



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
**REGION II**  
**SAM NUNN ATLANTA FEDERAL CENTER**  
**61 FORSYTH STREET SW SUITE 23T85**  
**ATLANTA, GEORGIA 30303-8931**

August 22, 2003

Carolina Power & Light Company  
ATTN: Mr. James Scarola  
Vice President - Harris Plant  
Shearon Harris Nuclear Power Plant  
P. O. Box 165, Mail Code: Zone 1  
New Hill, NC 27562-0165

**SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT - NRC PROBLEM  
IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
05000400/2003005**

Dear Mr. Scarola:

On July 25, 2003, the Nuclear Regulatory Commission (NRC) completed an inspection at the Shearon Harris Nuclear Power Plant. The enclosed report documents the inspection results, which were discussed on July 25, 2003, with Mr. R. Duncan and other members of your staff.

The inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and 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.

On the basis of the sample selected for review, there were no findings of significance identified during this inspection. The inspectors concluded that problems were properly identified, evaluated and resolved within the problem identification and resolution programs. However, during the inspection, several minor problems were identified related to thoroughness and effectiveness of corrective action.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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).

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Sincerely,

*/RA/*

Paul E. Fredrickson, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

Docket No.: 50-400  
License No.: NPF-63

Enclosure: NRC Inspection Report No. 05000400/2003005  
w/Attachment: Supplemental Information

cc w/encl:

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No: 50-400

License No: NPF-63

Report No: 05000400/2003005

Licensee: Carolina Power & Light Company (CP&L)

Facility: Shearon Harris Nuclear Power Plant, Unit 1

Location: 5413 Shearon Harris Road  
New Hill, NC 27562

Dates: July 7 - 11 and 20 - 25, 2003

Inspectors: J. Zeiler, Senior Resident Inspector, Vogtle Electric Generating  
Plant (Lead Inspector)  
R. Cortes, Reactor Inspector, Division of Reactor Safety  
R. Hagar, Resident Inspector, Harris

Approved by: P. Fredrickson, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

Enclosure

## **SUMMARY OF ISSUES**

IR 05000400/2003-005; 07/07-25/2003; Shearon Harris Nuclear Power Plant, Unit 1; Biennial baseline inspection of the identification and resolution of problems.

The inspection was conducted by a senior resident inspector, a resident inspector, and a Region II reactor inspector. No findings of significance were identified. 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.

### Identification and Resolution of Problems

The licensee was effective at identifying problems at a low threshold and entering them into the corrective action program. The licensee properly prioritized issues and routinely performed adequate evaluations that were technically accurate and of sufficient depth. Formal root cause evaluations for significant conditions adverse to quality were especially thorough and detailed. Corrective actions developed and implemented for problems were timely and effective, commensurate with the safety-significance of the issue. The licensee's self-assessments and audits were effective in identifying deficiencies in the corrective action program. Based on discussions conducted with plant employees from various departments the inspectors did not identify any reluctance to report safety concerns. However, several minor problems were identified related to thoroughness and effectiveness of corrective action, and equipment deficiencies not properly entered into the corrective action program.

## **REPORT DETAILS**

### **4. OTHER ACTIVITIES (OA)**

#### **4OA2 Problem Identification and Resolution**

##### **a. Effectiveness of Problem Identification**

###### **(1) Inspection Scope**

The inspectors reviewed Procedure CAP-NGGC-0200, Corrective Action Program, Revision (Rev.) 7, which describes the administrative process for initiating and resolving problems. A nuclear condition report (NCR) is initiated to document problems that are significant conditions adverse to quality (Priority 1), conditions adverse to quality (Priority 2), or improvement items (Priority 5).

The inspectors reviewed 153 NCRs from approximately 6300 that had been initiated by the licensee since July 2001 (coinciding with the last NRC baseline problem identification and resolution inspection) to verify that problems were being properly identified, appropriately characterized, and entered into the corrective action program (CAP). The reviews primarily focused on issues associated with five risk significant plant safety systems: emergency diesel generator (EDG), emergency service water (ESW), high head safety injection (HHSI), 125 volt DC, and 6.9 Kilovolt AC Distribution. In addition to the system reviews, the inspectors selected a representative number of NCRs that were identified and assigned to the major plant departments which included operations, maintenance, engineering, security, chemistry, health physics, and emergency preparedness.

The inspectors reviewed completed maintenance work orders (WOs), system health reports, and the Maintenance Rule database for the five risk significant systems to verify that equipment deficiencies were being appropriately entered into the corrective action and Maintenance Rule programs. The inspectors conducted plant walkdowns of equipment associated with the EDG and ESW systems to assess the material condition and to look for any deficiencies that had not been entered into the CAP. The inspectors reviewed control room operator logs for January to February 2003 to verify that equipment deficiencies, especially those involving the five safety systems selected for the focused review, were entered in the CAP.

The inspectors reviewed selected industry operating experience items, including NRC generic communications, to verify that they were appropriately evaluated for applicability and whether issues identified through these reviews were entered into the CAP.

The inspectors reviewed licensee audits and self-assessments (focusing primarily on problem identification and resolution) to verify that findings were entered into the CAP and to verify that these findings were consistent with the NRC's assessment of the licensee's CAP.

The inspectors attended several plant daily status and unit evaluator meetings to observe management and unit evaluator oversight functions in the corrective action process. The inspectors also interviewed personnel from operations, maintenance, engineering, security, health physics, chemistry, and emergency preparedness to evaluate their threshold for identifying issues and entering them into the CAP.

Documents reviewed to support the inspection are listed in the Attachment.

(2) Assessment

The inspectors determined that the licensee was effective in identifying problems and entering them into the CAP. NCRs normally provided complete and accurate characterization of the subject issues. In general, the threshold for initiating NCRs was low and employees were encouraged by management to initiate NCRs. Equipment performance issues involving maintenance effectiveness such as maintenance errors, poor maintenance work practices, and inadequate risk assessments were being identified at an appropriate level and entered into the CAP. However, the inspectors noted instances where NCRs were not always being initiated for Maintenance Rule equipment deficiencies when a maintenance work request was also opened. This could result in loss of equipment performance trending information and not provide a complete and timely recognition of equipment reliability problems.

The licensee was effective in evaluating internal and external industry operating experience items for applicability and entering issues into the CAP.

Department self-assessments and audits performed by the Nuclear Assessment Section (NAS) and the Performance Evaluation Support Section were effective in identifying issues and these deficiencies were entered into the CAP. NAS audits were particularly self-critical and identified substantive issues or directed attention to areas that needed improvement. Site management was actively involved in the CAP and focused appropriate attention on significant plant issues.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors evaluated the same 153 NCRs and operating experience items discussed in Section 4OA2.a to verify that the licensee appropriately prioritized and evaluated problems in accordance with Procedure CAP-NGGC-0200. While the majority of NCRs reviewed were classified as Priority 2, the sample also included a representative number of Priority 1 and Priority 5 NCRs. The inspectors' review was also intended to verify that the licensee adequately determined the cause of the problems and adequately addressed operability, reportability, common cause, generic concerns, and extent of condition. For significant conditions adverse to quality, the review was also to verify that the licensee adequately addressed the root and contributing causes and appropriately identified corrective actions to prevent recurrence. The inspectors also reviewed a sample of voided NCRs to verify they were voided for the appropriate reasons.

(2) Assessment

The inspectors determined that the licensee properly prioritized issues entered into the CAP in accordance with Procedure CAP-NGGC-0200. Generally, the licensee performed adequate evaluations that were technically accurate and of sufficient depth. Formal root cause evaluations for Priority 1 NCRs were especially thorough and detailed. The inspectors did not identify any risk significant issues that had not been appropriately prioritized and evaluated. However, the inspectors identified several minor problems involving NCRs that lacked thorough investigations and minor documentation discrepancies. These issues included the following:

- NCR 60174, "A" EDG circuit breaker tripped during light bulb replacement: This NCR addressed the tripping of DC control power to the EDG while an operator was attempting to replace a light bulb for the "operational" light indication on the diesel panel. The NCR stated that the cause of the condition was known to be a result of inadvertent operator action. However, the NCR was closed as "No Further Investigation Required," without providing any details regarding what the "inadvertent action" was or how this implied human performance error was addressed. Upon discussing the NCR with the EDG system engineer, the inspectors learned that a similar problem occurred five months after the first incident involving the same light indication socket. The licensee's investigation into the second incident identified a generic problem with the light socket design. The inspectors determined that the licensee missed an opportunity to identify the real problem earlier due to lack of a thorough investigation. The licensee considered this another example of similar problems that had previously been identified and were addressing as part of NCR 47417.
- NCR 63108, EDG self-assessment weakness, and NCR 71959, Maintenance Rule functional failure on EDG starting air compressor: These NCRs described instances where the licensee failed to classify several spurious EDG starting air compressor circuit breaker trips as Maintenance Rule functional failures. While the cause was identified as incorrect Maintenance Rule database entries by the system engineer, corrective actions were limited to replacing the circuit breaker and updating the Maintenance Rule database to reflect the proper classifications. The inspectors noted that there was no other discussions regarding why the system engineer failed to properly classify the failures or address corrective actions for this causal factor. This issue was entered into the CAP as NCR 99414.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors evaluated the same 153 NCRs and operating experience items discussed in Section 4OA2.a to verify that the licensee had identified and implemented timely and appropriate corrective actions to address problems. The inspectors verified that the corrective actions were properly documented, assigned, and tracked to ensure completion. Where possible, the inspectors independently verified that corrective actions were implemented as intended. For significant conditions adverse to quality,

the review was to verify that effectiveness reviews were adequately performed as required by Procedure CAP-NGGC-0200. The review was also to verify the adequacy of corrective actions to address equipment deficiencies and Maintenance Rule functional failures of the five risk significant plant safety systems that were selected for the focused review as discussed in Section 4OA2.a.

(2) Assessment

Overall, corrective actions developed and implemented for problems were timely and effective, commensurate with the safety significance of the issues. However, several minor problems were identified related to corrective action effectiveness. These issues included the following:

- NCR 91818, Entry into AOP-14: This Priority 1 NCR documented a component cooling water (CCW) system surge tank pressure transient. One of numerous corrective actions identified was to revise the CCW system operation lineup procedure to change the sequence of valve manipulations during normal operations in order to minimize the potential for pressure transients in the CCW surge tank. The inspectors identified that the licensee failed to enter a tracking assignment (CORR) for this item. As a result, the procedure change had not been initiated. The inspectors considered this a minor issue since the procedure change was determined to be an enhancement item. The primary corrective actions, which included system design changes, were implemented to address the initial problem. Also, the inspectors noted that the licensee's effectiveness review had not been completed yet for this NCR and one of the expected review items was to verify that assignment tracking items were initiated for corrective actions. The licensee initiated NCR 99784 to address the assignment tracking error.
- NCR 51865, High air particulate release from equipment hatch: This NCR described a release of radioactive particulate material which caused the annual goal for such releases to be exceeded. The investigation identified three apparent causes, and the corresponding report listed three corrective actions. The report indicated that all three corrective actions were complete, but did not identify the assignment type or responsible group for any action. The inspectors learned that the listed actions were in fact not completed; instead, the licensee completed an alternative to one of the listed actions, and did not complete either of the other actions because they had determined that one was inappropriate and the other was unnecessary. The inspectors considered that the alternative corrective action was adequate to address the adverse condition, without the uncompleted actions. The licensee addressed this issue in NCR 99608 as one example of inadequate documentation of completed corrective actions.
- NCR 88091, Equipment deficiency leads to dilution event: This NCR described a reactor coolant system dilution event that resulted from inadequate maintenance performed on a reach rod for a chemical and volume control system diaphragm valve. The primary corrective action developed was to include a preventive maintenance checklist activity in the planning of any work orders involving corrective maintenance on reach rod operated diaphragm valves. The

inspectors noted that the manner in which the new checklist was added to the work planning database would not ensure that the person planning the valve work would know to include the checklist. The licensee addressed this issue by reopening NCR 88091 and providing more specific work planner instructions for ensuring the checklist would be included in future corrective WOs. The inspectors considered this an example where corrective actions were not completely effective.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

During technical discussions with members of the plant staff, to include operations, maintenance, engineering, chemistry, health physics, emergency preparedness, and security personnel, the inspectors conducted interviews to develop a general perspective of the safety-conscious work environment at the site. The interviews were also to determine if any conditions existed that would cause employees to be reluctant to raise safety concerns. The inspectors also reviewed the licensee's employee concerns program (ECP) which provides an alternate method to the C for employees to raise concerns and remain anonymous. The inspectors interviewed the ECP Coordinator and reviewed a select number of ECP reports completed since July 2001 to verify that concerns were being properly reviewed and identified deficiencies were being resolved in accordance with Procedure REG-NGGC-0001, Employee Concerns Program.

(2) Assessment

The inspectors concluded that licensee management emphasized the need for all employees to identify and report problems using the appropriate methods established within the administrative programs. All of the predominant methods established by the licensee, including the CAP, the WO system, and the ECP, were readily accessible to all employees. Licensee management encouraged all employees to promptly identify nonconforming conditions. Based on discussions conducted with plant employees from various departments, the inspectors did not identify any reluctance to report safety concerns.

4OA6 Management Meetings

The inspectors presented the inspection results to Mr. R. Duncan, and other members of licensee management at the conclusion of the inspection on July 25, 2003. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee personnel

J. Caves, Supervisor - Licensing/Regulatory Programs  
F. Diya, Superintendent - Systems Engineering  
R. Duncan, Director - Site Operations  
W. Gurganious, Manager - Nuclear Assessment  
A. Khanpour, Manager - Harris Engineering  
S. Larson, Quality Control  
E. McCartney, Training Manager  
G. Miller, Maintenance Manager  
T. Morton, Manager - Support Services  
T. Natale, Manager - Outage and Scheduling  
T. Pilo, Supervisor - Emergency Preparedness  
J. Scarola, Vice President Harris Plant  
G. Simmons, Superintendent - Radiation Control  
B. Waldrep, General Manager Harris Plant  
E. Wills, Operations Manager  
M. Wallace, Licensing Specialist

#### NRC personnel

R. Musser, Senior Resident Inspector, Harris  
L. Plisco, Director, Division of Reactor Projects, RII

### **LIST OF ITEMS OPENED, CLOSED AND DISCUSSED**

None.

Attachment

## LIST OF DOCUMENTS REVIEWED

### Procedures

ADM-NGGC-0101, Maintenance Rule Program, Rev. 15  
ADM-NGGC-0104, Work Management Process, Rev. 20  
ADM-NGGC-0200, Passport Action Tracking, Rev. 1  
AP-013, Plant Nuclear Safety Committee, Rev. 27  
AP-617, Reportability Determinations and Notification, Rev. 19  
AP-618, Operability Determinations, Rev. 13  
AP-925, Significant Adverse Condition Investigations, Rev. 2  
AP-930, Plant Observation Program, Rev. 3  
CAP-NGGC-0200, Corrective Action Program, Rev. 7  
CAP-NGGC-0201, Self-Assessment Program, Rev. 6  
CAP-NGGC-0202, Operating Experience Program, Rev. 4  
CAP-NGGC-0205, Significant Adverse Condition Investigations, Rev. 0  
EGR-NGGC-0008, Engineering Programs, Rev. 3  
REG-NGGC-0001, Employee Concerns Program, Rev. 11

### Nuclear Condition Reports

45164, Information Notice 01-10 Model GB series fire sprinkler head failures  
45168, Information Notice 01-12 Hydrogen fire at nuclear power plants  
45641, Evaluate results from 10CFR50.54(t) audit at the Robinson Nuclear Plant  
47237, Cooper inspection 2001-04 - white finding in emergency planning  
47760, Radioactivity in sewage sludge  
79757, Adverse trend in secondary chemistry  
53374, Reactor coolant pump "C" lift pump plexiglass cover missing  
62802, Spent fuel shipping activities  
65804, Elevated secondary chemistry during startup  
61495, Contamination control practices  
62316, Expectations for timely completion of corrective actions and assignments are not being enforced  
52541, Potential adverse trend in maintenance rework  
56231, High incidence of oil contamination  
69225, Relief valve 3CF-106 lifts each time the plant trips  
45907, Action-request assignments going overdue  
64981, Timeliness of corrective actions taken  
58269, Personnel do not attend foreign-material-exclusion training as recommended by INPO  
64783, Circulating water debris filter and waterbox corrosion  
64881, Rework  
65631, Work order 212286 on "C" charging/safety injection pump is considered rework  
73209, Lack of/improper tag out for 6.9 KV maintenance  
79472, Work performed without work order  
55458, 2001 CAP review of electrical equipment failures  
54438, Pressure valve seal performance  
55551, R10 turbine/generator project quality of work  
43580, "B" ESW strainer continuously runs following maintenance

- 55746, Perform needs analysis on lube oil sampling program  
54786, "C" charging/safety injection pump speed increase high particle count  
58948, "Continuous-use" procedures were not consistently implemented to meet standards  
48665, Inadequate risk assessment of schedule changes  
92940, R11 key safety function availability checklist configuration  
48724, Inadequate foreign-material-exclusion controls  
53713, Communication of risk-assessment changes  
55863, Emerging trend in outage & scheduling human performance  
61268, No clear guidelines provide directions on how to protect opposite-train equipment  
62132, Risk evaluation of spent fuel movement  
51865, High air particulate release from equipment hatch  
67375, Increase in steam generator sodium concentration  
83490, Steam generator blowdown demineralizers' performance is degrading  
92275, 120-volt alternating-current bus 1DP-1A-SA voltage spike  
54982, Safety battery charger high voltage trip  
48715, Trip of breaker 1CB for inverter S1  
48544, Discharge of 1A 250-volt direct-current battery  
90875, 6.9 kilovolt breaker found in incorrect position  
87750, 1C component cooling water breaker found in disconnect  
51797, "C" component cooling water pump breaker aligned to wrong train  
89400, Test relay failure during "A" trip actuating device operational test  
32111, Intermittent failure of test relay UVTX/SA during OST-1122  
28575, Management expectations for initiating action requests  
55742, Chemical control processes were not reviewed prior to the outage  
62317, Operating experiences are not being evaluated against HNP programs and processes  
59168, AP-929 self-assessment identified weakness  
45849, Maintenance self-assessment weakness #1  
45850, Maintenance self-assessment weakness #2  
68437, Benchmarking improvements for predictive maintenance  
56255, Quality of troubleshooting self assessment 28643  
45133, Strengthen HNP EP continuing training  
45141, Potential training adverse trend in procedure compliance  
45251, Overdue AR action items  
45703, Failure to initiate a CR  
46101, HNP EP drills need to minimize simulation  
47426, Uncompensated IDS Zone - One Hour NRC Notification  
47590, Incorrect value for peak containment accident pressure  
47871, Changes to plant process computers not tracked by simulator  
48409, Hanger CE-H-184 was found not supporting the piping  
49293, Mislabeled cable terminated in ARP-1A SA  
50261, Adverse trend of SW relief valves  
51026, "B" ESW strainer tube sheet support rings badly degraded  
51455, FSAR description of service water system operation  
51812, Pre-entry search discovery of firearm  
52399, Inadequate weapon inventories  
52488, "C" Loop AF-FW-1, R1  
53153, Buildup of debris on 1A-SA CCW motor  
54450, "A" chiller inoperable due to 1SW-1055 failure to modulate  
54455, EOF ventilation system not meeting minimum differential pressure

- 55801, IST post-outage assessment IMC #12  
56730, EP - radiological release mitigation strategies  
57260, AH-16B repetitive failure  
57407, Simulator benchmarking AR 56935-04 followup  
57511, EDG fuel oil day tank sizing and setpoint values  
57949, Main control room nuisance alarm ALB-23 (3-19)  
58536, TDAFW oil particle count above SAE class 4 target  
58893, IFMC 5 from PQD self-assessment 56270  
59630, Background noise level in the control room  
59783, 1X and 2X CTMU traveling screens are corroded  
59860, Security procedural enhancement  
59992, ERFIS calibration for main and auxiliary reservoir levels  
60679, Simulator runback not functioning as expected  
60984, RCCT unexplained gradual pressure increase  
60991, Thru wall leak on "B" ESW header  
61348, Incorrect due date for valve inspection PM  
63213, Significant adverse trend (security trainee injuries)  
64529, EP procedure compliance  
66058, Incomplete corrective action  
66681, SAMG qualification  
68437, Benchmarking improvements for predictive maintenance  
69600, Control of safeguards information (near miss)  
70021, Mislabeled oil samples sent to HEEC  
70303, Ineffective corrective actions  
70312, JPM performance problems under NRC exam conditions  
70352, ESW 1A-SA DP limit  
74403, IST program check valve testing  
74447, IFMC - trending of check valve inspection results  
76241, Missing IQR signature  
78758, Inappropriate oil selected for large motors  
78764, Lube oil selection and sampling basis documentation  
78849, EP siren failures due to ice storm  
85267, OSC facility briefings  
86613, Emergency communications failure to make state/county notifications in 15 minutes  
90333, Near miss with generating incorrect product type  
90664, Freeze seal jacket hung on ESW without proper seismic evaluation  
91818, Entry into AOP-014  
92331, Disconnected ESW screen wash pump motor 1A-SA incorrectly  
92678, EST-211 reseat information  
93059, Erosion/Corrosion of seal area on a ESW booster pump  
93066, Test failure of 1CC-129  
52336, Valve 1CS-7 failed to close on less than 17% in pressurizer  
52469, Reactor makeup water to boric acid blender valve FCV-1148 failure  
52623, High radiation swing gate tied open  
53186, Technical Specification 3.4.1.3 not met in Mode 4  
53945, Alternate dilution failed to stop at desired amount  
58700, Technical Specification 3.0.3 entry  
59194, Charging safety injection pump venting guidance questioned  
59352, Low security of the sources used for emergency preparedness functions

60083, Poor implementation of configuration control practices  
60174, "A" EDG circuit breaker tripped during light bulb replacement  
60391, Inadequate radiological work planning  
62606, "B" EDG overspeed trip would not reset  
63108, EDG self-assessment weakness  
63105, EDG system notebook not maintained up-to-date  
65361, Rework on "C" charging safety injection pump  
65802, 250 Volt DC Battery charger tripped  
67837, AP-618 log not properly completed for RWST level transmitter issue  
68511, EDG overspeed trip valves not replaced within vendor recommended timeframe  
71928, Moisture separator reheater tank alternate dump valve opens due to clearance error  
71959, Maintenance Rule functional failure on EDG starting air system  
72819, Breaker 1E-1A found in the off-normal position  
76069, Inadequate corrective action closure  
80575, Failure of MUX 54B power supply  
81788, Emerging CAP trend in operations procedure use  
84673, NAS radiation protection procedure deficiency  
84990, Radiation area boundary posting moved  
87051, Adverse trend in radiological postings  
88091, Equipment deficiency leads to dilution event  
88254, CTMU pump control switch found out of position  
88433, Reach rod for valve 1CS-65 rework  
89570, CAP self-assessment weakness 3: NCRs closed without assignments  
92350, Non-qualified radworker enters RCA on incorrect RWP  
92389, 1SF-120 found out of position  
92399, Clear area contamination from vacuum system  
92977, Radiation monitor not source checked  
93105, Entry into AOP-025 during OST-1823 performance  
94058, Repeat contamination in a clean area

### **Maintenance Work Orders**

391910, Did not receive expected results from the OST-1122 test of the 120-volt AC  
403765, Repair 6.9-kilovolt switchgear 1A unit auxiliary transformer supply bus bars  
405176, Breaker 501 did not shut while attempting to un-cross-tie the general service bus  
100320, Preventive maintenance on a 6.9-kilovolt bus and cubicle  
100527, Preventive maintenance on a 6.9-kilovolt 1200/2000 amp air circuit breaker  
186719, Preventive maintenance on a 6.9-kilovolt 1200/2000 amp air circuit breaker  
179881, Troubleshoot no charge light on the A 125-volt DC battery charger  
190806, 1A-SA DC bus voltage reads low on the main control board  
197798, Troubleshoot cause of increased noise in the 1A-SA battery charger  
233218, Troubleshoot failure of 125-volt DC emergency bus 1A-SA  
192910, Perform relay card calibration on the C&D battery charger  
100954, Calibration of Pyco temperature indication switch  
103968, Inspect internal pipe coating of Train "B" ESW piping  
104238, Perform OST-1215 to stroke time valve 1SW-274  
104445, Limitorque actuator inspection and lubrication  
106683, ESW pump "A" discharge header pressure

116758, ESW booster pump, bearing lubrication, and coupling re-lubrication  
147509, Cycle strainer to verify proper operation  
150681, Perform lube oil sampling on "A" ESW pump motor  
159917, ESW booster pump "A" discharge flow  
195275, Inspect valve 1CS-238 actuator for signs of lug damage  
197181, Inspect "A" ESW strainer  
210642, Shorten travel stop sleeve  
176103, No voltage to breaker for EDG lube oil heater  
191987, Excessive wear found on breaker for EDG jacket water heater  
197709, Valve 1CS-7 failed to shut when pressurizer level decreased  
198492, Valve 1SI-381 failed RPI during testing  
198511, Valve 1CS-151 failure to open  
243300, Starting air compressor for 1A EDG failure to start  
245835, 1A EDG annunciator panel failed  
331326, Refurbish 1A EDG starting air compressor breaker

### **Engineering Documents**

Engineering Change Request (ECR) 247, New pressure differential switches for emergency service water strainers  
ECR 441, Evaluate and approve graphite pressure seals for key feedwater valves  
Maintenance Rule Database - functional failures between July 2001 and July 2003; Scoping documents; and Performance Criteria for selected systems

### **Industry Operating Experience Reports**

OE12349, Self-contained breathing apparatus fiber breathing air cylinders  
OE12277, Indian Point 3 loss of spent fuel pool cooling  
OE16276, Westinghouse 7300 system comparator circuit card failure  
OE16524, Rapid increase in emergency diesel generator output  
OE16409, Repeat issues with station sensitivity to fire protection standards  
OE16213, Main generator breaker unexpectedly opens causing a reactor trip  
OE16104, Loss of station air and degradation of control air  
OE16061, Centrifugal charging pump low gearbox oil pressure  
OE15915, Emergency diesel generator rocker arm lube oil float valve adjustment problem  
OE15642, Reactor trip and safety injection caused by scaffold construction activities near a main steam isolation valve  
OE15461, Feedwater regulation valve stem wear  
OE15172, Emergency diesel generator jacket water intrusion  
OE14826, Forced power reduction caused by cooling tower fill material entering condenser  
OE14515, Diesel fire pump engine overheated during summer  
OE14812, Unplanned release of radioactive gaseous activity  
OE14094, Failure of breaker 1SB-B2 to close

**Self- Assessments**

82896, Radiological Effluent Management Programs  
56017, Laboratory Quality Control Practices  
56011, Quality of Regulatory Required Reports  
[none], AP-929, Procedure Effectiveness, Use, and Compliance  
26961, Maintenance Work Practices  
55286, Predictive & Preventive Maintenance  
21291, ACAD 91-015 Obj. 4, 5, & 6  
21294, Complete Comprehensive Evaluation of Operation Training Program Report  
25604, Organizational Performance & Safety  
27827, SAMG  
28637, Corrective Action Program  
28642, Prioritization of Engineering Work  
28644, Engineering Product Quality  
30080, Evaluation of Reduced Drill Impact  
27324, Operations Procedure Use and Adherence  
55157, Effectiveness of Operations Audit Programs  
55163, Clearance Process  
26969, Radiation Monitoring Instrumentation  
55549, Biennial Self-Assessment of HNP Corrective Action Program

**Performance Evaluation Support and Nuclear Assessment Section Assessments**

01-05-SW-H, HNP Environmental & Radiological Control (Chemistry) Assessment  
H-ERC-02-01, Environmental & Radiation Control Assessment  
H-MA-02-01, HNP Maintenance Assessment  
H-OUT-01-01, RFO10 Post Outage Assessment  
H-EP-02-01, HNP Emergency Preparedness  
H-EP-03-01, HNP EP  
H-SC-02-01, HNP Security  
H-TQ-02-01, HNP Training and Qualification Assessment  
H-ES-03-01, HNP Engineering  
H-TS/OL-03-01, HNP Technical Specification and Operating License Amendment  
H-SP-03-02, RF-11 Abnormal Operating Procedure (AOP-14) Entry Assessment  
H-ERC-02-01, Environmental & Chemistry and Radiation Control Assessment  
H-RP-03-01, HNP Radiation Protection Assessment