EQ	Equipment Qualification
GL	Generic Letter
HPCS	High Pressure Core Spray
HRA	High Radiation Area
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report or Issue Resolution
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LLRT	Local Leak Rate Testing
MOV	Motor-Operated Valve
MSIV	Main Steam Isolation Valve
NAC-NWT	NAC International Legal Weight Truck
NCV	Non-Cited Violation
NRC	U.S. Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
OSP	Off Site Power
PCIV	Primary Containment Isolation Valves
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RHRSW	Residual Heat Removal Service Water
RP	Radiation Protection
RPS	Reactor Protection System
SAC	Station Air Compressor
SBGT	Standby Gas Treatment
SBO	Station Blackout
SDP	Significance Determination Process
SSC	Systems, Structures, and Components
TDRFP	Turbine Driven Reactor Feed Pump
TI	Temporary Instruction
UFSAR	Updated Final Safety Analysis Report
UHS	Ultimate Heat Sink
Vac	Volts Alternating Current
VE	Auxiliary Electric Equipment Room Ventilation
VG	Standby Gas Treatment
VHRA	Very High Radiation Area