



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

December 28, 2007

Carolina Power and Light Company  
ATTN: Mr. Tom Walt  
Vice President - Robinson Plant  
H. B. Robinson Steam Electric Plant  
Unit 2  
3851 West Entrance Road  
Hartsville, SC 29550

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT - NRC EMERGENCY  
PREPAREDNESS INSPECTION REPORT 05000261/2007502

Dear Mr. Walt:

On December 7, the U.S. Nuclear Regulatory Commission (NRC) completed an Emergency Preparedness inspection at your H. B. Robinson reactor facility. The enclosed inspection report documents the inspection results, which were discussed on December 7, 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. 50-261  
License Nos. DPR-23

Enclosure: NRC Inspection Report No. 05000261/2007502  
w/Attachment: Supplemental Information

cc : See Page 2

CP&L

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cc w/encl:  
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Brian R. Bonser, Chief  
Plant Support Branch 1  
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Docket Nos. 50-261  
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Enclosure: NRC Inspection Report No. 05000261/2007502  
w/Attachment: Supplemental Information

cc w/encl: page 2

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DATE	12/28/2007	12/12/2007	12/10/2007	12/10/2007	January 7, 2008	January 7, 2008	January 7, 2008
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-261

License Nos: DPR-23

Report Nos: 05000261/2007502

Licensee: Carolina Power and Light (CP&L)

Facility: H. B. Robinson Steam Electric Plant, Unit 2

Location: Hartsville, SC

Dates: December 3 - 7, 2007

Inspector: L. Miller, Senior Emergency Preparedness Inspector  
M. Norris, Senior Emergency Preparedness Specialist  
R. Schmitt, Emergency Preparedness Specialist

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

Enclosure

## SUMMARY OF FINDINGS

IR 05000261/2007502;H.B.Robinson Steam Electric Plant, Unit 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

#### 1EP1 Exercise Evaluation

##### a. Inspection Scope

Prior to the inspection activity, the inspector conducted an in-office review of the exercise objectives and scenario submitted to the NRC to determine if the exercise would test major elements of the emergency plan as required by 10 CFR 50.47(b)(14). This inspection activity represents one sample on a biennial cycle.

The onsite inspection consisted of the following review and assessment:

- The adequacy of the licensee's performance in the biennial exercise conducted on December 4, 2007, was reviewed and assessed regarding the implementation of the Risk Significant Planning Standards (RSPS) in 10 CFR 50.47 (b)(4), (5), (9), and (10), which address emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of the licensee's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities" and Emergency Plan commitments. The facilities assessed were the Control Room simulator, Technical Support Center (TSC), Operations Support Center (OSC) and Emergency Operations Facility (EOF).
- Other performance areas besides the RSPS, such as the emergency response organization's (ERO) recognition of abnormal plant conditions, command and control, intra- and inter-facility communications, prioritization of mitigation activities, utilization of repair and field monitoring teams, interface with offsite agencies, and the overall implementation of the emergency plan and its implementing procedures.
- Past performance issues from NRC inspection reports and Federal Emergency Management Agency (FEMA)/Department of Homeland Security (DHS) exercise reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10 CFR 50.47(b)(14).
- The post-exercise critique process and the presentation to the licensee's senior management conducted on December 7, 2007, to evaluate the licensee's self-assessment of its ERO performance during the exercise and to ensure compliance with 10 CFR 50 Appendix E.IV.F.2.g.

The inspector reviewed various documents which are listed in the Attachment to this report.

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 Robinson Emergency Plan Revisions 63, 64 and changes to the implementing procedures from April - September 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 Nuclear Energy Institute (NEI) 99-01, "Methodology for Development of Emergency Action Levels," Revision 4, 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.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspector sampled licensee submittals for the three Performance Indicators (PIs) listed below for unit two. For each of the submittals reviewed, the inspector looked at the period from April 1 to September 30, 2007. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in 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 December 7, 2007, the lead inspector presented the inspection results to Mr. Tom Walt, Vice President, 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

T. Walt, Vice President  
E. McCartney, Director Site Operations  
E. Kapopoulos, Plant General Manager  
W. Farmer, Manager - Engineering  
J. Lucus, Manager - Nuclear Assessment  
B. Clark, Manager - Training  
S. Wheeler, Supervisor Emergency Preparedness

### LIST OF DOCUMENTS REVIEWED

#### 1EP1 Exercise Evaluation

##### Procedures

EPNOT-01, CR/EOF Emergency Communicator, Rev. 25  
EPCLA-01, Emergency Control, Rev. 23  
EPCLA-04, Emergency Action Level Technical Bases Document, Rev. 0  
EPRAD-00, Radiological Assessments and Consequences, Rev. 3  
EPRAD-02, Processing Very High Level Radioactive Samples, Rev. 3  
EPRAD-03, Dose Projections, Rev. 19  
EPEOF-00, Activation and Operation of the Emergency Operations Facility, Rev. 5  
EPTSC-00, Activation and Operation of the Technical Support Center, Rev. 6  
EPTSC-07, Damage Assessment, Rev. 6  
EPOSC-00, Activation and Operation of the OSC, Rev. 10  
EPOSC-01, Operational Support Center Leader, Rev. 15  
EPOSC-02, Damage Control Team Leader, Rev. 8  
EPOSC-03, Emergency and Radiation Control Team, Rev. 10

##### Records and Data

Selected exercise data, logs, and records (including classification notification forms, dose projections and PARs) for the TSC, OSC, EOF, and JIC

##### Nuclear Condition Report

257748 12/4/07 Dialogic system failure while attempting to activate the beepers  
257751 Data imported to ENF form line 16 will not take <1 mRem  
257753 Protective Actions Section of the EOF status board sector D-1 could not be updated  
257759 During biennial exercise AERM interfered with Lee county ANS activation  
257942 LPMS system engineer did not report alarm and audible indications on channel 752  
257994 Fuel Damage Assessment was not performed in TSC

- 257952 NRC communicator did not report information to NRC of initial steam leak
- 257970 Event Notification form #1 was not accurate
- 257973 Control Room communicator did not get ENF approval in WEBEOC
- 257979 Spurious EDG CO2 alarms received during exercise
- 257990 During exercise it was reported there was not enough security officers available for escorts
- 258023 Emergency Plan definition of exclusion area references 10CFR50.67
- 258026 Log-keeping during exercise did not meet site expectations
- 258035 Event Notification form #7 inaccurate
- 258066 Initial Event Notification forms 1, 4, 6 did not contain dose projection data.  
Appropriate sense of urgency not displayed in development and transmittal of dose data
- 258089 EOF should have questioned or validatee the 2-hour default used on dose projections
- 258157 Knowledge level for ERO positions RCD, RCM, and Dose Projection needs to be improved correlating to NEI 99-01 EALs
- 258159 Evaluate the criteria for activating the ERO
- 258209 General Emergency declaration unwarranted based on RG1.1 note 1

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

##### E-Plan Change package

- PLP-007, Robinson Emergency Plan, Rev. 64
- PLP-007, Robinson Emergency Plan, Rev. 63
- EPCLA-01, Emergency Control, Rev. 23
- EPEOF-00, Activation and Operation of the Emergency Operations Facility, Rev. 5
- EPEOF-01, Emergency Response Manager, Rev. 10
- EPNOT-01, CR/EOF Emergency Communicator, Rev. 24 and Rev. 23
- EPRAD-03, Dose Projections, Rev. 19

#### 40A1 Performance Indicator Verification

##### Records and Data

- Siren System Availability Test Records for April - September 2007
- ERO drill data for April 2007 - September 2007
- Records of drill and exercise participation by selected key ERO personnel for April - September 2007

#### LIST OF ACRONYMS

ANS	Alert and Notification System (ANS) Testing
DEP	Emergency Response Organization Drill/Exercise Performance
DHS	Department of Homeland Security
EAL	Emergency Action Level
EOF	Emergency Operations Facility

EP	Emergency Preparedness
ERO	Emergency Response Organization
FEMA	Federal Emergency Management Agency
NEI	Nuclear Energy Institute
OSC	Operations Support Center
PI	Performance Indicator
PS	Planning Standard
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center