



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

September 12, 2007

Duke Power Company LLC
d/b/a Duke Energy Carolinas, LLC
ATTN: Mr. Bruce H. Hamilton
Vice President
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION - NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000269/2007501, 05000270/2007501, AND
05000287/2007501

Dear Mr. Hamilton:

On August 17, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an Emergency Preparedness inspection at your Oconee Nuclear Station. The enclosed inspection report documents the inspection results, which were discussed on August 17, 2007, with Mr. D. Baxter, Station Manager, 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. 50-269, 50-270, 50-287
License Nos. DRP-38, DRP-47, DRP-55

Enclosure: NRC Inspection Report No. 05000269/2007501, 05000270/2007501 AND
05000287/2007501 w/Attachment: Supplemental Information
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DPC

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cc w/encl:

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cc w/encl: page 2

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NAME	B. Bonser	L. Miller		J. Moorman			
DATE	9/12/2007	9/11/20079		9/12/2007			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-269, 50-270, 50-287

License Nos: DRP-38, DRP-47, DRP-55

Report Nos: 05000269/2007501, 05000270/2007501, AND 05000287/2007501

Licensee: Duke Energy Corporation

Facility: Oconee Nuclear Station

Location: 7812B Rochester Highway
Seneca, SC 29672

Dates: August 13 - 17, 2007

Inspector: L. Miller, Senior Emergency Preparedness Inspector

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

Enclosure

SUMMARY OF FINDINGS

IR 05000369/2007-501, 05000270/2007-501, 05000287/2007-501;08/13/2007 - 08/17/2007;
Oconee Nuclear Station; 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," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Emergency Preparedness

None

B. Licensee-Identified Violations.

None

Enclosure

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Evaluation

a. Inspection Scope

The inspector evaluated the adequacy of licensee methods for testing the alert and notification system in accordance with NRC Inspection Procedure 71114, Attachment 02, "Alert and Notification System (ANS) 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.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization (ERO) Augmentation System

a. Inspection Scope

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 03, "Emergency Response Organization (ERO) 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 the ERO augmentation staffing requirements and the process for notifying the ERO to ensure the readiness of key staff for responding to an event and timely facility activation. The inspector reviewed the results of the October 24, 2006, unannounced off-hours augmentation drill and reviewed the backup notification systems. 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 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 also evaluated the associated 10 CFR 50.54(q) reviews associated with non-administrative emergency plan, implementing procedures and EAL changes. The Emergency Plan Revisions 2006-04 and 2007-01 were reviewed and covered the period from July 2006 to August 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 NUMARC/NESP-007, Methodology for Development of Emergency Action Levels, Revision 2 and Regulatory Guide 1.101 were also used as references. This inspection activity represents one sample on an annual basis.

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

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 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.

Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspector reviewed the licensee's procedure for developing the data for the Emergency Preparedness PIs which are: (1) Drill/Exercise Performance (DEP); (2) ERO Drill Participation; and (3) Alert and Notification System (ANS) Reliability. The inspector examined data reported to the NRC for the period July 2006 to June 2007. Procedural guidance for reporting PI information and records used by the licensee to identify potential PI occurrences were also reviewed. The inspector verified the accuracy of the PI for ERO DEP through review of a sample of drill and event records. The inspector reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspector verified the accuracy of the PI for ANS reliability through review of a sample of the licensee's records of periodic system tests.

The inspection was conducted in accordance with NRC Inspection Procedure 71151, "Performance Indicator Verification." The applicable PI, 10 CFR 50.9 and Nuclear Energy Institute (NEI) 99-02, Revision 4, "Regulatory Assessment Performance Indicator Guidelines," were used as reference criteria. This inspection activity represents three samples on an annual basis.

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

b. Findings

No findings of significance were identified.

4OA6 Meetings, including Exit

On August 17, 2007, the lead inspector for the emergency preparedness inspection presented the inspection results to Mr. D. Baxter, Station Manager, and other members of his staff. The inspector confirmed that proprietary information was not provided or taken during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

D. Baxter, Station Manager
L. Nicholson, Safety Assurance Manager
R. Brown, Emergency Preparedness Manager
R. Waterman, Emergency Preparedness
D. Kelley, Emergency Preparedness
R. Taylor, Emergency Preparedness

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1EP2: Alert and Notification System Evaluation

Procedures

PT/0/B/2000/002, Periodic Test of Emergency Response Communications Equipment, Rev. 35

Records and Data

Electrical/Mechanical Repair records for sirens conducted on 09/28/2006, 07/26/2006, 07/25/2006, 07/20/2006, 07/03/2006, 04/27/2005
Annual Maintenance packages from 08/05/05 to 06/20/2007 for 0-PT-172.3, Early Warning System Polling Functional Test
Weekly Silent ANS Test, 09/2006 - 08/2007

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

Procedures

PT/0/B/2000/001, Preparation and Conduct of Emergency Drills, Rev. 13
PT/0/B/2000/002, Periodic Test of Emergency Response Communication Equipment, Rev. 35
Nuclear System Directive 117, Emergency Response Organization Staffing, Training, and Responsibilities, Rev. 7

ERTG-001, Emergency Response Organization and Emergency Services Training Program, Rev. 16

Nuclear System Directive 117, Emergency Response Organization Staffing, Training, and Responsibilities, Rev. 7

Records and Data

Exercise 06-03, 07/18/2006, SGTR with MSRV leaking and fuel failure

Exercise 06-04, 08/30/2006, Hostile action inside OCA

Drill 07-01, 03/20/2007, SGTR/MSL break in same SG/> 1000mREM TEDE or >5000mREM CDE adult thyroid

Drill 07-02, 04/04/2007, ATWS/Manual Scram/Turbine Bldg flood/Loss normal and emergency feedwater/SAMG

2007 Off-year Exercise, 07/11/2007, ATWS/Manual Scram/Failed fuel/ SGTR with MSRV leak

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

E-Plan Changes

Change packages for the following:

Emergency Plan Rev. 2006-04 and 2007-01

OMP 1-14, Notifications, Rev. 011

OMP 1-17, Operations Emergency Response Organization, Rev. 23

RP/0/B/1000/001, Emergency Classification, Rev. 21

RP/0/B/1000/002, Control Room Emergency Coordinator Procedure, Rev. 15

RP/0/B/1000/007, Security Event, Rev. 12

RP/0/B/1000/015A, Offsite Communication From the Control Room, Rev. 11

SH/0/B/2005/001, Emergency Response Offsite Dose Projections, Rev. 5

Section 1EP5: Correction of Emergency Preparedness Weakness and Deficiencies

Records and Data

GO-06-019(NPA)(EP)(ALL) 2006 Emergency Planning Functional Area Assessment, 11/09/2006

Corrective Actions - Problem Investigation Process (PIP)

O-07-04452, UFSAR section 3.9.3.3 verbiage appears to be incorrect in describing the Main Steam relief valve configuration

O-07-04434, No documented training on ERO Activation process/procedures for PBX operators

O-06-01154, Chemistry provided incomplete information concerning total EC Calculations for the purpose of determining emergency classification based on liquid unplanned release.

O-06-01438, RP/0/B/1000/001 Enclosure 4.6 does not agree with ONS EAL Description Guidelines

O-06-01610, EP Drill 06-01 was conducted on January 25, 2006. Several problems were identified

O-06-01337, Follow-up on comments from TSC Emergency Coordinator/EOF Training Director training conducted on 03/08/06
 O-06-0711, NSD-117 Expectations for ERO Response to after-hours drill were not met.
 O-05-05254, Problems identified during the 2005 ERO Augmentation Drill which was conducted on August 5, 2005
 O-05-05019, ONS Emergency Planning Drill 05-03 was conducted on June 30, 2005.
 O-05-05426, Insufficient guidance exists on how the site should respond to a concurrent multi-unit shutown.
 O-05-06610, Drill Scenario Development Team did not identify a Drill/Exercise Performance opportunity during the drill development stage.
 O-05-06812, NSD 117 compliance continues to challenge the site
 O-05-05333, MERT not toned out for MERT Response
 O-05-04806, Contradiction between SLC 16.13.1 Minimum Staffing Requirements and Fire Brigade SOG#2 Staffing Guidelines

Section 4AO1: Performance Indicator (PI) Verification

Records and Data

Performance Indicator Monthly Data from July 2006 to June 2007.
 Records of Drill and Exercise opportunities from July, 2006 to June, 2007
 Records of drill participation by 15 selected ERO personnel from July, 2006 to June, 2007
 Records of ERO training drills/exercises conducted between July, 2006 - June, 2007 (including drill scenario, critique report, offsite notification messages, PI evaluations)

LIST OF ACRONYMS

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