



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

June 2, 2006

Duke Energy Corporation  
ATTN: Mr. D. M. Jamil  
Site Vice President  
Catawba Site  
4800 Concord Road  
York, SC 29745-9635

SUBJECT: CATAWBA NUCLEAR STATION - NRC INSPECTION REPORT  
05000413/2006008 AND 05000414/2006008

Dear Mr. Jamil:

On May 19, 2006, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Catawba Nuclear Station Units 1 and 2. The enclosed inspection report documents the inspections results, which were discussed 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).

Should you have any questions concerning this letter, please contact us.

Sincerely,

*/RA/*

Brian R. Bonser, Chief  
Plant Support Branch 2  
Division of Reactor Safety

Docket Nos. 50-413, 50-414  
License Nos. NPF-35, NPF-52

Enclosure: (See page 2)

DEC

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Enclosure: NRC Inspection Report 05000413/2006008 and 05000414/2006008  
w/Attachment: Supplemental Information

cc w/encl:  
Randy D. Hart  
Regulatory Compliance Manager  
Duke Energy Corporation  
Electronic Mail Distribution

Lisa Vaughn  
Associate General Counsel  
Duke Energy Corporation  
526 South Church Street  
Mail Code EC 07H  
Charlotte, NC 28202

Timika Shafeek-Horton  
Assistant General Counsel  
Duke Energy Corporation  
526 South Church Street-EC07H  
Charlotte, NC 28202

David A. Repka  
Winston & Strawn LLP  
Electronic Mail Distribution

North Carolina MPA-1  
Electronic Mail Distribution

Henry J. Porter, Asst. Director  
Div. of Radioactive Waste Mgmt.  
S. C. Department of Health  
and Environmental Control  
Electronic Mail Distribution

R. Mike Gandy  
Division of Radioactive Waste Mgmt.  
S. C. Department of Health and  
Environmental Control  
Electronic Mail Distribution

Elizabeth McMahon  
Assistant Attorney General  
S. C. Attorney General's Office  
Electronic Mail Distribution

(cc w/encl cont'd - See page 3)

DEC

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(cc w/encl cont'd)

Vanessa Quinn

Federal Emergency Management Agency

Electronic Mail Distribution

North Carolina Electric

Membership Corporation

Electronic Mail Distribution

County Manager of York County, SC

Electronic Mail Distribution

Piedmont Municipal Power Agency

Electronic Mail Distribution

R. L. Gill, Jr., Manager

Nuclear Regulatory Issues

and Industry Affairs

Duke Energy Corporation

526 S. Church Street

Charlotte, NC 28201-0006

Distribution w/encl:

J. Stang, NRR

RIDSNRRDIPMLIPB

PUBLIC

U. S. NUCLEAR REGULATORY COMMISSION  
REGION II

Docket Nos.: 50-413, 50-414

License Nos.: NPF-35, NPF-52

Report No: 05000413/2006008, 05000414/2006008

Licensee: Duke Energy Corporation

Facility: Catawba Nuclear Station

Location: 4800 Concord Road  
York, SC 29745-9635

Dates: May 15-19, 2006

Inspectors: L. Miller, Senior Emergency Preparedness Inspector  
(Section 1EP1,1EP4)  
J. Kreh, Emergency Preparedness Inspector (Section 1EP1, 4OA1)  
E. Guthrie, Senior Resident Inspector, (Section 1EP1)

Approved by: Brian R. Bonser, Chief  
Plant Support Branch 2  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000413/2006008, 05000414/2006008; 05/15-19/2006; Catawba Nuclear Station, Units 1 and 2; emergency preparedness

The report covered an announced inspection by a team of two emergency preparedness inspectors and one resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Emergency Preparedness

None

B. Licensee-Identified Violations.

None

## 1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

### 1EP1 Exercise Evaluation

#### a. Inspection Scope

Prior to the inspection activity, the inspectors 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 May 16, 2006, was reviewed and assessed regarding the implementation of the Risk Significant Planning Standards (RSPSs) in 10 CFR 50.47 (b) (4), (5), (9), and (10), which are 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), Operational 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) 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 conducted May 19, 2006, 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 inspectors reviewed various documents which are listed in the Attachment to this report.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors review of revisions to the emergency plan, implementing procedures and EAL changes was performed for determining that changes had not decreased the effectiveness of the plan. The inspectors also evaluated the associated 10 CFR 50.54(q) reviews associated with non-administrative emergency plan, implementing procedures and EAL changes. The Catawba Nuclear Station Emergency Plan, revision 06-01 was reviewed.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, "Emergency Action Level and Emergency Plan Changes." The applicable 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 Preparedness in Support of Nuclear Power Plants," Revision 1, Regulatory Guide 1.101 were also used as references. This inspection activity represents one sample on an annual basis.

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

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors reviewed the licensee's procedure for developing the data for the Emergency Preparedness PIs which are: (1) DEP; (2) ERO Drill Participation; and (3) Alert and Notification System (ANS) Reliability. The inspectors examined data reported to the NRC for the period January 1, 2005 to March 31, 2006. Procedural guidance for reporting PI information and records used by the licensee to identify potential PI occurrences were also reviewed. The inspectors verified the accuracy of the PI for ERO drill and exercise performance through review of a sample of drill and event records. The inspectors 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 inspectors verified the accuracy of the PI for alert and notification system 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 planning standard, 10 CFR 50.9 and Nuclear Energy Institute (NEI) 99-02, Revision 3, "Regulatory Assessment Performance Indicator Guidelines," were used as reference criteria. This inspection activity represents three samples on an annual basis.

The inspectors 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 May 19, 2006, the team lead for the Emergency Preparedness Inspection presented the inspection results to Mr. D. Jamil, Catawba Site Vice President, and other members of his staff. The inspectors confirmed that proprietary information was not provided or taken during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

D. Jamil, Catawba Site Vice President  
J. Pitesa, Station Manager  
M. Patrick, Work Control Department Superintendent  
E. Beadle, Manager - Emergency Planning  
R. Repko, Engineering Manager  
G. Strickland, Regulatory Compliance (Engineer)

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

## LIST OF DOCUMENTS REVIEWED

### Section 1EP1: Exercise Evaluation

#### Plans and Procedures

RP/0/A/5000/006B, Notifications to States and Counties from the Technical Support Center, Rev. 20  
RP/0/A/5000/020, Technical Support Center (TSC) Activation Procedure, Rev. 20  
RP/0/A/5000/024, OSC Activation Procedure, Rev. 15  
SR/0/B/2000/003, Activation of the Emergency Operations Facility, Rev. 15  
SR/0/B/2000/004, Notification to States and Counties from the Emergency Operations Facility, Rev. 9  
RP/0/A/5000/001, Classification of Emergency, Rev. 017  
RP/0/A/5000/002, Notification of Unusual Event, Rev. 038  
RP/0/A/5000/003, Alert, Rev. 041  
RP/0/A/5000/004, Site Area Emergency, 043  
RP/0/A/5000/005, General Emergency, 044  
RP/0/A/5000/006A, Notification to States and Counties from the Control Room, Rev. 020  
RP/0/A/5000/006B, Notification to States and Counties from the Technical Support Center, Rev. 021  
PT/0/B/4600/006, Emergency Exercises and Drills, Rev. 011  
SR/0/B/2000/003, Activation of the Emergency Operations Facility, Rev. 016  
SH/0/B/2005/001, Emergency Response Offsite Dose Projections, Rev. 004

#### Miscellaneous

##### Problem Investigation Process

C-06-03819, Apparent mis-classification of General Emergency during graded exercise, 5/16/06  
C-06-3808, Corrective Action Items for non-risk significant items from Graded Exercise 06-2, 05/16/06  
C-06-03776, Required Boron concentration for end of cycle shutdown margin appear to be overly conservative on both units, 05/16/06  
C-06-03807, Corrective Action Items for risk significant items from Graded Exercise 06-2, 05/16/06

Nuclear Power Plant Emergency Notification Form (Messages 1-8) for State and local agencies

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

#### Plans and Changes packages

Emergency Plan, Rev. 06-01  
Catawba Emergency Plan Change Package 05-01  
Catawba Emergency Plan Change Package 05-02  
Catawba Emergency Plan Change Package 06-01

Change Package for RP/0/A/5000/006B, Notification to States and Counties from the Technical Support Center, Rev. 020

Change Package for SR/0/B/2000/004, Notification to States and Counties from the Emergency Operations Facility, Rev. 9

#### Section 4OA1: Performance Indicator (PI) Verification

##### Procedures

DPND-1551.00-0001, Emergency Planning Functional Area Manual: Section 3.7, NRC Regulatory Assessment Performance Indicator Guideline – Emergency Preparedness Cornerstone, Rev. 10

##### Records and Data

Documentation (scenario, time line, event notification forms, critique report) of ERO drills on 06/21/2005, 11/22/2005

Documentation of CRS DEP evaluations in February 2005 and February 2006

Selected training records of drill/exercise participation by ERO personnel during 2004-2005

Siren system test records for January 2005-March 2006

## LIST OF ACRONYMS

ANS	Alert and Notification System
DEP	Drill/Exercise Performance
EAL	Emergency Action Level
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
IMC	Inspection Manual Chapter
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OSC	Operational Support Center
PI	Performance Indicator
PS	Planning Standard
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center
FEMA	Federal Emergency Management Agency

June 2, 2006

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**(\*) - SEE ATTACHED E-MAIL FOR CONCURRENCES**

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE

ADAMS:  Yes      ACCESSION NUMBER: \_\_\_\_\_

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DATE	6/ /2006	5/23/2006	5/30/2006	6/2/2006	6/2/2006	6/ /2006	6/ /2006
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO