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December 23, 2008

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC
William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019
AP1000 Combined License Application for the
William States Lee III Nuclear Station Units 1 and 2
Partial Response to Request for Additional Information (RAI No. 50)
Ltr # WLG2008.12-24

Reference: Letter from Brian C. Anderson (NRC) to Peter S. Hastings (Duke Energy), *Request for Additional Information Letter No. 025 Related to SRP Section 13.3 for the William States Lee III Units 1 and 2 Combined License Application*, dated September 26, 2008.

This letter provides the Duke Energy response to the Nuclear Regulatory Commission's (NRC) requests for the following additional information (RAI) included in the reference letter:

13.03-15, ETE-15	13.03-60, SITE-7
13.03-56, SITE-3	13.03-66, SITE-13
13.03-58, SITE-5	13.03-73, SITE-20
13.03-59, SITE-6	13.03-74, SITE-21

Responses to the NRC information requests described in the referenced letter are addressed in separate enclosures, which also identify associated changes, when appropriate, that will be made in a future revision of the applicable part of the combined license application.

If you have any questions or need any additional information, please contact Peter S. Hastings at 980-373-7820.

Bryan J. Dolan
Vice President
Nuclear Plant Development

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NRO

Enclosures:

1) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-15 (ETE-15)
2) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-56 (SITE-3)
3) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-58 (SITE-5)
4) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-59 (SITE-6)
5) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-60 (SITE-7)
6) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-66 (SITE-13)
7) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-73 (SITE-20)
8) Duke Energy Response to Request for Additional Information Letter 025, RAI 13.03-74 (SITE-21)

AFFIDAVIT OF BRYAN J. DOLAN

Bryan J. Dolan, being duly sworn, states that he is Vice President, Nuclear Plant Development, Duke Energy Carolinas, LLC, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this supplement to the combined license application for the William States Lee III Nuclear Station and that all the matter and facts set forth herein are true and correct to the best of his knowledge.

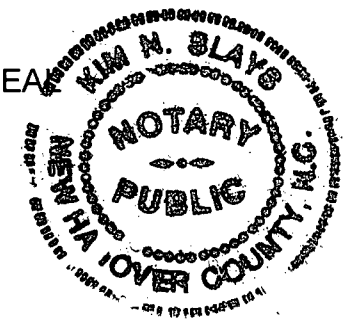
Bryan J. Dolan

Subscribed and sworn to me on December 23, 2008

Notary Public

My commission expires: April 19, 2010

SEAL



xc (w/o enclosures):

Loren Plisco, Deputy Regional Administrator, Region II
Stephanie Coffin, Branch Chief, DNRL

xc (w/enclosures):

Brian Anderson, Project Manager, DNRL
Brian Hughes, Senior Project Manager, DNRL

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-015

NRC RAI:

ETE-15:

In Table 8-1, "Transit Dependent Population Estimates," the transit dependent population definition does not include any individuals with special needs. The South Carolina Radiological Emergency Response Plan, IV, (B)(6)(h) states that transportation will be provided to residents who are homebound and require special transportation. Provide information to support that there are no transit dependent special needs individuals who would require medical support during an evacuation or include appropriate details in the ETE to address this population group.

Duke Energy Response:

Homebound individuals requiring special transportation were not specifically identified for the purposes of the ETE Report. This particular special needs population is normally identified to the county emergency management agency on an annual basis. For that reason, an estimation of the homebound, special needs population within the Lee EPZ was calculated in the following manner.

For the year 2000, census data yields 13,102 disabled persons compared with a total population in Cherokee County of 52,537, or 24.9%. For York County, in 2000, 30,084 disabled persons out of 164,614 total population yields 18.3%. The statewide figure in 2000 was 20.2%.

An estimate of homebound disabled individuals who are transit dependent, is developed as follows:

1. Assume that a disabled person living at home would not likely live alone, if they have no access to transportation. Based on the telephone survey performed during preparation of the ETE, documented in Appendix F of the ETE report, 2.55% of households with 2 or more persons had no access to a privately owned vehicle (POV).
2. Estimate the total number of households (HH) within the EPZ that have 2 or more persons, based on the average of 2.62 persons/HH (p. F-2 of the ETE Report):

   $$48{,}249 \div 2.62 \times (470 \div 591) = 14{,}645$$

   In this case, 48,249 is the estimated population in 2007 (Table 3-1 of the ETE Report); (470/591) is the proportion of HH with 2 or more persons to the total number of HH surveyed.
3. The number of such HH with no privately owned vehicles (POV) available is 14,645 x 0.0255 = 373

4. Assume no more than one disabled person per HH. Then the blended percentage of HH with a disabled person that are estimated to be within the EPZ is:

   $24.9 \times 0.913 + 18.3 \times 0.087 = 24.3\%$

   For this case 24.9 and 18.3 are the percentages of disabled persons in Cherokee and York Counties, respectively, obtained from census data, and reported above. Cherokee County has 91.3% of the combined population of York and Cherokee Counties within the EPZ. It is assumed that this blended percentage also applies to ERPA A-3 in Cleveland County.

5. Then the number of such HH with disabled persons is:

   0.243 x 373 = 91

   It is reasonable to expect that all HH members will accompany the disabled person. Based on the telephone survey conducted in support of the ETE Report preparation, these HH with 2+ persons and no POV average 2.5 persons. Thus, transportation must be provided for:

   2.5 x 91 = 228 persons, including the 91 disabled persons

Catawba Special Needs Data

The Catawba Nuclear Power Plant is located in York County, approximately 25 miles east of the proposed Lee site. The Catawba EPZ includes parts of York, Mecklenburg, and Gaston Counties. The population within the York County portion of the EPZ is 231,682 people. Based on information provided by York County Office of Emergency Management, there are 1,096 special needs persons currently registered within the York County portion of the Catawba EPZ. The following data were provided by the York County Office of Emergency Management:

York County Special Needs Population Residing within Catawba EPZ		
Transportation Needed	**Number of Persons**	**Percentage of York County EPZ Population**
Non-Specific Transportation	573	0.25%
Ambulance	91	0.04%
Wheelchair Van	67	0.03%
No Transportation Assistance needed	365	0.16%
Total	**1,096**	**0.48%**

A comparison with Lee follows:

Population	Lee EPZ (based on Census data)	Catawba EPZ (based on special needs registration data)
Entire EPZ	48,249	231,682
Special Needs persons	228	1,096
Percent	**0.47**	**0.48**

Given this close agreement of two independent estimates in the same region, it appears that these estimates of special needs persons within the Lee EPZ are reasonable.

Data are not available at this time to estimate the number of homebound individuals within the proposed Lee EPZ that require special vehicles/specially equipped vehicles. These individuals will be self identified to the counties by responding to annual mailings to EPZ residents. Once the number of individuals fitting this small category is identified, future planning efforts will develop appropriate mechanisms for evacuation.

Due to the close proximity of the proposed Lee EPZ and the existing Catawba EPZ, it is appropriate to use the special needs transportation data from Catawba to estimate the needs for the proposed Lee EPZ. Based on this analysis shown above, the following transportation needs are estimated for the Lee EPZ:

- 19 people [228 x (91 ÷ 1096)] will require an ambulance to be evacuated.
- 14 people [228 x (67 ÷ 1096)] will require a wheelchair van to be evacuated.
- 120 people [228 x (573 ÷ 1096)] will require "non-specific transportation" which is assumed to be buses.

ETE for Special Needs Persons

Ambulances

It is estimated that 20 ambulance runs will be needed to evacuate the institutionalized bed-ridden population within the EPZ – see revised Table 8-4 in the response to RAI 13.03-026. The ETE for these ambulances is estimated at 1:05 minutes as discussed on page 8-8 of the ETE report. As discussed in the response to RAI 13.03-030, these ambulances would be able to return to the EPZ by 2 hours and 15 minutes (1:05 + 30 + 15 + 25) if the institutionalized bed-ridden population is evacuated to host hospitals in Spartanburg. As estimated above, there are 19 homebound special needs persons who require an ambulance to be evacuated. Assuming a capacity of 2 persons per ambulance (see page 8-4 of the ETE report), 10 ambulances are needed. Each ambulance will make 2 stops with an estimated distance of 5 miles between stops and an estimated distance of 5 miles to the EPZ boundary after the final stop. It is conservatively assumed that ambulances will travel at 30 mph within the EPZ.

The ETE are computed as follows:

a. Ambulance arrives at first household: 2:15
b. Loading time at first household: 30 minutes
c. Ambulance travels to second household: 5 miles @ 30 mph = 10 minutes
d. Loading time at second household: 30 minutes
e. Ambulance travel time to EPZ boundary at 3:25: 5 miles @ 30 mph = 10 minutes

ETE: 2:15 + 30 + 10 + 30 + 10 = 3:35

If additional ambulances are available in Spartanburg – assume that 90 minutes would be needed to mobilize the ambulances and arrive at the first household.

ETE: 1:30 + 30 + 10 + 30 + 10 = 2:50

Wheel-Chair Vans

Page 8-4 of the ETE report identifies a wheelchair van capacity of 4 wheelchairs per trip. As estimated above there are 14 special needs persons within the EPZ requiring wheelchair van transportation; therefore 4 wheelchair vans are needed. Assuming one special needs person per household, each wheelchair van will service about 4 households. It is conservatively assumed that the households are spaced 5 miles apart and that van speeds approximate those of school buses = 20 mph between households.

a. Assumed mobilization time for wheelchair van resources to arrive at first household: 1:30
b. Loading time at first household: 15 minutes
c. Travel to next household: 3 @ 15 minutes (5 miles @ 20 mph) = 45 minutes
d. Loading time: 3 @ 15 minutes = 45 minutes
e. Wheelchair van travel time to EPZ boundary at 3:15: 5 miles @ 20 mph = 15 minutes

ETE: 1:30 + 15 + 45 + 45 + 15 = 3:30

Non-Specific Transportation

This population is considered to be ambulatory and are included in the transit-dependent population evacuated following the completion of school evacuations. It is assumed that the majority of these individuals will be able to reach the designated school pickup locations; those that are unable to get to a pickup location are expected to register with the county emergency management agency so that a bus can be dispatched to their residence for pickup.

While these individuals may require a longer boarding time per stop and may require the bus to travel a distance further off the designated route; given the relatively small numbers, it is not expected that the time will have any significant negative impact on the overall ETE.

Associated Revision to the Lee Nuclear Station Evacuation Time Estimate Report:

Revise Section 8 of the ETE Report "Special Needs Population" as shown in Attachment 1.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

None

Attachments:

1. Addition of "Special Needs Population" section to ETE Report Section 8

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-015

ETE Report; Addition of "Special Needs Population" section to Section 8

COLA Part 5, Emergency Plan, ETE Supplement, Section 8 revised to add:

8.5 Special Needs Population

For the year 2000, census data yields 13,102 disabled persons compared with a total population in Cherokee County of 52,537, or 24.9%. For York County, in 2000, 30,084 disabled persons out of 164,614 total population yields 18.3%. The statewide figure in 2000 was 20.2%.

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While these individuals may require a longer boarding time per stop and may require the bus to travel a distance further off the designated route; given the relatively small numbers, it is not expected that the time will have any significant negative impact on the overall ETE.

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-056

NRC RAI:

SITE-3: Requesting, Using and Accommodating Emergency Response Support Resources

Basis: 10 CFR 50.47(b)(3); Planning Standard C; NUREG-0654/FEMA-REP-1; Evaluation Criterion C.1.a; Evaluation Criterion C.1.b; Evaluation Criterion C.3, Evaluation Criterion C.4

SRP ACCEPTANCE CRITERIA: Requirement A; Acceptance Criteria 1 and 18

A. Section II.C, "Emergency Response Support and Resources" (pages II-21/22), of the Lee Emergency Plan, describes arrangements for Federal emergency response support and resources. Discuss when the Federal Assets [Federal Coordination Agency, DOE Radiological Assistance Program, and Radiation Emergency Assistance Center/Training Site (REAC/TS)] will be requested.

B. Section II.A.1.b., "Concept of Operations" (page II-8), of the Lee Emergency Plan references the National Response Plan, rather than the National Response Framework (NRF) which has now been implemented. Reference the NRF in the Lee Nuclear Station Emergency Plan.

C. Section II.C.3, "Radiological Laboratories" (pages II-21/22), of the Lee Emergency Plan identifies mobile monitoring and assessment capabilities in addition to fixed facilities for gross counting and spectral analysis. There is no additional detail on the location and abilities of the fixed facilities. The Lee Emergency Plan also states that other Duke Energy facilities at McGuire, Oconee, and Catawba could provide additional support within 1-4 hours, but the criteria for when the support would be requested or how it would be requested is not included. Discuss the location and capabilities for the fixed radiological facilities located at the Lee Nuclear Station site; and how the request will be initiated.

D. Section II.C.4, "Other Supporting Organizations" (page II-22), of the Lee Emergency Plan identifies additional emergency response support from: Institute on Nuclear Power Operations (INPO) Fixed Nuclear Facility Voluntary Assistance Agreement signatories, and REAC/TS. No letters of agreement were found for INPO or REAC/TS. (Note: Section II.A.1.b (page II-8) states that "....responsibilities of many Federal agencies is established in the National Response Plan and therefore no certification letters are required..."). Provide letters of agreement or other appropriate supporting documentation related to the emergency assistance provided by INPO and REAC/TS.

E. Subsection 1.a, "Federal Response Capability," of Section II.C "Emergency Response Support and Resources" states: "The EOF Director or Radiological Assessment Manager may request FRMAC assistance directly or through the NRC (Federal Coordinating Agency)." However, requesting federal assets such as the FRMAC should be coordinated through the state based on the situation, and other factors such as a state and federal disaster declaration or similar action. If there is no disaster declaration the NRC, as the Coordinating

Agency under the Nuclear /Radiological Incident Annex of the National Response Framework, would contact DOE. The decision to deploy the FRMAC is coordinated between DOE and FEMA. Discuss whether paragraph subsection C.1.a should be revised, and if not, why.

Duke Energy Response:

A. Consistent with the National Response Framework, the processes for requesting federal assistance may vary depending on whether or not a disaster declaration has been issued. As indicated in Table 3 of the Nuclear/Radiological Incident Annex of the NRF, the request for FRMAC assistance could originate with the coordinating agency (NRC) or with State, tribal, or local governments. Details regarding the request for federal assets are contained in the State and local emergency plans. Duke will continually evaluate response capabilities against current needs to determine the necessity for federal assistance. Any Duke request for Federal assistance would be directed to the NRC from the EOF Director or Radiological Assessment Manager and would be dependent on specific conditions that may arise during an emergency.

   Duke currently maintains an agreement with REAC/TS for supporting services for dose assessment of whole-body exposures to ionizing radiation at its other operating nuclear power plants. The agreement is with Duke Energy rather than individual agreements with each operating facility. It is expected that the agreement will be revised to incorporate the Lee Nuclear Station prior to fuel load.

B. The National Response Plan was replaced by the National Response Framework (NRF) effective March 22, 2008, following submittal of the William States Lee III Nuclear Station Combined License Application in December 2007. Implementation of the NRF will be addressed in Section II.A.1.b and the NRF will be provided as a reference in Section III, "References and Appendices," in a future revision of the Emergency Plan. Drafts of these revisions are provided as Attachments 1 and 2 to this response.

C. Section 12.5 of the AP1000 Design Control Document describes the health physics facilities. Whole body counting equipment is located in a low background radiation area in the Annex Building. Analytical equipment is provided that is capable of determining beta-gamma and alpha contamination levels for both airborne radioactivity and surface contamination samples to support the monitoring criteria of the occupational radiation protection program and the environmental monitoring program as outlined in FSAR Chapter 12 and the chemistry program discussed in FSAR subsection 13.1.1.2.4. Gamma spectroscopy analytical capabilities provide for identification of individual radionuclide contributions to sample total activity. The capability also exists to analyze post-accident activity levels. Should the activity levels of post-accident samples exceed the analytical capabilities of the provided instrumentation, the samples may be analyzed by volume reduction, dilution, inference of activity from other measured parameters, such as exposure rates, or the samples may be transported to an offsite laboratory having suitable capabilities.

   Facilities within Duke Energy that may be utilized during an emergency at the Lee Nuclear Station consist of fixed radiological facilities at the Catawba, McGuire, and Oconee Nuclear Station. In the event of an Alert or higher emergency classification, the Radiological

Assessment Manager reviews the emergency condition with the EOF Director and makes a determination as to the proper staffing of the Radiological Assessment staff, taking into consideration the potential or actual need for offsite dose or environmental assessment and the potential or actual need for in-plant Radiation Protection support. The Radiological Assessment Manager is responsible for committing the support efforts of the Duke Energy Nuclear organization to the affected plant to deal with radiological aspects of an emergency. If the Duke Energy Nuclear organization cannot fulfill the needs of the affected plant, the Radiological Assessment Manager has the authority to seek help from other organizations within Duke Energy. The Radiological Assessment Manager has the authority to commit the radiological assessment and radiation protection resources required to support emergency response activities as provided by appropriate site management. The Radiological Assessment Manager provides the EOF Director with periodic summaries of information needed for overall radiological accident assessment.

D. Agreement letters between Duke Energy and INPO and REAC/TS will be incorporated into Appendix 7 of the Lee Emergency Plan, prior to receipt of fuel on site, in a future revision to the plan after the agreements have been reached.

E. Evaluation Criterion II.C.1.a of NUREG-0654/FEMA-REP-1 indicates that the licensee Emergency Plan should designate "specific persons by title authorized to request Federal assistance..." The Lee Emergency Plan correctly indicates that the persons responsible for requesting Federal assistance are the EOF Director and Radiological Assessment Manager. However, the Emergency Plan is incorrect in stating that these individuals may request FRMAC assistance directly. Consistent with the National Response Framework, the processes for requesting FRMAC assistance may vary depending on whether or not a disaster declaration has been issued. As indicated in Table 3 of the Nuclear/Radiological Incident Annex of the NRF, the request for FRMAC assistance could originate with the coordinating agency (NRC) or with State, tribal, or local governments. Therefore, any Duke request for Federal assistance would be directed to the NRC from the EOF Director or Radiological Assessment Manager. Part 5 Subsection II.C.1.a will be clarified accordingly in a future revision of the Lee Emergency Plan as shown in Attachment 3.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

1. Revise Section II.A.1.b of the Lee Emergency Plan as shown in Attachment 1.
2. Revise Section III.A.5 of the Lee Emergency Plan as shown in Attachment 2.
3. Revise Section II.C.1.a of the Lee Emergency Plan as shown in Attachment 3.

Attachments:

1. Mark-up of Lee Emergency Plan Subsection II.A.1.b
2. Mark-up of Lee Emergency Plan Section III.A.5
3. Mark-up of Lee Emergency Plan Subsection II.C.1.a

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-056

Mark-up of Lee Emergency Plan Section II.A.1.b

- South Carolina Department of Health and Environmental Control, Division of Waste Assessment and Emergency Response
- North Carolina Department of Environment and Natural Resources, Division of Environmental Health, Radiation Protection Section

Federal Government Emergency Response

The emergency response roles of various Federal agencies are established in the National Response ~~Plan~~ Framework and various agency-specific documents (e.g. NRC's Incident Response Plan) supporting that plan.

Lee Nuclear Station also maintains close contact with the NRC Operations Center and/or the NRC Region II offices in Atlanta, Georgia. This is an important function to provide accurate information and assessment of the emergency to the Federal Government. As a result of these communications, the NRC can best appraise their response to the emergency. In a like manner, the U.S. Department of Energy, Savannah River Site, is available to provide radiological assistance to the station.

Department of Energy

The Federal Radiological Monitoring and Assessment Center (FRMAC) Operations Plan (Reference III.A.3) provides for the coordinated management of Federal technical response activities related to a radiological emergency.

DOE is assigned responsibility to establish and manage the FRMAC. The FRMAC may be activated when a major radiological emergency exists, and the Federal government will respond when a State, other governmental entity with jurisdiction, or a regulated entity requests Federal support.

Further information concerning objectives and organization is provided in the FRMAC Operations Plan.

Nuclear Regulatory Commission

The response provided by the NRC is described in NUREG-0728, "NRC Incident Response Plan" (Reference III.A.4). The representative of the NRC who would provide input to the EOF Director is the Region II Regional Administrator/ designee. A workspace and a telephone have been provided in the EOF for this NRC representative.

Environmental Protection Agency (EPA)

The U.S. EPA may provide assistance in supporting environmental monitoring teams and mobile radioanalytical laboratories.

DHS/FEMA

DHS/FEMA bears responsibility for coordinating Federal agency response for non-technical aspects of the emergency, such as providing support for displaced members of the public. Such support would typically be requested by affected State and local agencies.

Appendix 7 of this Plan provides copies of the certification letters established between Duke Energy and the supporting Federal, State, and local government agencies and private sector organizations supporting this Emergency Plan. The responsibilities of many Federal agencies are established in the National Response ~~Plan~~ Framework (Reference III.A.5) and therefore no certification letters are required for these agencies.

Appendix 8 of this Plan provides a cross-reference to these provisions in State and Local Plans, as applicable.

c. Organizational Interrelationships

Figure II-1 illustrates the interrelationships between the affected organizations.

Appendix 8 of this Plan provides a cross-reference to these provisions in State and Local Plans, as applicable.

d. Individual in Charge of Emergency Response

In the event of an abnormal condition, the Operations Shift Manager determines if an emergency condition exists and, if so, the proper emergency classification. Upon declaration of an emergency, the Operations Shift Manager assumes the role of the Emergency Coordinator and is in charge of the emergency response for the facility.

If required by the emergency classification, or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations[6]. The Operations Shift Manager is relieved as Emergency Coordinator when the Station Manager or his designated alternate reports to the station and is updated as to the status of the unit, the emergency actions taken, and the current status of the emergency.

The EOF is activated upon declaration of an Alert, Site Area Emergency or General Emergency. The EOF is staffed by corporate personnel, including the EOF Director, who directs the activities of this facility. The senior Duke Energy representative is responsible for ensuring the EOF communicates emergency status to the State and local governments, directs the efforts of the off-site monitoring teams, makes radiological assessments, recommends off-site

[6] See Section II.A.1.a of this Plan regarding situations under which staffing of the emergency response facilities may be deferred.

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 2 to RAI 13.03-056

Mark-up of Lee Emergency Plan Section III.A

III. REFERENCES AND APPENDICES

A. CITED REFERENCES

1. U.S. Nuclear Regulatory Commission, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," NUREG-0654/FEMA-REP-1, Rev. 1, October 1980.

2. U.S. Nuclear Regulatory Commission, Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," Revision 3, August 1992.

3. U. S. Department of Energy, "Federal Radiological Monitoring and Assessment Center Operations Plan," DOE/NV 11718-080, December 2005.

4. U.S. Nuclear Regulatory Commission, "NRC Incident Response Plan," NUREG-0728, Rev. 4, April 2005.

5. U.S. Department of Homeland Security, "National Response ~~Plan~~Framework," ~~December~~ January 20048.

6. Nuclear Energy Institute, "Methodology for Development of Emergency Action Levels, Advanced Passive Light Water Reactors," NEI 07-01, Rev. 0, January 2007.

7. U.S. Nuclear Regulatory Commission, "Event Reporting Guidelines: 10 CFR 50.72 and 50.73," NUREG-1022, Rev. 2, October 2000.

8. Westinghouse Electric Company, LLC, "AP1000 Design Control Document," APP-GW-GL-700, Revision 16, May 26, 2007.

9. U.S. Nuclear Regulatory Commission, "Functional Criteria for Emergency Response Facilities," NUREG-0696, February 1981.

10. U.S. Nuclear Regulatory Commission, "Clarification of TMI Action Plan Requirements," NUREG-0737, Supplement 1, January 1983.

11. U.S. Nuclear Regulatory Commission, "Environmental Monitoring for Direct Radiation," Generic Letter 79-65, November 1979.

12. U.S. Environmental Protection Agency, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," EPA-400-R-92-001, October 1991.

13. KLD Associates, Inc., "William States Lee III Nuclear Station Development of Evacuation Time Estimates," September, 2007.

14. U.S. Nuclear Regulatory Commission, "Development of Evacuation Time Estimate Studies for Nuclear Power Plants," NUREG/CR-6863, January 2005.

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 3 to RAI 13.03-056

Mark-up of Lee Emergency Plan Section II.C.1.a

C. EMERGENCY RESPONSE SUPPORT AND RESOURCES

1. Federal Response Capability

a. Under some complex circumstances it may be necessary to obtain off-site radiological monitoring support from Federal government agencies. The EOF Director or Radiological Assessment Manager may request FRMAC assistance ~~directly or~~ through the NRC (Federal Coordinating Agency).

b. Federal radiological monitoring assistance may be provided by DOE-Savannah River under the DOE Radiological Assistance Program. Support available from DOE-Oak Ridge includes medical support from the Radiation Emergency Assistance Center/Training Site (REAC/TS).

c. Duke Energy estimates that a FRMAC Advance Party would arrive at the Lee Nuclear Station within 3 to 4 hours following the order to deploy, based on driving time. This response time may be shortened by use of aircraft.

d. Duke Energy expects that NRC assistance from NRC's offices in Atlanta, GA, will arrive in the Lee Nuclear Station vicinity within 7-8 hours following notification; the team may reduce this time by use of aircraft.

e. Duke Energy will provide facilities and resources needed to support the Federal response through the EOF. Available resources include office space and telephones. Duke Energy will also provide limited office space and telephone communications facilities for NRC personnel in the TSC.

Appendix 8 of this Plan provides a cross-reference to these provisions in State and Local Plans, as applicable.

2. Off-site Organization Representation in the EOF

a. This NUREG-0654 criterion does not apply to the licensee, but to State and local plans. Appendix 8 of this plan provides a cross-reference to these provisions in State and Local Plans, as applicable.

b. Designated work areas have been provided in the EOF for Plume Exposure Pathway EPZ State/county Emergency Management Liaisons and State Radiation Protection Liaisons.

3. Radiological Laboratories

Radiological laboratories available to support emergency response efforts include the SC Department of Health and Environmental Control, Bureau of Radiological Health; NC Department of Environment and Natural Resources, Radiation Protection Section and the DOE Radiological Assistance Team. In addition, the station has vehicles that can be set up for mobile monitoring and assessment purposes. Fixed facilities are available for gross counting and spectral analysis in the station counting laboratory and at the Duke Energy Applied Sciences Center. Other facilities within the Duke System at McGuire, Oconee, and Catawba

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-058

NRC RAI:

SITE-5: Activation and Notification Processes
Basis: 10 CFR 50.47(b)(5); 10 CFR 50, Appendix E.IV.C; 10 CFR 50, Appendix E.IV.D.1; NUREG-0654/FEMA-REP-1; Evaluation Criterion E.2; Evaluation Criterion E.3; Evaluation Criterion E.4; Evaluation Criterion E.7

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1, 2 and 6

A. Section II.E, "Notification Methods and Procedures" (page II-25), of the Lee Emergency Plan is unclear. The first sentence of the second paragraph states that elected local officials are responsible for off-site radiological emergency response. The fourth sentence indicates that the State agency providing direction and control initiates action to.....provide guidance and assistance to local governments. Paragraph three states that the Lee Nuclear Station will communicate with the affected counties who can then activate their EOC's. It is not clear how the counties are being notified. Clarify the notification process(es) to the State and counties detailing how effective and timely implementation of protective actions is achieved if the licensee is not communicating directly with the local governments.

B. Section II.E, "Notification Methods and Procedures" (pages II-25/28), of the Lee Emergency Plan outlines communication procedures, mobilization, message content (see State plans for content), and follow-up messages, however, it does not address the administrative or physical means for notifying local, State and Federal officials and agencies. The Lee Emergency Plan only provides a list of warning points notified that does not include a list of officials by title and agency located in the Emergency Planning Zones (EPZs). Provide the local governments and position titles that will be notified by the Lee Nuclear Station when a radiological emergency occurs at the plant. Describe the procedure for and physical means for making notifications to offsite agencies.

C. The Lee Emergency Plan does not include potentially affected areas and populations as listed in the Guidance in NUREG-0654, FEMA-REP-1, Evaluation Criterion E.3. There is no mention of a notification form. Provide additional description of the notification forms

D. Section II.E.4, "Follow-up Messages to Off-site Authorities" (page II-27), of the Lee Emergency Plan states that there are dedicated communications for continuous communication allowing regular updates. However, the Lee Emergency Plan does not provide any detail on where the communication system is located or who provides the communication. Provide information identifying the communicators and where they will be located during an emergency.

E. Section II.E.7, "Written Messages to the Public" (page II-27), of the Lee Emergency Plan states that Duke Energy will assist with the development of the messages, but does not

identify who will assist and in what EPIP the procedure for providing assistance will be located. Provide details on how the supporting information for written messages to the public will be provided. Discuss what position in the ERO will provide this assistance.

Duke Energy Response:

A. Initial notification of an emergency declaration is made to State and county warning points within 15 minutes of the declaration. The Selective Signaling Telephone System, discussed in Lee Emergency Plan Section II.F.1.b, is a dedicated system that allows the Emergency Coordinator to provide emergency notification directly to the State and county governments. The warning points, staffed 24 hours a day, are established in NC, SC, and each at-risk county.

After verification that State and county warning points are on-line, an emergency notification form is transmitted to each of them. The notification form provides information that includes emergency classification and description, protective action recommendations, radiological release information, meteorological data and plant status. Hourly follow-up notifications are then provided, in accordance with existing Duke Energy procedures, for as long as the emergency exists.

Upon notification, State and county warning points implement their respective emergency plans and notify the appropriate State or local officials specified in their plans.

Backup communication capability is provided that includes commercial telephone and EOF satellite phone.

B. The Lee Emergency Plan is designed to function effectively with existing State and local government emergency plans while satisfying the guidance provided in NUREG-0654/FEMA-REP-1. Section II.E of NUREG-0654/FEMA-REP-1 provides that "Each organization shall establish procedures which describe mutually agreeable bases for notification of response organizations consistent with the emergency classification and action level scheme..." The NUREG guidance does not suggest that the licensee specify the "officials" to be notified, but indicates that the licensee should specify "response organizations."

Federal agencies are notified via notification of the NRC, which is the coordinating agency for licensed facility radiological events. The NRC is notified of the emergency declaration immediately following notification of State and local governments and not later than one hour following the emergency declaration. Response to Item A of this response describes the process and physical means of notifying State and local governments.

C. Lee Emergency Plan Sections II.E.3 and II.E.4 discuss the content of initial and follow-up messages to State and local authorities consistent with the guidance provided in the corresponding NUREG-0654/FEMA-REP-1 evaluation criteria. Information regarding affected populations is addressed by providing information on meteorological conditions, projected doses, and protective action recommendations as described in response to Item A of this response and discussed in Lee Emergency Plan Section II.E.4.

As discussed in Lee Emergency Plan Section II.E.3, the content of emergency notification messages has been established in conjunction with State and local governments. The

notification forms are included in the State emergency plans, which have been included in Part 5 of the COL application.

D. Follow-up communications with State and local authorities are provided via the Selective Signaling Telephone System as discussed in Lee Emergency Plan Section II.F.1.b and described in response to Item A of this response. The communications are provided by the TSC or EOF Off-Site Agency Communicators, located in the TSC and EOF, respectively, when staffed. Follow-up communications during a Notification of Unusual Event are provided by the Control Room.

E. The Lee emergency response organization coordinates with State and local authorities in preparing emergency messages to the public by providing detailed information regarding Protective Action Recommendations (PARs) during initial and follow-up emergency notifications. In addition, the Lee emergency response organization includes a dedicated communications organization to provide plant status updates to State and local officials and to the media. This group, activated as part of the EOF emergency response organization, is managed by the EOF News Manager. Duke Energy maintains corporate procedure, SR/0/B/2000/001, "Standard Procedure for Corporate Communications Response to the Emergency Operations Facility (Applies to Catawba/McGuire/Oconee)," for its other operating nuclear stations, included as Attachment 1. This procedure will be modified to include the Lee Nuclear Station on a schedule that supports NRC inspection activities and execution of the emergency exercise required by Section IV.F.2 of 10 CFR 50, Appendix E.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

None

Attachments:

1. SR/0/B/2000/001, "Standard Procedure for Corporate Communications Response to the Emergency Operations Facility (Applies to Catawba/McGuire/Oconee)"

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-058

Duke Corporate Procedure SR/0/B/2000/001, "Standard Procedure for Corporate Communications Response to the Emergency Operations Facility (Applies to Catawba/McGuire/Oconee)"

Duke Energy Standard Procedure for CNS, MNS & ONS **Standard Procedure for Corporate Communications Response To The Emergency Operations Facility (Applies to Catawba/McGuire/Oconee)** **Reference Use**	Procedure No. **SR/0/B/2000/001** Revision No. **009** Electronic Reference No. **OP00945E**
PERFORMANCE * * * * * * * * * * UNCONTROLLED FOR PRINT * * * * * * * * * * **(ISSUED) - PDF Format**	

1. Symptoms

1.1 Conditions exist such that the corporate communications emergency response organization has been activated.

2. Immediate Actions

2.1 News manager position will be staffed when the on-site media center has been relocated to the Charlotte/Isaqueena Trail media center or as needed to support news conferences in the Charlotte/Isaqueena Trail media center.

2.2 Public spokesperson position will be staffed when the on-site media center has been relocated to the Charlotte/Isaqueena Trail media center or as needed to support news conferences in the Charlotte/Isaqueena Trail media center.

2.3 EOF/EOC technical liaison position will be staffed as quickly as possible after the activation of the EOF/EOC.

2.4 Public information coordinator position will be staffed as quickly as possible after the activation of the EOF/EOC.

3. Subsequent Actions

3.1 Respond as required by enclosures designated for the individual position.

NOTE:
- Actions are **NOT** required to be followed in any particular sequence.
- Place Keeping Aids: ☐ at left of steps may be used for procedure place keeping (☑).

4. Enclosures

4.1 News Manager Activation Checklist (Nuclear Only)

4.2 Public Spokesperson Activation Checklist (Nuclear Only)

4.3 Public Information Coordinator Activation Checklist

4.4 EOF/EOC Technical Liaison Activation Checklist

Enclosure 4.1
News Manager Activation Checklist
(Nuclear Only)

SR/0/B/2000/001
Page 1 of 3

1. News Manager Activation Checklist

☐ 1.1 Sign in on the corporate communications EOF staffing board.

☐ 1.2 Put on position badge (located in top drawer of corporate communications' file cabinet).

☐ 1.3 Discuss the collection of data information with the EOF technical liaison.

☐ 1.4 Prepare the public spokesperson for news conferences by:

- Reviewing the news conference form (located in corporate communications' file cabinet).
- Verifying data sheets have been provided by EOF technical liaison.
- Providing copies of all news releases/bulleted updates.
- Developing messages and talking points based on current conditions and issues/rumors which need to be addressed.
- If injuries/fatalities are involved, review the corporate guideline "Responding to Serious Injuries or Fatalities" (located on the JIC drive, \\charf01\ccr_ jic\ procedures-guidelines folder) with the public spokesperson PRIOR to news conferences/briefings.
- To quickly address the media after event classification/upgrade, refer to the prepared initial event messages located in the "Nuclear Messages" folder in the Nuclear folder on the JIC drive.

☐ 1.5 Share the spokesperson's talking points/message block with the public information coordinator PRIOR to news conferences/briefings to allow this information to be incorporated into news releases/updates.

☐ 1.6 (McGuire & Catawba only) Contact the public information manager to:

- Determine time for pre-news conference briefing with state/county/federal PIOs.
- Set a time for news conference.
- Determine visual aids needed for news conference.

Enclosure 4.1
News Manager Activation Checklist
(Nuclear Only)

NOTE: (Oconee only) The News Manager in the Oconee Joint Information Center must coordinate with the Public Information Manager in the Charlotte Joint Information Center to plan for news conferences at the Issaqueena Trail media center. If the Charlotte media center will be opened, the Charlotte News Manager should also be involved in these discussions.

NOTE:
- During smaller or informal news briefings, encourage the public spokesperson to speak from the podium in the media center to allow videotaping and recording.
- If conducting a phone interview, use a conference phone or phone with a second line to allow the news manager to listen in with minimal interference.

☐ 1.7 Accompany and assist the public spokesperson during all news briefings, news conferences and interviews.

☐ 1.8 When preparing for news conferences with state and county public information officers, complete the news conference agenda form (located in corporate communications' file cabinet) during the pre-news conference briefing.

☐ 1.9 Serve as the news conference moderator/facilitator by using information gathered on the news conference agenda form during the pre-news conference briefing. Always use the suggested guidelines on the news conference agenda form for opening and closing each session.

Prior to beginning news conference:

- Ensure all people at the speakers table have a name card or a title card.
- Ensure all people at the speakers table have a place to sit - obtain additional seats if needed.
- Ensure participants' cell phones/pagers are turned off or placed on vibrate during news conferences.
- Ensure a media liaison in the media center is on the JIC/EOF conference bridge (704-382-8080/866-385-2663, conferee code 276087) to keep you informed of major changes in plant status or classification level.

CAUTION:
- Stop the news conference if a change in emergency classification occurs while the conference is being held. Words to use are shown on the agenda form.
- **DO NOT** share specific upgrade information unless you are certain state and county agencies have been notified.

☐ 1.10 Contact the NRC representatives in the EOF to keep them up to date on communication activities.

☐ 1.11 Document key decisions, calls, and contacts using EOF Position Log sheets or a notepad (located in corporate communications' file cabinet).

☐ 1.12 Complete turnover sheet for next shift and conduct turnover by reviewing current status, outstanding issues, items for follow up, etc.

☐ 1.13 Verify all checklists and information sheets have been properly completed/signed and leave paperwork for the corporate communications emergency communications planner.

2. Sign Off

Completed By: _____ Date: _____

Enclosure 4.2
Public Spokesperson Activation Checklist
(Nuclear Only)

SR/0/B/2000/001
Page 1 of 2

1. Public Spokesperson Activation Checklist

☐ 1.1 Sign in on corporate communications EOF staffing board.

☐ 1.2 Put on position badge (located in top drawer of corporate communications' file cabinet).

☐ 1.3 Make contact with your key support personnel:

1.3.1 News Manager

1.3.2 EOF Technical Liaison

1.3.3 Public Information Coordinator

☐ 1.4 Review data sheets, new releases and information appropriate to the event.

NOTE: The EOF technical liaison maintains data sheets and a chronological list of events.

☐ 1.5 Obtain a chronology of events in preparation for the news conference.

☐ 1.6 Request the EOF technical liaison make you aware of any significant change in plant status - whether you are in the EOF, JIC or a news conference.

NOTE: The EOF Public Spokesperson is responsible for approving news releases/updates/messages for all locations/events. If the Spokesperson is not available, the EOF Director/Assistant EOF Director will approve them. These roles are responsible for verifying accurate information is released whether their facility is operational or activated.

☐ 1.7 Review and approve news releases/bulleted updates when they are ready for release.

☐ 1.8 Review all news releases/bulleted updates prior to news conference.

☐ 1.9 Review current copies of data sheets prior to news conference.

☐ 1.10 Keep in contact with the public spokesperson located at the visitor's center or ONS JIC (if applicable) to keep abreast of information being provided to the media from the plant site.

☐ 1.11 If other Duke Energy nuclear units are affected, ensure appropriate information has been coordinated and incorporated into your information and that similar messages are being shared by spokespersons staffing the other affected locations.

☐ 1.12 Review all documented escalated rumor information about plant status and/or misinformation revealed by media queries.

☐ 1.13 Request news manager arrange for visual aids that will be needed (if appropriate) for press conference.

NOTE: Do not speculate during the news conference. Information should relate to plant status and plant recovery. Do not discuss public protective actions and state/county response. Do not provide information related to the location of off-site assembly points.

CAUTION: **DO NOT** make reference to projected dose or rad data from the ENF during a news conference. Any reference to dose should be based on actual dose at the site boundary.

☐ 1.14 Provide brief update to state/county PIO representatives prior to each news conference at the pre-news conference briefing.

☐ 1.15 As requested, provide updates and address issues or concerns of key internal and external stakeholders such as:

- Duke Energy Board of Directors
- Governors of North Carolina and/or South Carolina
- ECOC

☐ 1.16 Document key decisions, calls, and contacts using EOF Position Log Sheets or a notepad (located in corporate communications' file cabinet).

☐ 1.17 Complete turnover sheet for next shift and conduct turnover by reviewing current status, outstanding issues, items for follow up, etc.

☐ 1.18 Verify all checklists and information sheets have been properly completed/signed and leave paperwork for the corporate communications emergency communications planner.

2. Sign Off

Completed By: _____ Date: _____

Enclosure 4.3
Public Information Coordinator Activation Checklist
SR/0/B/2000/001
Page 1 of 4

1. Public Information Coordinator Activation Checklist

☐ 1.1 Sign in on corporate communications EOF/EOC staffing board.

☐ 1.2 Put on position badge (located in top drawer of corporate communications' file cabinet).

NOTE: EP FAM Section 3.15 provides details for logging on to WEBEOC. Logon information may also be found in the Public Information Coordinator notebook.

☐ 1.3 (Nuclear only) Secure copies of the emergency notification form (ENF) that have been sent to the state/county agencies from the offsite agency communicator in the EOF.

☐ 1.4 Access the JIC media bridge line (704-382-8080/866-385-2663, conferee code 273855) for a communication path to the JIC, and the site visitor center if appropriate. It is imperative that the bridge line be accessed quickly. If the "normal" headset is not working, quickly search for an alternative: another cellular phone with a headset, a mobile belt pack unit which uses batteries, or a stationary headset. If all else fails, use a standard desk phone.

☐ 1.5 When additional computers are needed to support public affairs EOF/EOC response, contact the Admin & Logistics Manager (704-382-0548) in the JIC to request additional computers in the EOF/EOC.

NOTE: The public information coordinator and one EOF technical liaison should be located in the data coordinator room. If a laptop computer is not available or the printer in the data coordinator room is not working properly, the public information coordinator and EOF technical liaison should relocate to the news group desk in the director's area until the equipment issue can be resolved.

☐ 1.6 Using a laptop/portable computer, log onto the workstation using your LAN id and password. Using directions next to printer, align computer to the desktop printer located in the data coordinator's room. Contact data coordinator if any problems are encountered. Once computer and printer are operational, access the JIC drive.

☐ 1.7 (Nuclear only) Log on to e-mail and maintain this as an open path for emails to the NRC and Charlotte JIC.

NOTE: Directions for accessing JIC drive (charf01/ccr_jic) are in the Joint Information Center (JIC) Reference Manual, located in corporate communications' file cabinet.

☐ 1.8 Access the JIC drive and print the initial news release that was prepared by the site community relations/media relations duty person for this event.

☐ 1.9 Ensure all news releases and bulleted updates are copied and distributed within the EOF/EOC. Ensure a copy is put in the Master EOF/EOC News Release folder.

- (Oconee only) Ensure releases/updates are also distributed to the ONS JIC by contacting the Distribution Coordinator (864-624-4954) or the ONS News Manager (864-624-4362) when news releases are approved.

NOTE: When developing news releases/updates provide as much information and clarity as possible. Try to anticipate questions and related issues and find answers.

☐ 1.10 (Nuclear only) Develop news releases and bulleted updates appropriate to the event by working with the news manager, the EOF technical liaison, and the public spokesperson. News releases/updates should address, as appropriate:

- Changes in event classification
- Current plant conditions
- Visible or audible events such as fires and noises
- Nuclear insurance (if the public has been evacuated)
- Employee information such as injuries, personnel accountability, and site evacuation
- Radiological releases
- Dispatch of field monitoring teams
- Hazardous substance release
- Any offsite response such as fire truck or ambulance
- Rumors (dispel)

☐ 1.11 (Storms only) Develop news releases and messages appropriate to the event by working with the EOC technical liaison, the media coordinator, and the customer service center (CSC) liaison. News releases should address, as appropriate:

- Current system conditions
- Outage updates
- Schedule of planned restoration
- Employee information (e.g. injuries)
- Use of outside utilities
- State/county resources being utilized
- Rumors (dispel)
- Localized information

☐ 1.12 Have the EOF/EOC technical liaison verify the technical information provided in news releases.

☐ 1.13 Provide copy of news release/bulleted update to the public spokesperson (or EOF/EOC Director, if spokesperson not available) for review and approval prior to releasing to JIC for distribution or posting to the web.

☐ 1.14 After spokesperson or EOF/EOC Director reviews the news release/bulleted update:

- Notify JIC that news release/bulleted update is ready for review - and subsequent distribution if no changes are noted.
- (Nuclear only) E-mail a "courtesy review" copy of the news release/bulleted update (marked as Draft for Review) to the NRC (use one of the following email addresses: kmc@nrc.gov or rdh1@nrc.gov).

☐ 1.15 After JIC review, enter the time on the news release and save the final approved version of the news release in a file named "Final" plus the name of the release (e.g., Final CNS Alert, Final 02-04-04 9am Ice Storm) to eliminate confusion with previous draft versions. Ensure media coordinator knows name and location of the file.

☐ 1.16 Document key decisions, calls, and contacts not included in news releases and updates using ERO Facility Log sheets, or a note pad.

CAUTION: If requests for estimates of materials occur EARLY in an event, verify that those asking for this information understand they are receiving ESTIMATES - which usually err on the "high" side. Use of these early estimates should be discouraged. (Storms only)

☐ 1.17 (Storms only) Obtain storm data information from the EOC technical liaison and send this information to the CSC and JIC every three hours (coincide with news release schedule).

☐ 1.18 (Storms only) Assist the EOC technical liaison, as needed, in coordinating and disseminating information.

☐ 1.19 (Nuclear only) If a public spokesperson is needed for the Charlotte/Isaqueena Trail media center prior to visitor center evacuation, utilize the appropriate steps in the news manager checklist to prepare the public spokesperson for news conference.

☐ 1.20 Keep a copy of all news releases/bulleted updates prepared in the EOF/EOC for the corporate communications emergency communications planner.

CAUTION:	Assure that a copy of each news release/bulleted update is available prior to deleting files.

☐ 1.21 Complete turnover sheet for next shift and conduct turnover by reviewing current status, outstanding issues, items for follow up, etc.

☐ 1.22 (Nuclear only) Delete all news releases/bulleted updates developed as a result of the EOF activation from the JIC drive after the event is terminated.

☐ 1.23 Verify all checklists and information sheets have been properly completed/signed and leave paperwork for the corporate communications emergency communications planner.

2. Sign Off

Completed By: _____ Date: _____

Enclosure 4.4
EOF/EOC Technical Liaison Activation Checklist
SR/0/B/2000/001
Page 1 of 3

1. EOF/EOC Technical Liaison Activation Checklist

☐ 1.1 Sign in on corporate communications EOF/EOC staffing board.

☐ 1.2 Put on position badge (located in top drawer of corporate communications' file cabinet).

☐ 1.3 Instructions for using the wireless phone/headsets are located on top of corporate communications' file cabinet or near the headsets.

1.3.1 When using the JIC bridge line, observe the following protocol:

- Identify yourself and your location.
- Take turns speaking - do not interrupt.
- Acknowledge receipt of information.
- Repeat back to ensure important/sensitive information is received/understood.
- Re-direct long discussions to a phone line - this is very important to ensure that all parties who need access to the bridge have it and that bridge integrity is maintained.
- Do not push the "Hold" button on your phone, this will lock the system to those currently on line.

CAUTION:
- It is imperative that the bridge line be accessed quickly. If the "normal" headset is not working, quickly search for an alternative: another cellular phone with a headset, a mobile belt pack unit which uses batteries, or a stationary headset.
- If all else fails, use a standard desk phone and then ask IM/IT for assistance in getting a mobile headset to work.
- When searching for batteries, look through the entire storage cabinet - moving other materials as you search.

☐ 1.4 Using the wireless headset/mobile phone, access the JIC/EOF conference bridge:

- Dial Duke Conference System at 704-382-8080 (toll free 866-385-2663)
- Enter conferee code 276087

NOTE: EP FAM Section 3.15 provides details for logging on to WEBEOC. Directions may also be found in the EOF/EOC Technical Liaison notebook.

☐ 1.5 Access WEBEOC as needed for additional plant information/clarification.

☐ 1.6 Gather technical information on the event and document this information on the appropriate blank data sheets (nuclear) or on a log sheet/notepad (storms).

☐ 1.7 (Storms only) Prepare talking points, presentations and summaries as requested and obtain approval by EOC and JIC.

☐ 1.8 (Storms only) Notify the System Operating Center (SOC) at 704-382-1103 for every incremental increase/decrease of 50,000 customers affected during an event.

☐ 1.9 (Nuclear only) Help the public information coordinator understand the information on the data sheets.

☐ 1.10 (Nuclear only) If requested, fax completed data sheets to the Charlotte JIC.

☐ 1.11 (Nuclear only) Provide completed data sheets/information to public spokesperson, and the ONS JIC if this is an ONS event.

☐ 1.12 Maintain a chronological listing of significant events using EOF Position Log sheets or a notepad. Obtain copies of the EOF status board information from the EOF log keeper. Share this information with the ONS JIC if this is an ONS event.

CAUTION: (Nuclear only) BEFORE sharing information about classification changes with the JIC or any entity outside the EOF, ALWAYS verify with Off-Site Communicator that the information has been shared with the states and counties. THIS IS MANDATORY.

☐ 1.13 Update regional communications coordinator on the JIC bridge as conditions change, particularly concerning emergency classifications or outage/ETOR status.

☐ 1.14 (Storms only) Attend EOC and Event Communications conference calls and meetings to gather additional information.

☐ 1.15 (Nuclear only) Request assistance from EOF rad assessment manager or their designee in obtaining Raddose V page 3 information. Remember to share this information with the ONS technical liaisons if this is an ONS event. The EOF is their only source for this information.

☐ 1.16 (Nuclear only) Utilize dose comparison tip sheet and information from Raddose V to develop dose comparisons for news releases/bulleted updates.

CAUTION: (Nuclear only) Discussions relating to dose are always based on actual dose at the site boundary only. Do NOT use projected dose information or rad data from the ENF at any time. Raddose V page 3 meets this criteria.

☐ 1.17 (Nuclear only) Provide dose comparison information to public information coordinator for use in news releases/bulleted updates.

☐ 1.18 (Nuclear only) Continue to monitor and update information relative to radiological releases.

☐ 1.19 (Storms only) Assist in the coordination of crews and locations for news conferences, and media briefings, in conjunction with the media coordinator and region communicators.

☐ 1.20 Assist regional communications coordinator and state/county EOC liaisons by tracking down information to dispel rumors. Seek answers to all requests without prioritizing or judging the merit of the question.

☐ 1.21 Immediately notify the public spokesperson of any significant changes, such as changes in emergency classifications (nuclear) or changes in outage/ETORs (storms).

☐ 1.22 Provide feedback/information to the JIC concerning community issues /concerns and situational updates.

☐ 1.23 Complete turnover sheet for next shift and conduct turnover by reviewing current status, outstanding issues, items for follow up, etc.

☐ 1.24 Verify all checklists and information sheets have been properly completed/signed and leave paperwork for the corporate communications emergency communications planner.

2. Sign Off

Completed By: _____ Date: _____

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-059

NRC RAI:

SITE-6: Communication Processes

Basis: 10 CFR 50, Appendix E.IV.E.9; 10 CFR 50, Appendix E.IV.E.9.b;10 CFR 50, Appendix E.IV.E.9.c; 10 CFR 50, Appendix E.IV.E.9.d; NUREG-0654/FEMA-REP-1; Evaluation Criterion F.1.a; Evaluation Criterion F.1.c; Evaluation Criterion F.1.d; Evaluation Criterion F.3.

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

A. Section II.F.3, "Communication System Reliability" (page II-31), of the Lee Emergency Plan states that failure of normal power supplies does not impact offsite communications because, in most cases, backup power is provided. Discuss how the communications will be maintained and what instances that the communications will be lost and what compensatory measures will be in place.

B. Section II.F, "Emergency Communications" (pages II-29/31), of the Lee Emergency Plan provides communication system descriptions but does not identify communication between the licensee and Federal emergency response organizations other than Nuclear Regulatory Commission (NRC). Provide information regarding communications between the licensee and Federal emergency response organizations other than NRC.

C. Section II.N.2.a, "Communications Drills" (page II-61), of the Lee Emergency Plan states, "Duke Energy tests communications with Federal emergency response organizations and States within the EPZ (Emergency Planning Zone)... quarterly." This does not meet the monthly requirement. Clarify the testing frequency from the licensee to the NRC Headquarters and the appropriate NRC Regional Office Operations Center.

D. Section II. F, "Emergency Communications" (page II-29), of the Lee Emergency Plan states that responsibilities of designated personnel for the communication systems can be found in State and local plans and in the Emergency Plan Implementing Procedures (EPIPS). Provide information on who is designated to use communication systems and what responsibilities they have for using those communication systems.

Duke Energy Response:

A. Duke Energy maintains systems to facilitate communications both within the station and offsite. As discussed in subsection 9.5.2.2.3.2.2 of the FSAR regarding emergency off-site communications:

> The primary means of communication between the station and these offsite agencies is the selective signaling system. The selective signaling system uses Duke telecommunication interfaces to dedicated private lines leased from the

local telephone companies to provide reliable communication links with these offsite organizations. The design utilizes existing corporate telecommunications equipment to complete calls without having to go through a local telephone company switch.

Onsite systems supporting the selective signaling system are provided with sufficient alternate or backup power sources having automatic transfer capability to maintain continuity of communication in the event the normal power source is lost. The design addresses the recommendations of IE Bulletin BL-80-15, "Possible Loss of Emergency Notification System (ENS) With Loss of Offsite Power."

The secondary means of communication between the station and offsite state, local and corporate interfaces are commercial telephone company lines.

A radio system provides a backup means of communication between the station and these offsite communication points. Communications by radio with the state and local agencies can be achieved either by using the Duke network or by using the radio network operated by each state agency. Communication between the station, offsite radiological monitoring teams, and the EOF can also be achieved by using the Duke radio network.

The site radio system is powered by a non-essential AC source and has a built-in battery backup.

B. In addition to the communications with Federal agencies discussed in Lee Emergency Plan Section II.F, the Radiological Assessment Manager may contact DOE-Savannah River and/or REAC/TS for radiological monitoring assistance. This support is discussed in Lee Emergency Plan Section II.C.1.b. Communications with other Federal agencies are possible under emergency conditions. As the coordinating agency, the NRC is the primary interface in these communications.

C. The first sentence of Lee Emergency Plan Section II.N.2.a addresses the monthly communication test with State and local governments within the Plume Exposure Pathway EPZ consistent with guidance provided in the corresponding section of NUREG-0654/FEMA-REP-1. The text of the Emergency Plan cited in the RAI is misquoted. This sentence addresses testing of communications with organizations within the Ingestion Exposure Pathway EPZ, including Federal emergency response organizations and States. The quarterly frequency for this activity is consistent with the guidance provided in the corresponding section of NUREG-0654/FEMA-REP-1.

   NUREG-0654/FEMA-REP-1 Evaluation Criterion II.N.2.a does not address periodic testing of communications from the licensee to the NRC Headquarters and the appropriate NRC Regional Office Operations Center. These communications systems are tested monthly in accordance with 10 CFR 50, Appendix E, Section IV.E.9.d. A revision has been developed for input to the Lee Emergency Plan and is included as an attachment with this response.

D. Many members of the Lee Nuclear Plant emergency response organization may be called upon to use one or more communications systems in the course of executing their assigned tasks. Their responsibilities for use of these systems include use of proper communications

protocols and techniques and ensuring clarity and accuracy of transmitted and received communications. A communicator will be assigned by the Operations Shift Manager/Emergency Coordinator from the on shift staff. This would generally be a Control Room Operator or Non-Licensed Operator from the unaffected unit who has been trained to perform this function. Specified individuals in the Duke emergency response organization are dedicated to full-time communications positions. These positions include: the TSC Off-Site Agency Communicator, who is responsible for maintaining communications with off-site agencies prior to activation of the EOF; the EOF Off-Site Agency Communicator, who is responsible for maintaining communications with off-site agencies following activation of the EOF; and the NRC Communicator, who is responsible for maintaining a continuous communications link with the NRC.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

Revise Section II.N.2.a of the Lee Emergency Plan Section to reflect the markup provided as Attachment 1.

Attachments:

1. Mark-up of Lee Emergency Plan Subsection II.N.2.a.

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-059

Mark-up of Lee Emergency Plan Section II.N.2.a

allows affected State and local governments located within the plume exposure pathway EPZ to participate in the drills.

During these drills, activation of all of the ERFs may not be necessary. Duke Energy may use the drills to consider accident management strategies, provide supervised instruction, allow the operating staff to resolve problems and focus on internal training objectives. Duke Energy may include one or more drills as portions of an exercise.

The activities undertaken in the event of an actual declared emergency may be used to satisfy emergency drill requirements, provided that these activities demonstrate adequate execution of the specified activities.

The drill program includes the following:

a. Communications Drills

Duke Energy tests communications between the facility and NRC Headquarters and the NRC Regional Operations Center monthly.

Duke Energy tests communications with State and local governments within the Plume Exposure Pathway EPZ, as identified in Section II.A of this Plan, monthly.

Duke Energy tests communications with Federal emergency response organizations and States within the Ingestion Pathway EPZ, as identified in Section II.A of this Plan, quarterly.

Duke Energy tests communications between the facility, State and local EOCs, and field assessment teams annually.

Communications drills evaluate both the operability of the communications system(s) and the ability to understand message content.

b. Fire Drills

Duke Energy conducts fire drills as discussed in Section 9.5.1 of the FSAR.

c. Medical Emergency Drills

Duke Energy conducts medical emergency drills that include a simulated contaminated injured individual and participation by the local support services agencies (e.g., medical transportation and off-site medical treatment facility) annually.

Medical Emergency drills include:

- A simulated contaminated injured individual
- Transport to an off-site medical facility
- Participation by the off-site medical facility

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-060

NRC RAI:

SITE-7: Distribution of Public Information

Basis: 10 CFR 50.47(b)(7); 10 CFR 50, Appendix E.IV.D.2; NUREG-0654/FEMA-REP-1; Evaluation Criterion G.1; Evaluation Criterion G.2; Evaluation Criterion G.4.b

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

A. Section II.G, "Public Education and Information" (page II-32), of the Lee Emergency Plan states that Duke Energy commits to coordinating with the State and local authorities to disseminate information to the public on responding to a radiological emergency at the Lee Nuclear Station site. The Lee Emergency Plan does not state who is responsible for the actions that Duke Energy will take or what they will actually do to coordinate and assist the State and locals. Section II.G.2, "Distribution and Maintenance of Public Information" (page II-32), gives a list of how written information may be provided to permanent residences and transient populations, but it does not provide sufficient detail to determine if the dissemination of material is sufficient to meet the regulations and guidance. Additionally, the Lee Plan does not address who will be responsible for creating the material and having the material disseminated. Provide information on who at Duke Energy will be responsible for coordinating with the State and local authorities and what responsibilities this individual will have. In addition, provide more specific information on how the public information will be distributed and who is responsible for creating and distributing the material. Describe how the information planned to be distributed to the public addresses how they will be notified in an emergency. In addition to providing information related to special needs of the handicapped, describe how the information planned to be distributed to the public addresses information for individuals whose mobility may be impaired, such as those without transportation, in nursing homes, in day care centers, etc. Discuss the method that will be used to advise parents, relatives, and neighbors not to pick up their children at school prior to arrival of the buses.

B. Section II.G.4.b, "(Information Exchange)" (page II-33), of the Lee Emergency Plan states that liaisons coordinate with licensee and designated members of the State and local emergency response organizations on a periodic basis. Appendix 9, "Justification for Common EOF (Emergency Operations Facility)" (page A9-3) states "State and utility staff at the Joint Information Center (JIC) are responsible for providing timely and accurate information concerning an emergency to the media." However, there is no explanation of how timely and accurate information is provided to the media. Discuss the timely exchanges of information and identification of designated spokespersons and details on how timely and accurate information is provided to the media during an emergency.

Duke Energy Response:

a. NUREG-0654/FEMA-REP-1, Revision 1, Planning Standard II.G establishes guidance for maintaining a coordinated program to educate affected members of the public regarding emergency notification methods and actions. Duke distributes educational material on an annual basis to each commercial and residential address within the Plume Exposure Pathway EPZ. The material distributed for the Lee Nuclear Plant will similar to that used at Duke's current operating plants. As an example, the public information distributed to residents living in the Catawba Nuclear Station Plume Exposure Pathway EPZ is attached to this response (Attachment 1). A similar publication will be developed and distributed to residences and commercial establishments in the Lee plume exposure pathway EPZ. Public education material for Duke's operating nuclear plants is also available on the Internet via the Duke Energy Nuclear Emergency Preparedness Website at http://www.duke-energy.com/safety/nuclear-emergency-preparedness.asp .

The Duke Energy Emergency Communications Manager is responsible for coordinating emergency planning efforts related to public information for the Lee site, including operation and maintenance of the Joint Information Center (JIC), and creation and distribution of public informational materials in cooperation with State and local authorities for the Lee site.

The educational material that will be distributed to the public will contain information on how the public will be notified in an emergency. The information will explain that sirens will sound repeatedly to alert people to turn on their radio or television immediately and tune to a local station that will carry an emergency information message. The educational material will explain that fire, police, and rescue units may also patrol the affected area and sound their sirens, if necessary. The educational material will also provide a list of emergency alert stations to tune to in the event of an emergency.

The educational material will explain that County emergency management offices assist people without transportation or with special needs by notifying them of an emergency and assisting with evacuation, if necessary. The material encourages those who are visually impaired, hearing impaired, physically disabled or have special needs, to contact their county emergency management office upon receipt of the educational material and requests that residents provide information concerning individual special needs that may need to be provided by county emergency management.

Printed material distributed to each commercial and residential address in the Plume Exposure Pathway EPZ and available on the Internet via the Duke Energy Nuclear Emergency Preparedness Website will contain information pertaining to the evacuation of schoolchildren. This information explains that local school systems maintain evacuation plans that will be implemented prior to the evacuation of the general public. These plans detail how the students will be transported to locations outside the EPZ. The printed material explains that parents should not pick up their children at school, but should review their school's plan to get specific details on where the children will be relocated and when they can be picked up.

Details regarding the creation and distribution of emergency preparedness and response informational materials for the public will be developed on a schedule that supports NRC

inspection activities and execution of the emergency exercise required by 10 CFR 50, Appendix E, Section IV.F.2.

b. Section II.G.3 and II.G.4 of the Lee Emergency Plan address arrangements for News Media Coordination and the exchange of information among designated spokespersons. Corporate procedures, applicable to Duke Energy's operating nuclear facilities; which describe the public information responsibilities of emergency response personnel are currently in place. The procedure provides for the activation, staffing, operation and deactivation of the JIC.

   As described in the Lee Emergency Plan, the JIC (Media Center) provides the media with ready access to current information on plant status. An on-site media center is established that provides space for a limited number of media and a larger media center is activated at the Energy Center in Charlotte, NC if needed to support additional media.

   The Chief Nuclear Officer and his direct reports fill the position of public spokesperson to provide plant status and company information during the scheduled news conferences and media briefings. By procedure, the public information/media briefings are conducted on at least an hourly basis and for any significant event.

   Accuracy of the information disseminated is assured by providing senior company officials, who have direct access to the most current event information. In addition, the JIC staff monitors communications to identify any rumors so that accurate information can be obtained and disseminated.

   Duke Energy's JIC Activation Procedure is maintained as a corporate document and will be revised to incorporate the Lee Nuclear Plant on a schedule to support the requirements of 10 CFR 50, Appendix E, for the Lee Nuclear Plant.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

None

Attachment:

1. Catawba Nuclear Station Public Information Calendar

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-60

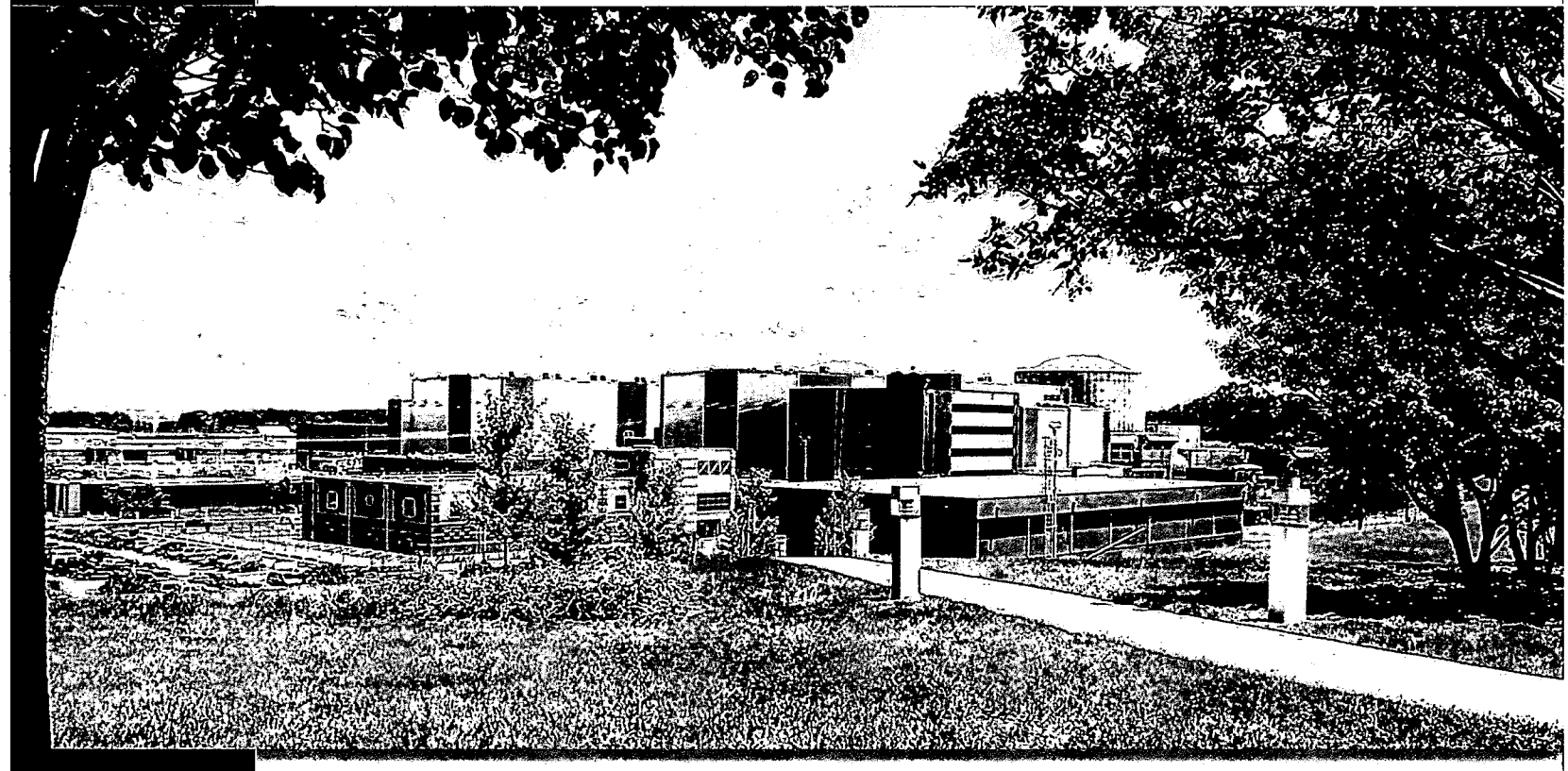
Catawba Nuclear Station Public Information Calendar

IMPORTANT PLANNING INFORMATION

Please read and keep.

Para recibir información en español sobre planes de emergencias llame a la oficina local de Duke Energy y presione el número 2 cuando el sistema telefónico lo indique.

Catawba Nuclear Station is jointly owned by:
North Carolina Municipal Power Agency Number 1,
North Carolina Electric Membership Corporation,
Piedmont Municipal Power Agency, and Duke Energy.



EMERGENCY PLANNING CALENDAR
CATAWBA NUCLEAR STATION

2009

SPECIAL NEEDS CARD

Would you need special help during an emergency evacuation?

If you have a disability that requires special help during an emergency evacuation, please fill out and return this card as soon as possible. **State and local authorities will keep this information confidential.**

Please note - Even if you have sent in a Special Needs Card in the past, a **new card should be sent in each year to keep our records current.**

Please check off each box that applies to you.

- ☐ I do not have transportation available to leave the area during an emergency evacuation.
- ☐ I use a cane or walker, but can ride in a van, bus, or car.
- ☐ I am in a wheelchair and would need a wheelchair van.
- ☐ I would need to ride in an ambulance.
- ☐ I have specialized medical equipment and require special transportation

  because _____
- ☐ I am deaf or hard of hearing.
- ☐ I am visually/sight-impaired and require special help.
- ☐ I require and use a Service Dog.
- ☐ Other (Please explain) _____
- ☐ Please contact during an emergency evacuation (Name) _____

  (Area Code_____) Home _____ Work _____

If you have identified any needs, please complete this form and return.

PLEASE PRINT

Name _____

Street Address _____

City _____

State _____ Zip _____ Telephone _____

County _____

If completing this card for someone else,

Your Name: _____

Telephone _____

For those with Special Needs...

Provisions have been made to provide transportation. It is important that you make any special needs known *beforehand.* For example, special needs could include a walking disability, sight or hearing impairment or need for specialized medical equipment during an emergency evacuation.

(To mail, please fold in half and tape once. DO NOT STAPLE)

JAN.-DEC. 2009

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO 473 CHARLOTTE
POSTAGE WILL BE PAID BY ADDRESSEE

CATAWBA
NUCLEAR EMERGENCY PLANNING
(CN01EP)
DUKE ENERGY
PO BOX 1006
CHARLOTTE NC 28254-3442

JANUARY 2009

December

S	M	T	W	T	F	S
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7	8	9	10	11	12	13
14	15	16	17	18	19	20
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February

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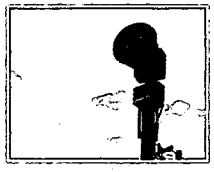
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
 Sirens are used to alert people outdoors of an emergency situation. In an emergency, sirens would sound repeatedly. Hearing a siren does not mean evacuate – **it means you should tune your radio or television to a local station and listen for emergency information messages.**				1 New Years Day	2	3
4	5	6	7	8	9	10
11	12	13	14 **Siren Test at 11:50 a.m.** Catawba, McGuire & Oconee No Public Action Required **Siren Test at 12:00 p.m.** Mountain Island Hydro Station No Public Action Required	15	16	17
18	19 MLK Jr. Birthday (observed)	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY 2009

January

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18	19	20	21	22	23	24
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March

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22	23	24	25	26	27	28
29	30	31				

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 Groundhog Day	3	4	5	6	7
8	9	10	11	12 Lincoln's Birthday	13	14 Valentine's Day
15	16 Presidents' Day	17	18	19	20	21
22 Washington's Birthday	23	24	25	26	27	28
1	2					

At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits.

Here is our sustainability tip for the month: **An average American family acquires 60 plastic bags per week and rarely reuses them. In the U.S., about 12 million barrels of oil and 14 million trees go to producing plastic and paper bags each year. Carry your own reusable bags to minimize your environmental impact.**

MARCH 2009

February

S	M	T	W	T	F	S
1	2	3	4	5	6	7
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April

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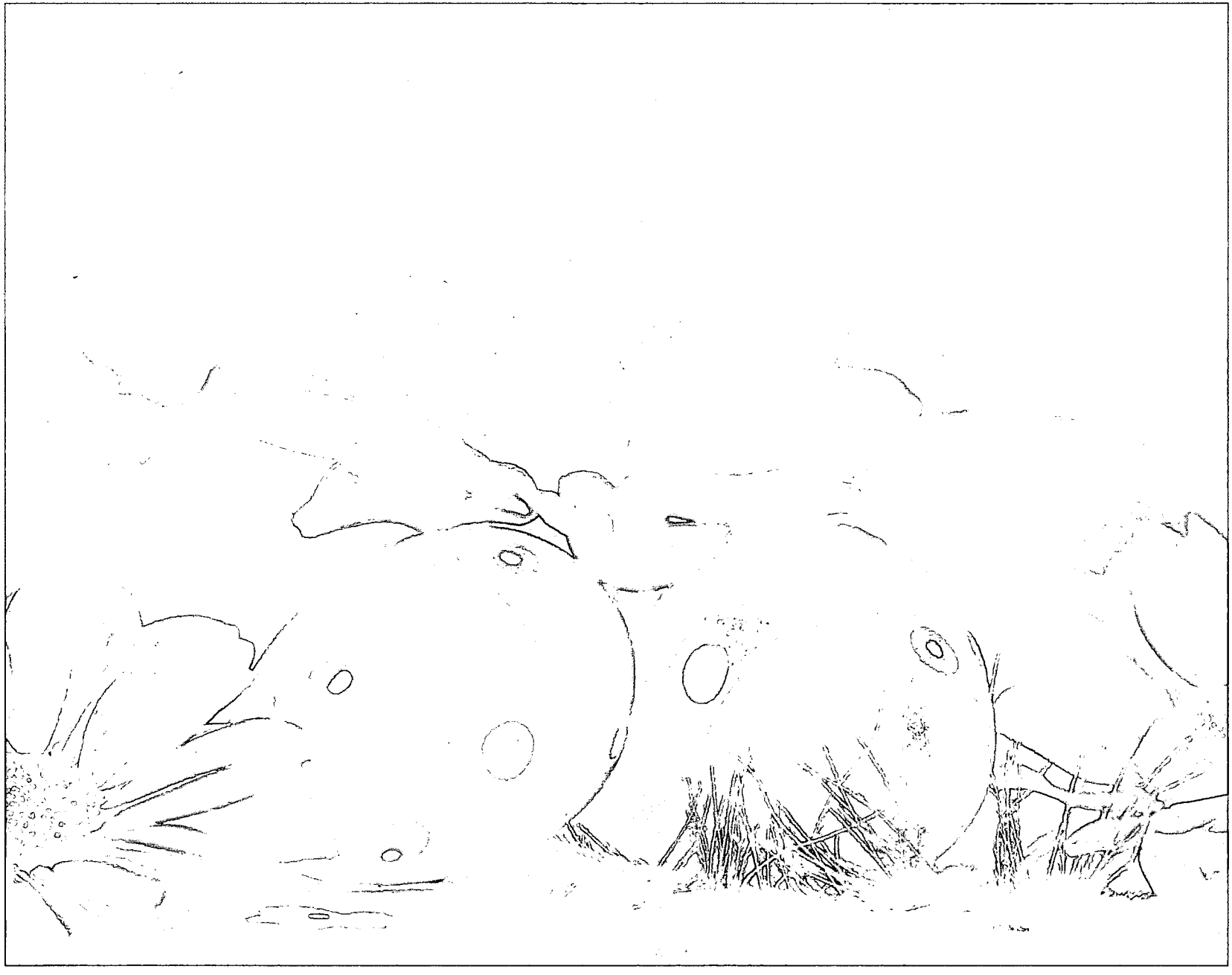
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8 Daylight Saving Time Begins	9	10	11	12	13	14
15	16	17 St. Patrick's Day	18	19	20 First Day of Spring	21
22	23	24	25	26	27	28
29	30	31				

At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits.

Here is our sustainability tip for the month: **Use energy efficient light bulbs. Compact fluorescent light bulbs use at least 2/3 less energy than standard incandescent light bulbs to provide the same amount of light and last up to 10 times longer!**



APRIL 2009

March

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29	30	31				

May

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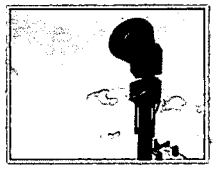
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
 Sirens are used to alert people outdoors of an emergency situation. In an emergency, sirens would sound repeatedly. Hearing a siren does not mean evacuate – **it means you should tune your radio or television to a local station and listen for emergency information messages.**			1 April Fool's Day	2	3	4
5 Palm Sunday	6	7	8 **Siren Test at 11:50 a.m.** Catawba, McGuire & Oconee No Public Action Required **Siren Test at 12:00 p.m.** Mountain Island Hydro Station No Public Action Required Passover	9	10 Good Friday	11
12 Easter	13	14	15 Tax Day	16	17	18
19	20	21	22 Earth Day	23	24	25
26	27	28	29	30	1	2

MAY 2009

April

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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

June

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
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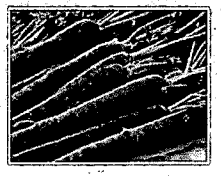
28	29	30				

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
 At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits. Here is our sustainability tip for the month: **A typical carrot has to travel 1,838 miles to reach your dinner table. Buying goods produced locally saves energy by reducing the fossil fuels needed to transport food and other items across the country and around the globe.**				30	1	2
3	4	5 Cinco de Mayo	6	7	8	9
10 Mother's Day	11	12	13	14	15	16 Armed Forces Day
17	18	19	20	21	22	23
24 / 31	25 Memorial Day	26	27	28	29	30

JUNE 2009

May

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31						

July

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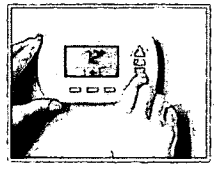
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14 Flag Day	15	16	17	18	19	20
21 Father's Day First Day of Summer	22	23	24	25	26	27
28	29	30				



At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits.

Here is our sustainability tip for the month: **By moving your thermostat down by just 2 degrees in the winter and up 2 degrees in the summer, you will save money and reduce your carbon dioxide emissions.**

JULY 2009

June

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August

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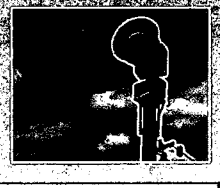
30	31					

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Sirens are used to alert people outdoors of an emergency situation. In an emergency, sirens would sound repeatedly. Hearing a siren does not mean evacuate – **it means you should tune your radio or television to a local station and listen for emergency information messages.**		1	2	3	4  Independence Day
5	6	7	8 **Siren Test at 11:50 a.m.** Catawba, McGuire & Oconee No Public Action Required **Siren Test at 12:00 p.m.** Mountain Island Hydro Station No Public Action Required	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

AUGUST 2009

July

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26	27	28	29	30	31	

September

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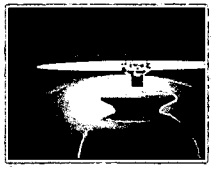
20	21	22	23	24	25	26
27	28	29	30			

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
 At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits. Here is our sustainability tip for the month: **Place heat-producing appliances such as lamps and televisions away from the air conditioning thermostat to prevent inaccurate temperature readings and higher electric bills.**				30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23 / 30	24 / 31	25	26	27	28	29

SEPTEMBER 2009

August

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						1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

October

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				1	2	3
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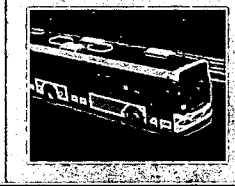
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30	31	1	2	3	4	5
6	7 Labor Day	8	9	10	11	12
13	14	15	16	17	18 Rosh Hashanah	19
20	21	22 First Day of Autumn	23	24	25	26
27 Yom Kippur	28	29	30		At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits. Here is our sustainability tip for the month: **Carpooling and using public transportation reduces greenhouse gas emissions.**	

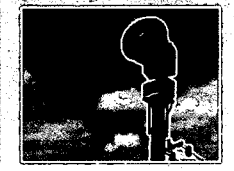
OCTOBER 2009

September

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

November

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Sirens are used to alert people outdoors of an emergency situation. In an emergency, sirens would sound repeatedly. Hearing a siren does not mean evacuate – **it means you should tune your radio or television to a local station and listen for emergency information messages.**			1	2	3
4	5	6	7	8	9	10
11	12 Columbus Day	13	14 **Siren Test at 11:50 a.m.** Catawba, McGuire & Oconee No Public Action Required **Siren Test at 12:00 p.m.** Mountain Island Hydro Station No Public Action Required	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31 Halloween

NOVEMBER 2009

October

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

December

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		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 Daylight Saving Time Ends	2	3 Election Day	4	5	6	7
8	9	10	11 Veterans Day	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26 Thanksgiving	27	28
29	30					

At Duke Energy, sustainability means doing business in a way that is good for people, the planet, and profits.

Here is our sustainability tip for the month: **Bottled water creates a huge amount of container waste. Rather than buying expensive bottled water, buy a filter for your tap at home and carry a reusable water bottle when you travel.**

DECEMBER 2009

November

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

January

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					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	1	2	3	4	5
6	7	8	9	10	11 Hanukkah	12
13	14	15	16	17	18	19
20	21 First Day of Winter	22	23	24	25 Christmas Day	26 Kwanzaa Begins
27	28	29	30	31 New Year's Eve	1	2

Emergency Classifications

There are four classifications used to describe a nuclear station emergency. Duke Energy would contact federal, state and local authorities in each of the following situations:

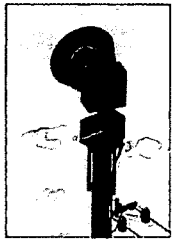
1 An **Unusual Event** is the least serious of the four classifications. It means there is a minor problem at the station. Because of strict federal regulations, a number of problems are reported as Unusual Events. Unusual Events pose no danger to the public.

2 An **Alert** is an event that could reduce the station's level of safety. There would still be no danger to the public. County and state officials and Duke Energy would get emergency operations centers ready for use, if needed.

3 A **Site Area Emergency** is an event that could involve major problems with station systems. County officials would sound the sirens and, along with state officials, prepare other means of notification. The public should listen to local radio or television stations in their area for information and instructions.

4 A **General Emergency** is the most serious of the four classifications. State and local authorities would take action to protect the public. Sirens would be sounded and the emergency alert stations, identified below, would give information and instructions. People in affected areas would be advised to stay indoors or to evacuate.

Siren Tests



To ensure sirens are working correctly, they are tested regularly. The testing is part of normal maintenance and no public action is necessary. Siren test dates are noted in this calendar. Siren tests last approximately three minutes. Remember, in an emergency, the sirens would sound repeatedly.

2009 Siren Test dates: January 14, April 8, July 8 and October 14. All nuclear siren tests are at 11:50 a.m.

What Should I Do In Case Of A Problem At Catawba Nuclear Station?

Catawba Nuclear Station (CNS) is dedicated to the safe, reliable and efficient production of electricity. Duke Energy would immediately notify federal, state and local authorities of a problem at the station. These officials would then notify you if any action is necessary. There are several ways you could be notified of a problem at CNS:

1 To alert people outdoors, county officials would sound sirens around the station. Sirens would sound repeatedly in an emergency. **If you hear a siren, turn on your radio or television immediately. Tune to a local station that will carry an emergency information message.** These stations will give you information and tell you what to do. **The sirens may be used to warn local residents of any type of emergency, such as a flood or severe storm. HEARING A SIREN DOES NOT MEAN YOU SHOULD EVACUATE.**

2 To alert people indoors, radio and television stations will carry emergency information messages. Follow the instructions. Stay tuned.

3 In an emergency, fire, police and rescue units may also patrol the affected area and sound their sirens, if necessary. Boaters also would be alerted.

Upon hearing a siren or emergency message, we also encourage people living in the 10-mile emergency planning zones to check with their neighbors to ensure they are aware of the situation – especially neighbors who may have special needs. In case of a problem, you might be told to stay indoors. You might be told to evacuate. Follow the instructions given on the radio or television. Pages 25-31 of this calendar provide details on what to do. The local primary stations/emergency alert stations that state and county officials would use to provide Catawba neighbors with emergency information and instructions are:

South Carolina: **FM 107.1 WRHM York County**
AM 1340 WRHI Rock Hill

North Carolina: **FM 107.9 WLNK Charlotte**
FM 103.7 WSOC Charlotte

NOAA Weather Radio – All Hazards

Other local radio and television stations may also carry the emergency information message. If you hear no message on radio or television, call your county's emergency management office. The phone number is listed on this page.

Agricultural Information

If instructed in an emergency, farmers should be prepared to take the following actions:

1 Monitor and follow instructions given over the emergency alert system. Specific recommendations for the protection of farm animals and agricultural products will be issued by appropriate state and county officials.

2 Remove all dairy animals from pasture, shelter if possible, and provide them with stored feed and protected water. Protected self-feeders and automatic livestock waterers are the most effective.

3 Store feed in buildings, or cover it if outdoors. Feed stored in buildings will be protected from contamination. Cover the feed with plastic or canvas.

4 Cover open wells and water tanks.

The states of North Carolina and South Carolina have published special brochures concerning livestock, crops and gardens. Residents may request a copy by contacting the county cooperative extension agent.

Emergency Phone Numbers

York County Emergency Management
(24 hours) **803-329-7270**
Clover, Lake Wylie and Bethel..... **803-684-1321**
Web address: ..... **www.yorkcountyoem.com**

Charlotte-Mecklenburg County Emergency Management
(working hours) **704-336-2412**
(other hours) **704-943-6200**

Gaston County Emergency Management
(working hours) **704-866-3350**
(other hours) **704-866-3300**

Catawba Nuclear Station
EnergyQuest ..... **1-800-777-0006, option 1**

Locating Your Zone

If there were an emergency at Catawba Nuclear Station, it is unlikely everyone within the 10-mile area would be affected. The areas affected would depend on weather conditions and the nature of the emergency. Look at the map on page 27. You will see the 10-mile area around Catawba Nuclear Station is divided into zones.

Find the zones where you live, work and/or go to school. This way you will know if you are in the area affected by an emergency. For example, residents in zones A-0 and A-1 might be told to stay indoors, while others might not be affected.

Next, look at the charts on pages 28-30. Find the reception center for your zone(s). Locate it on the map on page 27. This is where you would go if there were an evacuation.

What If My Children Are In School?

Schools in the area around Catawba Nuclear Station have emergency plans for school children.

- In an emergency, school officials would be contacted by county emergency management officials.
- If an evacuation were ordered, all children attending school inside the 10-mile Emergency Planning Zone (EPZ) would be moved to a pick-up point (York County) or reception center (Mecklenburg and Gaston Counties) for their school. This may be different from the reception center listed for the student's home. **Parents should pick up students at reception centers or pick-up points only. Do not call or go to the schools.** This will help avoid delays. All pick-up points and reception centers are more than 10 miles from the station.
- Children in York County not picked up at their school's pick-up point within four hours would be moved to the reception center for their school.
- Adults would care for the children until parents arrive at the pick-up point or reception center.
- It is important for parents to know in what zones their children's schools are located. To find out, look at the chart on page 28 and the map on page 27. Parents should familiarize themselves with the pick-up points and reception centers for their children's schools.

If your children are ever left home alone, you should tell them what to do in an emergency. Be sure they know what zone they are in.

Exit Routes During An Evacuation

Look at the map and protective action zones chart to find your evacuation route. Routes would also be announced on local radio and television. Law enforcement officials would manage traffic during an evacuation.

What If I Need Transportation Or Special Help During An Emergency Evacuation?

County emergency management offices (telephone numbers listed above and on page 34) assist people who do not have transportation or have special needs by notifying them of an emergency and assisting with evacuation if necessary. If you or someone you know needs transportation or is visually impaired, hearing impaired, physically disabled or would have a special need during an emergency, call your county emergency management office today. Fill out the special needs card at the front of this calendar, listing the special needs or marking "other" and explaining your need. Please mail the card today so we can include your needs in our emergency plans. Even if you filled out a card last year, please send a new card so a current listing can be maintained.

Services Provided At Reception Centers

If you are ordered to evacuate, you would go first to your reception center. They are listed on pages 28-30. You can stay at the reception center. The following would be provided:

1 Food, water, emergency medical help, showers and toilets

2 People from service organizations, like the Red Cross, who would manage the facility

3 Decontamination facilities, if necessary

Things You May Want To Take, If Possible, In The Event Of An Evacuation

1 Two changes of clothing

2 Two blankets or a sleeping bag for each person

3 Important personal papers

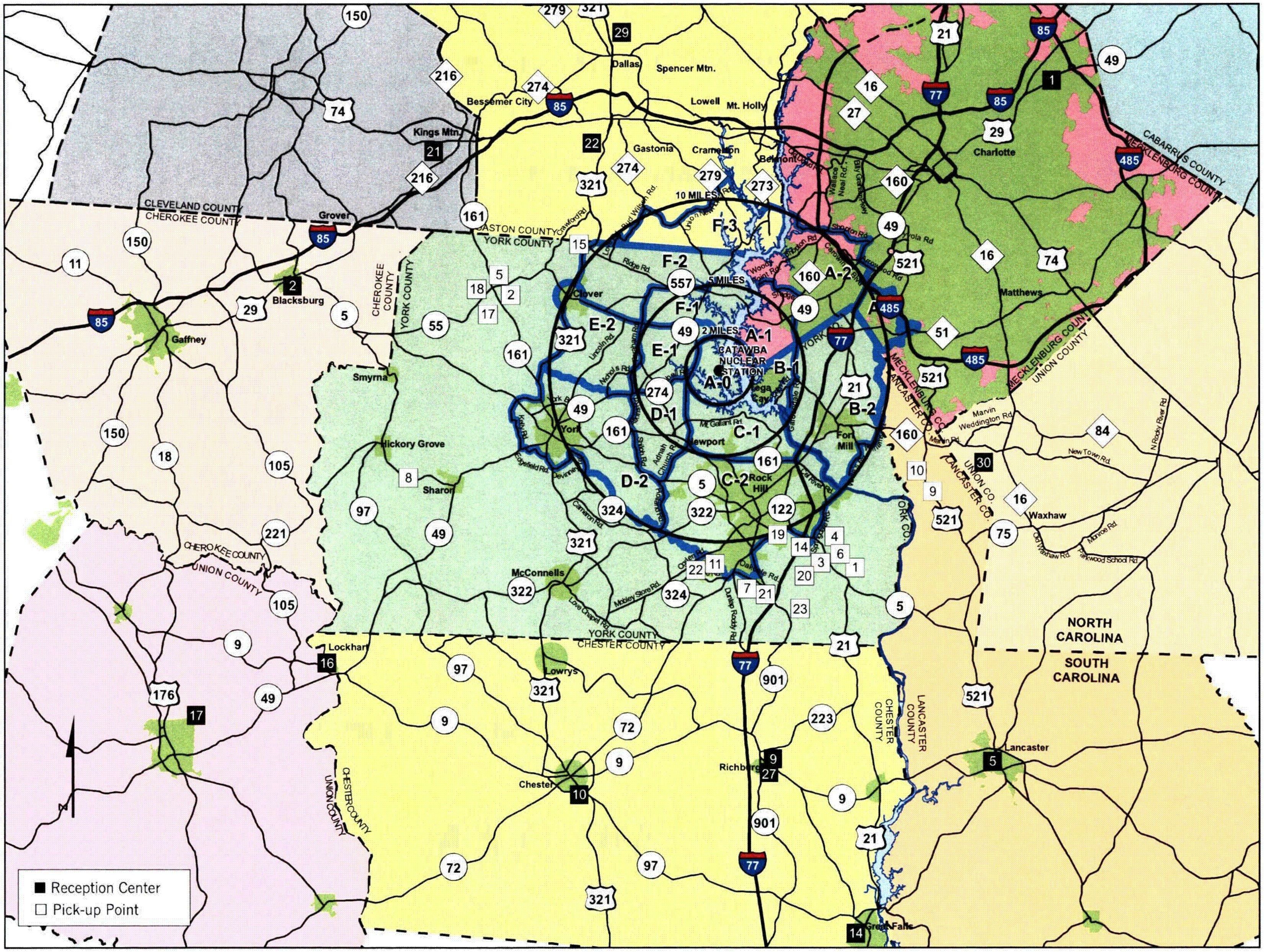
4 Toiletries such as soap, toothbrush and toothpaste, etc.

5 Personal medications and prescriptions

6 Special baby formulas or food and diapers

7 Battery operated radio, flashlight and batteries

8 Identification


CATAWBA NUCLEAR STATION
2 MILES
5 MILES
10 MILES
A-0
A-1
A-2
B-1
B-2
C-1
C-2
D-1
D-2
E-1
E-2
F-1
F-2
F-3
CLEVELAND COUNTY
CHEROKEE COUNTY
GASTON COUNTY
YORK COUNTY
MECKLENBURG COUNTY
CABARRUS COUNTY
UNION COUNTY
LANCASTER COUNTY
CHESTER COUNTY
YORK COUNTY
CHESTER COUNTY
NORTH CAROLINA
SOUTH CAROLINA
Dallas
Spencer Mtn.
Bessemer City
Lowell
Mt. Holly
Kings Mtn.
Gastonia
Cramerton
Belmont
Charlotte
Grover
Blacksburg
Gaffney
Clover
Smyrna
Hickory Grove
Sharon
York
Newport
Rock Hill
Fort Mill
Matthews
Waxhaw
McConnells
Lockhart
Lowrys
Chester
Richburg
Lancaster
Great Falls
Reception Center
Pick-up Point

The following is a list of schools, the zones in which they are located, and pick-up points or reception centers for each school.

SC Schools	Zone	Pick-up Point	Reception Center
Applied Technology Center-Clover	E-2	18 Midway Baptist Church	2 Blacksburg High School
Applied Technology Center-Rock Hill	C-2	3 Rock Hill High School	5 Lancaster High School
Banks Street School	B-2	9 Indian Land High School	5 Lancaster High School
Belleview Elementary School	C-2	1 Lesslie Elementary School	5 Lancaster High School
Bethel Elementary School	F-1	15 Bowling Green Presby. Church	2 Blacksburg High School
Blessed Hope Baptist School	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
Central Child Development Center	C-2	19 Flexible Learn. Ctr./ Old Castle Heights	5 Lancaster High School
Children's School at Sylvia Circle	C-2	7 Oakdale Elementary School	5 Lancaster High School
Clover High School	E-2	18 Midway Baptist Church	2 Blacksburg High School
Clover Junior High School	E-2	5 Bethany ARP Church	2 Blacksburg High School
Clover Middle School	E-2	2 Bethany Elementary School	2 Blacksburg High School
Cottonbelt Elementary School	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
Crowders Creek Elementary/ Middle School	F-1	15 Bowling Green Presby. Church	2 Blacksburg High School
Dutchman Creek Middle School	C-1	19 Flexible Learn. Ctr./ Old Castle Heights	5 Lancaster High School
Ebenezer Avenue Elem. School	C-2	21 Oakdale Baptist Church	5 Lancaster High School
Ebinport Elementary School	C-2	3 Rock Hill High School	5 Lancaster High School
Finley Road Elem. School	C-2	7 Oakdale Elementary School	5 Lancaster High School
Floyd D. Johnson Technical Center	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
Fort Mill Elementary School	B-2	10 Indian Land Elem. School	5 Lancaster High School
Fort Mill High School/Annex	B-2	9 Indian Land High School	5 Lancaster High School
Fort Mill Middle School	B-2	9 Indian Land High School	5 Lancaster High School
Gold Hill Elementary School	B-1	10 Indian Land Elem. School	5 Lancaster High School
Gold Hill Middle School	B-1	9 Indian Land High School	5 Lancaster High School
Griggs Rd. Elementary School	F-2	2 Bethany Elementary School	2 Blacksburg High School
Harold C. Johnson Middle Sch.	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
Hunter Street Elem. School	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
India Hook Elementary School	C-2	23 Mt. Holly Elementary School	5 Lancaster High School
Jefferson Elementary School	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
Kinard Elementary School	E-2	17 Oakdale Presbyterian Church	2 Blacksburg High School
Knox St. Alternative School	E-2	2 Bethany Elementary School	2 Blacksburg High School
Mount Gallant Elem. School	C-1	3 Rock Hill High School	5 Lancaster High School
Nation Ford High School	B-2	9 Indian Land High School	5 Lancaster High School
Northside Elementary School	C-2	1 Lesslie Elementary School	5 Lancaster High School
Northwestern High School	C-2	22 South Pointe High School	5 Lancaster High School
Old Pointe Elementary School	C-2	22 South Pointe High School	5 Lancaster High School
Orchard Park Elementary School	B-2	10 Indian Land Elem. School	5 Lancaster High School
Pinckney Street Learning Center	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School

SC Schools	Zone	Pick-up Point	Reception Center
Rawlinson Road Middle School	C-2	11 Saluda Trail Middle School	5 Lancaster High School
Richmond Drive Elem. School	C-2	23 Mt. Holly Elementary School	5 Lancaster High School
Riverview Elementary School	B-2	10 Indian Land Elem. School	5 Lancaster High School
Rosewood Elementary School	C-1	19 Flexible Learn. Ctr./ Old Castle Heights	5 Lancaster High School
Springfield Elementary School	B-2	10 Indian Land Elem. School	5 Lancaster High School
Springfield Middle School	B-2	9 Indian Land High School	5 Lancaster High School
St. Anne's Catholic Church Sch.	C-2	6 Hopewell Presbyterian Church	5 Lancaster High School
Sullivan Middle School	C-2	20 Castle Heights Middle School	5 Lancaster High School
Sunset Park Elementary School	C-2	11 Saluda Trail Middle School	5 Lancaster High School
Trinity Christian School	C-2	4 Southside Baptist Church	5 Lancaster High School
Westminster Catawba School – Catawba Campus	C-1	4 Southside Baptist Church	5 Lancaster High School
Westminster Catawba School – Westminster Campus	C-2	6 Hopewell Presbyterian Church	5 Lancaster High School
Winthrop University	C-2		9 Lewisville High School
York Comprehensive High School	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
York Head Start	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
York Junior High School	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
York One Academy	D-2	8 Hickory Grove/Sharon Elem.	2 Blacksburg High School
York Road Elementary School	C-2	14 Independence Elem. School	5 Lancaster High School

NC Schools	Zone	Reception Center
Forestview High School	F-3	22 Hunter Huss High School
Kennedy Middle School	A-2	1 UNC Charlotte
Lake Wylie Elem. School	A-2	1 UNC Charlotte
Olympic High School	A-2	1 UNC Charlotte
Pineville Elem. School	A-3	1 UNC Charlotte
Rod of God Christian Academy	A-2	1 UNC Charlotte
Steele Creek Elem. School	A-2	1 UNC Charlotte
Southwest Middle School	A-1	1 UNC Charlotte
W. A. Bess Elem. School	F-3	22 Hunter Huss High School
Winget Park Elem. School	A-2	1 UNC Charlotte

South Carolina day care centers and private schools not listed will move their students to the pick-up point for the nearest public elementary school.

North Carolina day care centers and private schools will move their students to the reception center for the zone in which the day care center/private school is located.

Children in York County not picked up at their school's pick-up point within four hours will be moved to the reception center for their school.

Zones	Communities	Primary Evacuation Routes For Residents/Visitors	Reception Centers
A-0 NC	Bankhead Rd., Bessebrook Rd., Cozy Cove Rd., Fairview Dr., Harbor Rd., Harbor View Rd. and Snug Harbor Rd.	• Snug Harbor or McKee Rd to Youngblood Rd, to NC 49 north to I-77, north to I-85, north on I-85 to NC 49, north on NC 49 to the reception center • North on NC 49 to I-77, north to I-85, north on I-85 to NC 49, north on NC 49 to the reception center • North on NC 49 to Arrowood Rd., east to I-77, north to I-85, north to NC 49, north on NC 49 to the reception center	1 UNC Charlotte
A-1	All areas bounded by Woody Point Rd. to Sledge Rd. to Hwy 160 to the SC state line, including Hamilton Rd., McKee Rd., Pine Harbor Rd., Red Fez Club Rd., Shopton Rd., Solder Rd., Thomas Rd., York Rd., Youngblood Rd. and Zoar Rd.	• North on NC 49 to NC 160, north on NC 160 to Billy Graham Pkwy., north on Billy Graham Pkwy. to I-85, north on I-85 to NC 49, north on NC 49 to the reception center • North on NC 49 to I-77, north to I-85, north on I-85 to NC 49, north on NC 49 to the reception center • North on NC 49 to Arrowood Rd., east to I-77, north to I-85, north to NC 49, north on NC 49 to the reception center	1 UNC Charlotte
A-2	All areas bounded by 6800 Dixie River Rd. to Shopton Rd. to York Rd. to Arrowood Rd. to I-77 to the SC state line, including Brown-Grier Rd., Carowinds, Choate Cir., Erwin Rd., Hairpin Rd., Hamilton Rd., Hwy. 160 in Steele Creek area, Island Point Rd., Moss Rd., Rock Island Rd., Sam Neely Rd., Sandy Porter Rd., Shopton Rd. West, Smith Rd., Westinghouse Blvd., Wildlife Rd. and Winget Rd.	• North on NC 49 to NC 160, north on NC 160 to Billy Graham Pkwy., north on Billy Graham Pkwy. to I-85, north on I-85 to NC 49, north on NC 49 to the reception center • North on NC 49 to I-77, north to I-85, north on I-85 to NC 49, north on NC 49 to the reception center • North on NC 49 to Arrowood Rd., east to I-77, north to I-85, north to NC 49, north on NC 49 to the reception center	1 UNC Charlotte
A-3	Pineville	• East on NC 51 to Providence Rd. (NC 16), left on Providence to Wendover, right on Wendover to Eastway Dr., follow Eastway to US 29, right on US 29 to NC 49, north on NC 49 to the reception center • North on US 521 to Tyvola Rd., left on Tyvola Rd. to I-77, north on I-77 to I-85, north on I-85 to NC 49, north on NC 49 to the reception center	1 UNC Charlotte
A-0 SC	Allison Creek Rd., Concord Rd., Concord Shores, Forest Winds, Hudson Rd., Torrence Branch, West Liberty Hill Rd.	• North on SC 274 to SC 49, east to NC 160, north to Billy Graham Pkwy., north to I-85, north to NC 49, north on NC 49 to the reception center • North on NC 49 to I-77, north to I-85, north to NC 49, north on NC 49 to the reception center • North on NC 49 to Arrowood Rd., east to I-77 North, north to I-85, north to NC 49, north on NC 49 to the reception center	1 UNC Charlotte
B-1	Dam Rd., Gold Hill Rd. (west of Hwy. 160), Tega Cay	• Gold Hill Road to I-77 north, north to I-85, north to NC 49, north on NC 49 to the reception center	1 UNC Charlotte
B-2	Anne Springs Close Greenway, Avery Lakes, Bailes Farm, Bailiwyck, Baxter, Carowinds, Doby Bridge Rd., Forest Lake, Fort Mill, Fox Hill, Gold Hill Rd. (east of Hwy. 160), Gray Rock, Greenway Industrial Park, Hamilton Place, Heritage U.S.A., Knights Bridge, Knights Castle, Lakemont Industrial Park, Peachtree Place, Regent Park, Riverview, Steele Meadows, Sutton Rd., Tara Plantation, Waterstone, White Grove, Willow Brook	• East on SC 160 to Hwy. 521, right on Hwy. 521 (south) to Marvin Rd., Marvin Rd. becomes New Town Rd. as it crosses the state line into NC, continue on New Town Rd., turn right onto Crane Rd., turn left at Marvin Ridge High School/Middle School	30 Marvin Ridge High School
C-1	Brookwood, Bryant Field Industrial Park, Camelot Woods, Cedar Forest Acres, Cedarwood, Churchill Heights, City of Rock Hill north of Celanese Rd., Creekside, Crystal Lakes, Devonshire, Forest Hills, Glenwood Acres, Hickory Hill, Kimberly Woods, Lakewood, Monterey Hills, Museum Rd., Park Creek, River Pines, Trexler Acres, Twin Lakes, Willow Acres, Windwood	• Mt. Gallant Rd. to Celanese Rd. (SC 161), south on I-77 to US 21 exit, south on US 21 to SC 5, east to US 521, south on Main Street, west on Woodland Drive to Lancaster High School	5 Lancaster High School

Zones	Communities	Primary Evacuation Routes For Residents/Visitors	Reception Centers
C-2	Belair Acres, Cato Estates, City of Rock Hill south of Celanese Rd., College Downs, Country Oaks, Coventry Estates, Eastview Rd., Fairlawn, Falls Rd., Hallmark Estates, Heathridge, Heckle Blvd., Hickory Oaks, Highland Creek, Hutchinson Place, Iredell Way, Lakeview Acres, Meadow Lakes, Oak Park Rd., Oakhurst, Oakwood Acres, Olewoods, Quiet Acres, Ragin Estates, Ravencroft, Rawlinson Woods, Red Oaks, Rock Hill Industrial Park, Royal Oaks, Sharonwood, Shorewood, Steeple Chase, Squire Estates, Sturgis Estates, Sunset Park, Swan Meadows, Westerwood, Wintercrest, Winthrop University, Woodbridge, Woodfield, Woodvale, York Technical College	• South on I-77 to SC 9, east to Lewisville High School • South on I-77 to SC 9, east to Lewisville Middle School • South on SC 72 to Saluda Rd. (SC 121), south to Chester Senior High School • South on I-77 to SC 97, east on SC 97 to SC 99, south on SC 99 to SC 138, right (west) on SC 138 to Great Falls School Complex	9 Lewisville High School 27 Lewisville Middle School 10 Chester Senior High School 14 Great Falls School Complex
D-1	Adnah Church Rd., Campbell Rd., Farmstead Rd. area, Ivywood, Mallard Creek, Providence Heights, Rollingwood Circle, Shiloh Rd., Tirzah Rd., Wedgefield Dr., Windsong, Windy Run	• SC 49 west to SC 9, north on SC 9 to Lockhart School • SC 49 west to Union, SC, and to Union High Complex	16 Lockhart School 17 Union High Complex
D-2	Branch Rd., Countryside Estates, Fairhope Rd., Gordon Rd., Hwy. 5 York Bypass, Limestone Rd., Lincoln Forrest, Pioneer Rd., Turkey Farm Rd., Shiloh Farms, York	• SC 49 west to SC 9, north on SC 9 to Lockhart School • SC 49 west to Union, SC, and to Union High Complex	16 Lockhart School 17 Union High Complex
E-1	Bethel Forest Subdivision, Charter Oaks, Clearcreek, Crosswinds, East Liberty Hill Rd., Ferguson Acres, Kingsburry Rd. South of Hwy. 55, Mountain View Rd., Newport Acres, Tidewood Lane, Twin Streams, Vander Lakes	• SC 55 west to SC 5, north to US 29, west to Rutherford St. in Blacksburg, left on Rutherford St. to reception center	2 Blacksburg High School
E-2	Brightwood Dr., Brown Rd., Calabash Rd., Clearcreek Rd., Clover, Cloverbrook, Jim McCarter Rd., McCarter's Acres, Meadow Rd., Nichols Estate, Ormand Rd., Ramble Rd., St. Paul Church Rd., The Farms, Wood Rd., Woodland	• SC 55 west to SC 161, north to NC 161, north to Business NC 74, west to Phifer Rd., south to reception center	21 Kings Mountain High School
F-1	Autumn Cove, Barclay Acres, Bethel School Rd., Camp Thunderbird, Chandler Woods, Forest Oaks, Johnson Rd., Lake Wylie Rd., Lake Wylie Woods, Marina Way Rd., Morningstar Rd., River Hills	• SC 49 east to NC 160, north to Billy Graham Pkwy., north to I-85, north to NC 49, north to reception center	1 UNC Charlotte
F-2	Amity Estates, Bowling Green, Brandon Rd., Cameron Acres, Fewell Rd., Green Pond Rd., Kendrick Rd., Lake Wylie Mobile Home Park, Lakedale, Love Rd., Meadow Wind, Oakridge Rd., Pole Branch Rd., Ridge Rd., Ridgewood, River Oaks Rd., Singing Pine Drive, Southwoods, State Line Rd., The Landing	• NC 274 to NC 321 to Dallas to reception center or NC 279 to Dallas to reception center	29 North Gaston High School
F-3	Catawba Cove Dr., Country Woods, Eller Rd., Farmwood, Forest Cove, Frances Ct., Glover Rd., Lake Wylie Rd., Moore Rd., Moss Haven, Old Whisnant Farm Rd., Paradise Point, Patrick Rd., Wilson Farm Rd., Zellwood	• NC 274 to NC 321 to Dallas to reception center or NC 279 to Dallas to reception center	29 North Gaston High School

Radiation ... A Fact Of Life

Radiation is a natural part of our environment. It is not new or mysterious. We receive radiation from the sun, minerals in the earth, the food we eat and building materials in our houses. Even our bodies give off small amounts of radiation. Exposure to extremely large amounts of radiation can be harmful, even fatal. However, the amount of radiation given off in the normal operation of a nuclear station is very small; smaller, in fact, than the amount we would receive on a coast-to-coast airplane trip. Some familiar sources of radiation are shown in the following table. Although radiation is invisible, it can be measured. Radiation is measured in units called rems and millirems. The rem is a unit of measure that takes into account the effect different types of radiation have on the body. A millirem is 1/1000th of a rem.

Amounts Of Radiation From Common Sources

(measured in millirems)

Average annual background in North Carolina and South Carolina	360
Gastrointestinal tract X-ray	250
Chest X-ray	10
Nuclear power station - average per year at site boundary	Less than 1

Potassium Iodide (KI)

Potassium iodide, also known as KI, is a non-prescription drug similar to iodized table salt. KI may prevent the thyroid gland from absorbing radioactive iodine and is one protective action that might be recommended during a nuclear emergency. KI is available to residents living within 10 miles of the station at no cost through county health departments. **It should only be taken at the direction of public health officials.** For more information on KI, contact your county health department:

Mecklenburg	**704-336-6409**
Gaston	**704-853-5205**
York (Rock Hill office)	**803-909-7300**
(York office)	**803-684-7004**
SC DHEC	**800-476-9677**

For online KI information, visit: **N.C.**: ncpublichealth.com or **S.C.**: www.scdhec.gov/environment/lwm/html/nuclear_power.html

Protecting Yourself Against Radiation Exposure

Exposure to very high levels of radiation can make you sick. In extreme cases, it can be fatal. Emergency plans are designed to protect you in the unlikely event of a nuclear station emergency. State and local governments have guidelines about when people should be protected from radiation. These guidelines call for protective actions at levels far below those that can make you sick. You would be told to protect yourself if radiation levels at or above those guidelines were expected.

There Are Three Things You Might Be Told To Do:

1 Stay indoors

2 Evacuate

3 Take potassium iodide (KI)

Sometimes staying indoors is safer than evacuating. Emergency officials will know which is better. Follow their instructions.

If You Are Told To Stay Indoors:

1 Stay indoors until you are told it is safe to go out.

2 Close all windows and doors. Turn off fans, air conditioners, heat pumps and forced-air heat, which bring in outside air.

3 Go to the basement if possible. If you don't have a basement, go to a downstairs room in the center of the house. It should be a room without windows or outside doors.

4 Listen to the local radio stations listed on page 25 for instructions from emergency management officials.

5 Commercial supplies of water, milk and food will be checked for radiation, if necessary. Government officials will tell you if these are safe.

If You Are Ordered To Evacuate To A Reception Center:

1 Do not try to take all of your belongings with you. You could be away from home for a few hours or a few days.

2 Turn off appliances and faucets. Lock all windows and doors.

3 Get into your vehicle and close all windows and vents. Drive to your reception center and register. You can stay at the reception center, or after you register, you may stay with friends or relatives outside the protective action zone(s). It is important to go to the reception center because:

(a) If any radioactive material were found on you, it would be removed by changing clothes and washing. This process is called decontamination and is important to reduce radiation dose to yourself and others.

(b) Local emergency management officials would need to know who has evacuated. They would also need to know where you are so you could be contacted.

If You Have Pets:

Make arrangements for pets and livestock. Accommodations for pets may be limited at Reception Centers. Pets may also be boarded at veterinarian offices or boarding facilities located outside of the 10-mile emergency planning zone (EPZ).

Dear Neighbor,

Catawba Nuclear Station and Duke Energy are proud to have been a part of this community for more than 20 years. Our employees are your friends, neighbors and volunteers in the community. Every day, the Catawba team works hard to deliver safe and reliable electricity to you. We take this commitment very seriously – it's an around-the-clock responsibility. At Catawba, and in the nuclear industry, excellence in operations is an expectation and the safety of our neighbors and employees will always be our top priority.

The men and women who operate Catawba are highly trained to do their jobs. Station operators go through a rigorous training program before they can operate the plant. Once licensed, they commit to a lifelong career of learning and receive additional training every five weeks.

Catawba's nuclear plant security force is the role model for business and industry. We have a highly-trained and armed security force with a very detailed plan in place to protect the plant and public.

I hope the information in this calendar will help you understand Catawba's operations and what to do in the unlikely event of an emergency at the station. We have detailed and comprehensive emergency plans and practice them throughout the year in coordination with local, state and federal emergency management officials to ensure our plans, equipment and personnel can appropriately respond to an emergency. If you have additional questions, we have included telephone numbers and Web information for the state, counties, U.S. Nuclear Regulatory Commission and nuclear station.

As the demand for energy in the Carolinas continues to grow, Catawba, along with the other two nuclear stations operated by Duke Energy will continue to play a vital role to meet the electricity needs of our customers. Nuclear energy is an important component of Duke Energy's diverse fuel mix and it continues to be the most reliable and efficient source of electricity generation for the future.

Thank you for your continued support and allowing us to be part of your community. If you have additional questions, please feel free to contact us or any of the other resources listed in this publication.

James R. Morris
Vice President

Catawba Nuclear Station is jointly owned by: North Carolina Municipal Power Agency Number 1, North Carolina Electric Membership Corporation, Piedmont Municipal Power Agency and Duke Energy.

Glossary of Nuclear Terms

Background Radiation – radiation in the environment from cosmic rays and radioactive material that naturally exists in soil, water, and air.

Containment Building – the structure housing the nuclear reactor, pressurizer, reactor coolant pumps, steam generators, and other associated piping and equipment. It is an airtight structure, steel-lined, with heavily reinforced concrete walls several feet thick. It is designed to withstand tremendous physical forces.

Control Rods – rods made of material that absorbs neutrons. When inserted into the nuclear fuel, the rods stop the fission process, thereby shutting down the reactor.

Cooling Tower – a tall structure used to cool the water from the condenser at a power plant. Catawba Nuclear Station is the only Duke Energy nuclear station with cooling towers.

Core – the central part of a nuclear reactor that contains the nuclear fuel. The fission process takes place here.

Emergency Planning Zone (EPZ) – a defined 10 mile radius around a nuclear plant.

Fission – the splitting of the atom, which releases tremendous amounts of heat energy.

Pick-up Point (S.C.) – a facility, more than 10 miles from the nuclear station, where children attending schools within the emergency planning zone are moved if an evacuation is ordered.

Pressurized Water Reactor (PWR) – the kind of commercial power reactor Duke Energy operates. The reactor heats water in a closed system that then transfers its heat to another closed system in the steam generators to produce steam for a turbine generator.

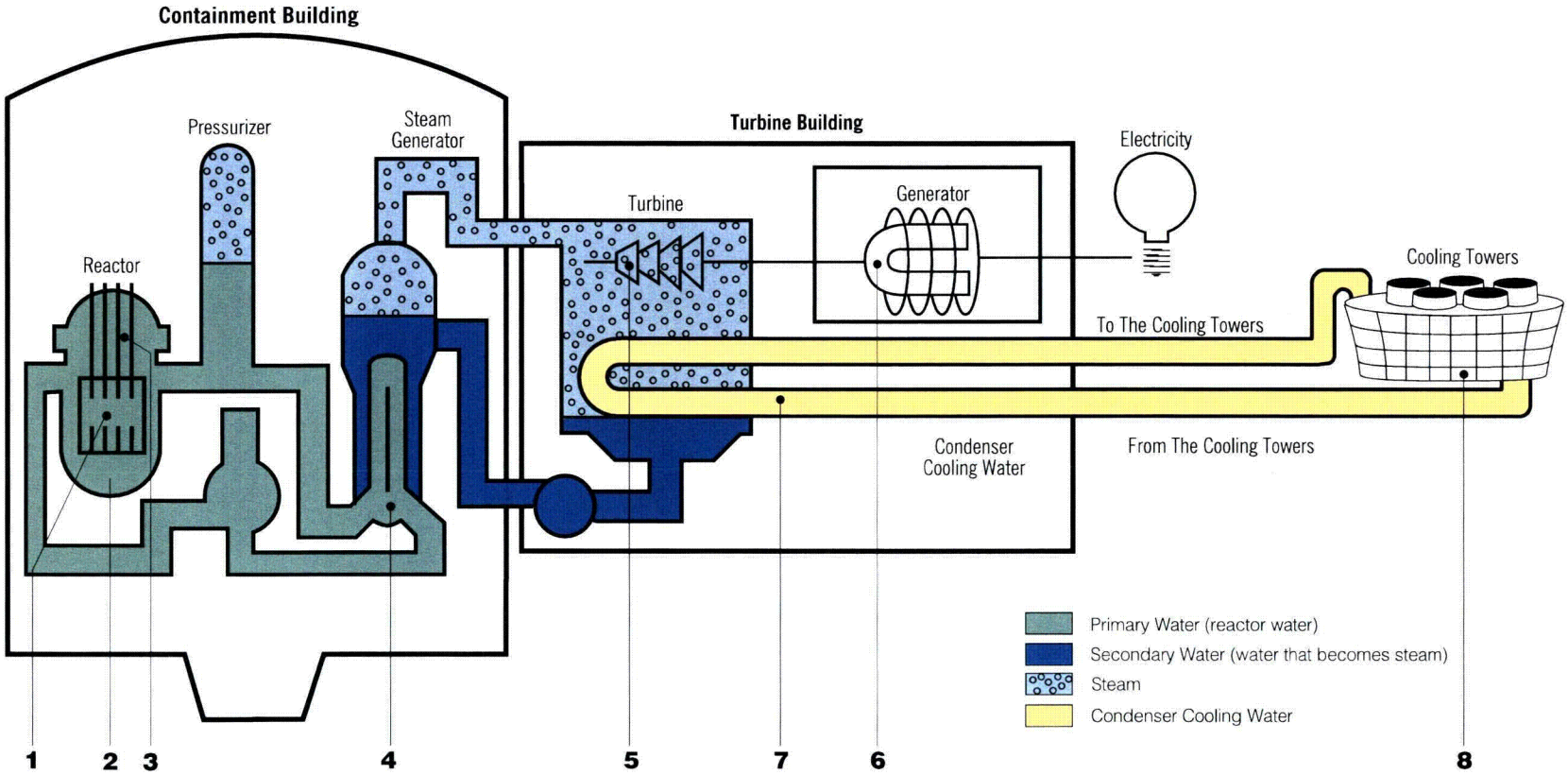
Radiation – particles and/or energy given off by unstable atoms as they undergo radioactive decay to stability.

Reactor – a cylindrical, steel vessel that contains the core, control rods, coolant and structures that support the core. In a pressurized water reactor, the reactor vessel is constructed of steel more than 8 inches thick.

Reception Center – a facility where people are registered, monitored for radiation, decontaminated (if necessary), clothing exchanged (if contaminated), treated for minor medical emergencies and housed in the event that the area in which they reside is evacuated.

Steam Generator – a large heat exchanger. In a pressurized water reactor, it is the large steel tank where steam is produced. It is located inside the containment building.

Turbine Building – a structure housing the steam turbine, electric generator and much of the feedwater system.



How Catawba Makes Electricity

Catawba Nuclear Station uses steam to generate electricity. Steam pushes against the blades of a turbine to turn them. As the turbine spins, it turns a generator. The generator produces electricity. Catawba uses uranium fuel to heat water. As uranium atoms are split apart (in a process known as nuclear fission), heat and fission products are produced. The heat is used to make steam. Some of the fission products are radioactive. The station is designed to keep radiation inside the containment building.

Here's How It Works

There are three separate systems of water at Catawba. Water in one system doesn't touch water in another system. The first system is the primary water system (shown in green). It circulates around the nuclear fuel, called the core (**1**). As it flows through the reactor (**2**), it heats to about 600°F. Because this water is under very high pressure, it does not boil. The reactor can be quickly shut down by lowering the control rods (**3**). The heated primary water next flows through u-shaped tubes in the steam generators (**4**). There it gives off its heat to the secondary water system (blue). It is then pumped back to the reactor to be heated again. Water in the secondary system is changed to steam (light blue) in the steam generators. The steam spins a turbine (**5**) connected to an electric generator (**6**) and produces electricity. As the steam leaves the turbine, it falls on pipes (**7**) carrying condenser cooling water in the third system (yellow). This water comes from the cooling towers (**8**). As the steam hits the outside of the pipes, it is changed back to water. It is then pumped to the steam generators to be heated to steam again. The steam heats the condenser cooling water inside the pipes. Before the condenser cooling water can be used again, it must be cooled in the cooling towers.

For more information about nuclear power go to:
www.duke-energy.com/power-plants/nuclear.asp

Important Contact Information

York County Emergency Management
(24 hours) **803-329-7270**
Clover, Lake Wylie and Bethel **803-684-1321**
Web address: ..... **www.yorkcountyoem.com**

Charlotte-Mecklenburg County Emergency Management
(working hours) **704-336-2412**
(other hours) **704-943-6200**

Gaston County Emergency Management
(working hours) **704-866-3350**
(other hours) **704-866-3300**

Catawba Nuclear Station
EnergyQuest ..... **1-800-777-0006, option 1**
www.duke-energy.com/power-plants/nuclear/catawba.asp

Nuclear Regulatory Commission ..... **www.nrc.gov**

Catawba Nuclear Station is jointly owned by: North Carolina Municipal Power Agency Number 1, North Carolina Electric Membership Corporation, Piedmont Municipal Power Agency and Duke Energy.

CATAWBA NUCLEAR STATION
4800 Concord Road • York, SC 29745

My Information

Evacuation Zone _____ (Home) _____ (Office)

Reception Center _____ (Home) _____ (Office)

Evacuation Route _____ (Home) _____ (Office)

_____ _____

_____ _____

_____ _____

Pick-up Point or Reception Center for my children's schools/child care facilities are: _____

_____

_____

_____

_____

Police # _____ Fire Dept. # _____

Hospital # _____ Veterinarian # _____

Dentist # _____ Doctor # _____

Personal Contact Numbers

Name _____ Phone # _____

Name _____ Phone # _____

Name _____ Phone # _____

Name _____ Phone # _____

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Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-066

NRC RAI:

SITE-13: Recovery and Reentry Actions

Basis: NUREG-0654/FEMA-REP-1; Evaluation Criterion M.2; Evaluation Criterion M.3; Evaluation Criterion M.4

SRP ACCEPTANCE CRITERIA: Requirement A; Acceptance Criterion 1

A. Section II.M.2, "Recovery Organization" (pages II-57/58), of the Lee Emergency Plan discusses the basis and procedure for the development of a recovery organization. The primary positions in the Recovery Organization are described on pages II-57/58. Emergency Operations Facility (EOF) Director assumes control and direction of the recovery operation with the authority and responsibilities set forth in the Emergency Plan Implementing Procedures (EPIPs). Provide the position/title and authority and responsibilities for the facility recovery organization.

B. Section II.M.3, "Changes in Organizational Structure", (pages II-58/59), of the Lee Emergency Plan does not address the means for informing members of the onsite response organizations that a recovery operation has been initiated. The Lee Emergency Plan does state that the EOF Director will notify the Nuclear Regulatory Commission (NRC) Operations Center and the State and local Emergency Operations Center (EOC). The means for this notification was not addressed. Discuss the notification of emergency response personnel onsite and emergency response organizations offsite that the emergency has been terminated and that a recovery organization has been implemented.

C. Section II.M.4, "Updating Total Population Exposure During Recovery Operations" (page II-59), of the Lee Emergency states that the Radiological Assessment Manager will work with South Carolina and North Carolina officials to periodically update estimates of total population exposure using population distribution data. The information on who they will be communicating with is not provided. Discuss who the Radiological Assessment Manager will be communicating with at the state level.

Duke Energy Response:

A. Key positions in the recovery organization as described in Subsection II.M.2 of the Emergency Plan include the EOF Director, Emergency Coordinator, and Other Lee Nuclear Station management and supervisory personnel. The EOF Director assumes overall management of recovery activities and coordination with federal, state, and local governments. The organizational structure of Duke's Recovery Organization for the operating nuclear plants at Catawba, Maguire, and Oconee is discussed in Enclosure 4.1 of Duke Energy's Corporate Procedure RP/0/B/5000/025, "Recovery and Reentry Procedure."

A copy of the current version of this procedure (Rev. 003) is provided for information purposes as it does not yet specifically address the Lee Nuclear Station (Attachment 1). Duke Energy expects to use the same organization for the Lee Nuclear Station.

B. Notification methods and procedures are discussed in Section II.E of the Lee Emergency Plan. Emergency communication systems are discussed in Section II.F. As discussed throughout these sections, means for providing emergency information to the NRC and State and local Emergency Operations Centers, including termination and entry into a recovery mode, have been established. Section E.1 (Page II-25) of the Lee Emergency Plan states, "The Emergency Coordinator initiates notification of affected State and local authorities within 15 minutes of the emergency declaration, including escalation or de-escalation of any emergency condition" and "The NRC is notified as soon as is practical following the notification of State and local authorities and within one hour of the emergency declaration, including escalation or de-escalation of any emergency declaration. The primary notification system to be used is the Emergency Notification System." These requirements are established in compliance with 10 CFR 50.72. The termination of an emergency classification and transition to a recovery organization is considered a significant change in plant condition and emergency classification change requiring notifications.

   The method of communications used for notification of State and local authorities is the selective signaling system, communication with offsite field teams is maintained via the radio system, communication with on-site responders is maintained between the emergency facilities using the selective signaling system and notification of emergency response personnel not actively engaged in the response is via the telephone pager system. All of the methods are as described in Section F.1 of the Lee Emergency Plan.

   In addition, the EOF Director is responsible for developing a message that details the date and time recovery operations are initiated as well as any organizational realignments. This message is distributed to EOF Managers, News Manager, Emergency Coordinator, State and Local Officials, NRC and any other representatives identified by the EOF Director. Details regarding implementation of the recovery organization are discussed in the Duke Corporate Emergency Plan Implementing Procedure RP/0/B/5000/025 (Attachment 1). Duke Energy expects to use the same process for the Lee Nuclear Station.

C. The Radiological Assessment Manager will communicate with South Carolina Department of Health and Environmental Control and the North Carolina Department of Environment and Natural Resources/Radiation Protection Section via liaison personnel that are assigned within the EOF to periodically update estimates of total population exposure using population distribution data. This is an established, tested, direct communication pathway between State and Duke Energy radiological protection professionals.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

None

Attachments:

1. RP/0/B/5000/025, "Recovery and Reentry Procedure"

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-66

Procedure RP/0/B/5000/025, "Recovery and Reentry Procedure"

Duke Power Company Catawba Nuclear Station	Procedure No. RP/0/B/5000/025
Recovery and Reentry Procedure	Revision No. 003
Multiple Use	Electronic Reference No. CN005GOD
PERFORMANCE	

* * * * * * * * * * UNCONTROLLED FOR PRINT * * * * * * * * * *

(ISSUED) - PDF Format

1. Symptoms

1.1 Protective actions have established effective control over the Classified Event.

1.2 The General Emergency or Site Area Emergency has been terminated by the Emergency Coordinator or the EOF Director.

2. Immediate Actions

NOTE:	The lines in the left margin are for place keeping; date, time and initials are not required. Immediate actions may be performed simultaneously.

_____ 2.1 The EOF Director and Emergency Coordinator shall establish a Recovery Organization that is appropriate for the existing on-site and off-site conditions. Enclosure 4.1 provides a minimum organizational structure; however, this organizational structure may be supplemented as necessary to support the particular circumstances. In some situations, i.e. no core damage, the normal organization may be adequate with no separate Recovery Organization required.

2.1.1 The recovery activities will be managed much like a normal outage, except that certain activities unique to the post accident situation will be managed by the Recovery Organization.

2.1.2 The Recovery Organization will function as a matrix management organization to coordinate activities with the normal station organization.

2.1.3 The Recovery Organization may be located at the EOF, at the site, or a combination of the two as appropriate.

2.1.4 The Emergency Coordinator will act as the site liaison for the Recovery Organization. Other site management and supervisory personnel will interface with the Recovery Organization as necessary.

2.1.5 The protection of the public health and safety is the foremost consideration in formulating recovery plans.

_____ 2.2 The EOF Director shall develop a message that details the date and time recovery operations will be initiated as well as any organizational realignments. This message shall be distributed to EOF Managers, News Manager, Emergency Coordinator, State and Local Officials, NRC and any other representatives identified by the EOF Director.

_____ 2.3 The EOF Director shall ensure that Radiation Protection conducts the initial re-entry into the affected area(s) to evaluate radiological hazards and contamination levels as described in HP/0/B/1009/001, "Radiation Protection Recovery Plan."

3. Subsequent Actions

_____ 3.1 The EOF Director and the Emergency Coordinator shall determine the procedures and precautions to be used to return the site to a normal status based upon the radiological information obtained through Radiation Protection's initial re-entry. Recovery activities not covered by existing/approved procedures shall be preplanned and reviewed/approved by the PORC prior to implementation.

_____ 3.2 The EOF Director shall ensure the following periodic updates are performed:

3.2.1 Public officials shall be kept informed of recovery plans so they can properly carry out their responsibilities to the public.

3.2.2 Periodic information shall be provided to the news media so they may provide information to the public regarding recovery plans and progress made.

3.2.3 Periodic status reports shall be given to Duke Power employees at other locations.

3.2.4 Periodic status reports shall be given to government and industry representatives.

_____ 3.3 Radiation Protection shall ensure that radiation doses are maintained as low as reasonably achievable using HP/0/B/1009/001, "Radiation Protection Recovery Plan."

_____ 3.4 The EOF Director shall receive periodic updates from the Radiological Assessment Manager concerning estimates of total population exposure. This information shall be obtained utilizing HP/0/B/1009/024, "Implementing Procedure for Estimating Food Chain Doses Under Post-Accident Conditions."

_____ 3.5 **IF** a long term recovery operation is indicated, a Recovery Organization duty roster shall be established.

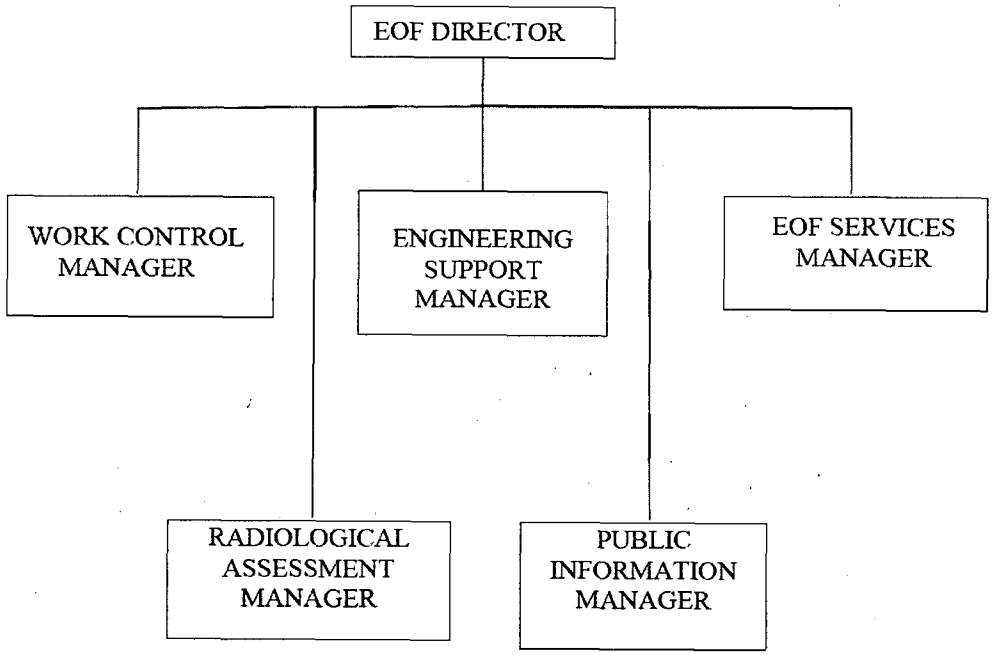
4. Enclosures

4.1 Minimum Recovery Organization

Enclosure 4.1

Minimum Recovery Organization

RP/**0**/B/5000/025
Page 1 of 1



Enclosure 4.1
Minimum Recovery Organization

RP/0/B/5000/025
Page 2 of 1

EOF Director - Overall management of recovery activities and coordination with federal, state and local governments.

Radiological Assessment Manager - Coordinates radiological and environmental assessments with federal and state agencies. Coordinates radwaste management and decontamination activities.

Engineering Support Manager - Coordinates the engineering and maintenance support.

Public Information Manager - Manages communications of recovery activities to news media, employees, etc.

EOF Services Manager - Coordinates activities such as purchasing, finance, insurance, human resources, transportation, etc.

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-073

NRC RAI:

SITE-20: COL Information Items

Basis: 10 CFR 50.47 and Appendix E to 10 CFR Part 50
SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

A. COL Action Item 13.3-1 in NUREG-1793, "Final Safety Evaluation Report Relating to Certification of the AP1000 Standard Design," states in part that the COL applicants that reference the AP1000 certified design will address communication interfaces associated with the TSC. Explain why this aspect of the COL Action Item was not captured in STD COL 13.3-1?

B. COL Action Item 13.3.3.3.5-1 in NUREG-1793, "Final Safety Evaluation Report Relating to Certification of the AP1000 Standard Design," states: "Combined license applicants referencing the AP1000 certified design will address activation of the emergency operations facility consistent with current operating practice and NUREG-0654/FEMA-REP-1." Section 13.3, "Emergency Planning," of Part 2 of the FSAR states in STD COL 13.3-2 states:

> "The emergency plan describes the plans for coping with emergency situations, including communication interfaces and staffing of the emergency operations facility."

Discuss the relationship between the two Information Items. For example, while COL Action Item 13.3.3.3.5-1 addresses activation of the emergency operations facility, STD COL 13.3-2 addresses staffing and communication interfaces of the emergency operations facility.

Duke Energy Response:

A. The last paragraph of Section 13.3.2 (Page 13-3) of NUREG-1793 addresses COL Action Item 13.3-1 and specifically discusses the reference to post 72-hour actions. The paragraph concludes with a staff acceptance and statement that the reference is consistent with the extent that the COL applicant can address EP design features, facilities, functions, and equipment.

The fourth paragraph of Section 13.3.2 (Page 13-2) discusses the communications interface responsibility of the COL applicant, this action item has been captured in STD COL 13.3-2. The Lee Emergency Plan addresses communications interfaces of the Control Room, TSC and EOF primarily in Section II.E, which discusses emergency notification methods, and Section II.F, which discusses various emergency communication systems, their locations, reliability, and periodic tests. The Lee Emergency Plan addresses specific aspects of

emergency communications in numerous additional sections, including Sections II.A.1.b, II.A.1.d and e, II.B.7, II.E, II.F, II.G, II.H, II.L.4, and II.M.3.

The combination of STD COL 13.3-1 and STD COL 13.3-2 satisfies the COL Action Item 13.3-1 as described in NUREG-1793.

STD COL 13.3-2 addresses the staffing and communications interfaces of the Control room, TSC and EOF consistent with the information provided in DCD Tier 2, Section 18.8.3.5 addressing communications.

B. Within the Lee Emergency Plan, the concept of "activation" as used in NUREG-1793 and the AP1000 DCD, includes the activities of notifying the appropriate emergency response personnel, staffing the emergency response facilities, establishing the required communications interfaces, and declaring the facility to be operational. As addressed in the response to Item A, the combination of STD COL 13.3-1 and STD COL 13.3-2 satisfies COL Action Item 13.3-1 as described in NUREG-1793.

Associated Revision to the Lee Nuclear Station Final Safety Analysis Report or Emergency Plan:

None

Attachments:

None

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter No. 025

NRC Technical Review Branch: Licensing and Inspection Branch (NSIR/DPR/LIB (EP))

Reference NRC RAI Number(s): 13.03-074

NRC RAI:

SITE-21: ITAAC

Regulatory Basis: 10 CFR 52.80(a)

SRP ACCEPTANCE CRITERIA: Requirement E; Acceptance Criterion 23

A. Some EP ITAAC will be completed for Unit 1 before those for Unit 2. To allow closure of the common ITAAC for both units when Unit 1 is constructed, was the development of separate ITAAC tables for each unit considered so that the common ITAAC would not need to stay open until Unit 2 is constructed?

B. In Table 3.8-1, "Inspections, Tests, Analyses, and Acceptance Criteria," in Part 10 of the COL Application, Acceptance Criterion 6.3 ends with the words "for various radiological conditions." Table 14.3.10-1, "Emergency Planning Generic Inspections, Tests, Analyses, and Acceptance Criteria," of Section 14.3.10, "Emergency Planning Generic Inspections, Tests, Analyses, and Acceptance Criteria," of NUREG-0800, "Standard Review Plan," contains corresponding Acceptance Criteria 9.3 that ends with the words "for various meteorological conditions." Justify the wording difference between Acceptance Criterion 6.3 in the COL Application and corresponding Acceptance Criterion 9.3 in NUREG-0800.

C. Table 3.8-1, "Inspections, Tests, Analyses, and Acceptance Criteria," in Part 10 of the COL Application, each acceptance criterion is prefaced with the phrase "A report exists that confirms ..." The goal of ITAAC Acceptance Criteria is to be objective criteria that can be demonstrated to have been met prior to fuel load. The Acceptance Criteria must be specific and sufficiently objective, in order to clearly identify what the requirements are, and to provide the ability to determine whether they have been met. In RIS 2008-05, "Lessons Learned to Improve Inspections, Tests, Analyses, and Acceptance Criteria Submittal," February 27, 2008, the following guidance is provided in regard to the use of such a phrase:

   If applicants use the phrase, "a report exists and concludes that ...," they should consider specifying the scope and the type of report. For example, they should explain whether the scope of the report includes the design, the as-built construction (as reconciled with the design), or any other information.

   The use of the phrase "A report exists that confirms ..." in the Acceptance Criteria does not clearly describe how verification is actually conducted to confirm that the acceptance criteria are met. An area that might be appropriate for using a report to confirm that various ITAAC have been met is Planning Standard 8.0, "Exercises and Drills," for which an Exercise Report could serve to verify that various exercise-related ITAAC (e.g., exercise objectives) have been met.

Consistent with RIS 2008-05, discuss the type and scope of the reports cited in ITAAC Table 3.8-1, including how the report will serve to provide accurate and reliable confirmation that the Acceptance Criteria have been met, or consider removing the words "A report exists that confirms" from the Table, to create specific and sufficiently objective Acceptance Criteria. The removal of the reference to future reports will provide for objective ITAAC Acceptance Criteria, and leave open the specific method(s) that the licensee will use to confirm that the ITAAC acceptance criteria have been met.

D. Table 3.8-1, "Inspections, Tests, Analyses, and Acceptance Criteria," in Part 10, "Proposed Combined License Conditions (Including ITAAC," of the COL Application provides four separate acceptance criteria for planning standard 8.0, "Exercises and Drills." Address the following questions pertaining to the full-participation exercise, and the applicable guidance provided in Regulatory Guide (RG) 1.206, Appendix B, Table C.II.1-B1, "Emergency Planning – Generic Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)."

D.1 Table C.II.1-B1 acceptance criterion 14.1.3 addresses offsite exercise objectives associated with the full participation exercise. Explain why Table 3.8-1 does not include an acceptance criterion to reflect the offsite exercise objectives associated with the full participation exercise, and how this is consistent with the intent of this generic ITAAC. Either provide the appropriate acceptance criterion, or explain why it is not required.

D.2 Table 2.3-1 acceptance criteria 8.1.2.1 and 8.1.2.2 appear to address Table C.II.1-B1 acceptance criterion 14.1.2. Explain why 8.1.2.2 does not include the word "successfully" in regard to emergency response personnel performing their assigned responsibilities.

D.3 Table C.II.1-B1 acceptance criterion 14.1.2 includes the bracketed statement that "[t]he COL applicant will identify responsibilities and associated acceptance criteria." Explain why Table 3.8-1 (acceptance criteria 8.1.2.1 and/or 8.1.2.2) does not identify any responsibilities and associated acceptance criteria, in relation to onsite emergency response personnel successfully performing their assigned responsibilities. Either provide the appropriate acceptance criterion, or explain why it is not required.

D.4 Table C.II.1-B1 acceptance criterion 14.1.1 includes the bracketed statement that "[t]he COL applicant will identify exercise objectives and associated acceptance criteria." Table 3.8-1 acceptance criterion 8.1.1.2 states that exercise objectives, including acceptance criteria, address each of the 8 listed emergency planning program elements. However, Table 3.8-1 does not identify (in the acceptance criteria) what the exercise objectives and associated acceptance criteria are (as called for in Table C.II.1-B1). The goal of ITAAC acceptance criteria is to be objective criteria that can be demonstrated to have been 'met' prior to fuel load. The acceptance criteria must be specific and sufficiently objective, in order to clearly identify what the requirements are, and to provide the ability to determine whether they have been met. As written, the acceptance criterion 8.1.1.2 does not provide such clear and objective criteria. For the full participation exercise acceptance criteria in Table 3.8-1, provide specific exercise objectives and associated acceptance

criteria, consistent with Table C.II.1-B1. Either provide the appropriate acceptance criterion, or explain why it is not required.

E. EP Program Element 3.2 of Table 3.8.1 states that the means exists for communications from the control room, TSC, and EOF to NRC Headquarters and regional office EOCs (including establishment of the Emergency Response Data System (ERDS) between the onsite computer system and the NRC Operations Center. The "Inspection, Tests, and Analysis" for the EP Program Element is a note that states that the ITAAC for these communications systems are addressed in Table 3.1-1 of Tier 1 of the AP1000 Design Control Document, Rev.16. However, ITAAC number 2 in Table 3.1-1, "Inspections, Tests, Analyses, and Acceptance Criteria," states that the TSC has voice communication equipment for communication with the control room, EOF, OSC, and NRC. Provide additional details regarding the establishment of communications with the regional NRC EOC and ERDS between the onsite computer and the NRC Operations Center.

F. Table C.II.1-B1, " Emergency Planning-Generic Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)," in Appendix C.II.1-B, "Development Guidance for Emergency Planning ITAAC," to RG 1.206 contains the generic EP-ITAAC table. The table lists 17 Planning Standards and the accompanying EP Program Elements, Inspection, Tests, Analysis, and Acceptance Criteria. The COL application EP-ITAAC does not address 9 of the generic ITAAC Planning Standards. The following generic ITAAC Planning Standards are not addressed:

1. Assignment of Responsibility-Organizational Control--10 CFR 50.47(b)(1) An inspection of the implementing procedures or staffing rosters will be performed.
2. Onsite Emergency Organization--10 CFR 50.47(b)(2) An inspection of the implementing procedures or staffing rosters will be performed.
3. Emergency Response Support and Resources--10 CFR 50.47(b)(3) Provide letters of agreement or other documentation that demonstrates arrangement have been made for requesting and effectively using assistance resources, arrangements to accommodate local and state staff at the licensee's near site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.
4. Radiological Exposure Control--10 CFR 50.47(b)(11) A test will be performed of the capabilities
5. Medical and Public Health--10 CFR 50.47(b)(12) A test will be performed of the capabilities
6. Recovery an Reentry Planning and Post Accident Operations --10 CFR 50.47(b)(13) A report exists that confirms the Recovery and Reentry and Post Accident Operations plans have been demonstrated.
7. Radiological Emergency Response Training--10 CFR 50.47(b)(15) An inspection will be performed to verify the emergency response training program meets the applicable standards for those who may be called upon to assist in an emergency and that procedures for the conduct and evaluation of the training program exist and records of training offered and conducted exists.

8. Responsibility for Planning Effort: Development, Periodic Reviews, and Distribution of Emergency Plan --10 CFR 50.47(b)(16) An inspection of the Emergency Plan distribution will be performed to insure all agencies identified in the Emergency Plan have been provided a copy of the final, approved plan and any subsequent revisions, changes, supplements, or amendments.

9. Implementing Procedures: 10 CFR Part 50, Appendix E.V. An inspection of the submittal letter will be performed to insure all required implementing procedures are adequately addressed.

Discuss why ITAAC were not developed for the above Planning Standards, or propose an ITAAC.

G. Table C.II.1-B1, " Emergency Planning-Generic Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)," in Appendix C.II.1-B, "Development Guidance for Emergency Planning ITAAC," to RG 1.206 contains the generic EP-ITAAC table. EP Planning Standard 5.0, "Notification Methods and Procedures," states in associated Acceptance Criteria 5.3 states:

"The means for notifying and providing instructions to the public are demonstrated to meet the design criteria as stated in the emergency plan. (The COL applicant will identify specific capabilities.)

The Lee COL Emergency Plan states in Chapter II.E.6, "Instructions to the Public in the Plume Exposure EPZ," states:

"The Alert Notification System includes an outdoor warning system, measures for notifying special facilities, and notification of the public. This system is designed to meet the acceptance criteria of Section B of Appendix 3, NUREG-0654/FEMA REP-1."

Provide additional information regarding the alert notification system design to meet the guidance provided in Appendix 3 to NUREG-0654/FEMA REP-1 or propose an ITAAC.

Duke Energy Response:

A. ITAAC will be included in the operating license issued to each Unit as a license condition to be closed specific to that unit. As such, the EP ITAAC does not need to be unit-specific. Closure documentation for each ITAAC will address the applicability to one or both units.

B. The error in Table 3.8-1, Acceptance Criterion 6.3 will be corrected to end with the wording "for various meteorological conditions."

C. The use of the phrase, "a report exists that confirms..." was incorporated into the Acceptance Criteria in Table 3.8-1 for consistency with Acceptance Criteria presented in the AP1000 Design Certification Document. Upon further review, it has been determined that those Acceptance Criteria associated with conducting a drill or exercise will retain this phrase. However, the phrase, "a report exists that confirms..." will be removed from the following Acceptance Criteria in Table 3.8-1: 1.1.1, 1.1.2, 4.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.1, 5.2.2, 6.2, 6.3, 6.4, 6.5,and 6.7

D.1 Acceptance Criterion 8.1.1.2 in Table 3.8-1 specifically states that "Exercise objectives, including specific acceptance criteria addressed each of the following Emergency

Planning (EP) Program Elements..." This Acceptance Criterion is all inclusive because it does not specify "onsite" or "offsite."

The applicant recognizes that a full participation exercise must be conducted prior to fuel loading. The applicant also understands that offsite exercise objectives must be met or deficiencies addressed prior to operation above 5% power. Further, regulations (i.e., 10 CFR 52.80) require that ITAAC be "performed" by the licensee. The applicant does not control whether or not offsite exercise objectives have been met and thus these ITAAC cannot be performed by the licensee. Offsite objectives are, therefore, not appropriate for ITAAC. FEMA will evaluate offsite response during the full participation exercise and render their finding with respect to the adequacy of offsite response in support of plant operations. FEMA's finding will be the determining factor for the NRC to authorize fuel loading and operation above 5% power.

D.2 The term, "successfully," is a subjective term. Acceptance Criteria 8.1.2.1 and 8.1.2.2 provide objective criteria that can be met.

D.3 The COL Application Emergency Plan provides information regarding the onsite emergency response organization and associated responsibilities in Sections II.B.1 through II.B.7. A clarifying note will be added to Acceptance Criteria 8.1.2.1 and 8.1.2.2.

D.4 In order to determine that future exercise objectives are sufficient for a comprehensive test of the COL Application Emergency Plan, the applicant provided a list of EP Program Elements that must be tested, including developing exercise objectives and specific acceptance criteria in Acceptance Criteria 8.1.1.2. Additionally, other Acceptance Criteria in Table 3.8-1 provide details directly related to specific objectives that must be met. Acceptance Criteria 2.1.1 and 2.2 address specific notification methods and procedures, Acceptance Criteria 3.1.1, 3.1.2, 3.1.3, and 3.1.4, and EP Program Element 3.2 address specific emergency communication objectives, and Acceptance Criterion 6.1 directly addresses accident assessment and classification and radiological assessment and control.

Exercise planning and conduct is a cooperative effort with State and local agencies. Integral to this planning effort is the development of specific exercise objectives. Considering that it will be several years before the full participation exercise required prior to fuel loading is conducted, the development of specific exercise objectives will be undertaken when the full participation exercise planning effort is initiated with the State and local agencies.

E. Communications with the regional NRC EOC is possible utilizing the commercial telephone system. The ERDS plant performance data is collected by the AP1000 Plant Monitoring System (PMS) and then provided to the NRC Operations Center. Because the PMS design is not finalized, the exact protocol for transmitting the data is not yet finalized, but the DCD, Tier 1, ITAAC represents a commitment to provide data to the NRC supporting oversight and assessment.

F. Duke relied on the Emergency Planning (EP) ITAAC agreed to between the NRC staff and industry documented in SECY-05-0197, "Review of Operational Programs in a Combined License Application and Generic Emergency Planning Inspections, Tests, Analyses, and

Acceptance Criteria." One of the stated purposes of SECY-05-0197 was to "Allow the use of proposed generic emergency planning/emergency preparedness (EP) inspections, tests, analyses, and acceptance criteria (ITAAC) as a model for inclusion in COL applications."

Duke recognizes that additional EP ITAAC were included in the guidance offered in Regulatory Guide 1.206, but found that the additional ITAAC were already adequately addressed in the set of EP ITAAC proposed, as discussed below:

Items 1 and 2: Responsibilities for performance of an integrated emergency response are demonstrated during an evaluated exercise as required by COLA Part 10 (ITAAC) Table 3.8-1, item 8.0. The Emergency Plan contains descriptions of the response team staffing and responsibilities. The clarifying note added to acceptance criteria 8.1.2.1 and 8.1.2.2 as discussed in response to the question in D.2 of this RAI strengthens the acceptance criteria.

Item 3: The Emergency Plan submitted as Part 5 of the COLA included Certification Letters in which supporting organizations have documented their commitment to support the licensee. The integrated response is also demonstrated in the evaluated exercise required by ITAAC Table 3.8-1, item 8.0.

Item 4: An evaluated exercise as required by ITAAC Table 3.8-1, item 8, requires Protective Action Guidelines to be utilized. The Protective Action Guidelines for emergency workers are often included and demonstrated during evaluated exercises. Most often NRC Emergency Planning Inspection teams confirm that implementing procedures include dose extension and approval guidance for emergency workers. The use of inspection procedures and exercise demonstrations are the preferred way to confirm this emergency planning standard.

Item 5: The Emergency Plan contains a detailed agreement from Piedmont Medical Center addressing arrangements for treating contaminated injured workers. Testing of medical capabilities is not included as an ITAAC; however, this capability must be tested annually as required by subsection II.N.2.c.

Item 6: Emergency Plan implementing procedures are required to include recovery and reentry guidance. NRC Emergency Planning inspections confirm the guidance exists in licensee procedures. ITAAC Table 3.8-1, acceptance criteria 8.1.1.2 specifically lists Recovery and Reentry as an element to be tested.

Item 7: The NRC Emergency Planning Inspectors periodically observe emergency planning training, inspect training records and compare rosters with training records to confirm individuals are attending required training. This method of verification is the accepted practice to confirm licensee actions are acceptable. Additionally, the effectiveness of training is specifically addressed through the exercise performance demonstrations required in ITAAC Table 3.8-1 acceptance criteria 8.1.2.2.

Item 8: The NRC Emergency Planning Inspectors periodically confirm emergency plan implementation procedures are distributed to supporting agencies and response centers. This is an important activity but is administrative in nature and not appropriate for an ITAAC.

Item 9: Emergency Plan implementing procedures are required to be submitted to the NRC at least 180 days prior to the scheduled date for initial fuel loading under Section V of Appendix E to 10 CFR 50. This section states "No less than 180 days before... the scheduled date for initial loading of fuel for a combined license under part 52 of this chapter, the applicant's or licensee's detailed implementing procedures for its emergency plan shall be submitted to the Commission as specified in § 50.4." There is no need for, or regulatory basis for requiring, a license condition that merely duplicates an existing regulation.

G. Additional information regarding the Alert and Notification System design information is located in Appendix 3 of the COL Application Emergency Plan. This information addresses guidance provided in Appendix 3 of NUREG-0654.

Associated Revision to the Lee Nuclear Station Combined License Application:

Revise COLA Part 10, Table 3.8-1 as shown in Attachment 1.

Attachment:

1. Markup of Affected Portions of COLA Part 10, Table 3.8-1

Lee Nuclear Station Response to Request for Additional Information (RAI)

Attachment 1 to RAI 13.03-074

Mark-up of Affected Portions of COLA Part 10, Table 3.8-1

William States Lee III Nuclear Station
COL Application, Part 10
Inspections, Tests, Analyses, and Acceptance Criteria

TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 1 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
1.0 Emergency Classification System			
10 CFR 50.47(b)(4) – A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.	1.1 A standard emergency classification and emergency action level (EAL) scheme exists, and identifies facility system and effluent parameters constituting the bases for the classification scheme. [D.1**] [**D.1 corresponds to NUREG-0654 /FEMA-REP-1 evaluation criteria.]	1.1 An inspection of the control room, technical support center (TSC), and emergency operations facility (EOF) will be performed to verify that they have displays for retrieving facility system and effluent parameters in specific Emergency Action Levels (EALs) identified in the following list of EALs in Appendix 1, Section 5, of the Emergency Plan: **EALs in Emergency Plan Appendix 1, Section 5** Abnormal Rad Levels/Radiological Effluents: AU1 (EALs 1, 2), AU2, AA1 (EALs 1, 2), AA2, AA3, AS1 (EAL 1), AG1 (EAL 1) Cold Shutdown/Refueling System Malfunction: CU2, CU3, CU4, CU7, CU8, CA1, CA4, CS1, CG2 Fission Product Barrier Thresholds: Fuel Clad Barrier Thresholds Values: 2. Primary Coolant Activity Level 3. Core Exit Thermocouple Readings 4. Reactor Vessel Water Level 6. Containment Radiation Monitoring RCS Barrier Threshold Values: 2. RCS Leak Rate 4. SG Tube Rupture 6. Containment Radiation Monitoring Containment Barrier Threshold Values: 2. Containment Pressure 3. Core Exit Thermocouple Reading 4. SG Secondary Side Release with P-to-S Leakage 5. CNMT Isolation Failure or Bypass 6. Significant Radioactive Inventory in Containment Hazards or Other Conditions Affecting Plant Safety: HU1 (EAL 2), HA1 (EALs 1, 2) System Malfunction: SU1, SU4 (EAL 1), SU8, SA1, SA2, SA4, SS1, SS2, SS3, SS6, SG1, SG2	1.1.1 ~~A report exists that confirms t~~The specific parameters identified in the EALs in Emergency Plan Appendix 1, Section 5 have been retrieved and displayed in the control room, TSC, and EOF. 1.1.2 ~~A report exists that confirms t~~The ranges available in the control room, TSC, and EOF encompassed the values for the specific parameters identified in the EALs in Emergency Plan Appendix 1, Section 5.

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Inspections, Tests, Analyses, and Acceptance Criteria

TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 4 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
4.0 Public Education and Information			
10 CFR 50.47(b)(7) – Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.	4.1 The licensee has provided space which may be used for a limited number of the news media at the EOF. [G.3.b]	4.1 An inspection of the Joint Information Center will be performed to verify that space is provided for a limited number of the news media.	4.1 ~~A report exists that confirms t~~The Joint Information Center has been located in the Duke Energy Center at 526 South Church Street, Charlotte, NC.

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COL Application, Part 10
Inspections, Tests, Analyses, and Acceptance Criteria

TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 5 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
5.0 Emergency Facilities and Equipment			
10 CFR 50.47(b)(8) – Adequate emergency facilities and equipment to support the emergency response are provided and maintained.	5.1 The licensee has established a technical support center (TSC) and onsite operations support center (OSC). [H.1]	5.1 An inspection of the as-built TSC and OSC will be performed. NOTE: Additional ITAAC for the as-built TSC and OSC are addressed in Table 3.1-1 of Tier 1 of the AP1000 Design Control Document, Rev. 16.	5.1.1 ~~A report exists that confirms t~~The TSC has been located in the Maintenance Building. 5.1.2 ~~A report exists that confirms t~~The TSC includes radiation monitors and a ventilation system with a high efficiency particulate air (HEPA) and charcoal filter. 5.1.3 ~~A report exists that confirms b~~Back-up electrical power supply was available for the TSC. 5.1.4 ~~A report exists that confirms t~~The OSC was in a location separate from the control room.
	5.2 The licensee has established an emergency operations facility (EOF). [H.2]	5.2 An inspection of the EOF will be performed.	5.2.1 ~~A report exists that confirms t~~The EOF had at least 243 square meters (2,625 square feet). 5.2.2 ~~A report exists that confirms v~~Voice transmission and reception have been accomplished between the EOF and TSC. 5.2.3 A report exists that confirms voice transmission and reception have been accomplished via the Selective Signaling Telephone System between the EOF and the following: • Cherokee County Warning Point • York County Warning Point • Cleveland County Warning Point • South Carolina Warning Point • North Carolina Emergency Operations Center Radiological Warning Point

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Inspections, Tests, Analyses, and Acceptance Criteria

TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 6 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
6.0 Accident Assessment			
10 CFR 50.47(b)(9) – Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.	6.1 The means exist to provide initial and continuing radiological assessment throughout the course of an accident. [I.2]	6.1 A test of the emergency plan will be conducted by performing an exercise or drill to verify the capability to perform accident assessment.	6.1 A report exists that confirms an exercise or drill has been accomplished including use of selected monitoring parameters identified in the EALs in **Emergency Plan Appendix 1, Section 5**, to assess simulated degraded plant and initiate protective actions in accordance with the following criteria: A. Accident Assessment and Classification 1. Initiating conditions identified, EALs parameters determined, and the emergency correctly classified throughout the drill. B. Radiological Assessment and Control 1. Onsite radiological surveys performed and samples collected. 2. Radiation exposure to emergency workers monitored and controlled. 3. Field monitoring teams assembled and deployed. 4. Field team data collected and disseminated. 5. Dose projections developed. 6. The decision whether to issue radioprotective drugs to Duke emergency workers made. 7. Protective action recommendations developed and communicated to appropriate authorities.
	6.2 The means exist to determine the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors. [I.3]	6.2 An analysis of emergency plan implementing procedures will be performed.	6.2 ~~A report exists that confirms a~~A methodology has been established to determine source term of releases of radioactive materials within plant systems.

William States Lee III Nuclear Station
COL Application, Part 10
Inspections, Tests, Analyses, and Acceptance Criteria

TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 7 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
	6.3 The means exist to continuously assess the impact of the release of radioactive materials to the environment, accounting for the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions. [I.4]	6.3 An analysis of emergency plan implementing procedures will be performed.	6.3 ~~A report exists that confirms a~~A methodology has been provided to establish the relationship between effluent monitor readings and onsite and offsite exposures and contamination for various ~~radiological~~ meteorological conditions.
	6.4 The means exist to acquire and evaluate meteorological information. [I.5]	6.4 An inspection of the control room, TSC, and EOF will be performed to verify the availability of the following meteorological data is available: · Wind speed (at 10 m and 60 m) · Wind direction (at 10 m and 60 m) · Air temperature (at 10 m and 60 m)	6.4 ~~A report exists that confirms t~~The specified meteorological data was available at the control room, TSC, and EOF.
	6.5 The means exist to make rapid assessments of actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including activation, notification means, field team composition, transportation, communication, monitoring equipment, and estimated deployment times. [I.8]	6.5 An analysis of emergency plan implementing procedures will be performed.	6.5 ~~A report exists that confirms a~~A methodology has been established to provide rapid assessment of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways.
	6.6 The capability exists to detect and measure radioiodine concentrations in air in the plume exposure EPZ, as low as 10-7 µCi/cc (microcuries per cubic centimeter) under field conditions. [I.9]	6.6 A test of Duke field survey instrumentation will be performed to verify the capability to detect airborne concentrations as low as 1E-07 microcuries per cubic centimeters.	6.6 A report exists that confirms instrumentation used for monitoring I-131 to detect airborne concentrations as low as 1E-07 microcuries per cubic centimeters has been provided.

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Inspections, Tests, Analyses, and Acceptance Criteria

TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 8 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
	6.7 The means exist to estimate integrated dose from the projected and actual dose rates, and for comparing these estimates with the EPA protective action guides (PAGs). [I.10]	6.7 An analysis of emergency plan implementing procedures will be performed to verify that a methodology is provided to establish means for relating contamination levels and airborne radioactivity levels to dose rates and gross radioactivity measurements for the following isotopes – Kr-88, Ru-106, I-131, I-132, I-133, I-134, I-135, Te-132, Xe-133, Xe-135, Cs-134, Cs-137, Ce-144.	6.7 ~~A report exists that confirms t~~The means for relating contamination levels and airborne radioactivity levels to dose rates and gross radioactivity measurements for the specified isotopes has been established.

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TABLE 3.8-1 INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (SHEET 10 of 10)

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
8.0 Exercises and Drills			
10 CFR 50.47(b)(14) – Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.	8.1 Licensee conducts a full-participation exercise to evaluate major portions of emergency response capabilities, which includes participation by each State and local agency within the plume exposure EPZ, and each State within the ingestion control EPZ. [N.1]	8.1 A full-participation exercise (test) will be conducted within the specified time periods of Appendix E to 10 CFR Part 50.	8.1.1.1 A report exists that confirms an exercise was conducted within the specified time periods of Appendix E to 10 CFR Part 50, onsite exercise objectives were met, and there were no uncorrected onsite exercise deficiencies. 8.1.1.2 A report exists that confirms exercise objectives, including specific acceptance criteria, addressed each of the following Emergency Planning (EP) Program Elements: · Emergency Classification · Notification and Emergency Communications · Emergency Public Information · Emergency Facilities and Equipment · Accident Assessment · Protective Response and Protective Action Recommendations · Radiological Exposure Control · Recovery and Re-Entry 8.1.2.1 A report exists that confirms onsite emergency response personnel were mobilized to fill emergency response positions and there were no uncorrected onsite exercise deficiencies. 8.1.2.2 A report exists that confirms onsite emergency response personnel performed their assigned responsibilities and there were no uncorrected onsite exercise deficiencies. Note 1: Applicant emergency response organization assigned responsibilities are specified in Sections II.B.1 through II.B.7 of the COL Application Emergency Plan.