



Steven D. Capps
Vice President
McGuire Nuclear Station

Duke Energy
MG01VP | 12700 Hagers Ferry Road
Huntersville, NC 28078

o: 980.875.4805
f: 980.875.4809
Steven.Capps@duke-energy.com

October 20, 2014
Serial No: MNS-14-082

10 CFR 50.54(q)

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

Subject: Duke Energy Carolinas, LLC
McGuire Nuclear Station, Units 1 and 2
Docket Nos. 50-369, 50-370
Emergency Plan, Revision 14-4

Please find attached Revision 14-4 to the McGuire Nuclear Station Emergency Plan. This revision is submitted in accordance with the requirements of 10 CFR 50.54(q) and does not result in a reduction in the effectiveness of the Emergency Plan or the Emergency Plan Implementing Procedures.

Questions regarding this submittal should be directed to Kay Crane, McGuire Regulatory Affairs, at (980) 875-4306.


for

Steven D. Capps

Attachments

AX45
NRK

U. S. Nuclear Regulatory Commission
October 20, 2014
Page 2

(Two Copies)
cc: Mr. V.M. McCree, Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, GA 30303-1257

(One Copy)
Catherine Haney, Director
Office of Nuclear Material Safety and Safeguards
Mail Stop 14 A12
Washington, D. C. 20555-0001

(w/o attachments)

Mr. G.E. Miller
NRC Project Manager (McGuire)
U. S. Nuclear Regulatory Commission
One White Flint North, Mail Stop 08C2
11555 Rockville Pike
Rockville, MD 20852-2738

Mr. John Zeiler
NRC Senior Resident Inspector
McGuire Nuclear Station

October 2, 2014

MEMORANDUM

To: All Holders of the McGuire Emergency Plan

Subject: McGuire Emergency Plan

Enclosed please find Revision 14-4 to the McGuire Nuclear Site Emergency Plan. Refer to Attachment 1 to complete the revision to the manual.

If there are any questions, please call me at 980-875-4672.

Sincerely,

A handwritten signature in black ink that reads "Kevin Murray". The signature is written in a cursive, flowing style.

Kevin Murray
Emergency Preparedness Manager
McGuire Nuclear Station


KLM/jcm

Attachment: Emergency Plan Revision

cc: EP File 1502

| <u>SECTION</u> | <u>REMOVE PAGES</u> | <u>INSERT PAGES</u> |
|-----------------------------------|--|--|
| Coversheet | Revision 14-3 | Revision 14-4 |
| Emergency Plan Revision List | Revision 14-3 | Revision 14-4 |
| List of Effective Pages (LOEP) | Complete Section, Rev. 14-3 Pages 1 thru 4 | Complete Section, Rev. 14-4 Pages 1 thru 4 |
| Table of Contents | Complete Section, Rev. 14-3 Pages 1 thru 6 | Complete Section, Rev. 14-4 Pages 1 thru 6 |
| Section E | Complete Section, Rev. 12-1 Pages E1 thru E11 | Complete Section, Rev. 14-4 Pages E1 thru E11 |
| Section Q | Complete Section Rev. 14-3 Pages Q1 thru Q20 | Complete Section Rev. 14-4 Pages Q1 thru Q20 |

DUKE ENERGY
McGUIRE NUCLEAR SITE
EMERGENCY PLAN

APPROVED:  for Steven D. Capps

SITE VICE PRESIDENT

DATE APPROVED: 10/20/14

REVISION 14-4: October, 2014

EFFECTIVE DATE: October, 2014

ORIGINAL DATE: August 25, 1980

DUKE ENERGY COMPANY
McGUIRE NUCLEAR SITE
EMERGENCY PLAN
REVISION LIST

August 25, 1980 Date Issued

| | |
|-------------------------------|-----------------------------|
| Change 1, October, 1980 | Revision 37, March 1992 |
| Change 2, February, 1981 | Revision 92-1, August 1992 |
| Change 3, June, 1981 | Revision 92-2, October 1992 |
| Change 4, August, 1981 | Rev. 93-1, April 1993 |
| Revision 1, November 16, 1981 | Rev. 93-2, June, 1993 |
| Revision 2, February, 1982 | Rev. 93-3, December 1993 |
| Revision 3, February, 1982 | Rev. 94-1, January, 1994 |
| Revision 4, April, 1982 | Rev. 94-2, June, 1994 |
| Revision 5, June, 1982 | Rev. 94-3, August 1994 |
| Revision 6, July, 1982 | Rev. 94-4, October 1994 |
| Revision 7, September, 1982 | Rev. 95-1, February 1995 |
| Revision 8, November, 1982 | Rev. 95-2, April 1995 |
| Revision 9, January, 1983 | Rev. 96-1, April 1996 |
| Revision 10, February, 1983 | Rev. 96-2, July 1996 |
| Revision 11, June, 1983 | Rev. 97-1, April 1997 |
| Revision 12, November, 1983 | Rev. 97-2, May 1997 |
| Revision 13, March, 1984 | Rev. 97-3, July, 1997 |
| Revision 14, August, 1984 | Rev. 98-1, January, 1998 |
| Revision 15, January, 1985 | Rev. 98-2, February, 1998 |
| Revision 16, March, 1985 | Rev. 98-3, May, 1998 |
| Revision 17, May, 1985 | Rev. 98-4, July, 1998 |
| Revision 18, November, 1985 | Rev. 98-5, August, 1998 |
| Revision 19, January, 1986 | Rev. 98-6, November, 1998 |
| Revision 20, July, 1986 | Rev. 99-1, March, 1999 |
| Revision 21, May, 1987 | Rev. 99-2, July, 1999 |
| Revision 22, June, 1987 | Rev. 99-3 November, 1999 |
| Revision 23, November, 1987 | Rev. 00-1, April, 2000 |
| Revision 24, March, 1988 | Rev. 00-2, May, 2000 |
| Revision 25, July, 1988 | Rev. 00-3, November, 2000 |
| Revision 26, July, 1989 | Rev. 01-1, January, 2001 |
| Revision 27, September, 1989 | Rev. 01-2, June, 2001 |
| Revision 28, October, 1989 | Rev. 02-1, March, 2002 |
| Revision 29, November, 1989 | Rev. 02-2, August, 2002 |
| Revision 30, March, 1990 | Rev. 03-1, April, 2003 |
| Revision 31, April, 1991 | Rev. 03-2, June, 2003 |
| Revision 32, July, 1991 | Rev. 04-1, February, 2004 |
| Revision 33, September, 1991 | Rev. 04-2, July, 2004 |
| Revision 34, October, 1991 | Rev. 05-1, July, 2005 |
| Revision 35, December, 1991 | Rev. 06-1, January, 2006 |
| Revision 36, January, 1992 | Rev. 06-2, September, 2006 |
| | Rev. 07-1, May, 2007 |

Rev. 07-2, December, 2007
Rev. 08-1, September, 2008
Rev. 09-1, July, 2009
Rev. 09-2, December, 2009
Rev. 10-1, May, 2010
Rev. 10-2, November, 2010
Rev. 11-1, March, 2011
Rev. 11-2, August, 2011
Rev. 11-3, October, 2011
Rev. 12-1, May, 2012
Rev. 12-2, June, 2012
Rev. 12-3, November, 2012
Rev. 12-4, December, 2012
Rev. 13-1, March, 2013
Rev. 13-2, June, 2013
Rev. 13-3, October, 2013
Rev. 14-1, January, 2014
Rev. 14-2, June 2014
Rev. 14-3, September, 2014
Rev. 14-4, October, 2014

**McGuire Emergency Plan
List of Effective Pages**

Emergency Plan Approval Cover Sheet

| | | | |
|------------|-----------|---------------|--|
| Coversheet | Rev. 14-4 | October, 2014 | |
|------------|-----------|---------------|--|

Emergency Plan Revision List

| | | | |
|---------------|-----------|---------------|--|
| Page 1 thru 2 | Rev. 14-4 | October, 2014 | |
|---------------|-----------|---------------|--|

Table of Contents

| | | | |
|---------------|-----------|---------------|--|
| Page 1 thru 6 | Rev. 14-4 | October, 2014 | |
|---------------|-----------|---------------|--|

List of Figures

| | | | |
|---------------|-----------|-----------------|--|
| Page 1 thru 2 | Rev. 14-3 | September, 2014 | |
|---------------|-----------|-----------------|--|

Introduction

| | | | |
|--------------------|-----------|---------------|--|
| Pages i-1 thru i-7 | Rev. 13-3 | October, 2013 | |
|--------------------|-----------|---------------|--|

A. Assignment of Responsibility

| | | | |
|--------------------|-----------|-----------------|--|
| Pages A-1 thru A-5 | Rev. 14-3 | September, 2014 | |
|--------------------|-----------|-----------------|--|

B. Onsite Emergency Organization

| | | | |
|---------------------|-----------|------------|--|
| Pages B-1 thru B-13 | Rev. 14-2 | June, 2014 | |
|---------------------|-----------|------------|--|

C. Emergency Response Support & Resources

| | | | |
|--------------------|-----------|------------|--|
| Pages C-1 thru C-2 | Rev. 09-1 | July, 2009 | |
|--------------------|-----------|------------|--|

D. Emergency Class System/EAL Basis Document

| | | | |
|---------------------|-----------|---------------|--|
| Pages D-1 thru D-83 | Rev. 14-1 | January, 2014 | |
|---------------------|-----------|---------------|--|

E. Notification Methods & Procedures

| | | | |
|---------------------|-----------|---------------|--|
| Pages E-1 thru E-11 | Rev. 14-4 | October, 2014 | |
|---------------------|-----------|---------------|--|

Rev. 14-4
October, 2014

McGuire Emergency Plan
List of Effective Pages

F. Emergency Communications

Pages F-1 thru F-7 Rev. 06-2 September, 2006

G. Public Education & Information

Pages G-1 thru G-4 Rev. 14-3 September, 2014

H. Emergency Facility & Equipment

Pages H-1 thru H-17 Rev. 14-2 June, 2014

I. Accident Assessment

Pages I-1 thru I-3 Rev. 12-1 May, 2012

J. Protected Response

Pages J-1 thru J-22 Rev. 13-3 October, 2013

K. Radiological Exposure Control

Pages K-1 thru K-4 Rev. 00-3 November, 2000

L. Medical & Public Health Support

Pages L-1 thru L-2 Rev. 13-3 October, 2013

M. Recovery & Re-entry Planning

Pages M-1 thru M-5 Rev. 06-2 September, 2006

N. Exercises & Drills

Pages N-1 thru N-3 Rev. 10-2 November, 2010

Rev. 14-4
October, 2014

**McGuire Emergency Plan
List of Effective Pages**

O. Radiological Emergency Response Training

| | | |
|--------------------|-----------|----------------|
| Pages O-1 thru O-2 | Rev. 10-2 | November, 2010 |
|--------------------|-----------|----------------|

P. Development Periodic Review & Distribution of Emergency Plans

| | | |
|---------------------|-----------|-----------------|
| Pages P-1 thru P-10 | Rev. 14-3 | September, 2014 |
|---------------------|-----------|-----------------|

Q. Appendices 1-4

| | | |
|---------------------|-----------|---------------|
| Pages Q-1 thru Q-15 | Rev. 14-4 | October, 2014 |
|---------------------|-----------|---------------|

Appendix 5 Agreement Letters

| | | |
|---------------------|---------------------|-----------------|
| Index - Page Q-16 | Rev. 14-4 | October, 2014 |
| Agreement Letter 1 | Rev. 13-1 | March, 2013 |
| Agreement Letter 2 | Rev. 14-2 | June, 2014 |
| Agreement Letter 3 | Rev. 14-2 | June, 2014 |
| Agreement Letter 4 | Rev. 13-1 | March, 2013 |
| Agreement Letter 5 | Rev. 00-1 (Deleted) | May, 2000 |
| Agreement Letter 6 | Rev. 14-2 | June, 2014 |
| Agreement Letter 7 | Rev. 14-2 | June, 2014 |
| Agreement Letter 8 | Rev. 14-2 | June, 2014 |
| Agreement Letter 9 | Rev. 14-2 | June, 2014 |
| Agreement Letter 10 | Rev. 14-2 | June, 2014 |
| Agreement Letter 11 | Rev. 14-2 | June, 2014 |
| Agreement Letter 12 | Rev. 14-2 | June, 2014 |
| Agreement Letter 13 | Rev. 14-2 | June, 2014 |
| Agreement Letter 14 | Rev. 14-2 | June, 2014 |
| Agreement Letter 15 | Rev. 13-3 | October, 2013 |
| Agreement Letter 16 | Rev. 14-2 | June, 2014 |
| Agreement Letter 17 | Rev. 14-3 | September, 2014 |
| Agreement Letter 18 | Rev. 12-2 | June, 2012 |
| Agreement Letter 19 | Rev. 12-2 | June, 2012 |
| Agreement Letter 20 | Rev. 14-2 | June, 2014 |
| Agreement Letter 21 | Rev. 12-2 | June, 2012 |
| Agreement Letter 22 | Rev. 12-2 | June, 2012 |
| Agreement Letter 23 | Rev. 14-2 | June, 2014 |

**McGuire Emergency Plan
List of Effective Pages**

Appendix 6 Emergency Plan Distribution

| | | | |
|---------------------|-----------|---------------|---|
| Page Q-17 thru Q-20 | Rev. 13-3 | October, 2014 | 1 |
|---------------------|-----------|---------------|---|

Appendix 7 SPCC Plan

| | | |
|-------------------|-----------|----------------|
| Coversheet | Rev. 12-3 | November, 2012 |
| Table of Contents | Rev. 12-3 | November, 2012 |
| Pages 1 thru 75 | Rev. 12-3 | November, 2012 |

Appendix 8 Hazardous Waste Contingency Plan

| | | |
|-----------------|-----------|-------------|
| Pages 1 thru 19 | Rev. 13-1 | March, 2013 |
|-----------------|-----------|-------------|

Appendix 9 Hazardous Materials Response Plan

| | | |
|-----------------|-----------|---------------|
| Pages 1 thru 14 | Rev. 13-3 | October, 2013 |
|-----------------|-----------|---------------|

DUKE ENERGY
MCGUIRE NUCLEAR SITE
EMERGENCY PLAN

| <u>Table of Contents</u> | <u>Page #</u> |
|---|---------------|
| i. Introduction | |
| A. Purpose | i-1 |
| B. Scope | i-1 |
| C. Planning Basis | i-3 |
| A. Assignment of Responsibility | |
| A.1.a Organization | A-1 |
| A.1.b Concept of Operations | A-3 |
| A.1.c Block Diagram Interrelationships | A-3 |
| A.1.d Key Decisionmaking | A-3 |
| A.1.e 24 Hour Emergency Response | A-4 |
| A.2.a Responsibility for and Functions of Emergency Response Organization | A-4 |
| A.2.b Legal Basis for Authority | A-4 |
| A.3 Agreement Letters for Emergency Response Support | A-4 |
| A.4 Individuals Responsible for Continuity of Resources | A-5 |
| B. On-site Emergency Organization | |
| B.1 Plant Staff Under Emergency Conditions | B-1 |
| B.2 Emergency Coordinator | B-1 |
| B.3 Emergency Coordinator (line of succession) | B-1 |
| B.4 Functional Responsibilities of Emergency Coordinator | B-2 |
| B.5 Minimum Staffing Requirements | B-2 |
| B.6 On-site Functional Area Interfaces | B-2 |
| B.7 Augmented Support of On-site Emergency Organization | B-2 |
| B.8 Contractor and Private Organizations | B-3 thru B-4 |
| B.9 Local Agency Support Services | B-4 |
| B.9.a Law Enforcement, Emergency Traffic Control, Related Police Matters | B-4 |
| B.9.b Early Warning or Evacuation of the Populace | B-5 |
| B.9.c Radiological Emergency Monitoring Assistance | B-5 |
| B.9.d Hospitals, Medical Support | B-5 |
| B.9.e Ambulance Service | B-5 |
| B.9.f Fire-fighting | B-5 |
| B.9.g Public Health and Safety, Evaluation of the Radiological Situation | B-5 |
| B.9.h Local, State and Federal Support Responsibilities | B-6 |

Rev. 14-4
October, 2014

Table of Contents

Page

| | | |
|-------|--|---------------|
| C. | Emergency Response Support and Resources | |
| C.1.a | Individuals Authorized to Request Federal Assistance | C-1 |
| C.1.b | Federal Resources Arrival Time | C-1 |
| C.1.c | Emergency Operations Facility Resources Available to Federal Response Organizations | C-1 |
| C.2.a | State and County Representation at the Emergency Operations Facility (EOF) | C-1 |
| C.2.b | Licensee Representation at the Off-Site EOC's | C-1 |
| C.3 | Radiological Laboratories-Availability and Capability | C-2 |
| C.4 | Emergency Support From Other Organizations | C-2 |
| D. | Emergency Classification System/EAL Basis Document | |
| | Emergency Classification System/EAL Basis Document | D-1 thru D-83 |
| E. | Notification Methodology | |
| E.1 | Notification of Response Organization | E-1 |
| E.2 | Activation of Emergency Organization | E-1 |
| E.2.a | Notification of Unusual Event | E-1 |
| E.2.b | Alert | E-2 |
| E.2.c | Site Area Emergency | E-4 |
| E.2.d | General Emergency | E-6 |
| E.3 | Emergency Message Format (Initial) | E-8 |
| E.4 | Emergency Message Format (Follow-up) | E-9 |
| E.5 | State and Local Organizations-Disseminating Public Information | E-9 |
| E.6 | Alert and Notification System | E-9 |
| E.7 | Supporting Information for Public Information Message | E-9 |
| F. | Emergency Communications | |
| F.1.a | 24 Hour Notification Capability | F-1 |
| F.1.b | Communications With State/Local Governments | F-1 |
| F.1.c | Communications With Federal Organizations | F-2 |
| F.1.d | Communications Between Site, EOF, EOC's and Monitoring Team | F-2 |
| F.1.e | Activation of Emergency Personnel | F-2 |
| F.1.f | Communications Between NRC, EOC and Monitoring Teams | F-2 |
| F.1.g | ERDS Data Transfer | F-2 |
| F.2 | Medical Support Communications | F-3 |
| F.3 | Communications System Testing | F-3 |

Table of Contents

Page

G. Public Education and Information

| | | |
|---------|--|-----|
| G.1/G.2 | Public Education and Information Program | G-1 |
| G.3.a | News Group - Location and Contacts | G-1 |
| G.3.b | News Group - Media Center | G-1 |
| G.4.a | Public Spokesperson | G-2 |
| G.4.b | Spokesperson Information Exchange | G-2 |
| G.4.c | Rumor Control | G-2 |
| G.5 | News Media Training Sessions | G-2 |

H. Emergency Facilities and Equipment

| | | |
|-------|---|--------------|
| H.1 | Technical Support Center/Operations Support Center | H-1 |
| H.1.a | Control Room | H-1 |
| H.1.b | Technical Support Center (TSC) | H-1 |
| H.1.c | Operations Support Center (OSC) | H-2 |
| H.1.d | Alternate Facilities | H-2 |
| H.2 | Emergency Operations Facility (EOF) | H-2 thru H-3 |
| H.3 | State and Local Government Emergency Operations Center | H-4 |
| H.4 | Activation and Staffing | H-4 |
| H.5 | Assessment Actions | H-4 |
| H.5.a | Meteorological, Hydrologic and Seismic | H-4 thru H-5 |
| H.5.b | Radiological Monitors | H-6 |
| H.5.c | Plant Parameters | H-6 |
| H.5.d | Fire Detection | H-6 |
| H.6 | Data, Monitoring Equipment and Analysis Facilities | H-6 |
| H.7 | Off-site Radiological Monitoring | H-7 |
| H.8 | Meteorology Instrumentation and Procedures | H-7 |
| H.9 | Operations Support Center | H-7 |
| H.10 | Emergency Equipment/Instrumentation Inspection, Inventory, Operational Check, Calibration | H-7 |
| H.11 | Emergency Kits | H-7 |
| H.12 | Receipt and Analysis of Field Monitoring Data | H-7 |

I. Accident Assessment

| | | |
|-----------------|--|-----|
| I.1 | Emergency Action Level Procedures | I-1 |
| I.2 | On-site Capability and Resources to Provide Initial Values and Continuing Assessment | I-1 |
| I.2.a | Post Accident Sampling | I-1 |
| I.2.b | Radiation and Effluent Monitors | I-1 |
| I.2.c | In-plant Iodine Instrumentation | I-2 |
| I.3.a/ I.3.b | Method for Determining Release Source Term | I-2 |
| I.4 | Effluent Monitor Readings Vs On-site/Off-site Exposure | I-2 |
| I.5 | Meteorological Information Availability | I-2 |
| I.6 | Release Rates/Projected Doses for Offscale Instrumentation | I-2 |

Rev. 14-4
October, 2014

| <u>Table of Contents</u> | | <u>Page #</u> |
|--------------------------|---|---------------|
| I.7/ I.8 | Field Monitoring Within EPZ | I-3 |
| I.9 | Detect and Measure Radioiodine Concentration in the EPZ | I-3 |
| I.10 | Relationship Between Contamination Levels and Integrated Dose/Dose Rates | I-3 |
| I.11 | Plume Tracking | I-3 |
| J. | Protective Response | |
| J.1.a thru J.1.d | Onsite Alerting and Notification | J-1 |
| J.2 | Evacuation Routes and Transportation | J-1 |
| J.3 | Personnel Monitoring | J-1 |
| J.4 | Site Evacuation Procedures - Decontamination | J-2 |
| J.5 | Personnel Accountability | J-2 |
| J.6 | Protective Equipment Breathing Apparatus, Protective Clothing, KI | J-2 |
| J.7 | Protective Action Recommendations | J-3 |
| J.8 | Evacuation Time Estimates | J-4 |
| J.9 | Implementing Protective Measures | J-4 |
| J.10 | Implementation of Protective Measures for Plume Exposure Pathway | J-5 |
| J.10.a | EPZ Maps | J-6 |
| J.10.b | EPZ Population Distribution Map | J-6 |
| J.10.c | EPZ Population Alerting and Notification | J-6 |
| J.10.d | EPZ Protecting Immobile Persons | J-6 |
| J.10.e | Use of Radioprotective Drugs for Persons in EPZ | J-6 |
| J.10.f | Conditions for Use of Radioprotective Drugs | J-6 |
| J.10.g | State/County Relocation Plans | J-6 |
| J.10.h | Relocation Center Locations | J-6 |
| J.10.i | Evacuation Route - Traffic Capacities | J-6 |
| J.10.j | Evacuated Area Access Control | J-6 |
| J.10.k | Planning for Contingencies in Evacuation | J-6 |
| J.10.l | State/County Evacuation Time Estimates | J-6 |
| J.10.m | Bases for Protective Action Recommendations | J-6 |
| J.11 | Ingestion Pathway Planning | J-7 |
| J.12 | Relocation Center - Registering and Monitoring | J-7 |

Table of ContentsPage #

| | | |
|-------|--|-----|
| K. | Radiological Exposure Control | |
| K.1 | Onsite Exposure Guidelines | K-1 |
| K.2 | Doses in Excess of 10CFR Part 20 | K-1 |
| K.3 | Emergency Personnel Exposure and Records | K-1 |
| K.3.a | Distribution of Dosimetry | K-1 |
| K.3.b | Dose Records | K-2 |
| K.4 | State/Local Plan for Authorizing Doses Exceeding PAG's | K-2 |
| K.5 | Decontamination | K-2 |
| K.5.a | Action Levels for Determining the Need for Decontamination | K-2 |
| K.5.b | Radiological Decontamination | K-2 |
| K.6 | Contamination Control Measures | K-2 |
| K.6.a | Area Access Control | K-2 |
| K.6.b | Drinking Water and Food Supplies | K-2 |
| K.6.c | Recovery Efforts | K-3 |
| K.7 | Decontamination of Personnel at Relocation Assembly Area | K-3 |
| L. | Medical and Public Health Support | |
| L.1 | Hospital and Medical Support | L-1 |
| L.2 | On-site First Aid Capability | L-1 |
| L.3 | Public, Private, Military Hospitals, Emergency Medical Facilities | L-1 |
| L.4 | Transport of Accident Victims | L-2 |
| M. | Recovery and Reentry Planning and Post-Accident Operations | |
| M.1 | Recovery/Reentry Plans and Procedures | M-1 |
| M.1.a | Outline of Site Recovery Plans | M-1 |
| M.1.b | Outline of Recovery Plans | M-2 |
| M.2 | Recovery Organization | M-3 |
| M.3 | Information to Members of Recovery Organization | M-4 |
| M.4 | Total Population Exposure Estimates | M-4 |
| N. | Exercises and Drills | |
| N.1.a | Exercises | N-1 |
| N.1.b | Exercise Scenario/Response | N-1 |
| N.2 | Drills | N-1 |
| N.2.a | Communications | N-1 |
| N.2.b | Fire Drills | N-2 |
| N.2.c | Medical Emergency Drills | N-2 |
| N.2.d | Radiological Monitoring Drills | N-2 |
| N.2.e | Radiation Protection Drills | N-2 |
| N.3 | Exercise and Drill Execution | N-3 |
| N.4 | Exercise Critique | N-3 |
| N.5 | Critique Action Items | N-3 |

Rev. 14-4
October, 2014

Table of Contents

Page

| | | |
|-------|--|--|
| O. | Radiological Emergency Response Training | |
| O.1 | Offsite Agency Training | O-1 |
| O.1.a | Emergency Response Training (Offsite Agency) | O-1 |
| O.1.b | Off-site Support Agency - Participation in Training | O-1 |
| O.2 | Site Organization Training | O-1 |
| O.3 | First Aid Training | O-1 |
| O.4 | Training For Radiological Emergency Response Personnel | O-2 |
| O.5 | Training Period | O-2 |
| P. | Responsibility for the Planning Effort | |
| P.1 | Emergency Planning Staff Training | P-1 |
| P.2 | Emergency Response Planning | P-1 |
| P.3 | Site Emergency Planning Manager | P-1 |
| P.4 | Review of Emergency Plan | P-1 |
| P.5 | Distribution of Revised Plans | P-1 |
| P.6 | Supporting Plans | P-2 |
| P.7 | Implementing Procedures | P-2 |
| P.8 | Table of Contents | P-2 |
| P.9 | Audit of Emergency Plan | P-2 |
| P.10 | Telephone Number Updates | P-3 |
| Q. | Appendices | Q-1 |
| | Appendix 1 | Definitions |
| | Appendix 2 | Meteorological Program |
| | Appendix 3 | Alert and Notification System Description |
| | Appendix 4 | Evacuation Time Estimates |
| | Appendix 5 | Agreement Letters |
| | Appendix 6 | McGuire Nuclear Site Emergency Plan Distribution |
| | Appendix 7 | SPCC Plan |
| | Appendix 8 | Hazardous Waste Contingency Plan |
| | Appendix 9 | Hazardous Materials Response Plan |

E. Notification Methodology

E.1 Notification of Response Organization

This section identifies specific emergency responses and related criteria that specify when these measures are to be implemented. Emergency measures discussed in this section include notification of and activation of the emergency organization; assessment actions; corrective and protective actions.

E.2 Activation of Emergency Organization

This section describes the necessary communication steps to be taken to alert or activate emergency personnel for each class of emergency listed in Section D. The notification format and message authentication technique to off-site authorities shall be in accordance with the appropriate emergency procedure.

E.2.a Notification of Unusual Event

The Operations Shift Manager on duty is to be notified immediately of all initiating conditions indicative of an "Unusual Event" in process or that has occurred which indicates a potential degradation in the level of safety of the plant. (See Section D for examples of initiating conditions in this classification.)

NOTE: This emergency classification is further defined in McGuire Nuclear Site Emergency Response Procedure RP/0/A/5700/000, Classification of Emergency.

The Operations Shift Manager assumes the functions of the Emergency Coordinator and shall ensure that all actions required by any initiating Emergency Procedure have been performed and that all actions necessary for the protection of persons and property are being taken.

The Operations Shift Manager shall assure notification of appropriate site personnel in accordance with approved procedures for any initiating condition in the classification listed in Section D.

The Operations Shift Manager shall assure prompt notification of Federal, State and Local off-site authorities:

1. North Carolina Emergency Operations Center (Raleigh, NC)
2. Lincoln County Warning Point (Lincolnton, NC)
3. Iredell County Warning Point (Statesville, NC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. Cabarrus County Warning Point (Concord, NC)

7. Catawba County Warning Point (Newton, NC)
8. NRC Operations Center (Rockville, Md)

On-site personnel notification from the Control Room shall be in accordance with McGuire Nuclear Site Procedure RP/0/A/5700/001, Notification of Unusual Event.

Notification format and message authentication technique to off-site authorities from the Control Room, the Technical Support Center (TSC) and the Emergency Operations Facility (EOF) shall be in accordance with the applicable notification procedures.

The Operations Shift Manager shall augment on-shift resources to assess and respond to the emergency situation as needed to ensure the protection of persons and property.

The Operations Shift Manager will assess the emergency condition and determine the need to remain in a Notification of Unusual Event, escalate to a more severe class or close out the emergency.

The Emergency Planning Manager or designee will close out the Emergency with a verbal summary to the state and county off-site authorities listed above, followed by an LER or written summary within 30 days.

The actions required for this emergency class are performed by site personnel. Outside organizations (NRC, state and local officials) are notified of the event for information. Unless deemed necessary by the Emergency Coordinator the Emergency Response Organization is not activated for this emergency class.

If an Unusual Event occurs, a site representative calls the NRC, the State, and appropriate local officials. The Corporate Communications representative notifies media representatives and public officials per established public information procedures.

E.2.b

Alert

The Operations Shift Manager on duty is to be notified immediately of all initiating conditions indicative of an "Alert" classification in process or that have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of hostile action. (See Section D, for examples of initiating conditions in this classification.

NOTE: This Emergency Classification is further defined in McGuire Nuclear Site Procedure, RP/0/A/5700/000, Classification of Emergency.

The Operations Shift Manager shall ensure that all actions required by any initiating Emergency Procedure have been performed and that all actions necessary for the protection of persons and property are being taken.

NOTE: The Operations Shift Manager assumes the function of the Emergency Coordinator until the arrival of the Station Manager or designee at which time the Station Manager or designee assumes the responsibility of the Emergency Coordinator.

The Operations Shift Manager shall assure notification and activation of the Site Emergency Response Organization for any initiating condition in this classification listed in Section D.

The Emergency Response Organization will be notified via ERONS (Emergency Response Organization Notification System) and by an automated dial out system.

The Emergency Coordinator shall assure prompt notification of Federal, State and Local off-site authorities:

1. North Carolina Emergency Operations Center (Raleigh, NC)
2. Lincoln County Warning Point (Lincolnton, NC)
3. Iredell County Warning Point (Statesville, NC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. Cabarrus County Warning Point (Concord, NC)
7. Catawba County Warning Point (Newton, NC)
8. NRC Operations Center (Rockville, Md)

On-site personnel notification from the Control Room shall be in accordance with McGuire Nuclear Site Procedure RP/0/A/5700/002, Alert.

Notification format and message authentication technique to off-site authorities from the Control Room, the Technical Support Center (TSC) and the Emergency Operations Facility (EOF) shall be in accordance with the applicable notification procedures.

The Emergency Coordinator shall augment on-site resources by notification and activation of the Emergency Response Organization in accordance with McGuire Nuclear Site Emergency Planning Group Manual Section 1.1.

The Emergency Coordinator in the Technical Support Center will assess and respond to the emergency by:

1. Dispatching on-site monitoring teams with associated communication equipment in accordance with McGuire Nuclear Station Radiation Protection procedure HP/0/B/1009/022, Accident and Emergency Response.
2. Providing periodic plant status updates to off-site authorities (at least every hour or as agreed otherwise).
3. Providing periodic meteorological assessments to off-site authorities and, if any releases are occurring, dose estimates for actual releases.

NOTE: These functions will be provided through the EOF when activated.

The Emergency Coordinator will assess the emergency condition and determine the need to remain in an Alert status, escalate to a more severe class, reduce the emergency class or close out the emergency.

The EOF Director or designee, will close out the emergency with a verbal summary to the state and county off-site authorities listed above, followed by an LER or written summary within 30 days.

E.2.c

Site Area Emergency

The Operations Shift Manager on duty is to be notified immediately of all initiating conditions indicative of a "Site Area Emergency" in process or which have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to equipment needed for the protection of the public. (See Section D, for examples of initiating conditions in this classification.)

NOTE: This Emergency Classification is further defined in McGuire Nuclear Site Emergency Response Procedure RP/0/A/5700/000, Classification of Emergency.

The Operations Shift Manager shall ensure that all actions required by the initiating Emergency Procedure have been performed and that all actions necessary for the protection of persons and property are being taken.

NOTE: The Operations Shift Manager assumes the function of the Emergency Coordinator until the arrival of the Station Manager or designee at which time the Station Manager or designee assumes the responsibility of the Emergency Coordinator.

The Operations Shift Manager shall assure notification and activation of the Site Emergency Response Organization for any initiating condition of this classification listed in Section D.

The Emergency Coordinator shall assure prompt notification of Federal, State and Local off-site authorities:

1. North Carolina Emergency Operations Center (Raleigh, NC)
2. Lincoln County Warning Point (Lincolnton, NC)
3. Iredell County Warning Point (Statesville, NC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. Cabarrus County Warning Point (Concord, NC)
7. Catawba County Warning Point (Newton, NC)
8. NRC Operations Center (Rockville, Md)

On-site personnel notification from the Control Room shall be in accordance with McGuire Nuclear Site Procedure, RP/0/A/5700/003, Site Area Emergency.

Notification format and message authentication technique to off-site authorities from the Control Room, the Technical Support Center (TSC) and the Emergency Operations Facility (EOF) shall be in accordance with the applicable notification procedures.

The Emergency Coordinator shall augment on-site resources by notification and activation of the Emergency Response Organization in accordance with McGuire Nuclear Site Emergency Planning Group Manual Section 1.1.

The Emergency Response Organization will be notified via ERONS (Emergency Response Organization Notification System) and by an automated dial out system.

The Emergency Coordinator may order the evacuation of non-essential site personnel to an Evacuation-Relocation Site if the emergency situation warrants. The Emergency Coordinator in the Technical Support Center will assess and respond to the emergency by:

1. Dispatching the On-site and Off-site Monitoring Teams with associated communications.
2. Providing meteorological and dose estimate information to off-site authorities for actual releases via a dedicated individual or automated data transmission.
3. Providing release and dose projections based on available plant condition information and foreseeable contingencies to off-site authorities.
4. Providing a dedicated individual for plant status updates to off-site authorities.

5. Providing technical staff on-site available for consultation with the NRC and State on a periodic basis.

NOTE: These functions will be provided through the EOF when it is activated.

The Emergency Coordinator will assure notification of all McGuire Nuclear Site management not notified thus far for those initiating conditions or implementation of any Emergency Procedure affecting these personnel in accordance with McGuire Nuclear Site Emergency Response Procedure RP/0/A/5700/003, Site Area Emergency.

The Emergency Coordinator, in coordination with the EOF Director, will assess the emergency condition and determine the need to remain in Site Area Emergency, escalate to a more severe class, reduce the emergency class or close out the emergency.

The EOF Director will close out or recommend reduction of the emergency class by briefing of off-site authorities at the EOF or by phone if necessary, followed by an LER or written summary to the state and county off-site authorities listed above within 30 days.

E.2.d

General Emergency

The Operations Shift Manager on duty is to be notified immediately of all initiating conditions indicative of a "General Emergency" in process or which have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile action that results in an actual loss of physical control of the facility. (See Section D, for examples of initiating conditions in this classification.)

NOTE: This emergency classification is further defined in McGuire Nuclear Site Emergency Response Procedure, RP/0/A/5700/000, Classification of Emergency.

The Operations Shift Manager shall ensure that all actions required by the initiating Emergency Procedure have been performed and that all actions necessary for the protection of persons and property are being taken.

NOTE: The Operations Shift Manager assumes the function of the Emergency Coordinator until the arrival of the Station Manager or designee at which time the Station Manager or designee assumes the responsibility of the Emergency Coordinator.

The Operations Shift Manager shall assure notification and activation of the Site Emergency Response Organization for any initiating condition in the classification listed in Section D.

The Emergency Coordinator shall assure prompt notification of Federal, State and Local off-site authorities:

1. North Carolina Emergency Operations Center (Raleigh, NC)
2. Lincoln County Warning Point (Lincolnton, NC)
3. Iredell County Warning Point (Statesville, NC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. Cabarrus County Warning Point (Concord, NC)
7. Catawba County Warning Point (Newton, NC)
8. NRC Operations Center (Rockville, Md)

On-site personnel notification from the Control Room shall be in accordance with McGuire Nuclear Site Procedure, RP/0/A/5700/004, General Emergency.

Notification format and message authentication technique to off-site authorities from the Control Room, the Technical Support Center (TSC) and the Emergency Operations Facility (EOF) shall be in accordance with the applicable notification procedures.

Protective action recommendations shall be directed to the affected County Warning Points and State Emergency Operations Center, if required.

The Emergency Coordinator shall augment on-site resources by notification and activation of the Emergency Response Organization in accordance with McGuire Nuclear Site Emergency Planning Group Manual Section 1.1.

The Emergency Response Organization will be notified via ERONS (Emergency Response Organization Notification System) and by an automated dial out system.

The Emergency Coordinator shall order the evacuation of all non-essential site personnel to an Evacuation-Relocation Site.

The Emergency Coordinator, in the Technical Support Center, will assess and respond to the emergency by:

1. Dispatching the On-site and Off-site Monitoring Teams with associated communications.
2. Providing meteorological and dose estimate information to off-site authorities for actual releases via a dedicated individual or automated data transmission.
3. Providing release and dose projections based on available plant condition information and foreseeable contingencies to off-site authorities.
4. Providing a dedicated individual for plant status updates to off-site authorities and periodic press briefings.
5. Providing technical staff on-site available for consultation with the NRC and State on a periodic basis.

NOTE: These functions will be provided through the EOF when it is activated.

The Emergency Coordinator will assure notification of all McGuire Nuclear Site Management not notified thus far for those initiating conditions or implementation of any Emergency Procedure affecting these personnel in accordance with McGuire Nuclear Site Emergency Response Procedure RP/0/A/5700/004, General Emergency.

The Emergency Coordinator shall make a recommendation to the off-site authorities to evacuate the two-mile radius and all affected zones five miles downwind, recommend in-place sheltering and monitoring of EAS for the remainder of the 10-mile EPZ not evacuated and shall make follow up protective action recommendations as soon as possible.

The Emergency Coordinator, in coordination with the EOF Director and Offsite Agencies, will assess the emergency condition and determine the need to remain in a General Emergency or terminate the emergency and enter into Recovery.

The EOF Director will close out the emergency class by briefing the off-site authorities at the Emergency Operations Facility, or by phone if necessary, followed by an LER or a written summary to the state and county off-site authorities listed above within 30 days.

E.3 Emergency Message Format (Initial)

Figure E-1, Emergency Notification (example form) contains information about the class of emergency, whether a release is taking place, the potentially affected areas and whether protective actions may be necessary.

E.4 Emergency Message Format (Follow-Up)

Figure E-1, Emergency Notification (example form) contains provisions for follow-up information if it is known and appropriate.

E.5 State and Local Organizations-Disseminating Public Information

State and Local plans provide for disseminating information in Initial and Follow-up Messages to the public. (See state and local plans.)

E.6 Alert and Notification System

The Alert and Notification System for McGuire Nuclear Site will include an acoustic alerting signal, tone alert radios and notification of the public by the Emergency Alert System (EAS). The system is designed to meet the acceptance criteria of Section B of Appendix 3, NUREG-0654, FEMA-REP-1, Rev. 1. As a back-up, State and Local plans maintain the alert mechanism via emergency vehicles, PA Systems, etc., to also alert the public to monitor commercial broadcasts for emergency information. See Appendix 3, Alert and Notification System Plan.

Each county will control the activation of the sirens within its boundaries (except for Catawba County - their one siren will be activated by Lincoln County).

Duke Power Company will cooperate with FEMA and the state/local governments in their sampling of the residents to assess the ability to hear the alerting signal, the public's awareness of the meaning of the prompt notification message, and the availability of emergency information.

The siren system will be tested and maintained in accordance with the schedule as specified in Appendix 3.

The EAS System is the primary notification system. Backups include the use of county vehicles with audio equipment and other media communications.

E.7 Supporting Information for Public Information Messages

The portion of Figure E-1, Emergency Notification (example form), in which protective action recommendations are made assists the state and local authorities in preparing messages for the public's information via the EAS (Emergency Alert System).

EAS message format is described in the North Carolina Emergency Plans.

FIGURE E-1
EMERGENCY NOTIFICATION FORM (example)

1. ☒ DRILL ☐ ACTUAL EVENT MESSAGE # _____

2. ☒ INITIAL ☐ FOLLOW-UP NOTIFICATION: TIME _____ DATE ____/____/____ AUTHENTICATION # _____

3. SITE: _____ Confirmation Phone # (____) _____

4. EMERGENCY CLASSIFICATION: ☒ UNUSUAL EVENT ☐ ALERT ☐ SITE AREA EMERGENCY ☐ GENERAL EMERGENCY
BASED ON EAL # _____ EAL DESCRIPTION: _____

5. PROTECTIVE ACTION RECOMMENDATIONS: ☒ NONE
☐ EVACUATE _____
☐ SHELTER _____
☐ CONSIDER THE USE OF KI (POTASSIUM IODIDE) IN ACCORDANCE WITH STATE PLANS AND POLICY.
☐ OTHER _____

6. EMERGENCY RELEASE: ☒ None ☐ Is Occurring ☐ Has Occurred

7. RELEASE SIGNIFICANCE: ☒ Not applicable ☐ Within normal operating limits ☐ Above normal operating limits ☐ Under evaluation

8. EVENT PROGNOSIS: ☒ Improving ☐ Stable ☐ Degrading

9. METEOROLOGICAL DATA: Wind Direction* from _____ degrees Wind Speed* _____ mph
(*May not be available for Initial Notifications) Precipitation* _____ Stability Class* ☒ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

10. ☒ DECLARATION ☐ TERMINATION Time _____ Date ____/____/____

11. AFFECTED UNIT(S): ☐ 1 ☐ 2 ☐ 3 ☒ All

12. UNIT STATUS:
(Unaffected Unit(s) Status Not Required for Initial Notifications)

| | | |
|--|------------------------|---------------------|
| <input checked="" type="checkbox"/> U1 _____ % Power | Shutdown at Time _____ | Date ____/____/____ |
| <input type="checkbox"/> U2 _____ % Power | Shutdown at Time _____ | Date ____/____/____ |
| <input type="checkbox"/> U3 _____ % Power | Shutdown at Time _____ | Date ____/____/____ |

13. REMARKS: _____

FOLLOW-UP INFORMATION (Lines 14 through 16 Not Required for Initial Notifications)
EMERGENCY RELEASE DATA. NOT REQUIRED IF LINE 6 A IS SELECTED.

14. RELEASE CHARACTERIZATION: TYPE: ☒ Elevated ☐ Mixed ☐ Ground UNITS: ☒ Ci ☐ Ci/sec ☐ μ Ci/sec

MAGNITUDE: Noble Gases: _____ Iodines: _____ Particulates: _____ Other: _____

FORM: ☒ Airborne Start Time _____ Date ____/____/____ Stop Time _____ Date ____/____/____

☐ Liquid Start Time _____ Date ____/____/____ Stop Time _____ Date ____/____/____

15. PROJECTION PARAMETERS: Projection period: _____ Hours Estimated Release Duration _____ Hours

 Projection performed: Time _____ Date ____/____/____

16. PROJECTED DOSE:

| | <u>DISTANCE</u> | <u>TEDE (mrem)</u> | <u>Adult Thyroid CDE (mrem)</u> |
|---------------|-----------------|--------------------|---------------------------------|
| Site boundary | _____ | _____ | _____ |
| 2 Miles | _____ | _____ | _____ |
| 5 Miles | _____ | _____ | _____ |
| 10 Miles | _____ | _____ | _____ |

17. APPROVED
BY: _____ Title _____ Time _____ Date ____/____/____
NOTIFIED
BY: _____ RECEIVED
BY: _____ Time _____ Date ____/____/____

FIGURE E-1 *(example form)*

GOVERNMENT AGENCIES NOTIFIED

Record the name, date, time and agencies notified:

| | | | |
|----|-----------------------|-----------------------|-------------------------|
| 1. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |
| 2. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |
| 3. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |
| 4. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |
| 5. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |
| 6. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |
| 7. | <hr/> | | |
| | <small>(name)</small> | | |
| | <hr/> | | |
| | <small>(date)</small> | <small>(time)</small> | <small>(agency)</small> |

3.10 10CFR 50.54(q) Evaluations

§50.54(q) Screening Evaluation Form Activity Description and References: MNS
Emergency Plan Section E. (Notification Methodology) Rev 14-4 October 2014

BLOCK 1

MNS Emergency Plan Section E. (Notification Methodology) sections E.2.b, E.2.c and E.2.d changed "by pagers" to "via ERONS (Emergency Response Organization Notification System)".

Changes result from a fleetwide initiative to replace the current ERO Notification System which uses pagers to notify the ERO with a new system called "Emergency Response Organization Notification System (ERONS)" which uses cellular telephones or other communication devices to notify the ERO.

Methods to notify the ERO using pagers has been changed to using cellular telephones or other communication devices via a new notification system called the "Emergency Response Organization Notification System (ERONS)". This change supports a fleetwide initiative to replace the current ERO notification system at all Duke Energy Carolinas (DEC) sites with ERONS, resulting in alignment of ERO notification processes at all Duke Energy nuclear sites.

A new fleet procedure AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS), has been developed which provides instructions for performing notifications to the ERO using ERONS. Applicable sections of the McGuire Nuclear Station (MNS) Emergency Plan, emergency plan implementing procedures, and support procedures are being revised to implement this change. Those changes are being screened / evaluated in accordance with 10 CFR 50.54(q) under separate cover.


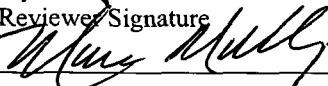
Planning Standards 50.47(b)(1), 50.47(b)(2), 50.47(b)(5), 50.47(b)(6), 50.47(b)(8), 50.47(b)(15) and 50.47(b)(16) are impacted by the new ERONS process there a 10CFR50.54(q) Effectiveness Evaluation must be performed.

Activity Scope:

BLOCK 2

- ☒ The activity is a *change* to the *emergency plan*
☐ The activity is not a *change* to the *emergency plan*

3.10 10CFR 50.54(q) Evaluations

| | | | |
|---|---|--|----------------|
| Change Type: <input type="checkbox"/> The change <u>is</u> editorial or typographical <input checked="" type="checkbox"/> The change <u>is not</u> editorial or typographical | BLOCK 3 | Change Type: <input type="checkbox"/> The change <u>does</u> conform to an activity that has prior approval <input checked="" type="checkbox"/> The change <u>does not</u> conform to an activity that has prior approval | BLOCK 4 |
| Planning Standard Impact Determination: <input checked="" type="checkbox"/> §50.47(b)(1) – Assignment of Responsibility (Organization Control) <input checked="" type="checkbox"/> §50.47(b)(2) – Onsite Emergency Organization <input type="checkbox"/> §50.47(b)(3) – Emergency Response Support and Resources <input type="checkbox"/> §50.47(b)(4) – Emergency Classification System* <input checked="" type="checkbox"/> §50.47(b)(5) – Notification Methods and Procedures* <input checked="" type="checkbox"/> §50.47(b)(6) – Emergency Communications <input type="checkbox"/> §50.47(b)(7) – Public Education and Information <input checked="" type="checkbox"/> §50.47(b)(8) – Emergency Facility and Equipment <input type="checkbox"/> §50.47(b)(9) – Accident Assessment* <input type="checkbox"/> §50.47(b)(10) – Protective Response* <input type="checkbox"/> §50.47(b)(11) – Radiological Exposure Control <input type="checkbox"/> §50.47(b)(12) – Medical and Public Health Support <input type="checkbox"/> §50.47(b)(13) – Recovery Planning and Post-accident Operations <input type="checkbox"/> §50.47(b)(14) – Drills and Exercises <input checked="" type="checkbox"/> §50.47(b)(15) – Emergency Responder Training <input checked="" type="checkbox"/> §50.47(b)(16) – Emergency Plan Maintenance *Risk Significant Planning Standards <input type="checkbox"/> The proposed activity does not impact a Planning Standard | | | BLOCK 5 |
| Commitment Impact Determination: <input type="checkbox"/> The activity <u>does</u> involve a site specific EP commitment Record the commitment or commitment reference: _____ <input checked="" type="checkbox"/> The activity <u>does not</u> involve a site specific EP commitment | | | BLOCK 6 |
| Screening Evaluation Results: <input type="checkbox"/> The activity <u>can</u> be implemented without performing a §50.54(q) effectiveness evaluation <input checked="" type="checkbox"/> The activity <u>cannot</u> be implemented without performing a §50.54(q) effectiveness evaluation | | | BLOCK 7 |
| Preparer Name: <i>Randy Gibson</i> | Preparer Signature:  | Date: 9/9/14 | |
| Reviewer Name: <i>Marc Mulkey</i> | Reviewer Signature:  | Date: 9/9/14 | |

§50.54(q) Effectiveness Evaluation Form

| | |
|---|----------------|
| Activity Description and References: Emergency Plan Section E. (Notification Methodology) Rev 14-4 October 2014 | BLOCK 1 |
| <p>MNS Emergency Plan Section E. (Notification Methodology) sections E.2.b, E.2.c and E.2.d changed "by pagers" to "via ERONS (Emergency Response Organization Notification System)".</p> <p>Changes result from a fleetwide initiative to replace the current ERO Notification System which uses pagers to notify the ERO with a new system called "Emergency Response Organization Notification System (ERONS)" which uses cellular telephones or other communication devices to notify the ERO.</p> <p>Methods to notify the ERO using pagers has been changed to using cellular telephones or other communication devices via a new notification system called the "Emergency Response Organization Notification System (ERONS)". This change supports a fleetwide initiative to replace the current ERO notification system at all Duke Energy Carolinas (DEC) sites with ERONS, resulting in alignment of ERO notification processes at all Duke Energy nuclear sites.</p> <p>A new fleet procedure AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS), has been developed which provides instructions for performing notifications to the ERO using ERONS.</p> <p><u>Additional information regarding this change:</u></p> <p>These changes support replacement of the current McGuire Nuclear Station (MNS) notification system which uses pagers for notifying members of the Emergency Response Organization (ERO) with a new system which uses cellular telephones and other wireless communications devices for ERO notification.</p> <p>The ERO notification system implemented at MNS is called "EverBridge Mass Notification" and is provided by EverBridge, a company that hosts the software, website, and telephone interfaces of this system. The Everbridge system (and it's Mass Notification software) is a web-based mass communications structure designed to provide rapid notification messages to all commonly used communication devices. The Everbridge system is capable of calling land line and cellular telephones, sending text messages to pagers and cell phones, and sending email messages as well. These changes are made to recognize all of the devices that can be called by the new ERO notification system. This system offers Duke Energy the flexibility necessary to rapidly muster the ERO in response to an emergency and enhances the ability of MNS to meet NRC requirements for emergency response. At MNS, pagers have been phased out for ERO notification use. Consequently, ERO members have been issued cell phones which are capable of receiving text messages.</p> <p>NOTE: The new Emergency Response Organization Notification System is abbreviated and referred to as "ERONS".</p> <p>Messages can be sent to the ERO via ERONS by logging into the system's website and initiating the appropriate commands. Additionally, ERONS can send messages by accessing a Live Operator.</p> <p>Pre-scripted, pre-recorded, and pre-typed {messages} are stored within the system along with the names and contact information for members of the ERO. In the event of an emergency requiring activation of the ERO and</p> | |

3.10 10CFR 50.54(q) Evaluations

staffing of emergency response facilities, the appropriate message is selected, and depending on the nature of the event, a trained member of the Security Force or the Operations staff will launch the message. Emergency Preparedness staff members perform administrative functions which ensure the system is maintained in a state of readiness via periodic testing and operability checks which are performed in accordance with emergency plan requirements.

NOTE: ERONS has been in service at other Duke Energy Progress (DEP) nuclear facilities (Harris Nuclear Plant, Robinson Nuclear Plant, Brunswick Nuclear Plant, and Crystal River Nuclear Plant) for several years and has proven to be capable of sending messages to multiple devices in a very short period of time. Additionally, other utilities, law enforcement agencies, government entities and others have employed this product to fill their mass communication needs.

The new ERONS notification system enhances the capability for notifying members of the MNS ERO by providing a more reliable method for notifications. ERONS maintains the capability for making notifications in a timely manner, in accordance with MNS Emergency Plan commitments and regulatory requirements. ERONS is activated in accordance with a new fleet procedure, "AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS), which provides detailed instructions for ERO activation via the Web-based or Live Operator notification process. Training on the new ERONS equipment and use of equipment was provided to MNS Emergency Response Organization (ERO) members qualified in making ERO notifications and Emergency Preparedness (EP) personnel prior to implementation of these changes. This change supports a Duke Energy fleetwide initiative and is an overall enhancement for notification of MNS ERO members in the event of an emergency at MNS. This change continues to comply with 10 CFR 50.47(b) planning standards and NRC requirements, as described in 10 CFR 50, Appendix E.

The changes in this EPlan section which support replacement of ERO pagers for notification of ERO members with cellular telephones (or other communications devices) using ERONS continues to comply with 10 CFR 50.47(b) planning standards and NRC requirements, as described in 10 CFR 50, Appendix E.

Activity Type:

BLOCK 2

- ☒ The activity is a *change* to the *emergency plan*
☐ The activity affects implementation of the *emergency plan*, but is not a *change* to the *emergency plan*

Impact and Licensing Basis Determination:

BLOCK 3

10 CFR 50.47(b)(1) states: (1) Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

The applicable emergency planning functions associated with 10 CFR 50.47(b)(1) state:

- Responsibility for emergency response is assigned.
- The response organization has the staff to respond and to augment staff on a continuing basis (i.e. 24/7 support) in accordance with the emergency plan.

10 CFR 50.47(b)(2) states: On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

The applicable emergency planning functions associated with 10 CFR 50.47(b)(2) state:

- The process ensures that onshift emergency response responsibilities are staffed and assigned.
- The process for timely augmentation of onshift staff is established and maintained.

10 CFR 50.47(b)(5) states: Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of

3.10 10CFR 50.54(q) Evaluations

initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

There is no applicable emergency planning function associated with 10 CFR 50.47(b)(5) for this change.

10 CFR 50.47(b)(6) states: Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

The applicable emergency planning functions associated with 10 CFR 50.47(b)(6) state:

- Systems are established for prompt communication among principal emergency response organizations.
- Systems are established for prompt communication to emergency response personnel.

10 CFR 50.47(b)(8) states: Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

The applicable emergency planning function associated with 10 CFR 50.47(b)(8) state:

- Adequate equipment is maintained to support emergency response.

10 CFR 50.47(b)(15) states: Radiological emergency response training is provided to those who may be called on to assist in an emergency."

The applicable emergency planning function associated with 10 CFR 50.47(b)(15) states:

- Training is provided to emergency responders

10 CFR 50.47(b)(16) states: "Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained."

The applicable emergency planning function associated with 10 CFR 50.47(b)(16) states:

- Planners responsible for emergency plan development and maintenance are properly trained.

Licensing Basis:

This evaluation included a search of the licensing basis documents for the McGuire Nuclear Station (MNS) for references to the ERO notification system and use of pagers. The search concluded that a review of the MNS Emergency Plan was warranted.

While the MNS Emergency Plan contains references to use of pagers for ERO notification, there are no details within the Emergency Plan regarding usage of the system, other than to indicate that it is the primary system used for prompt notification to the ERO in the event of an emergency. ERONS is replacing the current use of pagers for notification to the MNS ERO with cellular telephones (or other communication devices) as the primary method for notification of the ERO. The current backup methods for ERO notification, including the Nuclear Callout System, remain the same.

This review concludes that changes to this EPlan section which reflect replacement of the ERO notification system using pagers with ERONS, do not affect the licensing basis of the Emergency Plan. These changes support a Duke Energy fleet-wide initiative to upgrade the ERO notification system for notifying members of the MNS ERO and are an overall enhancement to emergency preparedness. These changes support alignment of ERO notification processes at all Duke Energy nuclear plant sites. These changes meet all emergency preparedness requirements based on NRC regulations and requirements.

Compliance Evaluation and Conclusion:

BLOCK 4

1. Evaluation:

10 CFR 50.47(b)(1) states: (1) Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned,

3.10 10CFR 50.54(q) Evaluations

the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

The applicable emergency planning functions associated with 10 CFR 50.47(b)(1) state:

- Responsibility for emergency response is assigned.
- The response organization has the staff to respond and to augment staff on a continuing basis (i.e. 24/7 support) in accordance with the emergency plan.

The applicable supporting requirement which is described in 10 CFR 50, Appendix E.IV. A states (in part):

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:

1. A description of the normal plant operating organization.
2. A description of the onsite emergency response organization (ERO) with a detailed discussion of:
 - a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency;
 - b. Plant staff emergency assignments;

The applicable supporting requirement which is described in 10 CFR 50, Appendix E.C.1 states:

The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, such as the pressure in containment and the response of the Emergency Core Cooling System) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such agencies. The emergency classes defined shall include: (1) Notification of unusual events, (2) alert, (3) site area emergency, and (4) general emergency. These classes are further discussed in NUREG-0654/FEMA-REP-1.

The applicable informing criteria described in NUREG-0654, Section II. A states (in part):

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

1. d: Each organization shall identify a specific individual by title who shall be in charge of the emergency response.
- 1.e: Each organization shall provide for 24-hour per day emergency response, including 24-hour per day manning of communications links.
- 2.a (in part): Each organization shall specify the functions and responsibilities for major elements and key individuals by title, of emergency response, including the following: Command and Control, Alerting and Notification, Communications, Public Information, Accident Assessment, Public Health and Sanitation, Social Services, Fire and Rescue, Traffic Control, Emergency Medical Protective Response (including authority to request Federal assistance and to initiate other protective actions), and Radiological Exposure Control.

10 CFR 50.47(b)(2) states: On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

The applicable emergency planning functions associated with 10 CFR 50.47(b)(2) state:

- The process ensures that onshift emergency response responsibilities are staffed and assigned.

3.10 10CFR 50.54(q) Evaluations

- The process for timely augmentation of onshift staff is established and maintained.

The applicable supporting requirement which is described in 10 CFR 50, Appendix E.IV.A.C.1 states (in part): The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described.

The applicable informing criteria described in NUREG-0654, Section II. B states (in part):

1. Each licensee shall specify the onsite emergency organization of plant staff personnel for all shifts and its relation to the responsibilities and duties of the normal shift complement.
5. Each licensee shall specify the positions or title and major tasks to be performed by the persons assigned to the functional areas of emergency activity. For emergency situations, specific assignments shall be made for all shifts and for plant staff members, both onsite and away from the site. These assignments shall cover the emergency functions in Table B-1 entitled, "Minimum Staffing Requirements for Nuclear Power Plant Emergencies." The minimum on-shift staffing levels shall be indicated in Table B-1. The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1.

10 CFR 50.47(b)(5) states: Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

There is no applicable emergency planning function associated with 10 CFR 50.47(b)(5) for this change.

The applicable informing criteria described in NUREG-0654, Section II.E, state (in part):

1. Each organization shall establish procedures which describe mutually agreeable bases for notification of response organizations consistent with the emergency classification scheme set forth in Appendix 1. These procedures shall include means for verification of messages. The specific details of verification need not be included in the plan.
2. Each organization shall establish procedures for alerting, notifying, and mobilizing emergency response personnel.

10 CFR 50.47(b)(6) states: Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

The applicable emergency planning functions associated with 10 CFR 50.47(b)(6) state:

- Systems are established for prompt communication among principal emergency response organizations.
- Systems are established for prompt communication to emergency response personnel.

There is no applicable supporting requirement described in 10 CFR 50, Appendix E.

There are no applicable informing criteria described in NUREG-0654, Section II.

10 CFR 50.47(b)(8) states: Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

The applicable emergency planning function associated with 10 CFR 50.47(b)(8) state:

- Adequate equipment is maintained to support emergency response.

The applicable supporting requirement which is described in 10 CFR 50, Appendix E.IV.E states (in part): Adequate provisions shall be made and described for emergency facilities and equipment.

3.10 10CFR 50.54(q) Evaluations

The applicable informing criteria described in NUREG-0654, Section II.H states (in part):

4. Each organization shall provide for timely activation and staffing of the facilities and centers described in the plan.

10 CFR 50.47(b)(15) states: Radiological emergency response training is provided to those who may be called on to assist in an emergency."

The applicable emergency planning function associated with 10 CFR 50.47(b)(15) states:

- Training is provided to emergency responders.

The applicable supporting requirement which is described in 10 CFR 50, Appendix E.IV.F states (in part):

1. The program to provide for: (a) The training of employees and exercising, by periodic drills, of radiation emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and (b) The participation in the training and drills by other persons whose assistance may be needed in the event of a radiation emergency shall be described. This shall include a description of specialized initial training and periodic retraining programs to be provided to each of the following categories of emergency personnel: i) Directors and/or coordinators of the plant emergency organization; ii) Personnel responsible for accident assessment, including control room shift personnel; iii) Radiological monitoring teams; iv) Fire control teams (fire brigades); v) Repair and damage control teams; vi) First aid and rescue teams; vii) Medical support personnel; viii) Licensee's headquarters support personnel; ix) Security personnel. In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/Civil Defense, local law enforcement personnel, local news media persons.
2. g states "All exercises, drills, and training that provide performance opportunities to develop, maintain, or demonstrate key skills must provide for formal critiques in order to identify weak or deficient areas that need correction. Any weaknesses or deficiencies that are identified in a critique of exercises, drills, or training must be corrected.

The applicable informing criteria described in NUREG-0654, Section II.O states (in part):

1. Each organization shall assure the training of appropriate individuals.
2. The training program for members of the onsite emergency organization shall, besides classroom training, include practical drills in which each individual demonstrates ability to perform his assigned emergency function. During the practical drills, on-the-spot correction of erroneous performance shall be made and a demonstration of the proper performance offered by the instructor.
4. Each organization shall establish a training program for instructing and qualifying personnel who will implement radiological emergency response plans. The specialized initial training and periodic retraining programs (including the scope, nature and frequency) shall be provided in the following categories:
 - a. Directors or coordinators of the response organizations;
 - b. Personnel responsible for accident assessment;
 - c. Radiological monitoring teams and radiological analysis personnel;
 - d. Police, security and firefighting personnel;
 - e. Repair and damage control/correctional action teams (onsite);
 - f. First aid and rescue personnel;
 - g. Local support services personnel including Civil Defense/Emergency Service personnel;
 - h. Medical support personnel;
 - i. Licensee's headquarters support personnel;

3.10 10CFR 50.54(q) Evaluations

- j. Personnel responsible for transmission of emergency information and instructions.
5. Each organization shall provide for the initial and annual retraining of personnel with emergency response capabilities.

10 CFR 50.47(b)(16) states: "Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained."

The applicable emergency planning function associated with 10 CFR 50.47(b)(16) states:

- Planners responsible for emergency plan development and maintenance are properly trained.

There is no applicable supporting requirement which is described in 10 CFR 50, Appendix E.

The applicable informing criteria described in NUREG-0654, Section II.P states:

Each organization shall provide for the training of individuals responsible for the planning effort.

Compliance is maintained in the following manner:

1. The McGuire Nuclear Station Emergency Plan, Section E, Notification Methodology, describes the manner of Emergency Response Organization (ERO) activation during all emergency classifications. The adoption of ERONS does not adversely impact this activation, because it directly contacts ERO members via diverse means (home telephone, mobile telephone, text, and email). In this respect, it is a more reliable and versatile means of activation than the activation system that contacts only pagers.
2. Either Security or Operations can activate the ERO using ERONS. Both organizations maintain 24-hour per day manning of locations capable of deploying ERONS. ERONS is in use at several nuclear reactor sites for ERO activation and has proven to be a user-friendly and reliable method. Experience has shown that both Security and Operations personnel can quickly learn operations of ERONS with minimal training.
3. In accordance with Section E of the MNS Emergency Plan, ERONS is used to activate the Emergency Response Organization (ERO) upon the declaration of an emergency. The purpose of this activation is to augment the on-shift staff within 75 minutes, per Emergency Plan requirements. Experience with ERONS at other nuclear reactor sites shows that ERO activation can be initiated quickly and effectively after emergency declaration with no impairment on the timeliness of ERO activation. This is consistent with the current capability of the existing pager system.
4. ERONS is the principal means of activating the ERO in response to an emergency. In addition to the primary internet method for contacting ERO members, it has multiple backup features that allow prompt activation regardless of internet failure or degradation. In this respect, ERONS is an improvement over the pager notification system.

Note: ERONS is used solely to activate the MNS ERO and is not used for any off-site response notification or activation. Therefore, compatibility with off-site response organization notification systems is not an issue.

This review concludes this EPlan section change which supports replacement of the ERO Notification System with a new system called "Emergency Response Organization Notification System (ERONS)" continues to comply with applicable regulations and commitments. These changes support a Duke Energy fleet-wide initiative to upgrade the ERO notification system as an overall enhancement to emergency preparedness.

Conclusion:

The proposed activity ☒ does / ☐ does not continue to comply with the requirements.

3.10 10CFR 50.54(q) Evaluations

Reduction in Effectiveness (RIE) Evaluation and Conclusion:

BLOCK 5

1. Evaluation:

The changes described this EPlan section do not result in a reduction in effectiveness of facilities, response organizations, or response equipment. The changes in this revision are associated with replacement of the ERO Notification System using pagers with a new system called the Emergency Response Organization Notification System (ERONS) which uses cellular telephones or other mass communication devices for ERO notification.

The replacement of the ERO notification system was primarily made because of a continual decrease in pager reliability as vendor support of these systems has declined. This erosion of support will continue as newer and more reliable technologies become more available.

MNS has conducted pre-implementation testing of ERONS. As stated earlier, periodic testing of ERONS will be conducted in accordance with applicable procedures and schedules. Testing periodicity has not changed or been impacted by implementation of the new system.

Text messaging to cell phones instead of pagers is an improvement based upon the use of newer and better supported technology. In addition to the text messages, ERONS is capable of calling land line and cellular telephones as well as sending emails to ERO members. The system is capable of sending messages to multiple devices quickly and accurately.

The changes in this EPlan section, do not reduce the effectiveness of the Plan. These changes reflect replacement of the ERO Notification System with a new notification system which will be used at all Duke Energy nuclear plant sites. These changes do not impact the timeliness, accuracy, or reliability of notification equipment in support of emergency response. Instead, these changes support an improved capability to notify MNS ERO personnel by providing new equipment capable of sending messages to multiple devices in a very short period of time and enhanced processes for making notifications. These changes support a fleetwide initiative to the ERO notification processes at all Duke Energy nuclear plant sites.

The changes in this revision do not affect the emergency planning functions associated with 10 CFR 50.47(b)(1), because this change continues to ensure that responsibility for emergency response is assigned; and the response organization has the staff to respond and to augment staff on a continuing basis (i.e., 24/7 support) in accordance with the emergency plan.). This change will have no impact on the complement, readiness, or function of MNS Onshift Operations personnel or other ERO members. The ERO will continue to be available on a 24-hour per day basis to augment the on-shift staff during an emergency. The intent of the implementation of ERONS is to provide an ERO activation system that is more robust and reliable than the current pager system. To that end, ERONS provides enhanced notification capability over the current system, because it can contact diverse devices (home telephones, mobile telephones, email, and text). The current system is limited to pagers only. These changes do not affect the applicable supporting requirements which are described in 10 CFR 50, Appendix E.IV.A and E.C.1 and continue to meet informing criteria described in NUREG-0654, Section II.A (1.d; 1.e; and 2.a (in part)).

The changes in this revision do not affect the emergency planning functions associated with 10 CFR 50.47(b)(2), because these changes continue to ensure that emergency response responsibilities are staffed and assigned, and the process for timely augmentation of the MNS onshift staff is established and maintained. The process for timely augmentation of onshift staff by ERO activation is described in Section E of the MNS Emergency Plan and site specific procedures. The implementation of ERONS supports this function by providing a proven method of ERO activation during an emergency. Experience with ERONS at other nuclear reactor sites shows that ERO activation can be initiated quickly and effectively after emergency declaration with no impairment on the timeliness of ERO activation. ERONS uses pre-established event-specific messages designed to activate the necessary level of ERO response. The use of these messages simplify operator actions and minimize error traps. These changes do not affect the applicable supporting requirements which are described in 10 CFR 50, Appendix E.IV.A.C.1 and continue to meet informing criteria described in NUREG-0654, Section II.B (1 and 5).

3.10 10CFR 50.54(q) Evaluations

The changes in this revision do not affect 10 CFR 50.47(b)(5), because these changes continue to ensure capability for notification of emergency personnel by all organizations. These changes continue to meet the intent of informing criteria described in NUREG-0654, Section II.F.1(a-d).

The changes in this revision do not affect the emergency planning functions associated with 10 CFR 50.47(b)(6), because the changes continue to ensure that systems are established for prompt communication among principal emergency response organizations and to emergency response personnel. Experience with ERONS shows that it can contact several hundred individuals on multiple devices almost simultaneously. This capability is a significant improvement over the current activation system that is limited solely to pagers.

The changes in this revision do not affect the emergency planning function associated with 10 CFR 50.47(b)(8), because the changes ensure adequate equipment to support the emergency response is provided and maintained at MNS, including ERONS. These changes do not affect the applicable supporting requirements which are described in 10 CFR 50, Appendix E.IV.E and continue to meet informing criteria described in NUREG-0654, Section II.H.4.

The changes described in this revision do not affect the emergency planning function associated with 10 CFR 50.47(b)(15), because the changes continue to ensure that training is provided to emergency responders, including ERO personnel responsible for activation of ERONS. These changes do not affect the applicable supporting requirement described in 10 CFR 50, Appendix E.IV.F and continue to meet the intent of informing criteria described in NUREG-0654, Section II.O (1, 2, 4, and 5).

The changes described in this revision do not affect the emergency planning function associated with 10 CFR 50.47(b)(16), because the changes continue to ensure that MNS Emergency Preparedness personnel who are responsible for emergency plan development and maintenance are properly trained and have received training on the new ERONS. These changes continue to meet the intent of informing criteria described in NUREG-0654, Section II.P.1.

The changes described this EPlan section provide additional assurance that the ERO has the ability and capability to:

- respond to an emergency;
- perform functions in a timely manner;
- effectively identify and take measures to ensure protection of the public health and safety; and
- effectively use response equipment and emergency response procedures.

This EPlan section has emergency plan implementing procedures that provide instructions for response to an emergency classification at MNS. Effective use of this procedure helps ensure emergency response capabilities described in the MNS Emergency Plan are adequately maintained and demonstrated.

The changes in this EPlan section enhance ERO readiness to support a classified emergency, resulting in an improved capability to ensure health and safety of plant personnel and the general public. These changes continue to meet NRC requirements, as described in 10 CFR 50.47(b) and 10 CFR 50, Appendix E.

These changes are an overall improvement to the MNS Emergency Preparedness Program.

Conclusion:

The proposed activity ☐ does / ☒ does not constitute a RIE.



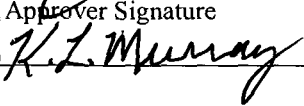
Effectiveness Evaluation Results

BLOCK 6

- ☒ The activity does continue to comply with the requirements of §50.47(b) and §50 Appendix E **and** the activity does not constitute a reduction in effectiveness. Therefore, the activity can be implemented without prior approval.

3.10 10CFR 50.54(q) Evaluations

- ☐ The activity does not continue to comply with the requirements of §50.47(b) and §50 Appendix E or the activity does constitute a reduction in effectiveness. Therefore, the activity cannot be implemented without prior approval.

| | | |
|--|--|-------------------------|
| Preparer Name: Randy Gibson | Preparer Signature  | Date: 9/9/14 |
| Reviewer Name: MARC Mulkey | Reviewer Signature  | Date: 9/9/14 |
| Approver Name: Kevin L. Murray | Approver Signature  | Date: 9-30-14 |

DUKE ENERGY
MCGUIRE NUCLEAR SITE

APPENDIX INDEX

| | |
|------------|--|
| Appendix 1 | Definitions |
| Appendix 2 | Meteorological System Description |
| Appendix 3 | Alert and Notification System Description |
| Appendix 4 | Summary of Evacuation Time Estimates |
| Appendix 5 | Agreement Letters |
| Appendix 6 | Distribution List for McGuire Emergency Plan |
| Appendix 7 | Spill Prevention Control and Countermeasure Plan |
| Appendix 8 | McGuire Hazardous Waste Contingency Plan |
| Appendix 9 | Hazardous Materials Response Plan |

APPENDIX 1

1.0 DEFINITIONS

AFFECTED PERSONS

Persons who have received radiation exposure or have been physically injured as a result of an accident to a degree requiring special attention as individuals, e.g., decontamination, first aid or medical services.

ANNUAL

For periodic emergency planning requirements, annual is defined as twelve months, with a maximum interval of 456 days.

ASSESSMENT ACTION

Those actions taken during or after an accident to obtain and process information that is necessary to make decisions to implement specific emergency measures.

BIENNIAL

For periodic emergency planning requirements, biennial is defined as at least once every two years, with a maximum interval of 912 days. (Note that this does not apply to the scheduling of biennial exercises. An exercise can occur at any time during the second calendar year after the previous exercise.)

CORRECTIVE ACTIONS

Emergency measures taken to ameliorate or terminate an emergency situation at or near the source of the problem to prevent an uncontrolled release of radioactive material or to reduce the magnitude of the release, e.g., shutting down equipment, fire-fighting, repair and damage control.

DEGRADING

- Plant parameters (ex. temperature, pressure, level, voltage, frequency) are trending unfavorably away from expected or desired values **AND** plant conditions could result in a higher classification or Protective Action Recommendation (PAR) before the next follow-up notification.
- Site conditions (ex. wind, ice/snow, ground tremors, hazardous/toxic/radioactive material leak, fire, security event) impacting plant operations or personnel safety are worsening **AND** plant conditions could result in a higher classification or Protective Action Recommendation (PAR) before the next follow-up notification.

DRILL

A drill is a supervised instruction period aimed at testing, developing, and maintaining skills in a particular operation.

EMERGENCY ACTION LEVELS (EAL's)

A pre-determined, site-specific, observable threshold for a plant Initiating Condition that places the plant in a given emergency class. An EAL can be: an instrument reading; an equipment status indicator; a measurable parameter (onsite or offsite); a discrete, or another phenomenon which, if it occurs, indicates entry into a particular emergency class.

EMERGENCY OPERATIONS FACILITY (EOF)

The Emergency Operations Facility is the facility utilized for direction and control of all emergency and recovery activities with emphasis on the coordination of off-site activities such as dispatching mobile emergency monitoring teams, communications with local, state and federal agencies, and coordination of corporate and other outside support.

EMERGENCY PLANNING ZONE (EPZ)

The area for which planning is needed to assure that prompt and effective actions can be taken to protect the public in the event of an accident. The plume exposure EPZ is about 10 miles in radius and the ingestion exposure EPZ is about 50 miles in radius.

EXCLUSION AREA

The nuclear site property out to a radius of 2500 feet, that meets the 10CFR100 definition.

EXERCISE

An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations.

IMPROVING

- Plant parameters (ex. temperature, pressure, level, voltage, frequency) are trending favorably toward expected or desired values **AND** plant conditions could result in a lower classification or emergency termination before the next follow-up notification.
- Site conditions (ex. wind, ice/snow, ground tremors, hazardous/toxic/radioactive material leak, fire, security event) have become less of a threat to plant operations or personnel safety **AND** plant conditions could result in a lower classification or emergency termination before the next follow-up notification.

INGESTION EXPOSURE PATHWAY

The principle exposure from this pathway would be from ingestion of contaminated water or foods such as milk or fresh vegetables. The time of potential exposure could range in length from hours to months.

MONTHLY

For periodic emergency planning requirements, monthly is defined as once each month, with a maximum interval of 38 days.

OPERATIONAL SUPPORT CENTER (OSC)

In the event of an emergency, shift support personnel (e.g., auxiliary operators and technicians) other than those required and allowed in the control room shall report to this center for further orders and assignment.

PLUME EXPOSURE PATHWAY

The principle exposure sources from this pathway are (a) external exposure to gamma radiation from the plume and from deposited material and (b) inhalation exposure from the passing radioactive plume. The time of potential exposure could range from hours to days.

POPULATION-AT-RISK

Those persons for whom protective actions are being or would be taken.

PROTECTED AREA

An area encompassed by physical barriers and to which access is controlled.

PROTECTIVE ACTIONS

Those emergency measures taken after an uncontrolled release of radioactive materials has occurred, for the purpose of preventing or minimizing radiological exposures to persons that would be likely to occur if the actions were not taken.

PROTECTIVE ACTION GUIDES (PAG)

Projected radiological dose or dose-commitment values to individuals in the general population that warrant protective action following a release of radioactive material. Protective actions would be warranted provided the reduction in individual dose expected to be achieved by carrying out the preventive action is not offset by excessive risks to individual safety in taking the protective action. The PAG does not include the dose that has unavoidably occurred prior to the assessment.

QUARTERLY

For periodic emergency planning requirements, quarterly is defined as once every three months, with a maximum interval of 112 days.

RECOVERY ACTIONS

Those actions taken after the emergency to restore affected property as nearly as practicable to its pre-emergency condition.

SEMI-ANNUAL

For periodic emergency planning requirements, semi-annual is defined as once every 6 months, with a maximum interval of 228 days.

SITE

That part of the nuclear site property consisting of the Reactor, Auxiliary, Turbine, Service Buildings and grounds, contained within the outer security area fence.

STABLE

Plant conditions are neither degrading nor improving.

TECHNICAL SUPPORT CENTER (TSC)

This on-site center is for use by plant management, technical and engineering support personnel. In an emergency, this center shall be used for assessment of plant status and potential off-site impact in support of the control room command and control function.

TRIENNIAL

For periodic emergency planning requirements, triennial is defined as at least once every three years, with maximum interval of 1369 days.

VITAL AREA

Areas within the Protected Area that house equipment important for nuclear safety. Access to a Vital Area is allowed only if an individual has been authorized to be in that area per the Security plan, therefore Vital Area is a Security term.

WEEKLY

For periodic emergency planning requirements, weekly is defined as once every 7 days, with a maximum interval of 9 days.

APPENDIX 2

MCGUIRE NUCLEAR SITE

METEOROLOGICAL PROGRAM

INTRODUCTION

The meteorological program described in this appendix was developed using guidance provided by NUREG-0654, Revision 1, Regulatory Guide 1.23, Proposed Revision 1, Regulatory Guide 1.111, Revision 1, and Regulatory Guide 1.109.

EFFLUENT DISPERSION MODEL

A computer model which simulates the transport and diffusion of released effluents is a puff-advection model which incorporates a horizontal wind field that can vary in time but is consistent in space. It is assumed in the puff-type model that the spread within a puff along the direction of flow is equal to the spread in the lateral direction (i.e., horizontal Gaussian Symmetry). In the model, concentration averages are obtained by summing concentrations of individual elements for the grid points over which the puffs pass. Features incorporated into the model include the use of primary, backup and predicted data, building wake effects and an assumed ground release mode. Appropriate persistence would be used for initial releases until a meteorologist is notified to provide predictive data.

INSTRUMENTATION

Figure 2-1 shows the type and number of parameters measured at McGuire Nuclear Site. The meteorological conditions present at McGuire Nuclear Site warrant the use of the basic described meteorological variables. These include wind speed and wind direction measured at high and low levels, delta-temperature and sigma theta for stability classification, ambient air and dew point temperature and precipitation.

DATA HANDLING

Meteorological data for dose calculation consists of a primary digital recording/storage system and a secondary analog chart recording system both of which meet system accuracies and other specifications as suggested in Regulatory Guide 1.23, Proposed Revision 1. In the digital system meteorological variables are sampled at varying time (1-60 seconds) intervals from which 15 minute total, average and/or standard deviation quantities are computed. Digital data is placed on an external PI server accessible to computers that are used for emergency effluent dispersion modeling and dose calculation. The chart recording system is maintained as a backup to the digital system.

DOSE ASSESSMENT METHODOLOGY

Dose assessment is calculated through a dose projection computer model RADDPOSE-V. The model provides for the assessment of off-site radiological doses and accommodates both real time and forecast modes in the calculation of exposures to the general public. The model provides results of the sum of the effective dose equivalent from external radiation (both plume and ground deposition) and

the committed effective dose equivalent from the inhalation of radioisotopes (the sum of both factors equaling the total effective dose equivalent of TEDE), and the committed dose equivalent to the thyroid (CDE thyroid). Dose conversion factors are derived from Regulatory Guide 1.109.

The model uses source term (amount of radioactivity in the unit vent, containment and containment leakage or steam release valves), flow rates and real time meteorology to calculate doses. Unit vent grab sample analyses or unit vent radiation monitor readings are used to determine concentrations of radioactivity within the unit vent source term. Containment atmosphere samples, containment process radiation monitors or containment high range radiation monitors are used to determine concentrations within the containment source term. The containment design leak rate is used unless factors, such as containment pressure, indicate that another value is more realistic. Equivalent concentrations from a steam release are calculated by using known or assumed steam mass release rates and the specific steam line radiation monitor reading.

PHYSICAL SYSTEM DESCRIPTION

Continuous parallel signals enter each Operator Aid Computer (OAC) and the analog recorders. The OAC calculates end to end 15 minute quantities, starting on the hour, for all meteorological variables (except sigma theta) with a sampling interval of 60 seconds. It calculates a 15 minute average for high and low level wind direction and speed; 15 minute averages are also calculated for delta-temperature, ambient temperature and dew point temperature. Total water equivalence is computed for precipitation. Sigma theta is calculated by a field unit with a sampling interval of one second again for end to end 15 minute periods starting on the hour, and then is fed to each OAC. All quantities are stored on the OAC with a minimum recall of 12 hours. This data is transferred to the MNS PI Server. Data stored on the PI server is accessible to computers which are used for emergency effluent dispersion modeling and dose calculation

DETAILED DESCRIPTION OF SUBSYSTEMS

Sensors to Operator Aid Computer

Lightning protection is provided for all sensors and signal conditioning equipment; wind sensors are outfitted with heating jackets, when necessary, for protection against icing conditions. Signal conditioners and the sigma theta field unit are housed in an environmentally controlled building at the base of the high level tower. Signal cables to the OACs and analog recorders are shielded to minimize electrical interference.

Operator Aid Computer (OAC) to MNS PI Server

The process computer OAC system which is utilized for data storage consists of SAIC, HP and RTP equipment. Each unit OAC is a backup for the other, capable of supplying the same required meteorological values. The data is transferred to the MNS PI server which is the server used for long-term data storage and retrieval. Plant data on the PI server is accessible to computers that are used for emergency effluent dispersion modeling and dose calculation.

QUALITY ASSURANCE

Meteorological components have been designed, procured and installed as a non-safety related system. Equipment has been purchased from suppliers which have provided high quality, reliable products in the past. Surveillance during construction was provided as for any other non-safety system.

FIGURE 2-1

MCGUIRE NUCLEAR SITE
METEOROLOGICAL PARAMETERS OF THE UPGRADED SYSTEM

Measurement
System

Existing high level and
10 meter tower

High level wind speed
and direction
Low level wind speed
and direction
Delta-temperature
Low level sigma theta
Dry bulb temperature
Dew point
Precipitation

APPENDIX 3

DUKE ENERGY
MCGUIRE NUCLEAR SITE
ALERT AND NOTIFICATION SYSTEM DESCRIPTION

GENERAL DESCRIPTION

The Alert and Notification System for McGuire Nuclear Site consists of an acoustic alerting signal and notification of the public by commercial broadcast (EAS). The system is designed to meet the acceptance criteria of Section B of Appendix 3, NUREG-0654, FEMA-REP-1, Rev. 1.

The Emergency plans of Duke Energy, the State of North Carolina, and the counties of Mecklenburg, Gaston, Catawba, Lincoln, and Iredell include the organizations and individuals, by title, who will be responsible for decision-making as regards the alert and notification system. The county locations from which the sirens would be activated and, potentially, the request for an EAS message would come are manned 24 hours per day. Each organization's plan describes provisions for use of public communications media or other emergency instructions to members of the public. The plans of the state of North Carolina include a description of the information that would be communicated to the public under given circumstances.

A. Concept of Operations

A system of 67 fixed sirens is installed and operational in the 10-mile EPZ around McGuire Nuclear Site. A backup means of alerting and notification is described in the State and County Plans. This backup method includes area-wide emergency service vehicles traversing the area and giving both an alerting signal and notification message.

Each county will control the activation of the sirens within its boundaries (except for Catawba County - their one siren will be activated by Lincoln County). However, Mecklenburg, as the lead county, has the ability to activate all EPZ sirens from its control point.

B. Criteria for Acceptance

The alert and notification system for the McGuire Nuclear Site provides an alerting signal and an informational or instructional message to the population (via the EAS) on an area-wide basis throughout the 10-mile EPZ within 15 minutes from the time the cognizant off-site agencies have determined the need for such alerting exists. The emergency plans for the state of North Carolina (Annex E) include evidence of EAS preparation for emergency situations and the means for activating the system.

C. Physical Implementation

1. The activation of this alert and notification system requires procedures and relationships between both Duke Energy and the off-site agencies that support Duke and McGuire

Nuclear Site. When an incident is determined to have reached the level requiring public protective actions, Duke contacts the cognizant off-site agency via the "selective signaling" phone system and provides its recommendations. This system is available for use 24 hours per day and links the Control Room, TSC, EOF, SERT headquarters, the county warning points, and the county EOC's.

2. The expected performance of the sirens used in this system is described in Figure Q-1. These sirens complement existing alerting systems. The ambient background sound level in the McGuire area is taken to be 50 db for areas of "less than 2000 persons/per square mile" and 60 db for areas above this density. On this basis, the siren coverages are designed to provide a signal 10db above the average daytime ambient background.

Furthermore, the sirens have been located to assure that the maximum sound levels received by any member of the public should be lower than 126 db.

The basis for selection of the 60 db(c) and 70 db(c) criteria is documented as follows:

Location of heavy industry - There is no "heavy industry" in the McGuire 10 mile EPZ.

Attenuation factors with distance - 10 db loss per distance doubled (See Figure Q-1)

Siren output db(c) at 100 ft. vs. assumed range and acoustic frequency spectra -

2001-AC: 126 ± 1.0 db at 100 feet

Assumed ranges per Figure Q-1, 10 db loss column

Frequency Spectra:

2001-AC: top frequency 750 Hz

Map showing siren location - See Figure Q-2

Mounting height of sirens - 50 feet (approximate)

Special weather condition considerations (such as expected heavy snow) - None

The siren system will produce a 3 minute steady signal and is capable of repetition.

Test Program

Periodic testing of the sirens is performed as follows:

| Test | Req'd By | Min. Req'd Freq. | Norm. Freq. Perf. By Duke |
|--|---|--------------------------------------|--|
| Silent Test | FEMA-REP-10, NUREG-0654 Rev. 1, App. 3 | Every two weeks. | Normally performed weekly on Thursdays. |
| Full Cycle Test (called full-scale test by FEMA) | FEMA-REP-10, NUREG-0654 Rev. 1, App. 3 | Annually. | Normally performed on the second Wednesday of each quarter, or during the biennial exercise. See Note 1 below. |
| Growl Test | FEMA-REP-10, NUREG-0654 Rev. 1, App. 3, FEMA CPG 1-17 March 1, 1980 {PIP-G-00-0135} | Quarterly and after PM is performed. | See NOTE 1 below for quarterly test. See NOTE 4 below for growl test following PM. |

- NOTE:**
1. Quarterly full cycle tests fulfill/exceed the requirements for quarterly growl tests.
 2. Each site may elect to perform some method of feedback system verification during the full cycle siren test.
 3. For the FEMA CPG 1-17 growl test following PM, the siren chopper is sounded for a short period of time so that it never produces full sound output. {PIP G-00-0135}

Refer to FAM Section 3.3 for a detailed narrative of the siren test program.

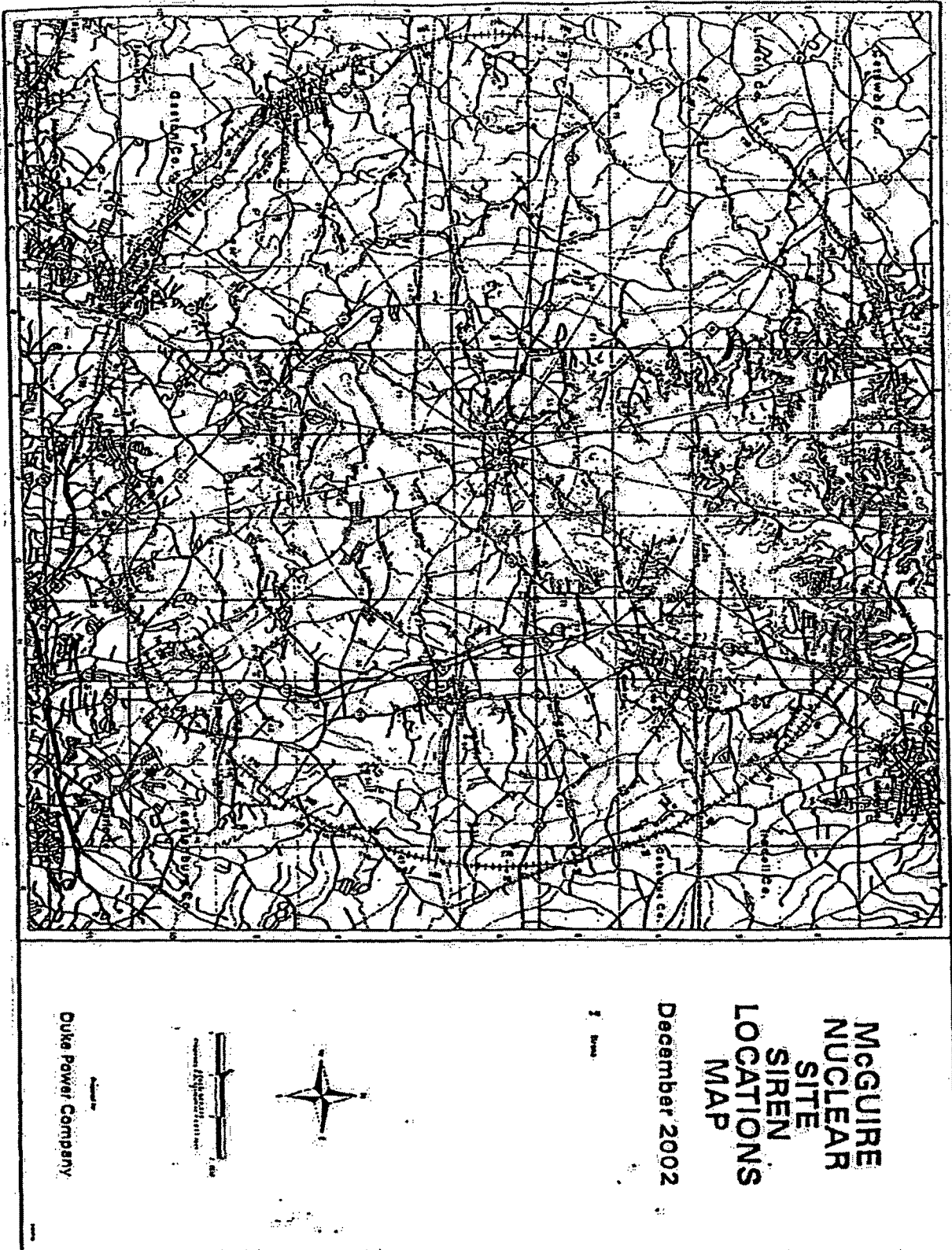
FIGURE Q-1

SIREN RANGE IN FEET

12 AND 10 dB LOSS PER DISTANCE DOUBLED

| MINIMUM LEVEL COVERAGE <u>IN dB</u> | 2001AC <u>126dB(c)SIREN</u> | |
|--|--------------------------------|-----------|
| | <u>12</u> | <u>10</u> |
| 85 | 1125 | 1830 |
| 80 | 1500 | 2600 |
| 75 | 2000 | 3680 |
| 73 | 2260 | 4210 |
| 70 | 2700 | 5200 |
| 68 | 3000 | 6000 |
| 65 | 3600 | 7400 |
| 60 | 4800 | 10400 |

FIGURE Q-2
SIREN LOCATIONS



APPENDIX 4

DUKE ENERGY MCGUIRE NUCLEAR SITE EVACUATION TIME ESTIMATES DECEMBER 2012

The evacuation time estimates described in part J of this plan were prepared for McGuire by KLD Engineering, P.C. Report KLDTR-501, MNS, development of Evacuation Time Estimates, revision 1. See MNS-ETE-12132012-000, MNS Evacuation time Estimates (ETE) dated December 2012.

The purpose of the study was to update the permanent resident population count for the EPZ around McGuire Nuclear Site due to population growth.

The ETE Report has been made available to site, state, and local planners for their use.

Six scenarios were chosen to be studied and ETE listed is for entire EPZ:

1. Winter weekday, fair weather conditions. Estimated evacuation time is 4 hours 35 minutes.
2. Winter weeknight, fair weather conditions. Estimated evacuation time is 3 hours 10 minutes.
3. Summer weekend, fair weather conditions. Estimated evacuation time is 3 hours 30 minutes.
4. Winter weekday, adverse weather conditions. Estimated evacuation time is 5 hours 40 minutes.
5. Winter weekend, adverse weather conditions. Estimated evacuation time is 4 hours 10 minutes.
6. Summer weekend, adverse weather conditions. Estimated evacuation time is 3 hours 55 minutes.

The evacuation study is available in the MNS Emergency Planning office for study and review.

APPENDIX 5 AGREEMENT LETTERS

The following agreement letters support the McGuire Nuclear Site Emergency Plan and are attached:

1. Carolinas Medical Center
2. Huntersville Fire Department
3. Cornelius Volunteer Fire Department
4. Mecklenburg County Fire Marshall
5. North Mecklenburg Rescue Squad (DELETED)
6. Mecklenburg Emergency Medical Services Agency (MEDIC)
7. Charlotte-Mecklenburg Emergency Management Office
8. Iredell County Civil Preparedness Agency
9. Lincoln County Department of Emergency Management
10. Gaston County Department of Emergency Management
11. Catawba County Department of Emergency Management
12. Cabarrus County Department of Emergency Management
13. REACTS
14. DOE - Savannah River
15. INPO
16. North Carolina
17. Letter Documenting Duke Energy Assumptions for Offsite Dose Calculation Methodology
18. Duke Energy Back-Up TLD Reader
19. Joint Information Center
20. Alternate Site Agreement
21. G & G Metal Fabrication (Hale pump repair vendor)
22. Duke's Lincoln Combustion Turbine Facility operating agreement with MNS/CNS/ONS on emergency supply of diesel fuel.
23. Charlotte Mecklenburg Police Department (CMPD)

These Letters of Agreement are updated as necessary and at least every (3) years to ensure adequate awareness on the part of all concerned of the existence and commitment to provide agreed services or assistance.

APPENDIX 6

MCGUIRE NUCLEAR SITE EMERGENCY PLAN DISTRIBUTION

NAME

McGuire Nuclear Site

Document Control, MG05DM
Site Emergency Planner, MG01EP
Site Emergency Planner (TSC), MG01EP
Control Room, MG01OP
Operator Training Director, MG03OT
Operations Staff Manager, MG01OP
Operations Shift Manager, MG01OP
Radiation Protection Manager, MG01RP
Satellite File, MG01S1
Environmental Management, MG01EM
Regulatory Compliance, MG01RC

EOF Director's Area

McGuire Emergency Planning, MG01EP

NRC

McGuire NRC Resident Inspector, MG01A
NRC Regional Administrator (copy forwarded by Emer. Plan)
NRC Regional Administrator (copy forwarded by Emer. Plan)
NRC Document Control (copy forwarded by Emer. Plan)
NRC Office Of Nuclear Material Safety and Safeguards

Emergency Planning Consultant/NSRB Staff

E. M. Kuhr, EC05P

News Group

Emergency Planning Consultant, EC12X

Catawba Nuclear Site

CNS Emergency Planning Manager, CN01EP

North Carolina

Director, Division of Environmental Health, Radiation Protection Section, Raleigh, NC
NCEM REP Program Manager, Raleigh, NC
NCEM Western Branch Office Manager, Conover, NC

Cabarrus County

Coordinator, Cabarrus County Dept. of Emergency Mgmt., Concord, NC

APPENDIX 6

MCGUIRE NUCLEAR SITE EMERGENCY PLAN DISTRIBUTION

Catawba County

Catawba County Emergency Management Coordinator, Newton, NC

Gaston County

Coordinator, Gaston County Dept. of Emergency Mgmt., Gastonia, NC

Iredell County

Coordinator, Iredell County Civil Preparedness Agency, Statesville, NC

Lincoln County

Director, Lincoln County Emergency Services, Lincolnton, NC

Mecklenburg County

Director, Charlotte-Mecklenburg Emergency Mgmt. Office, Charlotte, NC

Oconee Nuclear Site

ONS Emergency Planning Manager, ON03EP

APPENDIX 6

MCGUIRE NUCLEAR SITE EMERGENCY PLAN DISTRIBUTION

(ADDRESSES)

Director
Division of Environmental Health
Radiation Protection Section
1645 Mail Service Center
Raleigh, NC 27699-1645

REP Program Manager
NC Division of Emergency Management
4713 Mail Service Center
Raleigh, NC 27699-4713

Western Branch Office Manager
NC Division of Emergency Management
3305-15 16th Ave. S.E.
Suite 305
Conover, NC 28613-9213

Coordinator
Cabarrus County Department of Emergency Management
P.O. Box 707
Concord, NC 28026-0707

Michael F Weber, Director
Office of Nuclear Material Safety and Safeguards
Mail Stop T-8A23
Washington DC, 20555-0001

APPENDIX 6

MCGUIRE NUCLEAR SITE EMERGENCY PLAN DISTRIBUTION

(ADDRESSES Continued)

Emergency Management Coordinator
Catawba County Administration Building
100-A South West Boulevard
Post Office Box 389
Newton, NC 28658-0389

Coordinator
Gaston County Department of Emergency Management
Post Office Box 1578
1615 North Highland Street
Gastonia, NC 28052

Coordinator
Iredell County Civil Preparedness Agency
Post Office Box 788
Statesville, NC 28677

Director
Lincoln County Emergency Services
115 W. Main Street
Lincolnton, NC 28092

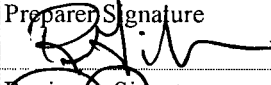

Director
Mecklenburg Emergency Management
228 East 9th Street
Charlotte, NC 28202-2852

3.10 10CFR 50.54(q) Evaluations

§50.54(q) Screening Evaluation Form

| | | |
|--|----------------|--|
| Activity Description and References: MNS Emergency Plan, Section Q (Appendix Index (Appendix 5 Agreement Letters) rev 14-4 October 2014 | | BLOCK 1 |
| <p>On page Q-16 added Agreement Letter 23 (Charlotte Mecklenburg Police Department (CMPD)) to the index.</p> <p>There are no impacts upon any planning standard and there are no impacts upon Appendix E of 10CFR part 50 therefore a 50.54(q) effectiveness evaluation is not required.</p> | | |
| Activity Scope: | | BLOCK 2 |
| <p><input checked="" type="checkbox"/> The activity <u>is</u> a <i>change</i> to the <i>emergency plan</i></p> <p><input type="checkbox"/> The activity <u>is not</u> a <i>change</i> to the <i>emergency plan</i></p> | | |
| Change Type: | BLOCK 3 | Change Type: |
| <p><input type="checkbox"/> The change <u>is</u> editorial or typographical</p> <p><input checked="" type="checkbox"/> The change <u>is not</u> editorial or typographical</p> | | <p><input type="checkbox"/> The change <u>does</u> conform to an activity that has prior approval</p> <p><input checked="" type="checkbox"/> The change <u>does not</u> conform to an activity that has prior approval</p> |
| Planning Standard Impact Determination: | | BLOCK 5 |
| <p><input type="checkbox"/> §50.47(b)(1) – Assignment of Responsibility (Organization Control)</p> <p><input type="checkbox"/> §50.47(b)(2) – Onsite Emergency Organization</p> <p><input type="checkbox"/> §50.47(b)(3) – Emergency Response Support and Resources</p> <p><input type="checkbox"/> §50.47(b)(4) – Emergency Classification System*</p> <p><input type="checkbox"/> §50.47(b)(5) – Notification Methods and Procedures*</p> <p><input type="checkbox"/> §50.47(b)(6) – Emergency Communications</p> <p><input type="checkbox"/> §50.47(b)(7) – Public Education and Information</p> <p><input type="checkbox"/> §50.47(b)(8) – Emergency Facility and Equipment</p> <p><input type="checkbox"/> §50.47(b)(9) – Accident Assessment*</p> <p><input type="checkbox"/> §50.47(b)(10) – Protective Response*</p> <p><input type="checkbox"/> §50.47(b)(11) – Radiological Exposure Control</p> <p><input type="checkbox"/> §50.47(b)(12) – Medical and Public Health Support</p> <p><input type="checkbox"/> §50.47(b)(13) – Recovery Planning and Post-accident Operations</p> <p><input type="checkbox"/> §50.47(b)(14) – Drills and Exercises</p> <p><input type="checkbox"/> §50.47(b)(15) – Emergency Responder Training</p> <p><input type="checkbox"/> §50.47(b)(16) – Emergency Plan Maintenance</p> <p>*Risk Significant Planning Standards</p> <p><input checked="" type="checkbox"/> The proposed activity does not impact a Planning Standard</p> | | |
| Commitment Impact Determination: | | BLOCK 6 |
| <p><input type="checkbox"/> The activity <u>does</u> involve a site specific EP commitment</p> <p>Record the commitment or commitment reference: _____</p> <p><input checked="" type="checkbox"/> The activity <u>does not</u> involve a site specific EP commitment</p> | | |

3.10 10CFR 50.54(q) Evaluations

| | | |
|--|---|-------------------------|
| Screening Evaluation Results: | | BLOCK 7 |
| <input checked="" type="checkbox"/> The activity <u>can</u> be implemented without performing a §50.54(q) effectiveness evaluation | | |
| <input type="checkbox"/> The activity <u>cannot</u> be implemented without performing a §50.54(q) effectiveness evaluation | | |
| Preparer Name: Randy Gibson | Preparer Signature  | Date: 9/23/14 |
| Reviewer Name: Renard O. Burris | Reviewer Signature  | Date: 10/1/14 |