



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

April 30, 2008

Carolina Power and Light Company
ATTN: Mr. Robert J. Duncan, II
Vice President – Harris Plant
Shearon Harris Nuclear Power Plant
P. O. Box 165, Mail Code: Zone 1
New Hill, North Carolina 27562-0165

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT - NRC EMERGENCY
PREPAREDNESS INSPECTION REPORT 05000400/2008501

Dear Mr. Duncan:

On April 10, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an Emergency Preparedness inspection at Shearon Harris Nuclear Power Plant. The enclosed inspection report documents the inspection results, which were discussed on April 10, 2008, with Mr. C. Burton and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 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/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian R. Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket Nos. 50-400
License Nos. NPF-63

Enclosure: NRC Inspection Report No. 05000400/2008501
W/Attachment: Supplemental Information

(cc w/encl: page 2)

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☒ PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE ☐ NON-SENSITIVE

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OFFICE	RII: DRS	RII:DRP	RII:DRS	RII:DRP	RII:DRP		
SIGNATURE	/RA/	/RA/		/RA/	/RA/		
NAME	L. Miller	R. Musser	B. Bonser	Eric Riggs	Dan Rich		
DATE	4/25/2008	04/25/08	04/30/08	4/25/2008	4/25/2008		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSIT\PSB1\EMERGENCY PREPAREDNESS\HARRIS\INSPECTION PLAN
AND INPUT\FY2008\HARRIS 2008-501 INSPECTION REPORT.DOC

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CP&L

3

Letter to Robert J. Duncan, II from Brian Bonser dated April 30, 2008

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT - NRC EMERGENCY
PREPAREDNESS INSPECTION REPORT 05000400/2008501

Distribution w/encl:

RIDSNRRDIRS

PUBLIC

M. Vaaler, NRR (PM - Harris)

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-400

License Nos: NPF-63

Report Nos: 05000400/2008501

Licensee: Carolina Power and Light Company

Facility: Shearon Harris Nuclear Power Plant, Unit 1

Location: New Hill, NC

Dates: April 07-10, 2008

Inspector: Lee Miller, Senior Emergency Preparedness Inspector

Approved by: Brian R. Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000400/2008-501; 04/07/2008 - 4/10/2008; Shearon Harris Nuclear Power Plant; Baseline Inspection.

The report covered an announced inspection by one emergency preparedness inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations.

None

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Testing

a. Inspection Scope

The inspector evaluated the adequacy of licensee's methods for testing the alert and notification system in accordance with NRC Inspection Procedure 71114, Attachment 02, "Alert and Notification System Evaluation". The applicable planning standard 10 CFR Part 50.47(b)(5) and its related 10 CFR Part 50, Appendix E, Section IV.D requirements were used as reference criteria. The criteria contained in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, was also used as a reference.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the alert and notification system on an biennial basis.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation

a. Inspection Scope

The inspector reviewed the licensee's Emergency Response Organization (ERO) augmentation staffing requirements and process for notifying the ERO to ensure the readiness of key staff for responding to an event and timely facility activation. The qualification records of key position ERO personnel were reviewed to ensure all ERO qualifications were current. A sample of problems identified from augmentation drills or system tests performed since the last inspection were reviewed to assess the effectiveness of corrective actions.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 03, "Emergency Response Organization Staffing and Augmentation System." The applicable planning standard, 10 CFR 50.47(b)(2) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the ERO staffing and augmentation system on a biennial basis.

Enclosure

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

The inspector's review of revisions to the emergency plan, implementing procedures, and Emergency Action Level (EAL) changes was performed to determine that changes had not decreased the effectiveness of the plan. The inspector evaluated the associated 10 CFR 50.54(q) reviews associated with non-administrative emergency plan, implementing procedures, and EAL changes. The inspector reviewed Shearon Harris Emergency Plan revision 46 and changes to the implementing procedures from February 2007 to February 2008.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, "Emergency Action Level and Emergency Plan Changes." The applicable planning standard (PS), 10 CFR 50.47(b)(4) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the EAL and emergency plan changes on an annual basis.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

a. Inspection Scope

The inspector reviewed the corrective actions identified through the EP program to determine the significance of the issues and to determine if repeat problems were occurring. The facility's self-assessments and audits were reviewed to assess the licensee's ability to be self-critical, thus avoiding complacency and degradation of their EP program. In addition, inspector reviewed licensee's self-assessments and audits to assess the completeness and effectiveness of all EP-related corrective actions.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 05, "Correction of Emergency Preparedness Weaknesses." The applicable planning standard, 10 CFR 50.47(b)(14) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection activity satisfied one inspection sample for the correction of emergency preparedness weaknesses on a biennial basis.

Enclosure

Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

Cornerstone: Emergency Preparedness

The inspector sampled licensee submittals for three Performance Indicators (PI) listed below. For each of the submittals reviewed, the inspector reviewed the period from January 2007 through December 2007. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Indicator Guideline," Revision 5, were used to verify the basis in reporting for each data element.

- Emergency Response Organization Drill/Exercise Performance (DEP)
- Emergency Response Organization Readiness (ERO)
- Alert and Notification System Reliability (ANS)

The inspectors reviewed portions of the raw PI data developed from monthly performance indicator reports and discussed the methods for compiling and reporting the PIs with cognizant emergency preparedness personnel. The inspector also independently screened drill and exercise opportunity evaluations, drill participation reports, and drill evaluations. Selected reported values were calculated to verify their accuracy. The inspectors compared graphical representations from the most recent PI report to the raw data to verify that the data was correctly reflected in the report. Reviewed documents are listed in the Attachment to this report.

b. Findings

No findings of significance were identified.

4OA6 Meetings, including Exit

On April 10, 2008, the lead inspector presented the inspection results to Mr. C. Burton and other members of your staff. The inspector confirmed that proprietary information was not provided during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

C. Burton	Director Site Operations
K. Henderson	Plant General Manager
P. Mentel	Manager Site Support Services (Acting)
C. Kamilaris	Manager Nuclear Assessment
T. Pilo	Fleet Coordinator – Emergency Preparedness
J. Overly	Emergency Preparedness Supervisor
D. McGee	Manager Shift Operations
M. Wallace	Senior Specialist – Licensing

LIST OF DOCUMENTS REVIEWED

1EP2 Alert and Notification System Testing

Procedures and Documentation

Public Warning System Operator Guide, March 27, 2008
WPS-29900 Series High Power Voice & Siren System Installation Manual
WPS-29900 Series High Power Voice & Siren System Operating and Troubleshooting manual
EPM-400, Public Notification and Alerting System
Tone Alert Weather Radio Survey, November 16, 2007
Tone Alert Weather Radio Survey, April 23, 2007
Tone Alert Weather Radio Survey, May 8, 2006
Harris Nuclear Plant Media Information Guide, 2007
Harris Plant Tone Alert Radios, 2007
Harris Nuclear Plant Safety Information
Student Safety Information, 2007

Corrective Actions – Action Request (AR)

274232, Siren system maintenance inadequate
274194, 2007 siren system full volume test results

Records and Data

Documentation for Siren testing and maintenance, January 2006 - December 2007

1EP3 Emergency Response Organization Augmentation

Procedures

EPM-100, EP Program Administration, Rev. 7

PEP-310, Notifications and Communications, Rev. 22
 EPM-602, Routine Maintenance and Testing of the Dialogic System, Rev. 1

Records and Data

ERO Roster, April 7, 2008
 Emergency Response Organization Duty Roster, 04/07/08 – 04/14/08
 Quarterly ERO Pager Test for 1st, 2nd, 3rd and 4th quarters 2006
 Quarterly ERO Pager Test for 1st and 2nd quarters 2007
 Unannounced Augmentation/Response drill conducted October 17, 2006 at 1845
 07-04 Drill Critique Report December 4, 2007, Rev. 1
 EP File #4.4, July 25, 2006 Full Scale EP Drill Critique Report
 EP File #4.4, November 7, 2006 Full Scale EP Drill Critique Report
 EP File #4.4, January 30, 2007 Full Scale EP Drill Critique Report, Rev. 1
 EP File #4.4, April 10, 2007 Full Scale EP Drill Critique Report, Rev. 1
 EP File #4.4, August 7, 2007 Full Scale EP Drill Critique Report, Rev. 1
 EP File #4.4, December 4, 2007 Full Scale EP Drill Critique Report, Rev. 1

Corrective Actions - Condition Report (CR)

274441, Dialogic Paging System Testing not adequate

1EP4 Emergency Action Level and Emergency Plan Changes

Procedures

PLP-201, Emergency Plan, Rev. 52

E-Plan Changes

PLP-201, Emergency Plan, Rev. 53 change package
 PEP-230, Control Room Operations, Rev. 15 and 16
 PEP-240, Activation and Operation of the Technical Support Center, Rev. 10

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

EPM-100, EP Program Administration, Rev. 7
 EPM-200 ERO Training Program, Rev. 9
 EPM-210 EP Drill and Exercise Program, Rev. 12

Audits and Self-Assessments

HNAS 06-073, Harris NAS Emergency Preparedness Mid-Cycle Review (Report H-EP-06-01)
 HNAS-07-115, Harris Emergency Preparedness Assessment (Report H-EP-07-01)
 247129, Root Cause Emergency Preparedness drill and objective tracking not being maintained
 177632, Formal Benchmark Report
 176147, ERO Training Program Effectiveness
 216600, Emergency Plan Effectiveness Based on Post 9/11 Security Changes

Corrective Actions - Action Request (AR)

262196, Alternate control room communication method needed
 262364, HNP communications long term reliability
 264164, Siren loss of communications
 264876, Siren communication problems
 265488, Inadequate procedure and training on backup phone system
 274041, Items missing from ENMON kits during quarterly inventory
 197858, Tone Alert Radio never received
 206206, Missed ENS monthly phone test
 214336, Siren losses due to power failures during storms
 235314, Tone Alert Radio annual test failure 64.4%
 207332, Emerging trend in full-scale drill PAR classification
 219331, EP EALs

OA1 Performance Indicator Verification

REG-NGGC-0009, NRC Performance Indicators and Monthly Operating Report Data, Rev. 8

Records and Data

Documentation of DEP opportunities packages for 01/01/2007 - 12/31/2007
 Documentation of ANS tests, 01/01/2007 - 12/31/2007
 Documentation of drill and exercise participation, 01/01/2007 - 12/31/2007

Corrective Actions - Condition Report (CR)

274596, EP December 2007 NRC Drill and Exercise PI Inaccurate
 274194, 2007 Siren system full volume test results

LIST OF ACRONYMS

ANS	Alert and Notification System (ANS) Testing
DEP	Emergency Response Organization Drill/Exercise Performance
EAL	Emergency Action Level
ERO	Emergency Response Organization
NEI	Nuclear Energy Institute
PI	Performance Indicator
PS	Planning Standard