October 26, 2007

Duke Power Company LLC
d/b/a Duke Energy Carolinas, LLC
ATTN: Mr. G. R. Peterson
Vice President
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT:  MCGUIRE NUCLEAR STATION - NRC EMERGENCY PREPAREDNESS INSPECTION REPORT 05000369/2007501 AND 05000370/2007501

Dear Mr. Peterson:

On October 18, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an Emergency Preparedness inspection at your McGuire Nuclear Station, Units 1 and 2. The enclosed inspection report documents the inspection results, which were discussed on October 18, 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. 50-369, 50-370
License Nos. NPF-9, NPF-17

Enclosure:  NRC Inspection Report No. 05000369/2007501, 05000370/2007501
w/Attachment: Supplemental Information

cc: Page 2
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October 26, 2007

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Docket Nos. 50-369, 50-370
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cc: Page 2

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Letter to: Mr. G. R. Peterson, Vice President Dated: October 26, 2007
McGuire Nuclear Station

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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket Nos: 50-369, 50-370

License Nos: NPF-9, NPF-17

Report Nos: 05000369/2007501, 05000370/2007501

Licensee: Duke Energy Corporation

Facility: McGuire Nuclear Station, Units 1 and 2

Location: Huntersville, North Carolina

Dates: October 15 - 18, 2007

Inspector: Lee Miller, Senior Emergency Preparedness Inspector
Nathan Sanfilippo, Emergency Preparedness Specialist
Carl Moore, Operations License Examiner

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

IR 05000369/207501, 05000370/2007501; 10/15-18/2007; McGuire Nuclear Station, Units 1 and 2; Baseline Inspection.

The report covered an announced inspection by one Senior Emergency Preparedness inspector, one Emergency Preparedness Specialist, and one Operations License Examiner. 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
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 October 16, 2007, 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 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 October 18, 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.

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 McGuire Emergency Plan revision 07-01 and changes to the implementing procedures from November 2006 to October 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.

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 units one and two. For each of the submittals reviewed, the inspector looked at the period from October 1, 2006 to June 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 4, 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 October 18, 2007, the lead inspector presented the inspection results to Mr. G. Peterson, 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

G. Peterson, Site Vice-President
R. Repko, Station Manager
N. Kunkel, Nuclear Section Manager
J. Kammer, Safety Assurance Manager
K. Murray, Emergency Preparedness Manager
T. Kuhr, Nuclear General Office - Emergency Preparedness

LIST OF DOCUMENTS REVIEWED

1EP1 Exercise Evaluation

Procedures

EP/1/A/5000/FR-C.2 UNIT 1; Response to Degraded Core Cooling; Rev. 4
RP/0/A/5700/000, Classification of Emergency, Rev. 013
RP/0/A/5700/002, Alert, Rev. 25
RP/0/A/5700/003, Site Area Emergency, Rev. 25
RP/0/A/5700/004, General Emergency, Rev. 24
RP/0/A/5700/010, NRC Immediate Notification Requirements, Rev. 17
RP/0/A/5700/011, Conducting a Site Assembly, Site Evacuation or Containment Evacuation, Rev. 010
RP/0/A/5700/012, Activation of the Technical Support Center (TSC), Rev. 30
RP/0/A/5700/022, Spill/Incident Response Procedure, Rev. 12
RP/0/B/5700/029, Notifications to Offsite Agencies from the Control Room, Rev. 008
RP/0/B/2000/003, Activation of the Emergency Operations Facility, Rev. 18
SH/0/B/2005/001, Emergency Response Offsite Dose Projections, Rev. 005
SR/0/B/2000/004, Notification of States and Counties from the Emergency Operations Facility, Rev. 12
Emergency Planning Functional Area Manual, Section 3.5, Basis for Protective Action Recommendations, 04/13/07
File No.: GS-M24.01, Memo to W.A. Haller re: Wind Persistence Study, 07/09/87

Records and Data

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

Corrective Actions - Condition Report (CR)

M-07-05521, 10/16/07 graded exercise took 22 minutes to activate site assembly after declaring an Alert.
M-07-05522, Due to a scenario injection of EMF data emergency notification form #1 was not accurate
M-07-05523, TSC team elected to use 10CFR50.54(x) process to isolate and recover from LOCA outside containment
M-07-05524, Scenario fidelity issues on the October 16, 2007 Graded Exercise
M-07-05525, On some emergency notification form faxes the “S” sector was cut off the form.
M-07-05507, PIP documents critique items from 10/16/07 exercise

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

E-Plan Changes

McGuire Nuclear Station Emergency Plan, Rev. 07-1
HP/0/B/1009/022, Accident and Emergency Response, Rev. 004
RP/0/A/5700/012, Activation of the Technical Support Center (TSC), Rev. 28

4OA1 Performance Indicator Verification

Records and Data

EP PI data for fourth quarter 2006 to second quarter 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
RSPSs Risk Significant Planning Standards
TSC  Technical Support Center