



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
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ATLANTA, GEORGIA 30303-8931

August 24, 2001

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 INSPECTION REPORT  
50-400/01-08

Dear Mr. Scarola:

On July 27, 2001, 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 27, 2001, with Mr. R. Field 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 team concluded that problems were properly identified, evaluated and resolved within the problem identification and resolution programs.

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). ADAMS is accessible from the NRC Web-site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Brian R. Bonser, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

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

Enclosure: (See page 2)

CP&L

Enclosure: Inspection Report No. 50-400/01-08  
w/Attachment

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

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

Report No: 50-400/2001-08

Licensee: Carolina Power & Light (CP&L)

Facility: Shearon Harris Nuclear Power Plant, Unit 1

Location: 5413 Shearon Harris Road  
New Hill, NC 27562

Dates: July 9 - 13 and 23 - 27, 2001

Inspectors: J. Lenahan, Senior Reactor Inspector, DRS, (Team Leader)  
B. Crowley, Senior Reactor Inspector, DRS  
R. Hagar, Resident Inspector, Harris  
S. Stewart, Senior Resident Inspector, Crystal River

Approved by: B. Bonser, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

## SUMMARY OF FINDINGS

Shearon Harris Nuclear Power Plant, Unit 1  
NRC Inspection Report 50-400/00-08

### Adams Template

IR 05000400-01-08, on 07/9-27/2001, Carolina Power and Light, Shearon Harris Nuclear Power Plant, Annual baseline inspection of the identification and resolution of problems. Corrective action program was acceptable.

The inspection was conducted by resident and regional inspectors. No findings of significance were identified.

#### Identification and Resolution of Problems:

- Based on the results of the inspection, no findings of significance were identified. The implementation of the corrective action program was acceptable. The licensee was effective at identifying problems and placing them into the corrective action program as evidenced by the review of external operating experience, Corrective Action Program Trend Reports, and items from system health reports. When conditions adverse to quality were identified, the licensee generally identified the appropriate causes, and developed and implemented effective corrective actions. Several minor negative observations were identified which included documentation of corrective actions, maintenance rule classification, and one isolated instance of untimely condition report initiation. The licensee properly classified discrepant conditions.
- Corrective actions to address the NRC identified cross-cutting issue concerning several conditions/events for which the licensee developed conclusions before they had gathered and adequately analyzed enough information to fully understand the condition/event (NRC Inspection Report 50-400/00-04) were reviewed. These corrective actions included heightened management attention to equipment problems and their resolution. Additional corrective actions were being implemented during the inspection. The completed and planned corrective actions were appropriate, thorough, and comprehensive.
- 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 determined that a reluctance to report safety concerns did not exist.

## Report Details

### 4. OTHER ACTIVITIES (OA)

#### 4OA2 Problem Identification and Resolution

##### a. Effectiveness of Problem Identification

##### (1) Inspection Scope

The inspectors reviewed items selected across the three strategic performance areas (reactor safety, radiation safety, and physical protection) to verify that problems were being properly identified, appropriately characterized, and entered into the corrective action program (CAP) for evaluation and resolution. The inspectors reviewed licensee procedure CAP-NGGC-0200, Corrective Action Program, Revision 2, which describes the administrative process for initiating and resolving problems. A condition report (CR) is initiated to document problems. A CR is generated in the licensee's Passport Action Tracking system as an Action Request (AR).

Prior to the inspection, the inspectors reviewed NRC inspection reports and Licensee Event Reports (LERs), and discussed the routine observation of the licensee's problem identification and resolution program with the resident inspectors. Operations and maintenance data were reviewed to verify that the licensee had not taken multiple safety systems out-of-service concurrently.

In addition, the inspectors reviewed the maintenance rule functional failures, including associated ARs, that have occurred over the last year and verified that maintenance rule equipment deficiencies were being appropriately entered into the CAP and the maintenance rule program. The maintenance rule evaluations for the equipment failures associated with the LERs listed in the Attachment were also reviewed.

The inspectors toured the plant with operators and/or system engineers to assess the material condition of plant systems important to safety, and to determine if deficiencies existed that had not been entered into the CAP. Specifically, the auxiliary feedwater (AFW), emergency service water (ESW), and high head safety injection (SI) systems were walked down. The inspectors also accompanied an NRC headquarters inspection team and the licensee system engineer during an inspection of the west auxiliary dam. Licensed reactor operators, and security, health physics, maintenance, engineering, and a number of supervisory personnel were interviewed to evaluate the threshold at which issues were being identified. The inspectors also evaluated the effectiveness of corrective actions.

Two shift turnovers by operations personnel were observed by the inspectors. Significant issues discussed at the operations turnover meetings were checked to determine if the issues had been placed in the licensee CAP.

The inspectors reviewed the NRC identified cross-cutting issue concerning several conditions/events for which the licensee developed conclusions before they had gathered and adequately analyzed enough information to fully understand the condition/event (described in NRC Inspection Report 50-400/00-04). The licensee initiated CR/AR 24123 to evaluate three equipment issues which the licensee's staff was unable to completely understand and resolve until several reviews were completed. To evaluate the licensee's response to this cross-cutting issue the inspectors reviewed: CR/AR 24123, the licensee's evaluation of the issue, and completed and planned corrective actions. The inspectors also discussed the issue with plant staff and managers. The inspectors reviewed the interim measures in place while the corrective actions were being developed and discussed the effectiveness of the interim measures with plant personnel. Among the completed actions reviewed was the formation of a root cause review team assigned the task of critically reviewing root cause evaluations for problems to assure that appropriate depth and problem resolution was accomplished by licensee staff. The inspectors attended one root cause review meeting to assess the quality of licensee activities.

Operating experience items, including selected NRC generic communications, were reviewed to determine if they had been evaluated for applicability, and whether problems identified through these reviews were entered into the corrective action program.

A review of licensee audits and self assessments (focusing on problem identification and resolution) was performed by the inspectors to determine whether they were consistent with NRC findings, and whether the assessments were performed in accordance with the licensee's commitments to the NRC; to determine if assessment findings were entered into the licensee's corrective action program; and to determine if corrective actions were completed to resolve identified program deficiencies. Corrective actions resulting from the audits and self-assessments were evaluated. In addition, trend reports for the past 12 months were reviewed to evaluate CAP effectiveness.

## (2) Issues and Findings

The inspectors determined that the licensee was effective at identifying problems and placing them into the CAP. In general, the threshold for documenting problems was at an appropriate level.

Corrective actions in CR/AR 24123, initiated by the licensee in response to the NRC problem identification and resolution cross-cutting issue, included enhancement of troubleshooting and root cause procedures, training of involved staff, and heightened management attention to equipment problems and their resolution. The inspectors concluded that corrective actions were appropriate and were comprehensive. At the time of the inspection, six of nine corrective actions had been implemented. Programmatic changes for improving equipment troubleshooting and root cause evaluation were in the final stages of development and implementation. Interim measures such as notifying engineering, maintenance, and operations supervisors on the pending changes in troubleshooting and root cause determination processes were verified completed. A root cause assessment team was in place and was actively

reviewing root cause evaluations, and setting standards for evaluation and documentation of problem evaluations.

The inspectors concluded that external industry operating experience and NRC generic communications had been evaluated for plant applicability, and both internal and external operating experience issues had been incorporated into the CAP. The licensee's CAP provided for identifying and dispositioning issues characterized in NRC generic communications and industry operating experience. Audits performed by the licensee and the licensee's self assessment programs were effective in identifying deficiencies in the CAP. Deficiencies identified by audits and self-assessments were entered into the CAP.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed a sample of corrective action documents (CRs/ARs) to determine if the licensee appropriately characterized problems and entered them into the CAP for evaluation and resolution. The documents reviewed are listed in the Attachment. The inspectors reviewed the corrective action documents to determine if the licensee found the appropriate causes, and, if appropriate, identified corrective action to prevent recurrence (including common cause and generic concerns). The corrective action documents selected for review were those having generic application to site wide programs, and those associated with plant systems that have the highest risk significance determined by the plant-specific probabilistic risk assessment. These systems included the SI, ESW and AFW systems. The inspectors also reviewed corrective action documents to determine if they were being properly classified based on the licensee's definition of significance levels in procedure CAP-NGGC-0200.

The inspectors also reviewed the ARs initiated by the licensee in response to NRC Non-Cited Violations (NCVs) issued during the last year, to verify that the licensee had appropriately addressed the associated issues. Those NCVs and corresponding ARs are listed in the Attachment.

The inspectors observed daily meetings where corrective action issues were discussed, to verify that risk insights were being used in prioritization and evaluation of issues. The inspectors also reviewed the plant's weekly plan of activities and risk profiles to assess that risk information was employed in work planning and scheduling.

(2) Issues and Findings

The inspectors determined that when conditions adverse to quality were identified, the licensee entered those conditions into the CAP and generally identified the appropriate causes and developed and implemented effective corrective actions. The inspectors determined that the licensee properly classified discrepant conditions. However, the inspectors identified the following negative observations:

- (a) Corrective actions were not well documented for five CRs/ARs.



CR/AR 23428 documented problems with identifying and documenting unavailability for Maintenance Rule performance trending. Corrective actions included performing a number of reviews. The results of these reviews were not documented. Through interviews with responsible personnel and review of some e-mails, the inspectors were able to verify that the required reviews were completed and appropriate corrective actions taken.

CR/AR 22222 documented a problem concerning 35 missing calculations. Corrective actions included interviews of engineering personnel to identify the calculations, a search of records to attempt to locate the calculations, and an update to the nuclear quality records system to document the status of the calculations in question. The results of the completed corrective actions were not documented in the CAP records. After discussions with licensee engineers and review of an e-mail memo, the inspectors were able to identify the calculations in question and to conclude that corrective actions taken were appropriate. The licensee could not locate the original calculations since some had been canceled or never issued (completed), and the calculation numbers were incorrect. The reasons for the missing calculations and a list of the calculations were not documented under the CAP program.

CR/AR 19675 and 20390 documented problems associated with the reactor coolant pump standpipe level switches. The text and assigned corrective actions were identical for both CRs/ARs. The corrective actions were to complete three work orders which involved troubleshooting the problem. The completion notes associated with 20390 indicated that an engineering service request (ESR) and associated work orders were required to replace the level switches during the next refueling outage and the CR/AR was closed even though the ESR was not complete and the work orders had not yet been written. CR/AR 19675 was still open. The inspectors concluded that after the troubleshooting was completed for the three work orders assigned to 19675, CR/AR 20390 was initiated to correct the problem through the ESR and work orders to replace the level switches. CR/AR 20390 was closed in error instead of CR/AR 19675 for which corrective actions (troubleshooting) was completed. Licensee engineers stated that they planned to reopen CR/AR 20390 and close CR/AR 19675.

CR/AR 23799 documented a problem with a DC ground on the turbine driven auxiliary feedwater pump. The event was not described in the CR/AR and the CR/AR recommended a single corrective action to add some instructions to procedure PIC-E070. However the status of this corrective action was shown as canceled. However discussions with licensee engineers and review of PIC-E070 disclosed it had been revised. This was not documented in the CAP program.

- (b) One example was identified where an CR/AR was not initiated in a timely manner. AR 18306 documented a problem with the reactor coolant system leak detection radiation monitor filter paper running too fast resulting in non-conservative particulate channel set points. The problem first occurred on February 27, 2000 and had occurred five times by March 24, 2000. It was recognized on March 24<sup>th</sup> that the condition was not normal. AR 18306 was not

issued until April 15, 2000. The problem had occurred five more times by April 15<sup>th</sup> when the CR/AR was issued.

There were no actual consequences from the untimely issue of the CR/AR and corrective actions appeared appropriate. Based on the entire population of CRs/ARs reviewed, this case of untimely issue of an AR was considered isolated.

- (c) Two CRs/ARs for equipment failures (20796 - Feedwater isolation valve failed and 22287 - Residual Heat Removal Valve RH-25 failed to stroke) were marked "No" for "loss of maintenance rule function". In both cases, "Yes" should have been marked. This was only a documentation problem. There were no actual affects on corrective actions since the failures were documented and dispositioned appropriately in the Maintenance Rule program.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed the corrective action reports listed in the Attachment to verify that the licensee had identified or implemented corrective actions commensurate with the safety-significance of the issue, and where possible, evaluated the effectiveness of the actions taken. The inspectors also verified that common causes and generic concerns were addressed where appropriate.

The inspectors reviewed selected station internal performance indicators and reports, and discussed safety system status with plant personnel. Significant material condition issues with plant safety systems were verified to be in the corrective action program.

The inspectors also reviewed several Troubleshooting Plans, and Action Plans that had been developed by the licensee to verify that all conditions adverse to quality associated with those documents had been entered into the licensee's CAP.

(2) Issues and Findings

Corrective actions developed and implemented for plant equipment problems were generally effective in correcting the equipment deficiencies. The inspectors found that the scope and depth of corrective actions assigned by the licensee were appropriate for the severity and risk significance of the problem identified.

The inspectors observed in review of the Harris, Periodic Review for the Chemical and Volume Control/High Head Safety Injection System, dated June 29, 2001, that the licensee had rated the overall system health as Red, (i.e. requiring excessive monitoring/resources to maintain) with an improving trend. The report noted problem areas that included unavailability, operator work arounds, radiation hot spots, number of LERs, maintenance costs, and critical impact on outage. The inspectors found that corrective actions being implemented were appropriate for the identified problems.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The inspectors interviewed licensee operations, maintenance, security, chemistry, health physics, engineering, and supervisory personnel to develop a general view of the safety-conscious work environment at Harris and to determine whether any conditions existed that would cause workers to be reluctant to raise safety concerns. The inspectors queried licensee employees to determine whether any conditions existed that would cause employees to be reluctant to raise safety concerns. The inspectors also reviewed the licensee's employee concerns program which provides an alternate method to the corrective action program for employees to raise safety concerns and remain anonymous. The inspectors reviewed Employee Concern Resolution Reports to determine if concerns were being properly reviewed and identified deficiencies were being resolved in accordance with the licensee's corrective action program.

(2) Issues and Findings

The inspectors concluded that licensee management emphasized the need for all employees to identify and report nonconforming conditions using the appropriate methods established within their administrative programs. Methods available included deficiency log entries, work requests, condition reports, and the employee concerns program. These methods were readily accessible to all employees. Licensee management encouraged all employees to promptly identify nonconforming conditions through the CAP. Based on discussions conducted with plant employees from various departments, the inspectors determined that a reluctance to report safety concerns did not exist.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to R. Field, and other members of licensee management at the conclusion of the inspection on July 27, 2001. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

**PARTIAL LIST OF PERSONS CONTACTED**Licensee

D. Alexander, Nuclear Assessment Manager  
G. Attarian, Engineering Support Services Manager  
C. Burton, Director of Site Operations  
R. Duncan, Plant General Manager  
R. Field, Regulatory Affairs Manager  
T. Hobbs, Operations Manager  
J. Holt, Major Projects Manager  
C. Kamilaris, Self Evaluation Unit Supervisor  
M. Munroe, Training Manager  
T. Natale, Outage and Scheduling Manager  
J. Scarola, Harris Plant Vice President  
P. Summers, Environmental & Radiation Control Manager  
B. Waldrep, Maintenance Manager  
M. Wallace, Senior Analyst, Licensing

NRC

J. Brady, Senior Resident Inspector, Harris  
M. Lesser, Chief, Engineering Branch 2, Division of Reactor Safety

**ITEMS OPENED, CLOSED AND DISCUSSED**

None.

## LIST OF DOCUMENTS REVIEWED

### Condition Reports/ Action Requests

<u>CR/AR No.</u>	<u>Description/Title</u>
15034	Assessment CES 99-020 Weakness - Procedure Improvements
15097	CES 99-020 Assessment Findings
15134	Maintenance Self Assessment Findings Relative to Allocation of Maintenance Resources
15166	Incorrect Welding Symbol Details On Electrical Support Drawings
15443	Failed Stroke Time for Screen Wash Supply Valve ISC-20 to "A" ESW Main Reservoir Suction Screen
15886	1-SC-H-85 Hanger Inspected to Outdated Drawings
16033	IWE/IWL Self Assessment (Weakness # 4.2)
16035	IWE/IWL Self Assessment (Weakness # 4.1)
16308	Repetitive Failure of Heater Drain Valve 1HD-13 Control
16332	Contaminated Water Found in Clean Area
16487	During Coatings Work on RCP Motor, QC Hold Point Bypassed
16513	Documentation Errors in Work Package 99-ADIW4
17063	Containment Dose for EQ
17088	Inadequate Embedment for Hilti Kwik Bolt Expansion Anchors
17449	NAS Issue Commitment Management
17472	During Performance of PM-I0039, Valves 1AF-137, and 1MS-70 Failed to Meet Test Acceptance Criteria
17496	Maintenance Rule Performance Criteria Exceeded After Two New Functional Failures
17702	FSAR and CALC Inconsistencies
18158	Steam Dump Maintenance Rule Scoping Issue

Attachment

18306	RC System Leakage Radiation Monitor Particulate Channel - Filter Paper Moving Too Fast
19342	"A" ESW Pump Discharge Strainer Tripped Following the Start of "A" Train During System Testing
20029	PASS Chiller Tripped on High Pressure Cutout
20093	Delay of Two AFW OSTs Due to Procedure Problems
20796	"A" Feedwater Isolation Valve Failed Closed Causing a Plant Trip
20822, 20823	Revise CM-0019, Maintenance Procedures for Charging Safety Injection Pumps
21316	Air Handling Unit AH-3 Service water Relief Valve 1SW-95 Lifted Due to Pressure Higher than Setpoint
21527	Self-Assessment Program is not Maintained at Same Standard as BNP and RNP
21644	Essential Service Chilled Water Supply Valve 1Ch-616 to Air Handling Unit AH-9B Failed
21649	Chiller WC-2A Tripped on Low Oil Pressure
22113	Adverse Trend Relative to Silt Blockage of Components Supplied by Service Water
22058	Cable Tray Hanger Allowable Load Tracking Problems
22063	ESR 99-00145 Missed Category A Drawing Updates
22222	35 Calculations can not be Located
22243	Radiation Monitor Failed Check Source Test - Exceeded Maintenance Rule Performance Criteria
22287	Valve 1RH-25 Failed to Stroke Open During Quarterly Performance Test
22395	Chiller WC-2A Tripped Second Time on Low Oil Pressure
22764	DC Ground on TDAFW Pump When Tripped Locally
23401	During OST-1011, Monthly Valve Test, 1AF-50 Failed to Indicate Fully Open

23428	Maintenance Rule (a)(3) Assessment Identified Problems With Accurately Capturing Unavailability Performance Data
23732	1SW-97, Containment Fan Cooler AH-3 Outlet Valve 1SW-97 Failed Its Stroke Time When Tested (OST-1214)
24123	Reviews for three significant equipment issues failed to bound the problems.
24588	FSAR Requirements not Captured in NAS Procedures
24971	Vendor Determination of Operability
24974	Cause Resolution Assignment Not Timely
24976	Original Record not in Passport
24977	No Corrective Actions to Prevent Recurrence in Root Cause Evaluation
25276	Inadequate Maintenance Scoping of TDAFW Functions
25428	"A" ESCW - Lack of Maintenance Rule (a)(1) Goal
25841	"A" ESW Main Reservoir Tripped on Thermal Overload During PM
25959	Employee Concern Identifies ESR Part Backlog
26202	Safety Injection Throttle Valves Further Shut than Previously Determined
26203	Channel Test Card 4-0841 Failed to Function Properly During Performance of MST-I0021 (MS/FW Calibration)
26323	Sequencer - Technical Specification Interval Requirements Exceeded for Load Blocks 6 to 7
26424	Significant ESR Quality Problems And Missed EPR Requirements
27847	Repetitive Automatic Backwash of ESW Strainer After Manual Backwash During Performance Testing of "A" ESW Pump
29138	During Performance Testing, the 1A ESW Pump Differential Pressure was Outside the Acceptable Range but in the Alert Range
30249	Potential Missed Surveillance on Fuel Handling Building Vent
30336	Potential Missed Surveillance on Radiation Monitors

31123	HESS Procedure Quality
31178	Computer Alarm Due to High Temperature on TAF2007A SG "A" MDAFW Back-Leakage
31449	High Number 1 Seal Leakoff on C Reactor Coolant Pump
43717	Main Generator Hydrogen Leakage
43285	Self-Assessment Issue, Incomplete Non-licensed Operator Task List
44458	Repetitive Failure of "B" ESW Strainer
44671	Limiting Condition for Operation Flag Not Correctly Set on work Order
44754	Relief Valve Discharge Pipe
45439	Inspection Of Auxiliary Dam
45444	Abnormal Operating Procedure 005 Entry Due to Tank Radiation Monitor in High Alarm

### **Procedures**

ADM-NGGC-0101, Maintenance Rule Program, Rev 13

ADM-NGGC-0200, Passport Action Tracking, Rev 1

CAP-NGGC-200, Corrective Action program, Rev. 2

CAP-NGGC-201, Self-Assessment Program, Rev. 4

CAP-NGGC-202, Operating Experience Program, Rev. 2

EGR-NGGC-0320, Civil/Structural Operability Reviews, Rev 4

MNT-NGGC-0006, Facility Change Process

CM-M0019, Charging Safety Injection Pump Disassembly and Maintenance, Rev 15

Operations Surveillance Test OST-1214, Emergency Service Water Operability Train A  
Quarterly Interval Modes 1-2-3-4, Rev 23

Plant Program Procedure PLP-620, Service Water Program (Generic Letter 89-13), Rev 8

Preventive Maintenance PM-I0039, DC Limitorque Shunt Resistor Test, Rev 5



**Maintenance Documents**

Work Request 15688 - Replacement of Relay 62/1928 in "A" MDAFW Close Circuit Annunciator

WRJO 00AGJL1 - Change MOV Torque Setting on Valve 1SW-91

WRJO 00AGJQ1 - Change MOV Torque Setting on Valve 1SW-110

WRJO 00AGJI1 - Change MOV Torque Setting on Valve 1SW-97

Preventive Maintenance Models AQQL and AQQM - Replace 1" Diameter ESW Supply and Return Lines for PASS

Open Corrective Maintenance Work Orders for the High Head Safety Injection System, dated June 25, 2001

Maintenance Rule Data Base - Functional Failures that Occurred Between June 2000 and June 2001; Scoping Documents, Performance Criteria, and Performance Data for Selected Systems; and Performance Criteria for Systems in (a)(1)

**Engineering Documents**

Chemical And Volume Control/High Head Safety Injection Periodic System Review, dated 6/29/01

Calculation HNP-F/PSA-0021, Impact of Degraded Charging Safety Injection Pump on Overall Risk Profile, dated 6/22/01

Engineering Service Request (ESR) 00-00084, Operability Evaluation for AR 17088, Rev 0

ESR 00-000101, Design Basis Substitution for Phillips Anchors, Rev 0

**Self- Assessments**

OPS-00-001, Operations Corrective Action Program

O&S-01-01, Outage and Scheduling - Planning

REG-00-007, Passport Use in the HNP Corrective Action Program

SEC-00-017, HNP Security Corrective Action Program

AR 10255, Configuration Management Assessment

AR 27218, Document Services Effectiveness of Restructuring

AR 27315, Operations Management Communications and Direction Effectiveness

AR 28152, Site-Wide on Procedure Quality

AR 28872, SFP Testing Readiness

AR 29272, SOER Implementation

**Nuclear Assessment Section Assessments**

RR-CA-00-01, RNP, BNP, HNP, Round Robin Corrective Action Program Self Assessment

H-MA-00-01, Maintenance Assessment

RR-SC-01-01, BNP, HNP Round Robin Security Assessment

H-ES-01-01, HNP Engineering Functional Area Assessment

H-SA-01-01, HNP Commitment Matrix

**Performance Evaluation Support Assessments**

01-024-SW-H, Harris Site-Wide Assessment

01-03-QA/QC-H, Harris Nuclear Plant Quality Control

**Operating Experience Issue Documents/ NRC Information Notices/ NRC Generic Letters**

NRC Information Notice 2000-06, Offsite Power Voltage Inadequacies (AR 18061)

NRC 10CFR Part 21 Report 1999-50, Potential Inoperability of Cutler-Hammer DS and DSL Circuit Breakers Due to Zinc Chromate Plating of Hardened Parts (AR17935)

Barton Transmitter Potential Wire Damage (NSAL 99-011), (AR15922)

SER 3-00, Criticality in Uranium Processing Plant, and WANO 1999-4, Criticality Accident at Uranium Processing Plant (AR 15944)

SER 6-00, Cultural Contributors to a Premature Criticality (AR 30233)

OE 95-69, Thermal Stratification in Reactor Coolant System Hot Legs (AI 95H0072)

NRC Generic Letter 99-02, Laboratory Testing of Nuclear Grade Activated Charcoal, (AR 03226)

NRC Information Notice 99-01, Deterioration of High Efficiency Particulate Air Filters. (CAPS 99-780)

NRC Information Notice 99-14, Unanticipated Reactor Water Draindown at Quad Cities Unit 2, (CAPS 99-1556)

NRC Information Notice 00-14, Non-Vital Bus Fault Leads to Fire and Loss of Offsite Power, (AR 24176)

O&MR 426, Plant Events that Occurred during Troubleshooting Activities, (CAPS 99-1701)

### **Previously Identified NRC Findings**

<u>Item ID No.</u>	<u>AR No.</u>	<u>Title</u>
50-400/2000-04 (PI&R cross-cutting issue)	24123	Problem Identification and Resolution Errors (Cross-Cutting Issue)
50/400-00-02-01	16858	Inadequate Control Room Emergency Filtration System Surveillance Test Procedure
50/400-00-03-03	22287	Technical Specification Violation Due to Inoperable Emergency Core Cooling System Flowpath
50/400-00-03-04	22395	Failure To Take Corrective Action To Complete Adequate Post-Modification Testing
50/400-00-04-03	24123	Failure To Take Corrective Action Regarding Multiple Trips Of The A Emergency Services Chilled Water Chiller
50/400-00-06-01	27038 & 30360	Inadequate Operability Evaluation For ECCS Throttle Valve

### **Troubleshooting Plans**

HNP Action Plan for Reactor Coolant Pump] Standpipe Level Switches (AR 19675 & 20390)

HNP Action Plan for Cooling Tower Makeup/Cooling Tower Blowdown Crosstie Throttling Valve 1MP-76 (AR 23857)

Troubleshooting Plan for 60 KVA Inverter

Troubleshooting Plan for ALB-13, 8-2 Rod Insertion Limit (AR 26737)

Troubleshooting Plan for E-19 Failure to Start on 5/16/01 (AR 31748)

Emergency Service Water Main Reservoir Bay 8 Traveling Screen 1A-SA (AR 25841)

Troubleshooting 1BD-27 Failure to Open when ESR 01-004 was Installed (AR 10292 & 27190)

Drift Problem in Loop L-0484 (AR 25640)

Troubleshooting Plan for 125 DC Ground (Rev. 2) (AR 28549)

Condenser In-Leakage Transient (AR 26718)

Troubleshooting Plan for 1BD-84 (AR 30674)

Containment Fire Protection Header Troubleshooting (AR 19581,18621,& 3516)

5B Feedwater Heater Troubleshooting Plan of 10/8/00, Rev. 4 (AR 24459)

Extended Troubleshooting Plan WR/JO 99-AFDN1 (AR 4093, 17784, & 25679)

Troubleshooting Plan "A" Condensate Booster Pump WR/JO 00-ADQY1 June 18, 2000 (AR 20663)

Emergency Response Facilities Information System Inverter Troubleshooting Plan (AR 17122 & 19726)

E-5 A&B (Containment Pre-Entry Purge - Backup for RAB Exhaust) Rev. 3 (AR 27414)

Determining Running Current on 1A-SA Main Reservoir Emergency Service Water Traveling Screen (AR 25841)

Turbine-Driven Auxiliary Feedwater DC Bus Ground Troubleshooting Plan Last Updated 1/23/01 (AR 23799)

Steam Generator "A" Level Transient Troubleshooting Plan 05/08/01 Rev. 1 (AR 31281)

Troubleshooting Plan for Determining why K645 B did not actuate (AR 19172)

Reactor Coolant Pump "C" No. 2 Seal Leak-off high flow alarm (AR 23508)

### **Licensee Event Reports**

1999-001-00 Spent Fuel Pool Water Level Not Maintained Greater Than 23 Ft Above Stored BWR Fuel Assemblies

1999-003-00 Plant Outside the Design Basis Due to Isolation of the Fire Protection Containment Sprinkler System

- 1999-005-00 Engineered Safety Features Actuation Systems Technical Specification Exceeded
- 1999-006-01 Containment Isolation Valve Technical Specification Noncompliance
- 1999-007-00 Containment Ventilation Isolation Area Radiation Monitors Technical Specification Noncompliance
- 1999-008-00 Control Room Emergency Filtration System Technical Specification Noncompliance
- 2000-001-00 Control Room Emergency Filtration System Technical Specification Violation
- 2000-002-00 Technical Specification Violation Due to Inoperable Radiation Monitor
- 2000-003-00 Inadvertent Safety Injection Actuation
- 2000-004-00 Technical Specification Violation Due to Inoperable Power Range Nuclear Instrumentation
- 2000-005-00 Manual Reactor Trip Due to a Reduction in Feedwater Flow
- 2000-006-00 Technical Specification Violation Due to Inoperable Emergency Core Cooling System Valve
- 2000-007-00 Technical Specification Violation Due to Inoperable Charging Safety Injection Pump
- 2000-002-01 Technical Specification Violation Due to Inoperable Radiation Monitor
- 2000-006-01 Technical Specification Violation Due to Inoperable Emergency Core Cooling System Valve
- 2000-007-01 Technical Specification Violation Due to Inoperable Charging Safety Injection Pump

**Other Documents**

Harris Nuclear Plant Play Book, Nuclear Safety and Production, Objectives and Strategies, November 30, 2000

Harris Site Business Plan, Maintenance Strategic Plan, June 20, 2001

Harris Nuclear Plant Non-Conformance Report Review Meeting (Agenda) dated July 9, 10, 11, 12, 25, 26, & 27, 2001

Configuration Control Trend Report through June 2001

Containment Entry Briefing Package, dated July 19, 2001

Corrective Actions Trend Report dated July 10, & 24, 2001

Completed (4/16/01) Engineering Periodic Test Procedure EPT-286, Revision 0, Essential Services Chilled Water Compressor Oil System Setup Analysis Test

Law Engineering Report, Harris Nuclear Plant, Inspection of Water Control Structures, dated December, 2000