



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

December 18, 2007

Carolina Power and Light Company

ATTN: Mr. J. Scarola

Vice President

Brunswick Steam Electric Plant

P. O. Box 10429

Southport, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT - NRC EMERGENCY
PREPAREDNESS INSPECTION REPORT 05000325/2007501 and
05000324/2007501

Dear Mr. Scarola:

On November 30, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an Emergency Preparedness inspection at your Brunswick Steam Electric Plant. The enclosed inspection report documents the inspection results, which were discussed on November 29, 2007, with you 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. 50-325, 50-324
License Nos. DPR-71, DPR-62

Enclosure: NRC Inspection Report No. 05000325/2007501, 05000324/2007501 w/Attachment:
Supplemental Information

cc w/encl: Se Page 2

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cc: Continued on Page 3

CP&L

3

cc: Continued from Page 2

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December 18, 2007

Carolina Power and Light Company

ATTN: Mr. J. Scarola
Vice President

Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT - NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000325/2007501 and 05000324/2007501

Dear Mr. Scarola:

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

Docket Nos. 50-325, 50-324
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Supplemental Information

cc w/encl: page 2

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OFFICE	RII:DRS	RII:DRS						
SIGNATURE	<i>/RA/</i>	<i>/RA/</i>						
NAME	B. Bonser	L. Miller						
DATE	12/18/2007	12/18/2007	April 8, 2008					
E-MAIL COPY?	YES	NO	YES	NO	YES	NO	YES	NO

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-325, 50-324

License Nos: DPR-71, DPR-62

Report Nos: 05000325/2007501 and 05000324/2007501

Licensee: Carolina Power and Light (CP&L)

Facility: Brunswick Steam Electric Plant, Units 1 & 2

Location: Southport, North Carolina

Dates: November 26-30, 2007

Inspector: Lee Miller, Senior Emergency Preparedness Inspector

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

Enclosure

SUMMARY OF FINDINGS

IR 05000325/2007501, 05000324/2007501;11/26-30/2007;Brunswick Steam Electric Plant, Units 1 and 2; 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

Enclosure

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 (ANS) Testing". 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 (ERO) Staffing and Augmentation System

a. Inspection Scope

The inspector reviewed the licensee's 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 (ERO) Augmentation Testing." 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 an biennial basis.

Enclosure

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes

a. Inspection Scope

The inspector's review of revisions to the emergency plan, implementing procedures and 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 Brunswick Emergency Plan Revision 69 and changes to the implementing procedures from November 1, 2006 to November 7, 2007.

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 criteria contained in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans" and Regulatory Guide 1.101 were also used as references.

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

a. Inspection Scope

The inspector reviewed the corrective actions identified through the Emergency Preparedness (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 and Deficiencies." 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 an biennial basis.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspector sampled licensee submittals for the three Performance Indicators (PIs) listed below for units one and two. For each of the submittals reviewed, the inspector looked at the period from October 1, 2006 to September 30, 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.

The inspection was conducted in accordance with NRC Inspection Procedure 71151, "Performance Indicator Verification."

The inspector reviewed various documents which are listed in the Attachment to this report. This inspection satisfied three inspection samples for PI verification on an annual basis.

b. Findings

No findings of significance were identified.

4OA6 Meetings, including Exit

On November 30, 2007, the lead inspector presented the inspection results to Mr. J. Scarola, Vice President - Brunswick Nuclear Plant , and other members of his staff. The inspector confirmed that proprietary information was not provided during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

J. Scarola, Vice President
B. Waldrep, Director Site Operations
E. Willis, Plant General Manager
S. Howard, Manager Operations
S. Rogers, Manager Maintenance
R. Garner, Manager Nuclear Assessment Section
D. Griffith, Manager Training
G. Atkinson, Supervisor Emergency Preparedness

LIST OF DOCUMENTS REVIEWED

1EP2 Alert and Notification System Evaluation

Procedures

0EPM-600, Brunswick Siren System System User Guide, Rev. 2
WPS-2900 Series High Power Voice & Siren System Manual
Public Warning System Operator Guide, February 13, 2007

Records and Data

Siren Maintenance Records, 11/11/05 -10/28/07
Siren Test Records (weekly silent, quarterly growl, and annual full-volume tests) 11/11/05 - 10/28/07

1EP3 Emergency Response Organization (ERO) Staffing and Augmentation System

Procedures

0EPM-400, Brunswick Emergency Notification System User Guide, Rev. 4
0PEP-04.2, Emergency Facilities and Equipment, Rev. 32
0PEP-04.7, Brunswick Emergency Notification (Automated Telephone) System, Rev. 6

Records and Data

BNP Graded Exercise (Documentation and Critique) 11/07/06
Medical Emergency Event (Documentation and Critique) 03/12/07
Off-hour ERO Response Drill (Documentation and Critique) conducted on 04/24/07
Quarterly Communications Drill from 2006 to 2007
Monthly BNP Communications Test (Selective Signaling) from 1/02 - 11/06/07
Training and Qualification Records of selected key ERO personnel, 2005-2007

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes

REG-NGGC-0010, 10 CFR 50.59 and Selected Regulatory Reviews, Rev. 10

Change Packages

0ERP-Radiological Emergency Response Plan (ERP), Rev. 69

0PEP-02.6.26, Activation and Operation of the Technical Support Center (TSC), Rev. 17

0PEP-02.6.21, Emergency Communicator, Rev. 47

0PEP-03.7.6, Emergency Exposure Control, Rev. 3

0PEP-04.3, Performance of Training, Exercises and Drills, Rev.19

1EP5 Correction of Emergency Preparedness Weaknesses

0EPM-210, Emergency Preparedness Drill/Exercise Program, Rev. 8

CAP-NGGC-0200, Corrective Action Program, Rev. 19

CAP-NGGC-0201, Self-Assessment and Benchmark Programs, Rev.11

B-EP-06-01, BNP Emergency Preparedness Assessment, October 5, 2006

B-EP-07-01, BNP Emergency Preparedness Assessment, August 8, 2007

194246, Radiological Emergency Response Plan Regulatory Review, February 12-16, 2007

176147, ERO Training Program Effectiveness, July 31 - August 3, 2006

Corrective Actions - Nuclear Condition Report (NCR)

227092, Siren System 911 Center Field Interrogation Unit failure alarms

228644, Selective signaling inop to New Hanover County Warning Point

230833, Problems with BEN scenario during augmentation Drill

231718, Selective signaling and decision line failure to New Hanover County

242056, Siren B27 repetitive component failure

243850, Siren system antenna hitting MET tower

238802, NAS assessment of Emergency Preparedness

4OA1 Performance Indicator Verification

NGGD-0006, NGG Key Performance Indicators, Rev. 1

REG-NGGC-0009, NRC Performance Indicators and Monthly Operating Report Data, Rev. 7

Records and Data

Documentation of PI data 10/01/06 to 9/30/07 for DEP, ANS, and ERO

ERO Response Drill (Documentation and Critique) conducted on 05/31/07

ERO Response Drill (Documentation and Critique) conducted on 07/24/07

ERO Response Drill (Documentation and Critique) conducted on 10/30/07

Records of drill and exercise participation by selected key ERO personnel, 2005-2007

LIST OF ACRONYMS

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