September 4, 2003

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

SUBJECT: LASALLE COUNTY STATION NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 50-373/03-07; 50-374/03-07

Dear Mr. Skolds:

On August 8, 2003, the U.S. Nuclear Regulatory Commission (NRC) completed a team inspection at the LaSalle County Station. The enclosed report documents the inspection findings which were discussed on August 8, 2003, with members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations and with the conditions of your operating license. Within these areas, the inspection involved selected examination of procedures and representative records, observations of activities, and interviews with personnel. No findings were identified

On the basis of the sample selected for review, the team concluded that in general, problems were being properly identified, evaluated, and corrected. The team made several observations regarding the effectiveness of problem identification and resolution program implementation as detailed in the enclosed report.

In accordance with 10 CFR 2.790 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 J. Skolds

document system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/RA/

Bruce Burgess, Chief Branch 2 Division of Reactor Projects

Docket No. 50-373; 50-374 License No. NPF-11/NPF-18

Enclosures: Inspection Report No. 50-373/03-07; 50-374/03-07

cc w/encl: Site Vice President - LaSalle County Station LaSalle County Station Plant Manager **Regulatory Assurance Manager - LaSalle** 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 M. Aguilar, Assistant Attorney General Illinois Department of Nuclear Safety State Liaison Officer Chairman. Illinois Commerce Commission

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-373; 50-374
License No:	NPF-11; NPF-18
Report No:	50-373/03-07; 50-374/03-07
Licensee:	Exelon Nuclear Generation Company
Facility:	LaSalle County Station, Units 1 and 2
Location:	2601 N. 21 st Road Marseilles, IL 61341
Dates:	July 21 through August 8, 2003
Inspectors:	G. Wright, Project Engineer - Team LeadD. Kimble, Senior Resident InspectorR. Winter, Electrical Engineering Inspector
Approved by:	Bruce Burgess, Chief Branch 2 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000373-03-007, 05000374-03-007; on 7/21-8/8/2003; Exelon Generation Company; LaSalle County Station; Identification and Resolution of Problems.

The inspection was conducted by two region-based inspectors and one senior resident inspector. No findings of significance were identified.

Identification and Resolution of Problems

In general, the plant identified issues and entered them into the corrective action process at an appropriate level. Nuclear Oversight (NOS) assessment reports identified issues for the plant to resolve, including issues with corrective action follow through. The majority of issues reviewed were properly categorized and evaluated although some evaluations were narrowly focused, particularly for cause evaluations. Most corrective actions reviewed were appropriately implemented and appeared to have been effective. While no findings were identified during the inspection, the team developed a number of observations including:

- 1. A more thorough assessment of issues associated with ineffective corrective action(s) is an aspect of the corrective action process that could be strengthened to reduce repeat issues at the plant.
- 2. Additional attention to thoroughness and quality of documentation in program descriptions, procedures, condition reports, and cause analyses would enhance the corrective action process by ensuring consistency in program application, completeness of reviews, and preservation of the historical record without reliance on institutional knowledge.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

- .1 <u>Effectiveness of Problem Identification</u>
- a. <u>Inspection Scope</u>

The inspectors reviewed NRC inspection report findings issued over the last 2 years, selected plant corrective action documents, Nuclear Oversight (NOS) assessments, operating experience reports and trend assessments to determine if problems were being identified at the proper threshold and entered into the corrective action process. The inspectors also conducted focused plant walkdowns of one emergency diesel generator and the diesel generator ventilation system to ensure that equipment problems were entered into the corrective action system. The documents used during the review are listed in Attachment 1.

b. Issues

In general, the plant identified issues and entered them into the corrective action process at an appropriate level. NOS assessment reports identified issues for the plant to resolve, including timely entry of deficiencies into the corrective action program (CAP). The licensee appropriately used the CAP to document instances where previous corrective actions were ineffective or inappropriate; however, in most instances, the need to identify and address why the initial corrective actions were not effective was not recognized. The team's review also noted the following items:

- The team identified a minor error within procedure LS-AA-125, "Corrective Action Program Procedure," which appeared to have occurred because of a lack of attention to detail. A Condition Report (CR) was issued to correct this condition.
- The team identified minor differences in cause codes defined in procedure LS-AA-125 and the PASSPORT software used to track corrective action documentation. A CR was issued to correct this condition.
- A review of previous inspection findings appeared to indicate that, at times, the licensee's perspective on plant conditions did not always consider all potential impacts of the observed condition. For example, the licensee had not associated foreign material in a corner room and the drywell with potential corner room flooding and operability of the drywell leak detection system until brought to their attention by the NRC.

b.1 Identification Threshold

The licensee had defined an adequate threshold for the identification of issues to be entered into the corrective action program in accordance with the LaSalle County Station procedure LS-AA-125 "Corrective Action Program (CAP) Procedure." La Salle uses an electronic database system. Corrective action documents are called an Action Request (AR) or Condition Report (CR). The generation rate for ARs/CRs was appropriate, with 4356 condition reports written in 2002 and 3149 CRs written in 2003 to date. Both the number and significancy level distribution of CRs appeared to be appropriate for the facility. While the threshold and generation rate appeared appropriate, the licensee found several examples of departments not placing issues in the corrective action program in a timely manner.

b.2 Operating Experience

The inspectors reviewed a sampling of industry operating experience (OPEX) reports and concluded that the licensee was appropriately including the issues in the CAP. Refer to Section .2.b.3 for additional information on operating experience.

b.3 Nuclear Oversight

The inspectors reviewed a sample of NOS assessment reports from the past 2 years and determined that the NOS staff, in general, was effectively identifying plant performance issues including issues with implementation of the CAP.

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The team reviewed inspection reports and corrective action documents to verify that identified issues were appropriately characterized and entered into the CAP.

Inspection team members attended management meetings to observe the assignment of CR categories for current issues and the review of root, apparent, and common cause analyses, and corrective actions for existing CRs.

The team conducted an independent assessment of the prioritization and evaluation of selected CRs. The assessment included a review of the category assigned, the operability and reportability determinations, the extent of condition evaluations, the cause investigations, and the appropriateness of assigned corrective actions. Other attributes reviewed by the team included the quality of the licensee's trending of conditions and the corresponding corrective actions. The team also assessed licensee corrective actions stemming from Non-Cited Violations (NCVs) and Licensee Event Reports (LERs). This review included the controlling procedures, selected records of activities, and observation of various licensee meetings. In addition, the team conducted several interviews with cognizant licensee personnel.

The team likewise reviewed the licensee's efforts to capture industry OPEX issues in the CAP. Documents reviewed included the licensee's assessment of industry operating event reports, NRC, and vendor generic notices.

Information reviewed by the team dated back to the previous problem identification and resolution inspection conducted in September 2001 (NRC IR 50-373/01-16; 50-374/01-16).

b. Issues

The team verified that the issues reviewed were properly categorized and evaluated. The team did, however, have several observations regarding the licensee's trending program and the quality of its documentation. Details of the team's observations are described in the following subsections.

b.1 Overview of Prioritization and Evaluation Process

The corrective action process included a review of newly initiated CRs by the Management Review Committee (MRC) composed of senior plant management. The MRC reviewed the investigation class assigned to each CR by a departmental CAP coordinator. Within the licensee's program, an "A" was assigned to a Significant Condition Adverse to Quality (SCAQ) requiring a root cause evaluation, a "B" was assigned to a Condition Adverse to Quality (CAQ) requiring an apparent cause evaluation, and "C" was a CAQ requiring a condition evaluation to determine the proper corrective actions. A significance level "D" was also available for conditions that were not adverse to quality.

b.2 Trending Program

The team performed an in-depth examination of the licensee's trending program as a follow-on to an observation made in the previous problem identification and resolution inspection.

As discussed in subsection b.3 below, the team initially had some difficulty identifying the total depth and breadth of the licensee's current trending program due to the lack of a single document that identified all of program subcomponents. Following discussions with the licensee, the team concluded that the licensee had in place an extensive trending program.

With respect to the quality of the trending program, the team had two observations:

- The team noted that the licensee's trend analyses rarely, if ever, examined the underlying cause for the apparent trend. The question of, "Why did this adverse trend occur in the first place?", was infrequently addressed.
- In the CAP coding area, the team noted that the licensee's use of computer-based, or computer-aided trend analysis relied primarily on individuals to identify trends. While the licensee used the system to generate lists of potentially related issues, it did not use the computer to identify when a trend

may exist. The lack of such computer enhanced trending tools in the CAP coding arena placed the burden of trend identification on the judgement of individual CAP coordinators.

The team identified that tools for trending system and component performance were in place.

b.3 Documentation

In general, the team found the licensee's documentation practices associated with the CAP to be weak. In several instances, the team was only able to successfully understand the licensee's actions because key individuals recalled details of what had occurred and, more importantly, why it had occurred. The team noted that this documentation weakness leaves the licensee vulnerable to the loss of key information should certain employees with the institutional knowledge leave LaSalle County Station. Examples noted by the team are described below.

- When the team began inspection of the licensee's trending program and requested CAP documents that addressed the trending weaknesses identified in the previous problem identification and resolution inspection, the team members were informed that no such documents existed. Through interviews with key licensee personnel, the team learned that the licensee had made a conscious decision to forego the creation of specific corrective actions to address the trending weaknesses because the rollout of a new licensee CAP was imminent. The new program was believed to be sufficient to address the trending program weaknesses. However, this decision and its basis were not documented.
- As discussed in b.2 above, the team found no documentation which described the total depth and breadth of the licensee's current trending program. For example, the team identified an apparent adverse trend regarding control room log deficiencies. Seemingly, some 80 percent of the identified deficiencies over a 20 month period were either identified by the NRC or the licensee's internal NOS group. However, upon further examination, the team found that control room log deficiencies self-identified by Operations personnel over the same 20 month period were about 7 times greater than the number identified by the NRC and NOS. The Operations group did not, however, document these deficiencies in the CAP as CRs, but rather in a "scorecard" program database used for various Operations group internal observations.
- In reviewing OPEX items, the team examined the program item which initially looked at the reactor recirculation jet pump hold down beam failure at the Quad Cities Nuclear Station in 2002 (GE RICSIL 086). The licensee evaluated this OPEX item as not applicable to LaSalle Station based upon an understanding that the jet pump hold down beams in use at LaSalle Station were of a different type than those identified in the OPEX item and not susceptible to the discussed failure mechanism. The licensee closed the OPEX item on this basis. The licensee subsequently identified that the assumption was not entirely true, i.e., LaSalle Station did have in service some susceptible jet pump hold down beams. However, the documentation for the original OPEX item was not revised to

reflect the new information or the licensee's current corrective and compensatory actions.

• Regarding the root cause analysis for an unexpected radiation level in the drywell, during a recent refueling outage, the licensee did not include all actions it had taken in preparation for the outage. While in this case the team did not believe that the root cause outcome would have been different, failure to include all pertinent information in the assessment limits the evaluation and may deprive the organization of valuable insights and potential corrective actions.

.3 Effectiveness of Corrective Action

a. Inspection Scope

The inspectors reviewed past inspection results, selected CRs, root cause reports and common cause evaluations to verify that corrective actions, commensurate with the safety significance of the issues, were specified and implemented in a timely manner. The inspectors evaluated the effectiveness of corrective actions. The inspectors also reviewed the licensee's corrective actions for Non-Cited Violations (NCVs) documented in NRC inspections in the past 2 years. The inspectors conducted a walkdown of one emergency diesel generator and the diesel generator ventilation system to assess the material condition of the system and verify that the licensee appropriately identified degraded conditions within the corrective action program.

b. <u>Issues</u>

In general, the licensee's corrective action for the sample reviewed were appropriate and appeared to have been effective. The team noted that the licensee generated CRs when they identified a corrective action which was either inadequate or inappropriate.

b.1 Observations on the Effectiveness of Corrective Actions

The inspectors had several observations regarding corrective actions that were not fully implemented, not fully effective in correcting the identified issue, or were narrowly focused. These observations are described below.

• A minor issue was identified for inadequate corrective action to preclude repetition concerning diesel generator erratic VAR indication. On May 30, 2002, the 2B diesel generator was started and slowly full loaded, until after about 20 minutes of operation, the VAR meter indicated repetitive spiking. A root cause report 00110032 identified a primary cause and contributing causes. However, this did not preclude recurrence because on October 16, 2002 the 2B diesel generator during a fast start surveillance again had erratic VAR meter indication. Another root cause report (00127728) was performed and identified the primary cause as a different component within the same governor and identified contributing causes. The self-revealing problem repetition highlighted that the key features in minimizing vulnerability from a number of components was not fully recognized during the first troubleshooting, root cause and analysis.

- A minor issue was identified for inadequate corrective action to preclude repetition concerning diesel generator air start compressor relief valve problems. From the period of January through September 2002, a series of ARs were generated because the air start compressor relief valves lifted on several different diesel generators and on one occasion, one relief valve stuck open. The corrective action was not particularly timely but a solution eventually emerged and actions to prevent recurrence include the change out of the air dryers associated with the diesel generators air start compressors.
- In evaluating inadequate or ineffective corrective actions, the licensee appropriately addressed the initial issue; however, rarely was an evaluation conducted to review why appropriate corrective actions were not initially proposed or implemented.

.4 Practice of Closing CRs to Work Requests or other CRs

a. Inspection Scope

The inspection team reviewed condition reports which had been closed to work requests or other condition reports to assess whether the original issue was appropriately addressed in the follow-on document.

b. Issues

The team verified that the issues addressed in the initial CR were appropriately addressed in subsequent work requests or CRs.

.5 Assessment of Safety-Conscious Work Environment

a. <u>Inspection Scope</u>

The inspectors conducted interviews with plant staff to assess whether there were impediments to the establishment of a safety conscious work environment. During these interviews, the inspectors used Appendix 1 to Inspection Procedure 71152, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R Issues," as a guide to gather information and develop insights. The inspectors also discussed the implementation of the Employee Concerns Program (ECP) and selected concerns with the plant's ECP Coordinators. Additional discussions with the ECP Coordinators centered on integration of the ECP and CAP programs.

b. <u>Issues</u>

Plant staff interviewed did not express any concerns regarding the safety conscious work environment. The staff was aware of and generally familiar with the corrective action program and other plant processes including the Employee Concerns Program through which concerns could be raised. Further, a review of the types of issues in the ECP indicated that site personnel were appropriately using the corrective action and employee concerns programs to address their concerns. Based on interviews, the ECP Coordinators were appropriately focused on ensuring all site individuals were aware of

the program, reviewing individual concerns, and integrating where appropriate the ECP and CAP programs to resolve concerns.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Ms. Susan Landahl and other members of licensee management in an exit meeting on August 8, 2003. Ms. Landahl acknowledged the findings presented and indicated that no proprietary information was provided to the inspectors.

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>	
D. Barrett	LaSalle NO - Employee Concerns
J. Barchello	Security
J. Beardon	Operations Corrective Action Program Coordinator (CAPCo)
R. Bellettini	Corrective Action Program Coordinator
A. Byers	Radiation Protection CAPCo
B. Carter	Nuclear Oversight
B. Cockrel	Diesel Generator System Engineer
D. Czufin	Engineering Director
C. Dieckmann	Training Director
L. Kofoid-Durdan	Chemistry CAPCo
D. Enright	Operation Services Manager
S. Fatora	Chemistry Manager
A. Ferko	LaSalle Nuclear Oversight (NO) Manager
M. Hayworth	LaSalle NO - Employee Concerns
P. Holland	Regulatory Assurance
G. Kaegi	Regulatory Assurance Manager
S. Landahl	Plant Manager
P. Manning	Engineering CAPCo
B. McConnaughay	Work Control
M. McDowell	Assistant Plant Manager
M. Murskyj	Electrical Design Engineering Supervisor
M. Phalen	Radiation Protection Superintendent
M. Poland	Maintenance CAPCo
G. Randle	Maintenance Director
S. Shields	Operating Experience Coordinator
B. Werder	Engineering
J. Wieging	Electrical Design Engineering Supervisor
G. Wilhelmsen	Engineering Balance of Plant Systems Manager
M. Williams	BOP System Engineer
C. Wilson	LaSalle Security Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

Items Opened: None

Items Closed: None

LIST OF ACRONYMS

AR	Action Request
CAP	Corrective Action Program
CAQ	Condition Adverse to Quality
CR	Condition Report
ECCS	Emergency Core Cooling System
ECP	Employee Concerns Program
LER	Licensee Event Report
MRC	Management Review Committee
NCV	Non-cited Violation
NOS	Nuclear Oversight
NRC	Nuclear Regulatory Commission
OPEX	Operating Experience
OPEX	Operating Experience
PI&R	Problem Identification and Resolution
SCAQ	Significant Condition Adverse to Quality
	-

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire documents, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

Plant Procedures and Audits					
EI-AA-101	Employee Concerns Program	Rev. 2			
LS-AA-21	Nuclear Oversight Audit Process Description	Rev. 0			
LS-AA-115	Operating Experience Procedure	Rev. 1			
LS-AA-125	Corrective Action Program (CAP) Procedure	Rev. 5			
LS-AA-125-1001	Root Cause Analysis Manual	Rev. 3			
LS-AA-125-1002	Common Cause Analysis Manual	Rev. 2			
LS-AA-125-1003	Apparent Cause Evaluation Manual	Rev. 2			
LS-AA-125-1004	Effectiveness Review Manual	Rev. 1			
LS-AA-125-1005	Coding and Trending Manual	Rev. 3			
LS-AA-125-1006	CAP Process Expectations Manual	Rev. 3			
LS-AA-126	Self-Assessment Program	Rev. 2			
LS-AA-126-1001	Focused Area Self-Assessments	Rev. 1			
NO-AA-200-001	Nuclear Oversight Continuous Assessment Procedure	Rev. 2			
NOA-LS-03-2Q	Nuclear Oversight Quarterly Report LaSalle County Station April-June 2003	07/23/03			
NOSA-LAS-03-03	NOS Security Audit Report	04/04/03			
NOA-LS-01-3Q	Nuclear Oversight Continuous Assessment Report	10/25/01			
NOA-LS-02-1Q	Nuclear Oversight Continuous Assessment Report	04/30/02			
NOA-LS-02-1Q	Nuclear Oversight Continuous Assessment Report	01/29/03			

4OA2 Identification and Resolution of Problems

Condition Reports Reviewed During LaSalle County Station PI&R Inspection:

CR/AR #	Title	Date
00001119	Perform an effectiveness review in accordance with NSWP-A-16 to the implemented corrective actions resulting from LER 97-043.	11/11/99
00001149	Testing of Removed/Damaged rupture disc assembly	03/07/00
L2001- 05688	Potential for Non-Conservative Steam Carryover Fraction in Computer Heat Balance Calculation.	10/03/01
L2001-06182	Locked high rad door #208 found open	11/01/01
L2001-05717	NRC identified: Procedure Adherence with AD-AA-106 CCA condition report identification	10/02/01
L2001-03138	U-2 Scram generated High Rad Area.	05/27/01
L2001-03153	Uncoupled Control Rod During Unit 2 Startup	05/29/01
L2001-05949	Untimely Station Response	10/19/01
00002477	Perform an Effectiveness review of the corrective actions	11/30/99
00002503	Perform EFF review of corrective action #4, to perform torque checks	12/03/99
00030864	Intermediate Hot Spot discovered on the Unit 2 east MPT during Thermogoraphy	06/28/00
00076848	Increase In U-1 Offgas Pretreatment Radiation	09/25/01
00078266	NRC ident: RCR risk analyses not quantitative.	10/09/01
00082155	Testing Required For 2A DG Governor Replacement	11/08/01
00085020	Ineffective Perimeter Zone	12/04/01
00085280	2A DG exhaust Temps >200 deg delta T during LOS-DG-M2	12/05/01
00086988	NRC Identified, ineffective corrective actions from scram	12/14/01
00088342	NRC Id - Human Performance Related Error Trend Identification	12/28/01
00088688	Potential NCV for unlocked High Rad door	12/31/01
00089048	2A DG Cylinder Exhaust Temperatures Erratic	01/02/02

00089355	LOS-DG-Q3 Could not be performed for 2B DG 'A' Air Compressor	01/07/02
00090734	Improper wiring determ in panels 1FW06JA and 1FW06JB	01/14/02
00091429	Unacceptable through bolt location	01/19/02
00091988	Fuel moves stopped at step 91 of L1C10 Axis shuffle	01/23/02
00092014	Fuel Handling Error during Shuffle 2	01/23/02
00092638	2A DG A Air Compressor Interstage Relief lifting	01/28/02
00092542	1E22-F024, HPCS Pump Discharge Check Failed Acceptance Criteria	01/26/02
00092596	Unusual Flow Noise During HPCS Pp Run	01/27/02
00093177	2A DG 'A' Compressor Relief lifting While Running	01/30/02
00094268	Unexpected temperatures observed on 1TE-VP115	02/07/02
00094589	2B D/G "A" Air Compressor Tripping Breaker	
00095253	Potential Bus duct Fire seal deficiencies Discovered by NRC	02/14/02
00097020	Off-pretreat purge valve not opening	02/27/02
00099302	Crew Critique for EMD Crew ECM	03/15/02
00099679	Unit 2 HPCS Pump IST Adverse Trend	03/18/02
00100428	Adverse Trend on Past Due PMs in Maintenance	06/03/02
00104619	NOS ID'd, RP: Ineffective Corrective Actions for CR 90284	04/20/02
00105133	CRD rebuild rooms continue to challenge RP and station	04/24/02
00106428	Adverse Trend on Backlog of Past Due PMs in Maintenance	05/02/02
00108670	U-1 B RHR pump seal leak causing contamination	05/18/02
00108841	Workers continue to leave scrubs in locker rooms	05/20/02
00109626	MSIV A Limit Switch Temperature exceeds 175 Degrees	5/28/02
00110168	Issues Identified During 2B DG Operability Run	05/31/02
00114125	1A DG Cooling Water Flow Adjustment Req'd During LOS-DG-Q2	07/02/02
00114397	New Quincy Compressors Have Incorrect Hydraulic Unloader Asm	07/03/02
00116251	0DG B Air Start Compressor Discharge Relief Lifting	07/19/02

00116992	Persistent recontamination of 2A RHR room	07/25/02
00117431	Safety Concern: CO2 Monitor INOP at Lake Screen House	07/30/02
00117569	0DG B Air Start Compressor Discharge Relief Lifting	07/30/02
00118101	0DG "A" Compressor Relief Valve Stuck Open	08/04/02
00119063	Tech Spec SR 3.8.1.6 not tracked/completed	10/19/02
00120845	Inadequate Closure of a CAPR	03/20/02
00121102	Ineffective CAPRs ID'd during EFR	08/29/02
00121634	Relief Valve 0DG022 B Lifting During Compressor Operation;	09/04/02
00121822	Diesel Gen Air Cmpr "A" Relief VIv Lifting	09/06/02
00124828	NRC 2002 SSDI Identified - DG Air Flow Regulator Calibration	09/27/02
00125571	NOS Id'd: (ENG) Potential Adverse trend in Eng. Clock Resets	10/02/02
00127728	2B Voltage Regulator Very Erratic	10/16/02
00128981	"0" Diesel Generator Cooler Outlet Throttle Valve Drifted	10/25/02
00131093	GE Part 21 TIP System Ball and Shear Valve Radiation Spec	10/08/02
00131665	TIP system Ball and Shear Valve Radiation Specification	11/14/02
00134097	Safeguards Drawing found in AEs uncontrolled file	12/04/02
00134417	Safeguards Drawing found in AEs uncontrolled file	12/06/02
00140501	NOS Id'd: (ENG) Decline in Engineering Performance for 02- 4Q	01/22/03
00142758	Adverse Trend on Backlog of Non-Outage Maintenance PMs	03/04/03
00142779	Incorrect wiring termination for EC 331396 U2 SLMS	02/03/03
00142811	Adverse Trend on Backlog of Non-Outage PMs	020/4/03
00142933	NOS Identified undersized welds	020/4/03
00143002	B DWFDS sump pump tripped on thermals	02/05/03
00143006	2B33-015B fails leak testing	020/4/03
00143076	Repeated trips of the RMCS system with no rod motion	02/05/03
00143130	2E51-F068 valve failed LLRT	02/05/03
00143131	2MS01-2888S missing locking screws	02/05/03
00143169	2E12-F050A fails high pressure water leak rate test	02/05/03

00143175	Incorrect sample tubing routing for EC 331396, SLMS	02/06/03
00143367	Discrepancies on snubbers 2MS01-2877S and 2MS01-2888S	02/06/03
00143658	Incomplete termination of ground on 2FE-RF021 for EC 51151	02/08/03
00143876	Effectiveness Review Reveals CAPRs not closed as written	02/10/03
00143954	2E51-F008, 63,76,357 LLRT failure in L2R09	01/26/03
00144084	Safeguards Drawing for Work Package	02/11/03
00144297	Water on Undervessel Sump Cover mat Routed to DWEDS	02/12/03
00144336	NOS ID'd inadequate Closure of Root Cause Corrective Action	02/12/03
00144487	Observed leakage RBCCW line to seal cooler	02/13/03
00144683	Pipe support M01-NB-16-2402X found out of tolerance	02/14/03
00144744	2E51-F063 valve failed LLRT	02/15/03
00144744	2E51-F063 valve failed LLRT	02/14/03
00144778	2B TDRFP Woodward hydraulic piping bent	02/11/03
00144839	2FW08JA system 1 pressure at 220 instead of 260-280 psig.	02/17/03
00145072	Drains continue to challenge contamination control	02/17/03
00145074	Strainer leak contaminates 710 for second time in three days	02/18/03
00145338	Inappropriate Style matting utilized under vessel sump area	02/16/03
00146687	Contamination spread in 1A RHR 673" room	02/27/03
00147370	ACE (RP) Rejected by MRC	030/4/03
00151231	Actions in Self Assessment Determined to be ineffective	03/28/03
00153681	Gland Steam Seal Evap low Level Alarm	04/13/03
00153686	SSE low level condition	04/12/03
00155426	0 DG Room exhaust damper is stuck open	04/23/03
00155441	0 Diesel Generator Partial CO2 Actuation	04/23/03
00156861	1E12-F068a has dual indication when closed	05/01/03
00157037	1E12-F068A did not fully close	050/2/03
00159489	Discovery of an unposted neutron area	05/19/03
00162229	Significant RP resource concern by RPT	06/06/03
00165440	Potential Adverse Trend Identified - RP Procedure Adherence	06/29/03

00167023	2A RHR pump run contaminates entire room	07/08/03
00167691	Inadequate evaluation of Temporary lead shielding Permit	070/8/03
00168900	Corrective action closed before actions taken	04/30/03

Completed Root Cause Reports

Number	Title	Date/Rev.
00082092	2A D/G Governor Failed to Respond During Monthly Run	11/ 07/ 01
00095677	Unit 1 RR System unable to Obtain Rated Core Flow	02/01/02
00110032	2B Diesel Generator (DG) VARs Erratic	05/30/02
00130964	Entered Region B during Control Rod Maneuver	11/10/02
00139037	Unit 2 Manual Reactor Scram	01/10/03
00143880	Numerous Challenges during Installation of EC 338974	02/10/03
00146141	RR Flow Units Settings Discovered Non-conservative	02/25/03
00148413	Mispositioned Control Rod	03/11/03
00090319	Higher than anticipated drywell dose rates	01/12/01

Operability Evaluations

Number	Title	Date/Rev.
OE02-014	RHR Pump Seal Cooler Flows	2/6/2003