



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

August 26, 2013

Mr. Steven D. Capps
Site Vice President
Duke Energy Corporation
McGuire Nuclear Station
MG01VP/12700 Hagers Ferry Road
Huntersville, NC 28078

SUBJECT: MCGUIRE NUCLEAR STATION NRC EMERGENCY PREPAREDNESS
INSPECTION REPORT 05000369/2013503 AND 05000370/2013503

Dear Mr. Capps:

On August 8, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your McGuire Nuclear Station, Units 1 and 2. The enclosed inspection report documents the inspection results that were discussed on August 8, 2013, 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.

No findings were identified based on the results of this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter, its Enclosure, and your response, if any, will be available electronically for public inspection in the NRC Public Document Room, or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

Docket No. 50-369 and 50-370
License No. NPF-9 and NPF-17

Enclosure:
Inspection Report 05000369 & 370/2013-503
w/Attachment: Supplemental Information

cc: Distribution via Listserv

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 05000369 and 05000370

License Nos: NPF-9 and NPF-17

Report Nos: 05000369/2013503 and 05000370/2013503

Licensee: Duke Power Company LLC

Facility: McGuire Nuclear Station, Units 1 and 2

Location: Huntersville, NC

Dates: August 5 – 8, 2013

Inspectors: M. Speck, Senior Emergency Preparedness Inspector
W. Loo, Senior Health Physicist
G. Croon, Resident Inspector (Oconee)
J. Laughlin, Emergency Preparedness Specialist

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

Enclosure

SUMMARY OF FINDINGS

IR 05000369/2013503 and 05000370/2013503; August 5 – 8, 2013; McGuire Nuclear Station, Units 1 and 2; Exercise Evaluation and Baseline Inspection

The report covered an announced inspection by one emergency preparedness inspector, one senior health physicist, one emergency preparedness specialist, and one resident inspector. No findings were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation

a. Inspection Scope

Prior to the arrival onsite, the inspectors conducted an in-office review of the exercise objectives and scenario submitted to the U.S. Nuclear Regulatory Commission (NRC) using IP 71114.08, Exercise Evaluation, Scenario Review, to determine if the exercise would test major elements of the emergency plan as required by Title 10 of the *Code of Federal Regulations* (10 CFR) 50.47(b)(14).

The onsite inspection consisted of the following review and assessment:

- The adequacy of the licensee's performance in the biennial exercise, conducted on August 6, 2013, 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 the Emergency Operations Facility (EOF).
- Other performance areas, 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 the 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 August 8, 2013, to evaluate the licensee's self-assessment of its ERO performance during the exercise and to ensure compliance with 10 CFR 50, Appendix E, Subsection IV.F.2.g.

The inspectors reviewed various documents which are listed in the Attachment. This inspection activity satisfied one inspection sample for the exercise evaluation on a biennial basis.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors sampled licensee submittals relative to the Performance Indicators (PI) listed below for the period October 1, 2012, through June 30, 2013. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, was used to confirm the reporting basis for each data element.

Emergency Preparedness Cornerstone

- Emergency Response Organization Drill/Exercise Performance (DEP)
- Emergency Response Organization Readiness (ERO)
- Alert and Notification System Reliability (ANS)

For the specified review period, the inspectors examined data reported to the NRC, procedural guidance for reporting PI information, and records used by the licensee to identify potential PI occurrences. The inspectors verified the accuracy of the DEP through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the ERO PI for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for ANS reliability through review of a sample of the licensee's records of periodic system tests. Licensee procedures, records, and other documents reviewed within this inspection area are listed in the Attachment.

The inspectors reviewed various documents which are listed in the Attachment. This inspection activity satisfied one inspection sample for each of the three Emergency Preparedness PI, i.e., DEP, ERO, and ANS, on an annual basis.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On August 8, 2013, the lead inspector presented the inspection results to Mr. S. Capps, Site Vice President, and other members of the plant staff. The inspectors confirmed that proprietary information was not provided during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

M. Austin, Fleet Emergency Preparedness Manager
D. Brewer, Organizational Effectiveness Manager
J. Bryant, Licensing Engineer
R. Burris, EP Facilities and Equipment Coordinator
S. Capps, Site Vice President
H. Gibson, Emergency Preparedness Staff Emergency Services
C. Morris, Station Manager
K. Murray, Emergency Preparedness Manager
M. Mulkey, Emergency Preparedness staff
J. Nolin, Engineering Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

1EP1 Exercise Evaluation

Procedures

Emergency Planning Functional Area Manual Section 3.19, Drills and Exercises, Rev. 3
McGuire Nuclear Station Emergency Plan, Rev. 13-2
NSD-208, Problem Investigation Program, Rev. 38
RP/0/A/5700/000, Classification of Emergency, Rev. 20
RP/0/A/5700/002, Alert, Rev. 28
RP/0/A/5700/003, Site Area Emergency, Rev. 29
RP/0/A/5700/004, General Emergency, Rev. 28
RP/0/A/5700/010, NRC Immediate Notification Requirements, Rev. 19
RP/0/A/5700/012, Activation of the Technical Support Center (TSC), Rev. 041
RP/0/A/5700/018, Notification to the State and Counties from the Technical Support Center,
Rev. 22
RP/0/A/5700/019, Core Damage Assessment, Rev. 06
RP/0/A/5700/020, Activation of the Operations Support Center (OSC), Rev. 028
RP/0/B/5700/029, Notifications to Offsite Agencies from the Control Room, Rev. 10
SH/0/B/2005/001, Emergency Response Offsite Dose Projections, Rev. 6
SH/0/B/2005/002, Protocol for the Field Monitoring Coordinator During Emergency Conditions,
Rev. 5
SR/0/A/2000/003, Activation of the Emergency Operations Facility, Rev. 0
SR/0/B/2000/001, Standard Procedure for Corporate Communications Response to the
Emergency Operations Facility, Rev. 12

Records and Data

2011, 2012, and 2013 Emergency Exercise and drill scenario documents
Control Room, Technical Support Center, Operations Support Center, Joint Information Center,

Emergency Operations Facility - Documentation packages (logs, event notification forms, Protective Action Recommendations, Media releases, and Radiological Dose Assessments) NRC/FEMA 2013 Graded Exercise Management Debrief

Corrective Action Program documents

G-13-1262; SAE inaccuracy – DEP failure
 M-13-7689; ERDS failure
 M-13-7695; FAX problems during exercise
 M-13-7696; Simulator fidelity issues
 M-13-7736; Untimely NRC notification
 M-13-7738; One county late notification. Inadequate use of PA
 M-13-7739; FMT objective failure
 M-13-7757; Exercise implementation enhancements
 M-13-7761; TSC task status tracking objective failure
 M-13-7769; Clock time maintenance problem

Section 40A1: Performance Indicator Verification

Procedures

Emergency Planning Functional Area Manual (EPFAM) Section 3.7, NRC Regulatory Assessment Performance Indicator Guideline, Rev. 19
 Emergency Planning Functional Area Manual Section 3.19, Drills and Exercises, Rev. 3

Records and Data

Drill and Exercise Performance opportunities documentation from 3rd Quarter 2012, through 2nd Quarter 2013
 Drill and exercise participation records of ERO personnel from 3rd Quarter 2012, through 2nd Quarter 2013
 Siren Test results from 3rd Quarter 2012 through 2nd Quarter 2013

Corrective Action Program documents

M-13-0187; Siren 8 failure (amended)
 M-13-1666; Siren system communication vulnerability
 M-13-5385; Siren rotation failure
 M-13-5710; DEP PI failure

LIST OF ACRONYMS USED

ANS	Alert and Notification System
DEP	Drill and Exercise Performance
DHS	Department of Homeland Security
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
FEMA	Federal Emergency Management Agency
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OSC	Operations Support Center
PI	Performance Indicator
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center