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Catawba Nuclear Station
Emergency Plan
Section E - Notification Methodology

E. Notification Methodology

E.1 Notification of Response Organization

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

E.2 Activation of Emergency Organization

This section describes the necessary communication steps to be taken to alert or activate emergency personnel for each class of emergency listed in Section D. The notification format and message authentication technique to off-site authorities shall be in accordance with Catawba Emergency Response Procedures RP/0/A/5000/006A, Notifications to States and Counties from the Control Room, and AD-EP-ALL-0304, State and County Notifications.

E.2.a. Notification of Unusual Event

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

NOTE: This emergency classification is further defined in AD-EP-ALL-0101, Emergency Classification and Catawba Nuclear Station Emergency Response Procedure RP/0/A/5000/001, Classification of Emergency.

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

The Shift Manager shall assure notification of:

1. Station Manager
2. Site Vice President
3. Chief Nuclear Officer

for any initiating condition in this classification listed in Section D.

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

1. North Carolina Warning Point (Raleigh, NC)
2. South Carolina Warning Point (Columbia, SC)
3. York County Warning Point (Rock Hill, SC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. NRC Operations Center (Rockville, MD)

Notification format and message authentication technique to off-site authorities shall be in accordance with applicable Catawba Nuclear Station Emergency Response Procedures.

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

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

The Emergency Preparedness Manager or designee will close out the Emergency with verbal summary to off-site authorities, notified above, followed by an LER or written summary within 30 days.

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

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

E.2.b Alert

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

NOTE: This Emergency Classification is further defined in AD-EP-ALL-0101, Emergency Classification and Catawba Nuclear Station Emergency Response Procedure, RP/0/A/5000/001, Classification of Emergency.

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

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

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

The Emergency Response Organization personnel will be notified by text and/or voice message upon the initial emergency declaration via a mass communication system using AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS). Redundant notification is provided by the on-site public address system, Nuclear Callout System and/or an automated telephone system which will allow timely alerting of Emergency Response Organization personnel.

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

1. North Carolina Warning Point (Raleigh, NC)
2. South Carolina Warning Point (Columbia, SC)
3. York County Warning Point (Rock Hill, SC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. NRC Operations Center (Rockville, MD)

Notification format and message authentication technique to off-site authorities shall be in accordance with applicable Catawba Nuclear Station Emergency Response Procedures.

The Emergency Coordinator shall augment on-site resources by notification and activation of the Emergency Response Organization in accordance with RP/0/A/5000/003, Alert, or AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS).

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

1. Dispatching on-site monitoring teams with associated communication equipment in accordance with Catawba Nuclear Station Radiation Protection procedures.
2. Providing periodic plant status updates to off-site authorities (at least every hour or as agreed otherwise).

3. Providing periodic meteorological assessments to off-site authorities and, if any releases are occurring, dose estimates for actual releases.

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

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

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

E.2.c. Site Area Emergency

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

NOTE: This Emergency Classification is further defined in AD-EP-ALL-0101, Emergency Classification and Catawba Nuclear Station Emergency Response Procedure RP/0/A/5000/001, Classification of Emergency.

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

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

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

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

1. North Carolina Warning Point (Raleigh, NC)
2. South Carolina Warning Point (Columbia, SC)
3. York County Warning Point (Rock Hill, SC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. NRC Operations Center (Rockville, MD)

Notification format and message authentication technique to off-site authorities shall be in accordance with applicable Catawba Nuclear Station Emergency Response Procedures.

The Emergency Coordinator shall augment on-site resources by notification and activation of the Emergency Response Organization in accordance with RP/0/A/5000/004, Site Area Emergency, or AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS).

The Emergency Response Organization personnel will be notified by text and/or voice message upon the initial emergency declaration via a mass communication system using AD-EP-ALL-0301 (Activation of the Emergency Response Organization Notification System (ERONS). Redundant notification is provided by the on-site public address system, Nuclear Callout System and/or an automated telephone system which will allow timely alerting of Emergency Response Organization personnel.

The Emergency Coordinator may order the evacuation of non-essential station personnel to an Evacuation-Relocation Site if the emergency situation warrants.

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

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

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

The Emergency Coordinator will assure notification of all Catawba Nuclear Station management not notified thus far for those initiating conditions or implementation of any Emergency Procedure affecting these personnel in accordance with Catawba Nuclear Station Emergency Response Procedure RP/0/A/5000/004, Site Area Emergency or AD-EP-ALL-0101, Emergency Classification.

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

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

E.2.d General Emergency

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

NOTE: This Emergency Classification is further defined in AD-EP-ALL-0101, Emergency Classification and Catawba Nuclear Station Emergency Response Procedure, RP/0/A/5000/001, Classification of Emergency.

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

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

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

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

1. North Carolina Warning Point (Raleigh, NC)
2. South Carolina Warning Point (Columbia, SC)
3. York County Warning Point (Rock Hill, SC)
4. Gaston County Warning Point (Gastonia, NC)
5. Mecklenburg County Warning Point (Charlotte, NC)
6. NRC Operations Center (Rockville, MD)

Notification format and message authentication technique to off-site authorities shall be in accordance with applicable Catawba Nuclear Station Emergency Response Procedures.

The Emergency Coordinator shall augment on-site resources by notification and activation of the Emergency Response Organization in accordance with RP/0/A/5000/005, General Emergency or AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS).

The Emergency Response Organization personnel will be notified by text and/or voice message upon the initial emergency declaration via a mass communication system using AD-EP-ALL-0301, Activation of the Emergency Response Organization Notification System (ERONS). Redundant notification is provided by the on-site public address system, Nuclear Callout System and/or an automated telephone system which will allow timely alerting of Emergency Response Organization personnel.

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

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

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

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

The Emergency Coordinator will assure notification of all Catawba Nuclear Station Management not notified thus far for those initiating conditions or implementation of any Emergency Procedure affecting these personnel in accordance with Catawba Nuclear Station Emergency Response Procedure RP/0/A/5000/005, General Emergency.

The Emergency Coordinator shall make a recommendation to the off-site authorities to evacuate and/or shelter affected zones in accordance with RP/0/A/5000/005, General Emergency, or AD-EP-ALL-0109, Offsite Protective Actions Recommendations.

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

The EOF Director will terminate the emergency class and recommend entry into recovery by briefing the off-site authorities at the Emergency Operations Facility, or by phone if necessary, followed by an LER or written summary within thirty days.

E.3 Emergency Message Format (Initial)

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

E.4 Emergency Message Format (Follow-Up)

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

E.5 State and Local Organizations-Disseminating Public Information

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

E.6 Alert and Notification System

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

Each county will control the activation of the sirens within its boundaries.

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

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

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

E.7 Supporting Information for Public Information Messages

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

EAS message formats are described in the North Carolina and South Carolina Emergency Plans.

Figure E-1
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NUCLEAR POWER PLANT EMERGENCY NOTIFICATION FORM

MESSAGE # _____ Confirmation Phone #: _____ AUTHENTICATION CODE #: _____

Lines 1 – 6 are required for INITIAL Notifications

1. EVENT: <input type="checkbox"/> DRILL <input type="checkbox"/> ACTUAL DECLARATION <input type="checkbox"/> TERMINATION (ONLY Lines 1, 2, & 4 required)	
2. AFFECTED SITE: CATAWBA	
3. EMERGENCY CLASSIFICATION <input type="checkbox"/> UNUSUAL EVENT <input type="checkbox"/> ALERT <input type="checkbox"/> SITE AREA EMERGENCY <input type="checkbox"/> GENERAL EMERGENCY	
4. EAL # _____	Declaration Date: ____/____/____ Time: _____ Termination Date: ____/____/____ Time: _____ (mark "N/A" for EAL # & Description)
EAL DESCRIPTION: _____ _____ _____	
5. RELEASE TO THE ENVIRONMENT (caused by the emergency): <input type="checkbox"/> NONE <input type="checkbox"/> IS OCCURRING <input type="checkbox"/> HAS OCCURRED	
6. PROTECTIVE ACTION RECOMMENDATIONS: <input type="checkbox"/> NONE <input type="checkbox"/> EVACUATE: _____ <input type="checkbox"/> SHELTER: _____ <input type="checkbox"/> CONSIDER THE USE OF KI (POTASSIUM IODIDE) IN ACCORDANCE WITH ORO PLANS AND POLICIES <input type="checkbox"/> OTHER: _____	

Lines 7-11 are **NOT** required for INITIAL notifications. Lines 7-11 may be provided separately for follow-up notifications.

7. PROGNOSIS: Upgrade in classification or PAR change is likely before the next follow-up notification ☐ Yes ☐ No

8. SITE UNIT(S) STATUS:

AFFECTED UNIT

☐ YES Unit 1 - _____ % Power Shutdown: Date ____/____/____ Time _____
☐ YES Unit 2 - _____ % Power Shutdown: Date ____/____/____ Time _____

9. METEOROLOGICAL DATA:

Wind direction from: _____ degrees Wind Speed: _____ mph Precipitation: _____ inches
Stability Class: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Lines 10 - 11 are completed for follow-up notifications, IF Line 5 IS OCCURRING or HAS OCCURRED is selected

10. AIRBORNE RELEASE CHARACTERIZATION: ☐ GROUND ☐ MIXED ☐ ELEVATED

MAGNITUDE UNITS: ☐ Ci ☐ Ci/sec ☐ μ Ci/sec
Noble Gases: _____ Iodines: _____ Particulates: _____

11. DOSE PROJECTION: Projection period: _____ Hours Estimated Release Duration _____ Hours

Performed:	DISTANCE	TEDE (mrem)	Thyroid CDE (mrem)
Date ____/____/____	Site Boundary		
Time: _____	2 Miles		
	5 Miles		
	10 Miles		

12. REMARKS (As Applicable): _____

13. APPROVED BY: _____ TITLE: _____ Date ____/____/____ Time _____

14. NOTIFIED BY: _____ Date ____/____/____ Time _____

15. RECEIVED BY (ORO use only): _____ Date ____/____/____ Time _____

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