

ANNEX Q, FIXED NUCLEAR FACILITY (FNF) RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP) TO THE FAIRFIELD COUNTY EMERGENCY OPERATIONS PLAN (EOP)

I. AUTHORITIES AND REFERENCES

A. Purpose

To provide for the Radiological Emergency Response (RER) to protect the populace and property of Fairfield County from harmful effects of ionizing radiation in the event of a radiological incident at the VC Summer Nuclear Station (VCSNS).

B. Authority

1. S.C. Legislative Act Number 199, Section 21, 1979, which places Emergency Management responsibilities under the Office of the Adjutant General and provides for Emergency Management.
2. S.C. Legislative Act Number 223 of 1967 with subsequent amendments which assigns State Radiological duties to the Department of Health and Environmental Control, (DHEC).
3. Fairfield County Ordinance Number 487, dated May 9, 2005.

C. Reference

1. South Carolina Emergency Operations Plan (SCEOP), 2012.
2. South Carolina Operational Radiological Emergency Response Plan (SCORERP), 2012.
3. South Carolina Technical Radiological Emergency Response Plan (SCTRERP), 2010.
4. NUREG-0654/FEMAREP-1, November, 1980.
5. Fairfield County Mitigation Plan

D. Maps

1. Map, VCSNS 10-Mile Emergency Planning Zone (EPZ), S.C. Primary Highways, Sectors, Evacuation Routes, Reception Centers, Traffic Access Control Points (TACPs), Procedures. (*Attachment 1*)
2. Traffic and Access Control Points and Routing Plan. (*Attachment 2*)
3. Map, 50-Mile EPZ, VCSNS. (*Attachment 3*)
4. Estimated Resident Population within 10-mile EPZ. (*Attachment 4*)

E. Definitions

1. **DHEC**--South Carolina Department of Health and Environmental Control.
2. **EMERGENCY OPERATIONS CENTER (EOC)**--A facility with the necessary communications from which essential functions are directed and controlled by county government.
3. **EMERGENCY PLANNING ZONES (EPZ) OF THE OFF-SITE AREA**
 - a. **Ten-Mile Plume Exposure Pathway Emergency Planning Zone**--An approximate ten-mile radius centered on a Fixed Nuclear Facility having an operational nuclear reactor. This EPZ is divided into two, five and ten-mile zones and is further divided into sub-sectors for area identification and control of population in evacuation. The EPZ represents that area in which, under a worst-case nuclear incident, ionizing radiation could spread and from which the population might have to be evacuated. (*Attachment 4*)
 - b. **Fifty-Mile Ingestion Pathway Emergency Planning Zone**--A fifty-mile radius (*approximate*) centered on VCSNS. This EPZ is that area which must be monitored and plans made to prevent human ingestion of ionizing radiation from food products such as milk, vegetables, and water which may have been contaminated. (*Attachment 3*)
4. **EMERGENCY RADIOLOGICAL ASSISTANCE TEAM (ERAT)**--A team of Department of Health & Environmental Control personnel trained in radiological accident response.
5. **FIXED NUCLEAR FACILITY (FNF)**--A permanently located nuclear facility which could present a radiological hazard off-site from the facility.
6. **OFF-SITE**--All land and water areas within Fairfield County which could be affected by a radiological incident at the VCSNS. Such area is under the operational control of the local jurisdiction affected and for which the jurisdiction is responsible for radiological emergency response planning.
7. **ON-SITE**--All land and water within the FNF's site boundary which cannot be used without authorization from the facility operators for RER Planning.
8. **PRICE-ANDERSON ACT**--Federal legislation which establishes an insurance pool over and beyond that available to the nuclear industry through private insurance firms. It would enable those affected by a radiological accident to recover through the Federal government their losses that are not covered by private insurance policies.
9. **RADIATION PROTECTIVE ACTIONS**--Actions taken to avoid or reduce the effects of ionizing radiation releases due to a radiological incident.

10. **RADIOLOGICAL INCIDENT**--Any unexpected occurrence of a condition which could or does result in the exposure of the public to any source of ionizing radiation.
11. **RER**--Radiological Emergency Response.
12. **STATE EMERGENCY OPERATIONS CENTER (SEOC)**—A facility with the necessary communication control capabilities from which essentially all disaster functions are directed and controlled by the Governor. The SEOC is located at 2779 Fish Hatchery Rd, West Columbia S.C. 29172.

II. SITUATION AND ASSUMPTIONS

A. SITUATIONS

1. National

The Nuclear Regulatory Commission (*NRC*) and the Federal Emergency Management Agency (*FEMA*), through NUREG-0654, FEMA REP-1, November, 1980, has specified criteria that the facility, the state and the local governments which lie within the EPZ must meet in order to provide for license to operate. The criteria is specific, precise and detailed on- and off-site RER to protect the populace and property vulnerable to the effects of ionizing radiation in the event of a nuclear accident. The minimum specified criteria must be met in order that nuclear power reactor facilities be licensed to operate or continue. It varies from natural disaster planning as follows:

- a. The NRC has federal responsibility for RER within the boundaries of the VCSNS, which is specified as “On-site.” The state and Fairfield County have no responsibility on-site other than that negotiated through written agreement with the facility.
- b. FEMA has federal agency responsibility for RER “Off-site.” The state secures federal assistance and support through FEMA and through letters of agreement with other state and federal agencies. Federal support off-site in any case will be requested **ONLY** by the state.
- c. The capability to warn the populace in a 10-mile EPZ.
- d. An emergency classification system for nuclear power reactor accidents with attendant facility, state and local actions to be taken is specified.
- e. Command, control and communications capabilities and procedures are precisely stated.
- f. Public Information requirements are continuous and must be specifically stated in plans.
- g. Specified exercises and drills for RER are required.
- h. RER Training for response forces will be detailed in the Plan and given as programmed.
- i. Periodic review/up-date of RERP is required.

- j. Local, state and facility plans must include each aspect of the criteria in NUREG-0654 FEMA REP-1, as referenced for the planning entity for the Plan to be considered adequate.

2. **State**

The state of South Carolina has four commercial nuclear power facilities and one Department of Energy facility currently in operation.

3. **Local**

- a. A portion of Fairfield County lies within the ten-mile EPZ of the VCSNS. Included in this zone are approximately 15.6 square miles of county territory and approximately 4,130 people, with the largest concentration in Jenkinsville. The approximately 699 square miles of Fairfield County are divided into 18,539 acres of crop land; 386,016 acres of woodlands and approximately 37,637 acres that fall into a general category of "all other." There are a total of four operating dairies in Fairfield County. The remaining portion of land is devoted to crops such as soybeans, cotton, hay, wheat, small grain and corn. Salem Crossroads, Blair, Monticello and Jenkinsville water departments utilize water in the ten-mile EPZ. Some rural residents depend upon deep open wells for water. Fairfield County provides the majority of the county with water.
- b. The remainder of Fairfield County lies within the fifty-mile Ingestion Pathway EPZ, in which approximately 19,000 people reside. The county has gently rolling topography. Approximately one-third of Fairfield County is un-inhabited forest, which includes one state park (Wateree). Exact crop and meat production data is available through the County Clemson University Agricultural Extension Service.
- c. Portions of Fairfield County lie within the 50-mile Ingestion Pathway EPZ for Catawba Nuclear Station, Rock Hill, SC and H. B. Robinson Steam Electric Plant, Darlington, SC.
- d. **VC Summer Nuclear Station (VCSNS):**
 1. The VCSNS, located in the western part of Fairfield County on Broad River, produces 900 megawatts of electricity from its nuclear reactor unit.
 2. Agreements exist between the VCSNS and Fairfield County for RER support. (*See Appendix 8.*)

B. Assumptions

A radiological accident will occur at a nuclear facility in South Carolina or an adjacent state that could have ionizing radiation effects of varying degrees on Fairfield County. Emergency response capabilities will be needed at the local level to meet the emergency situations.

C. Wind Data

The VCSNS is located in the western part of Fairfield County. A portion of the county lies within the ten-mile EPZ and all of it lies within the fifty-mile EPZ. Wind percentages and directions from the VCSNS are as follows:

N	4.1	SSW	8.4
NNE	6.3	SW	11.0
NE	9.1	WSW	10.8
ENE	7.1	W	8.4
E	4.4	WNW	4.7
ESE	2.9	NW	3.7
SE	3.2	NNW	3.4
S	7.3	SSE	5.2

Source: Table 2-1 of VCSNS Radiation Emergency Plan EP-100, April 2005

1. As a result, a radiological accident at VCSNS could have an Ionizing Radiation effect of varying degrees upon Fairfield County.

D. Planning Basis

1. Any radiological accident in South Carolina or adjacent states that present an off-site radiological threat to Fairfield County is the initial RER responsibility of Fairfield County.
2. Technological radiological emergency response support will be furnished to Fairfield County by VCSNS and DHEC.
3. The first three hours from notification of a radiological accident at VCSNS is critical to the county. The county will be prepared to initiate an immediate Crisis RER in reaction to the VCSNS and DHEC assessment, and by notification by SCEMD. Such response will be in absence of full state support, except that as might be immediately available within the county. State forces will react in accordance with the SCORERP.
4. State response and support will be available at the initiation of an emergency condition. Technological support will be available from SC DHEC.
5. State resource will be requested only after exhaustion or overload of county resources or for resources not usually available to Fairfield County.
6. Municipal emergency response forces will coordinate in support as required.

III. MISSION

Fairfield County will provide for the protection of the county populace and their property from the effects of ionizing radiation from a radiological incident at the VCSNS through an organized and coordinated RER.

IV. CONCEPT OF OPERATIONS

A. General

1. Successful accomplishment of the mission is visualized to include the following requirements for RER:
 - a. Capability to warn the populace in the 10-mile EPZ.
 - b. Coordination and Control.
 - c. Exhaustive Public Information.
 - d. Communications.
 - e. Training of response forces.
 - f. Exercising and testing.
 - g. Integration with other county agencies.
 - h. Capability to selectively evacuate or shelter the populace.
 - i. Capability to provide for recovery through decontamination.
 - j. Annual updating and rewriting of response plans.
 - k. Operational checks of RER Equipment.

2. Three distinct aspects of RER capability are required based upon time limits:

- a. **Fast Breaking Incident**

A sudden and uncontrollable radiological incident that could affect off-site areas within a very short time frame and before the state could position support or control. In such a situation, the county must react to the VCSNS assessment and immediately provide for such protective actions as are recommended by VCSNS to include possible evacuation and/or sheltering of the populace. This occurrence is low in probability.

- b. **Escalating Incident**

The county would be provided longer reaction time to assemble forces and to execute the plan in this situation. The radiological accident would be gradually escalated over a longer time frame, which would allow state forces to be activated to assume overall coordination and technical instruction. In such case, the county would be instructed by the state as opposed to VCSNS for required protective actions.

c. **Man-made Incident**

A “hostile action” event could be either a fast breaking or escalating incident and with or without a radiological release. “Hostile action” is defined as “an act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, an/or intimidate the licensee to achieve an end”. This includes attack by air, land or water using guns, explosives, projectiles, vehicles or other devices used to deliver destructive forces. (*NRC Bulletin 2005-02, Emergency Preparedness and Response Actions for Security-Based Events and the FEMA Radiological Emergency Preparedness manual dated April 2012*)

For hostile action based events, the lead responsibility rests with the Sheriff’s Department with support from SLED and Federal Bureau of Investigation (FBI) as needed.

3. In the event of a fast-breaking incident, Fairfield County immediately activates its RER and carries out protective action instructions issued by authorities from the VCSNS. State government is informed through the State Warning Point (SWP). The county continues operations within its own resources until such time as the SEOC is operational and assistance can be provided by the state. VCSNS will establish a near-site Emergency Operations Facility (EOF). The county will provide VCSNS with prenegotiated support from county resources.
4. In the event of an escalating incident, time should be available to alert and assemble county and state forces, inform the public and prepare for protective actions. The state would, through SC DHEC, establish technological coordination with VCSNS and assess the radiological situation. DHEC with SCEMD would recommend protective actions to the Governor, and would direct protective actions as ordered by the Governor. The State would provide for coordination of evacuation, radiological monitoring, decontamination, registration and sheltering of evacuees. The state will assist county efforts in monitoring and decontamination of personnel and vehicles from contaminated areas. The county will provide security of evacuated areas and assist in return of the populace to their homes upon clearance of radiological hazards.
5. In either reaction situation, the combined and total efforts of VCSNS, Fairfield County and the state will be utilized to reduce and neutralize any radiological hazard.
6. All emergency responders will be trained on the principles of the National Incident Management System (NIMS) and integrate those principles into all emergency responders planning and response operations.

B. Coordination and Control

1. See Para VII of this plan.

The line of succession for Fairfield County is as follows:

1. Chairman, Fairfield County Council.
2. County Administrator.
3. Deputy County Administrator
3. Emergency Management Director.
4. Support Service:

Emergency Operations Center (*Annex A*)
Communications (*Annex B*)
Warning (*Annex C*)
Public Information (*Annex D*)
Law Enforcement (*Annex E*)
Fire Control (*Annex F*)
Rescue (*Annex G*)
Medical Service (*Annex H*)
Emergency Medical Service (*EMS*) (*Annex I*)
Mental Health (*Annex J*)
Mass Care (*Annex K*)
Transportation (*Annex L*)
Engineering and Public Works (*Annex M*)
Supply and Procurement (*Annex N*)
Evacuation (*Annex O*)
Hazardous Materials Accidents (*Annex P*)
Radiological Protection (*Annex S*)
Damage Assessment (*Annex T*)
Hazard Mitigation (*Annex U*)

C. Public Notification

1. Annex C, Warning Service.
2. The design objective for warning the population shall be as follows:
 - a. To provide both an alert signal and an informational or instructional message to the population throughout the ten-mile EPZ, within 15 minutes after initial notification.
 - b. To insure that the public alert and notification system will assure direct coverage of essentially 100% of the population within ten miles of VCSNS.
 - c. Route alerting will be utilized to assure 100% coverage of the population who may not have received the initial siren notification within 45 minutes of siren sounding.
3. The County Warning Point is located in the Fairfield County Public Safety Answering Point, 350 Columbia Road, Winnsboro, S.C.
4. Local Warning Points are the Fairfield County Law Enforcement Center, county fire departments and the municipal police departments of Winnsboro and Ridgeway.

5. Both the county and local warning points provide 24-hour-a-day emergency response.
6. In the event that an Unusual Event, Alert, Site Area Emergency or an escalating General Emergency occurs at the VCSNS, Fairfield County will be alerted by the plant via the Electronics Switch System Exchange (*ESSX*) a dedicated ring-down telephone system to the County Warning Point, SWP and the four affected County Warning Points will receive the message simultaneously. SCEMD will verify receipt of the warning message. (*See SCORERP, Site Specific-Part 3, Para. IV.B.1.b. (2).*)
7. In the event of an escalating event, and the SEOC is activated, communications will flow from the plant to the SEOC and, in turn, to the county on a 24-hour basis (*See SCORERP, Site Specific-Part 3, Para. IV.B.2.*)
8. In the event of an IMMEDIATE General Emergency, an authorized VCSNS spokesperson will notify the Fairfield County Public Safety Answering Point and make the necessary protective action recommendations; notification will be made by telephone. Communication between the VCSNS and the Fairfield County Public Safety Answering Point will be provided on a 24-hour per day basis.
9. *See Annex C and Appendix 2*, this annex, procedures for alerting county warning teams and residents of the ten-mile EPZ.
10. *See Annex D, Public Information.*

D. Emergency Communication

1. *See Annex C, Warning Service*
2. VCSNS determines the Emergency Classification Level (*ECL*). Emergencies are classified in accordance with NUREG-0654, and the following notification procedures will be followed: *See page Q-10 through Q-16.*
3. Based upon the *ECL*, local government and state emergency response forces will react on a continuous 24-hour basis in accordance to RERPs.

EMERGENCY CLASSIFICATION LEVELS

NOTIFICATION OF UNUSUAL EVENT		
<p>CLASS DESCRIPTION</p> <p>Unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occur.</p>		
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
<ol style="list-style-type: none"> 1) Promptly inform SCWP and Affected counties of nature of unusual condition as soon as discovered. 2) Augment on-shift resources. 3) Assess and respond. 4) Escalate to a more severe class, if appropriate. 5) Close-out with verbal summary to off-site authorities followed by written summary within 24 hours. 	<ol style="list-style-type: none"> 1) SCWP verifies county notification. 2) SCWP notifies ESF 10. 3) ESF 10 assesses situation with plant and confirms with SCEMD. 4) SCEMD notifies Governor's Office & OTAG. 5) Escalate response to more severe class; if appropriate. 6) Stand by until verbal closeout. <p>Note: If the UE is due to the declaration of Condition B at Lake Jocassee or Keowee Dam:</p> <ol style="list-style-type: none"> 1. Alerting downstream counties; confirm Pickens/Oconee County by phone. 2. Partially activating the SEOC (ALERT). 3. Placing DNR/SCHP officers on standby. Consider SCDOT, if required. 4. Monitoring conditions at Keowee Dam. <p>If Keowee Dam declares Condition A, SAE is declared by ONS.</p>	<ol style="list-style-type: none"> 1) Provide fire, medical, or security assistance if required. 2) Escalate response to more severe class if so notified. 3) Stand by until verbal closeout.

EMERGENCY CLASSIFICATION LEVELS (*CONTINUED*)

ALERT

CLASS DESCRIPTION

Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

LICENSEE ACTIONS

STATE ACTIONS

LOCAL ACTIONS

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| <ol style="list-style-type: none"> 1) Promptly inform SCWP and affected counties of ALERT status. 2) Augment resources, activate on-site Technical Support Center (<i>TSC</i>) and on-site Operational Support Center (<i>OSC</i>). Emergency Operations Facility (<i>EOF</i>) and other key personnel to standby. 3) Assess and respond. 4) Consider activating the Joint Information Center. 5) Dispatch on-site monitoring teams and associated communications. 6) Provide periodic plant status updates to off-site authorities (<i>at least once every hour</i>). 7) Provide periodic meteorological assessments to off-site authorities, and dose estimates for actual releases. 8) Escalate to a more severe class, if appropriate. 9) Close-out or recommend reduction in emergency class to off-site authorities followed by written summary within 8 hours. | <ol style="list-style-type: none"> 1) SCWP verifies county notification. 2) SCWP notifies ESF 10. 3) ESF 10 assesses situation with plant and confirms with SCEMD. Recommends response required. 4) SCEMD notifies Governor's Office, OTAG, North Carolina, Georgia and FEMA. 5) Governor considers declaring a State of Emergency. 6) Alert key emergency response personnel to stand-by status. 7) SCEMD Director will determine level of SEOC activation. 8) Consider activating a Joint Information Center and/or deploying Public Information LNO's. 9) Coordinate activation of siren system and EAS in 10-mile EPZ if recommended. | <ol style="list-style-type: none"> 1) Provide fire, medical, or security assistance on request. 2) Augment resources and bring EOC(s) to stand-by status. Consider activation of EOC(s) downwind from the facility. 3) Bring alert and notification systems to stand-by status. 4) Activate siren system and EAS in 10-mile EPZ if recommended. 5) Alert key personnel to stand-by status. 6) Consider precautionary evacuation of schools. 7) Notify Host Counties of ALERT Status. 8) Escalate to more severe class if notified. 9) Maintain ALERT Status until verbal close-out or reduction of emergency class. 10) Consider deploying county PIO to JIC, if activated. |
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EMERGENCY CLASSIFICATION LEVELS (CONTINUED)

ALERT

CLASS DESCRIPTION Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
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	<ul style="list-style-type: none"> 10) Consider notification of 50-mile EPZ counties. 11) Consider activation of Dosimetry Redistribution SOP. 12) Provide assistance requested from counties and facility. 13) Escalate response to more severe class if appropriate. 14) Maintain ALERT Status until verbal close-out or reduction of emergency class. 15) Consider deploying state LNO's to affected County EOC. 	
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EMERGENCY CLASSIFICATION LEVELS (CONTINUED)

SITE AREA EMERGENCY

CLASS DESCRIPTION Events are in progress or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site boundary.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
<ol style="list-style-type: none"> 1) Promptly inform SCWP and affected counties of Site Area Emergency. 2) Augment resources by activating on-site Technical Support Center (TSC), on-site Operational Support Center (OSC) and near-site Emergency Operations Facility (EOF). 3) Assess and respond. 4) Dispatch on-site and off-site monitoring teams and communications. 5) Activate Joint Information Center. 6) Provide a dedicated individual for plant status updates to off-site authorities and periodic press briefings. 7) Make senior technical and management staff on-site available for consultation with NRC and State on a periodic basis. 	<ol style="list-style-type: none"> 1) SCWP verifies county notification. 2) SCWP notifies ESF 10. 3) ESF 10 assesses situation with plant and confirms with SCEMD. 4) SCEMD coordinates protective action decisions with counties. 5) ESF 10/SCEMD recommends protective actions to Governor. 6) Coordinate activation of public ALERT system and EAS in 10-mile EPZ if recommended. Provide public with periodic updates. 7) Prepare to activate shelters as needed. 8) SCEMD notifies State Emergency Response Team (SERT) to send representatives to SEOC. 9) SCEMD notifies Governor's Office, OTAG, North Carolina, Georgia and FEMA. 10) ESF 10 considers activation of Mobile Operations Center (MOC). 11) SCEMD dispatches State liaison to affected county EOC(s). 	<ol style="list-style-type: none"> 1) Activate EOC and emergency personnel to full status. 2) Dispatch representatives to the Joint Information Center. 3) Issue dosimeters and KI (if recommended by SCEMD/ESF 10) to emergency workers. 4) Be prepared to assist with radiological monitoring on request. 5) After coordination with SEOC, activate public alert system in 10-mile EPZ (<i>fixed, mobile or electronic tone signal</i>) if recommended. 6) Broadcast notification information at direction of the County PIO. 7) Prepare to activate shelters as needed. Notify host counties of impending shelter activation. 8) Establish predetermined Traffic Control Points. 9) Direct protective actions as recommended and deemed appropriate.

EMERGENCY CLASSIFICATION LEVELS (CONTINUED)

SITE AREA EMERGENCY		
CLASS DESCRIPTION		
Events are in progress or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site boundary.		
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
<p>8) Provide meteorological and dose estimates to off-site authorities for actual release via a dedicated individual or automated data transmission system.</p> <p>9) Provide release and dose projections based upon available plant condition information and foreseeable contingencies.</p> <p>10) Escalate to General Emergency Class, if appropriate.</p> <p>11) Close-out or recommend reduction in emergency class by briefing the off-site authorities at EOF and by phone followed by written summary within 8 hours.</p>	<p>12) Consider activating a Joint Information Center and/or deploying Public Information LNO's. Provide periodic press updates for public within at least 10-mile EPZ.</p> <p>13) Place other emergency personnel on standby status other (e.g., those required for evacuation and dispatch to near-site duty stations).</p> <p>14) ESF 8/10 considers if Potassium Iodide (KI) should be distributed to emergency workers.</p> <p>15) ESF 10 considers distribution of KI to shelters, reception centers hospitals, prisons and nursing homes.</p> <p>16) Consider activation of dosimetry redistribution SOP.</p> <p>17) Establish 2-mile road blocks and control access to the area on order.</p> <p>18) Consider precautionary evacuation of 2-mile EPZ and sheltering of downwind areas.</p> <p>19) Consider evacuation of lakes, rivers and forests.</p> <p>20) Provide assistance requested by county and facility.</p> <p>21) Escalate to General Emergency, if appropriate.</p> <p>22) Maintain Site Area Emergency Status until close-out or reduction of emergency class.</p>	<p>10) Request State assistance as needed.</p> <p>11) In an immediate emergency and SEOC is not operational: (a) Initiate protective actions recommended by plant as appropriate; (b) Activate the public alert system and EAS for 10-mile EPZ, and (c) Take actions appropriate at SAE and ALERT.</p> <p>12) Escalate to General Emergency if required.</p> <p>13) Maintain Site Area Emergency status until closeout or reduction of emergency class.</p>

EMERGENCY CLASSIFICATION LEVELS (CONTINUED)

GENERAL EMERGENCY

CLASS DESCRIPTION

Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss on containment integrity. Release can be reasonably expected to exceed EPA Protective Action Guideline exposure levels off-site for more than the immediate site area.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
<ol style="list-style-type: none"> 1) Promptly inform SCWP and affected counties of General Emergency. 2) Recommend protective actions necessary for public protection. 3) Augment resources by activating on-site TSC, on-site OSC and near-site EOF. 4) Assess and respond. 5) Dispatch on-site and off-site monitoring teams and communications. 6) Provide a dedicated individual for plant status updates to off-site authorities and periodic press briefings. 7) Make senior technical and management staff on-site available for consultation with NRC and State on periodic basis. 8) Provide meteorological and dose estimates to off-site authorities for actual releases via a dedicated individual or automated data transmission. 	<ol style="list-style-type: none"> 1) SCWP verifies county notification. 2) SCWP notifies ESF 10. ESF 10 coordinates with SCEMD and recommends protective actions. 3) ESF 8/10/SCEMD recommends to the Governor areas requiring evacuation, sheltering and administration of KI. 4) SCEMD obtains Governor's order for evacuation and/or sheltering. 5) ESF 8/10 coordinates distribution of KI tp shelters, reception center hospitals, prisons, and nursing homes. 6) SCEMD relays Governor's decision to affected counties. 7) Coordinate activation of public ALERT system and EAS in 10-mile EPZ if recommended. 8) SCEMD notifies FEMA, North Carolina and Georgia. 9) SCEMD coordinates evacuation, sheltering, and radiological monitoring if required. 	<ol style="list-style-type: none"> 1) Activate shelters as needed. 2) Conduct evacuation and/or sheltering as ordered by Governor. 3) Conduct off-site radiological monitoring and decontamination as required. 4) Broadcast notification information at direction of the County PIO at the JIC. 5) Provide security for evacuated area. 6) Request state assistance as needed. 7) Direct protective actions as recommended and deemed appropriate. 8) In an immediate emergency when the SEOC is not operational: <ol style="list-style-type: none"> (a) Initiate protective actions recommended by plant as appropriate; (b) Activate public alert system and EAS for 10-mile EPZ; (c) Take actions appropriate at ALERT and Site Area Emergency.

EMERGENCY CLASSIFICATION LEVELS (CONTINUED)

GENERAL EMERGENCY		
CLASS DESCRIPTION		
<p>Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss on containment integrity. Release can be reasonably expected to exceed EPA Protective Action Guideline exposure levels off-site for more than the immediate site area.</p>		
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
<p>9) Provide release and dose projections based upon available plant condition information and foreseeable contingencies.</p> <p>10) Closeout or recommend reduction of emergency class by briefing of off-site authorities at EOC and by phone followed by written summary within 8 hours.</p>	<p>10) Provide periodic press updates for public within at least 10-mile EPZ.</p> <p>11) Coordinate and allocate state support resources.</p> <p>12) Request Federal support as needed.</p> <p>13) Provide protective actions in 50-mile IPZ.</p> <p>14) Maintain General Emergency status until closeout or reduction in emergency class.</p>	<p>9) Maintain General Emergency status until closeout or reduction of emergency class.</p>

E. Public Information

1. Annex D, Public Information to Fairfield County EOP.
2. Annex 3, Public Information, SCORERP Basic Plan.
3. EAS/ETV Procedures, Annex 1, SCORERP Site Specific-Part 3.
4. Appendix 2, Tab C, S.C. Electric & Gas Power Company Evacuation Information Brochure. (*SCE&G Calendar*)

F. Public Health and Sanitation

Annex H, Emergency Medical Health Services to EOP and Annex M, Engineering and Public Works to EOP.

G. Social Services

1. Annex K, Mass Care (MC) to Fairfield County EOP.
2. Attachment 1, Map, Evacuation Routes, Reception Centers and Procedures.
3. Upon notification that an evacuation of population of all or a portion of the ten-mile EPZ has been ordered, MC will provide emergency workers who will establish registration stations at Reception Centers listed below. The evacuees will be directed through these stations to get registered and be advised concerning the appropriate shelters to which they are to report. These shelters will be at least five (5) miles from the EPZ outer boundary.
4. (*List of Reception Centers and their locations.*) Page Q-29.
5. *See County EOP Basic Plan, Attachment 4* for supporting county's plans.

H. Fire and Rescue

1. Annex F, Fire Service to Fairfield County EOP.
2. Annex G, Rescue Service to Fairfield County EOP.
3. Appendix 8, Letters of Agreement.

I. Emergency Medical Service (EMS)

1. Annex I, Emergency Medical Service (EMS) to Fairfield County EOP
2. **Appendix 8, Letters of Agreement--EMS in support of VCSNS FNF.**

J. Law Enforcement

1. Annex E, Law Enforcement to Fairfield County EOP.
2. ***Attachment 1, Map, Traffic Access Control Points (TACPs)***
 - a. SC Highway Patrol personnel will operate State TACPs to control access to VCSNS and to facilitate evacuation by the local populace.
 - b. Local law enforcement personnel will operate County TACPs to facilitate evacuation by the populace and to provide evacuation by the populace and to provide direction to the reception center and shelter.

K. Transportation

1. See Annex L, Transportation to Fairfield County EOP.
2. In the event of an evacuation of the populace of the ten-mile EPZ, emergency transportation will be necessary. Students in Kelly Miller and McCrorey Liston Elementary Schools, and residents without privately owned vehicles will require transportation.
 - a. Kelly Miller and McCrorey Liston, located in the ten-mile EPZ, will be evacuated by assigned school buses and available privately owned vehicles to the White Oak Conference Center.
 - b. Ambulances will be dispatched to transport any non-ambulatory resident(s) to the White Oak Conference Center. School buses and available county owned vehicles will also be available.
 - c. Transportation of contaminated victims will be accomplished by designated ambulances of the Fairfield County EMS. Protective measures will be taken to prevent the spread of any contamination from the victim. Upon arrival at the medical facility and removal of the victim, both ambulance and attendants will go through the county decontamination station at White Oak Conference Center.

White Oak Conference Center (*Primary*)
Fairfield Magnet School (*Alternate*)

Each school has immediate access to school buses that are parked on the school grounds. Additional school buses as required will be dispatched to schools to transport the remaining school students. School teachers with their own vehicles will also transport students.

- d. See Appendix 10, School Emergency Plan for VCSNS.

- e. Any resident in the EPZ who does not have transportation out of the area may call for transportation assistance as described in the Public Information Brochure.

Fairfield County will utilize all county owned bus and vehicles to transport any resident without transportation. Non-ambulatory residents will be transported by the Fairfield County EMS (*ambulance*). Residents will be transported to Reception Centers listed below:

White Oak Conference Center (*primary*)

Fairfield Magnet School (*secondary*)

L. Protective Response

1. The South Carolina Technical RERP provides for Protective Action Recommendations (*PARs*) and other criteria consistent with existing EPA guides. Fairfield County provides the mechanism for implementing *PARs* such as sheltering and/or evacuation of the county populace in and from sectors recommended by DHEC and ordered by the Governor of the State.

2. Potassium Iodide (KI)--Emergency Workers:

The State of South Carolina provides for policies and procedures for storing and distributing KI to ALL emergency workers including Fairfield County. *See Tab A to Appendix 5, Radiological Exposure Control for the General Public* . Emergency worker KI is stored at the county Emergency Management Department.

3. Potassium Iodide (KI)--Local Populace:

The State of South Carolina and Fairfield County will not prescribe or issue KI to the general populace of the county. *See Tab B to Appendix 5, Radiological Exposure Control for Emergency Workers*. This decision rests upon the Director of DHEC.

4. Protective Sheltering:

In the event of an incident at VCSNS resulting in the release of a radioactive plume, it may be necessary for the populace to shelter in-place at their respective locations. Certain procedures would be taken by the populace as recommended by VCSNS or DHEC.

- a. Stay inside their homes with all windows and doors closed.
- b. All air conditioners, attic fans, etc., should remain turned off.
- c. Anyone outside should immediately upon entering the home remove all clothing and take a thorough shower. Removed clothing should be placed inside a closed container.

5. Evacuation:

- a. The population distribution of the ten-mile EPZ located in Fairfield County is as follows:
(*See Attachment 4*)

<u>Zone</u>	Evacuation Times		
	<u>Population</u>	<u>Normal Conditions</u>	<u>Adverse Condition</u>
A-0	220	2:20	2:50
A-1	395	2:50	3:20
A-2	618	2:30	3:20
B-1	341	2:20	2:50
B-2	382	1:50	2:10
C-1	411	1:10	2:40
C-2	1515	1:50	2:10
		Total	3882

- b. All sectors will evacuate to the following White Oak Conference Center Reception Center:
- c. The SCORERP, Site Specific-Part 3 provides the following maps:
1. Maps of evacuation sectors, traffic routes, shelter areas, assembly areas, relocation centers.
 2. VCSNS 50-Mile Ingestion Pathway EPZ
 3. Population distribution map of permanent and maximum (*including transients*) persons within sectors around the plant.
- d. Under the coordination of the Fairfield County Sheriff, evacuation routes will be controlled by the S.C. Highway Patrol at specific Traffic Access Control Points.
- e. Traffic capability projections on the evacuation routes will be furnished by S.C. Electric & Gas Company for normal and emergency situations. – *See Attachment 4.*
- f. Access to the evacuated area will be stringently enforced by local law enforcement and only predesignated forms of identification will allow entrance to the evacuated area.
- g. Plans to evacuate critical facilities within the various Fairfield County sectors will be maintained by the facility with time estimates available by request.

M. Radiological Monitoring and Decontamination

1. Ten-Mile EPZ
 - a. With DHEC's technical supervision, the Fairfield County Radiological Officer will direct all county radiological monitoring teams, which will monitor the following:
 1. RER personnel and their vehicles at decontamination points.
 2. Evacuees and their vehicles at decontamination points.
 - b. The County Radiological Officer will assign teams and tasks. *See Appendix 4 to Annex S.*
 - c. Equipment to be utilized by monitoring teams is listed in *Appendix 4 to Annex S.*
 - d. If radiation is detected, decontamination will occur as outlined in *Appendix 7 to this annex.* After decontamination, people and vehicles will be remonitored.
 - e. Fairfield County will maintain monitoring documentation for evacuees and their vehicles.

Monitors at the Reception Centers will complete the Evacuee Monitoring/Decontamination Reports/Forms (*See Tab A, Appendix 5*) and forward below and forward information to the Radiological Officer on a regular basis. If an exposure increase is noted for a specific area, the Radiological Officer will be immediately notified.

MONITOR REPORT

1. Name of Evacuee
 2. Address
 3. Reading
 4. Time of Reading
 5. Clothing/Material Involved
 6. Problem areas/requests
 7. Monitor Identification
- f. Responsibilities for monitoring RER personnel are detailed in SCORERP Basic Plan Annex 6, and Appendix 5 of this annex.
 - g. The Radiological Officer is responsible for notifying DHEC and the EMD of any significant radiological exposure.
2. Ingestion Pathway Monitoring:
 - a. DHEC will coordinate the monitoring and technical assessment of the 50-mile EPZ.

N. Emergency Worker Radiation Exposure Control

1. Fairfield County Emergency Workers who have a responsibility which could result in their exposure to radiation from an incident at VCSNS will be issued a self-reading dosimeter (*SRD*) and a Permanent Record Dosimeter (*PRD*). The Radiological officer is in charge of distributing dosimeters.
2. Priority of issue of dosimeters will be to persons working with:
 - a. Law Enforcement
 - b. Fire Fighting
 - c. Rescue and Emergency Medical Services.
3. Emergency service chiefs or their designated representative will sign for any equipment issued and will be responsible for its return to the EOC.
4. All dosimeters will be issued to emergency personnel from the service chief's office. Before distribution, each worker will check his/her equipment for functionality and sign a clearance sheet to insure that all equipment can be accounted for at the end of a shift.
5. Additional dosimeters and chargers will be available at the County Emergency Management Department.
6. Each emergency worker who is issued a dosimeter will be responsible for reading and recording his/her own dose rate every 15-30 minutes as well as for submitting the accumulated dosage to their supervisor. *See Radiation Exposure record form, Appendix 5, this annex.*
7. Chiefs of services will compile dosage reports and submit them to the Radiological Officer before midnight on a daily basis.
8. The Radiological Officer will maintain permanent dose file cards for all emergency personnel in the EOC and is responsible to have this information available to DHEC upon request.
9. Dosimeters will be recharged by each individual after his/her shift dosage has been determined. Chargers will be located in the service chief's office.
10. Approximately one hour before a shift change, the Radiological Officer or the Emergency Management Director will brief the service chiefs on the dose rate calculated for specific area at that time interval. This briefing will be held in the EOC. Service chiefs will be instructed to closely monitor personnel who are working in contaminated areas and to arrange personnel rotations to limit accumulated dosages.
 - a. If a dosimeter reads 1R, instruct that worker to move to a safer place.

- b. If a dosimeter shows a maximum reading of 5R, instruct that worker to return to his department for further instructions and decontamination.
11. Each service chief will arrange communication checks with his field personnel to determine their dose rates every 15-30 minutes.
12. Exposure control will be regulated by SCORERP guidelines from SCTRERP. In the event emergency workers must incur doses in excess of 5R, authorization to do so will come from the County Administrator or the Radiological Officer. Emergency workers must voluntarily exceed 5R and be briefed on the medical consequences of doing so.

O. Medical

1. Contaminated victims will be treated at Palmetto Health Richland. *See Annex 3., Health and Medical Support, Site Specific-Part 3 to SCORERP.*
2. Transportation of contaminated victims is outlined in **Paragraph IV.K, Transportation, this annex.**

P. Recovery and Re-Entry

1. Fairfield County will rely on SCEMD for decisions on relaxing protective measures. Notification to relax protective measures will come from the SEOC to Fairfield County EOC.
2. Fairfield County will follow procedures as directed by the State Technical RERP for general recovery.

Q. Equipment

1. Radiation detection equipment assigned to Fairfield County monitoring stations may be used within its limitations for monitoring purposes under the guidelines of the manufacturer.
2. Fairfield County has the following equipment stored at the Emergency Management Department located at 100 Tidewater Dr., Winnsboro S.C.

10-Ludlum Model 3 Survey Meters
32-Dosimeters (0-5R)
1-Ludlum Model 52 Portable Portal Monitor
1-Ludlum Model 52-1 Portable Vehicle Monitor
6-Hand held Dosimeter Chargers

3. The receipt and analysis of all field monitoring data and the coordination of sample media will be handled by DHEC as outlined in SCORERP.
4. Identification of emergency kits:
 - a. Protective Equipment--*See SCORERP.*

- b. Communications Equipment--*See Annex B, Communications, Fairfield EOP. See also Paragraph VI.R., Communications, this Annex.*
 - c. Emergency Supplies--Fairfield County has no emergency supplies on-hand other than those supplies used by emergency response teams on a daily basis. See Annex N, Supply and Procurement, Fairfield EOP for procedures to procure any emergency supplies from state resources. *See Resource Appendix of each Annex EOP for a list of equipment on-hand.*
5. Each emergency service is responsible for operationally checking its equipment at least once each calendar quarter and after each use. Annual calibration of equipment shall be accomplished by the SCEMD Lab.

R. Exercises

1. Fairfield County will:

- a. Participate in full-scale RER exercises coordinated by SCEMD with input from Fairfield County Emergency Management Director. Such exercises will occur approximately every two (2) years. This exercise will be observed, evaluated and critiqued by federal observers/evaluators.
- b. Radiological exercises will comply with NUREG 0654 and FEMA REP1.

2. **Drills:**

Fairfield County will conduct and participate in drills, in addition to the biennial RER exercise. Such drills will be supervised and evaluated by a qualified instructor. Each emergency service organization/component will conduct drills as indicated below:

a. **Communications Drill**

Communications between the county, VCSNS and SCEMD will be tested monthly. Such drills will include the understanding and transmission of emergency messages.

3. **Conduct of Exercises:**

Exercises and drills will be designed and executed in such a manner as to allow free play for decision-making and to meet the following objectives:

- a. Drills in Fairfield County will consist of the following, with a basic objective of qualification:
 1. Notification Communications.
 2. Notification and Warning Procedures.
 3. Reception Center Procedures and Sheltering.
 4. Emergency Operations Center OPNS, Procedures and Communications.

5. Medical Emergency Response Capability.
 6. Rescue Response Capability.
 7. Law Enforcement Traffic Control and Security Capability.
 8. Fire Response Capability.
- b. Evaluation will be provided for every drill. A critique will be made and retaining, if required, will be conducted.
 - c. SCEMD will be notified of each drill and requested to observe.
 - d. Each drill will be planned and prepared as follows:
 1. Date, time period, place and participating county organizations will be identified.
 2. Simulated events.
 3. A time schedule of real, initiating and anticipated events. (*Scenario*)
 4. A narrative summary describing the conduct of the exercise.
 5. Description of arrangements for advanced materials to be issued to official observers.
 6. Means of evaluating, critiquing and assignment of responsibility for implementing corrective actions.

S. Radiological Emergency Response Training

1. The Fairfield County Emergency Management Department is responsible for training off-site emergency personnel to respond effectively to an incident involving the VCSNS . Personnel to receive initial and annual refresher training are: Law Enforcement, Fire, Rescue, Emergency Medical Services, Shelter Managers and Radiological personnel.
2. RER Training shall consist of the *Fundamentals Course for Radiological Monitors and Emergency Workers*, tabletop exercise and government conferences. Fairfield County emergency service and government officials will participate in a biennial RER exercise with VCSNS.
3. **Fairfield County Emergency Management Director:**
 - a. The Director may receive initial and follow-up training by SCEMD. Training will consist of daily responsibilities, radiological defense, governmental conferences, management seminars, workshops and career development courses. (*Reference SCORERP, Annex 2*)
 - b. The Director is responsible for the county training program to include responsibilities of county government and specific duties of the emergency services. Assistance may be obtained from SCEMD. (*Reference SCORERP, Annex 2*)
4. **Accident Assessment:**

Accident assessment is a state responsibility. *See SCORERP.*

5. Radiological Protection Officer and Monitors:

- (a) The Director of Emergency Management has the overall responsibility of training radiological monitors. The county has a Radiological Officer who is responsible for conducting training and refresher courses. Monitors must also participate in exercises and drills that involve radiological monitoring.
- (b) Radiological Monitoring for emergency workers will be accomplished in association with *paragraph IV. R*, above.
- (c) Emergency workers may be a part of the following
 - (1) County Law Enforcement
 - (2) County Volunteer Rescue Service
 - (3) Volunteer Fire Departments
 - (4) County EMS
 - (5) Municipal Fire Departments
 - (6) Municipal Police Departments
 - (7) Local Red Cross Workers.

6. Police, Security and Fire Fighting Personnel:

Law enforcement and fire fighting personnel will be trained locally with assistance from SCEMD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service SOP.

7. First Aid and Rescue Personnel:

Rescue Squads and the Emergency Medical Service will be trained locally with assistance from SCEMD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service SOP.

8. Medical Support Personnel:

Training of medical support personnel is coordinated by SCEMD (*REF: SCORERP, Annex 2*).

9. Public Information and Instruction:

The Public Information Officer will receive initial training from the County EMD with assistance from SCEMD. Training will include responsibilities, RER Plan, dissemination of information and development of an SOP. Follow-up training will consist of participation in tabletop exercise, governmental conferences and the biennial RER exercise.

T. Coordinating Instructions

- 1. This RERP will be reviewed/updated annually prior to the anniversary of the Plan.
- 2. Support RER Standard Operating Procedures (SOPs) will be reviewed/updated by responsible agencies at the time of the RERP update.

3. All RER personnel, employees or volunteers, must receive RER training as outlined in *Paragraph IV.S.*, above.

V. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Organization

The principal organizations, including utilities, that are part of the overall response organization for emergency planning zones are listed below:

1. **Federal**

See the SCORERP Basic Plan.

2. **State**

See the SCORERP Basic Plan.

3. **County**

See Appendix 1, FNF Organization Chart.

4. **Private Sector**

The principal organization(s) in the private sector which are part or the overall response for emergency planning zones are:

- a. S.C. Electric & Gas Power Company
- b. Verizon
- c. Bell South Telephone Company
- d. Ridgeway Telephone Company
- e. Chester Telephone Company
- f. Radio & Television Companies
- g. Private Hospitals
- h. The Salvation Army
- i. The American Red Cross
- j. Volunteer Organizations

B. Supporting Organizations

1. S.C. Department of Health and Environmental Control. (*S.C. Technical Radiological Emergency Response Plan, 2012*) provides radiological technological support.
2. S.C. Emergency Management Division (*SCEMD* Office of the Adjutant General,), coordinates all state agency support in accordance with the S.C. Emergency Operations Plan, 2012.
3. **American Red Cross (ARC):**

ARC will assist with sheltering of evacuees by providing food, bedding and clothing. ARC will give assistance with the keeping of up-to-date shelter rosters. Fairfield County Health Services will receive assistance from ARC in providing medical care to evacuees.

4. **The Salvation Army (TSA):**

TSA will assist in feeding, housing and clothing individuals in emergency situations. TSA will aid in identifying and registering evacuees as well as provide furniture, bedding and household needs to disaster victims.

5. Fairfield County will provide sheltering and MC.

6. Fairfield County has mutual aid agreements with adjacent counties for emergency support. Fairfield County has agreements with VCSNS and for RER support.

VI. ADMINISTRATION AND LOGISTICS

A. Administration

1. Fairfield County EOP.
2. SCORERP.
3. SCTRERP.
4. Administrative matters not contained above will be directed to the EOC.
5. Personnel effectiveness reports to EOC.

B. Logistics

1. Fairfield County EOP.
2. SCORERP.
3. SCTRERP.
4. Logistical matters not contained above will be directed to the EOC.
5. Equipment and transportation effectiveness reports to the EOC.

VII. DIRECTION AND CONTROL

A. Direction and Control

1. The Fairfield County EOC is located at 100 Tidewater Dr, Winnsboro, SC, and will be made operational immediately upon receipt of a Site Area Emergency.
2. The SEOC is located at 2779 Fish Hatchery Rd. West Columbia S.C.
3. The VCSNS Emergency Operations Facility (EOF) and the Joint Information System (JIS) are located at 113 Ballentine Crossing Lane in Ballentine, SC. The JIS will be coordinated by the SCEMD PIO . The VCSNS Technical Support Center is located near the station, technical support group will be station personnel.
4. Adjacent County EOC's are located at:
Newberry—Sheriff's Complex and EOC.
Richland---Emergency Services Building.
Lexington--County Administrative Building.
5. The County Administrator will provide county liaison with communications capability to the State SEOC and adjacent affected county EOC's where required.

6. County Council will provide liaison to operational reception centers if evacuation is required. Shelters or Reception Centers maximum evacuee occupancy as follows:

*White Oak Conference Center	855
*Fairfield Central High School	1300
*Fairfield Magnet School	1300

TOTAL 3455

These figures are based upon 50 square feet per person.

***RECEPTION CENTERS**

7. Chiefs of services or their designated representatives will be present in the Fairfield County EOC to direct and control their service upon direction of council.
8. The EOC will provide space for SCEMD liaison.
9. See Annex A, EOC Operations to the Fairfield County EOP.

B. Communications

1. During an emergency in Fairfield County which results in the opening of the EOC, continuous communications with the different agencies which respond is most vital. The following communications will be used:

- a. **County Law Enforcement Radio System**

The following frequencies will be utilized to coordinate county and municipal law enforcement personnel:

1. The Fairfield County Sheriff's Department transmits on 800 MHz and receives on 800 MHz. The Winnsboro Department of Public Safety transmits and receives on 800 MHz and 460.525 MHz. The Town of Ridgeway transmits and receives on the same 800 MHz.
2. *See Annex B, Communications, Fairfield EOP.*

- b. **Fire and Rescue Service**

1. All Fairfield County Fire Departments utilize frequency 154.160 MHz.
2. The Rescue Squads utilize frequencies 155.220 MHz.
3. See Annex F (Fire Service) Fairfield EOP.
4. See Annex G (Rescue Service) Fairfield EOP.

- c. **County Emergency Medical Service**

The Fairfield Memorial Hospital, Emergency Medical Service (EMS), can communicate with the Sheriff and the Rescue Squad via their base station on 155.340 MHz.

d. **SLED Teletype**

The SLED teletype is located in the Communications Room at the Emergency Management Department. It can be used to send and receive messages to SCEMD and other counties.

e. Other public and private communication systems, such as telephone companies, electric and gas companies, school bus maintenance shops, etc., having an emergency communications capability, when needed and having a desire to assist.

2. Fairfield County has been supplied with a Long-Range Radio by SCEMD.
3. Fairfield County owns and operates a Satellite Radio/Phone.
4. Fairfield County has been supplied with a Pal 800 MHz Radio by SCEMD.
5. *See Annex B*, Communication to the Fairfield County EOP.
6. Annex 2, (ESF-2) Communication to the SCEOP.

C. Reports

1. Situation reports will be submitted to the Fairfield County EOC as necessary and/or as required. These reports will include such information as follows:
 - a. Agencies activated, operations undertaken and personnel/equipment strength.
 - b. **Status of Evacuation (If Undertaken)**
 1. Area and number of population affected.
 2. Location and number of persons in shelter or congregate care facilities on an hourly basis to include by age and sex.
 3. Completion time of evacuation.
 - c. **Casualties**
 1. Radiation related and where hospitalized/stored.
 2. Non-radiation related and where hospitalized/stored.
 3. Nature and extent of injuries (*death*) and casualties.
 - d. Nature and extent to include time estimate of additional assistance and support required specifically defined as to *Who, What, When, Where and Why*.
 - e. After Action Reports--required from each Emergency Response Service to include:
 1. Number of personnel involved (total).

2. Hours devoted by personnel.
3. Average hours devoted by personnel.
4. Equipment involved and cost estimate for each piece of equipment for operation.
5. Support received from non-county assets.
6. Overall dollar cost for the service for the operation.

f. Damage Reports

1. County property
2. Personal property to include animals and crops.

VIII. PLAN MAINTENANCE AND DEVELOPMENT

A. Development

1. The Director of Fairfield County Emergency Management will be responsible for the development and maintenance of this annex.

B. Maintenance

1. This annex will be reviewed annually.
2. This annex will be updated as necessary, based upon deficiencies identified by drills and exercises, changes in local government structure, or technological changes, etc.
3. This annex and the approved changes will be forwarded to all organizations and appropriate individuals with responsibility for implementation of the plans.
4. Revised pages shall be dated and changes will be highlighted.

Administrator, Fairfield County

Date

Director, Fairfield County Emergency
Management Department

Date

ATTACHMENTS TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY OPERATIONS PLAN

Attachment 1—Map, VCSNS 10-Mile EPZ, S.C. Primary Highways, Sectors, Evacuation Routes, Reception Centers, Traffic Access Control Points, Procedures.

Attachment 2—TACP and Routing Plan

Attachment 3---Map, VC Summer FNF 50-Mile EPZ's.

Attachment 4---Map, Population Distribution of the Fairfield County 10-Mile EPZ.

Attachment 5---Traffic Capacities for Evacuation Routes.

APPENDICES TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY OPERATIONS PLAN

Appendix 1	County Organization Chart.
TAB A	Responsibility Summary Table.
Appendix 2	Procedures for Alerting and Notifying Residents and Warning Teams of the 10-Mile EPZ.
TAB A	Emergency Notification--Nuclear Facility to State/Local Government.
TAB B	General Alert List.
TAB C	SCE&G Power Company Brochure.
Appendix 3	Nursing Homes, Industries and Schools in the 10-Mile EPZ in Fairfield County.
Appendix 4	Law Enforcement SOP.
Appendix 5	Radiation Exposure Record.
TAB A	Radiological Exposure Control for the General Public
TAB B	Radiological Exposure Control for Emergency Worker
Appendix 6	Procedures to Implement the Fairfield County RERP.
Appendix 7	Radiological Decontamination. <i>See SCORERP, Annex 6.</i>
TAB A	Personnel Decontamination Procedures..
TAB B	Vehicle Decontamination Procedures.
Appendix 8	Letters of Agreement.
Appendix 9	Fairfield County Emergency Plan for VC Summer Nuclear Plant—School Emergency Plan for Nuclear Plants.
TAB A	Transportation Resources for Fairfield County Schools.
TAB A-1	School Transportation Form.
TAB B	Fairfield County Emergency Response Departments.
TAB C	Notification Message.

ATTACHMENT 1 TO ANNEX Q— TABLE TO FIGURE 1 - TRAFFIC AND ACCESS CONTROL POINTS, PUBLIC BOAT LANDINGS AND EVACUATION ROUTES FOR FAIRFIELD COUNTY

State Traffic Access Control Points

- ST-01: S-215 and St Barnabas Church Road
- ST-02: S-215 and S-213
- ST-03: S-215 and Glenss Bridge Road
- ST-04: Pearson Road and Cole Trestle Road
- ST-05: SC-213 and Broad River Road

County Traffic Access Control Points

- FA-01: Newberry Road (SC-34) and SC-215
- FA-02: Newberry Road (SC-34) and US Highway 321 Bypass North
- FA-03: SC-213 and US Highway 321 Bypass South
- FA-04: SC 269 and US Highway 321 South
- FA-05: Newberry Rd (SC-34) and Clark Bridge Rd

Public Boat Landings

- PBL 8: Lake Monticello East
- PBL 9: Lake Monticello West
- PBL 10: Sub-impoundment Ramp

Primary Evacuation Routes

- A-0 SC 213 east to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center
- A-1 Cole Trestle Rd to Peearson Rd, north to Newberry Rd, east to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center
- A-2 Newberry Rd east to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center
- B-1 SC 213 east to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center
- B-2 SC 213 east to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center
- C-1 SC 215 east to SC 269, north to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center
- C-2 SC 215 east to SC 269, north to US 321, north to Mobley Hwy, east to White Oak Baptist Conference Center

ATTACHMENT 2 TO ANNEX Q —TRAFFIC AND ACCESS CONTROL POINTS AND ROUTING PLAN

V.C. SUMMER NUCLEAR STATION—FAIRFIELD COUNTY

THE FOLLOWING IS A PLAN TO BE UTILIZED IN THE EVENT OF A NUCLEAR ACCIDENT OR WHEN ORDERED BY PROPER AUTHORITIES REGARDING A NUCLEAR ACCIDENT AT THE VC SUMMER NUCLEAR STATION IN FAIRFIELD COUNTY.

The assembly area and holding area for all Fairfield County Sheriff’s Deputies will be located at the Fairfield County Sheriff’s Department, which is located at 350 Columbia Road. All deputies *pre-assigned* to Traffic Access Control Points (*TACP*) will report to their respective points. All men assigned to the holding area will report directly to the holding area for further instructions.

TACP #1 SC 34 (Newberry Road) and SC 215 South (3 deputies)

Traffic will be directed East along SC 34 to US Highway 321.

TACP #2 SC 268 (Peay Ridge Road) and US Highway 321 North to White Oak Conference Center.

TACP #3 SC 213 and US Highway 321 Bypass South (3 deputies)

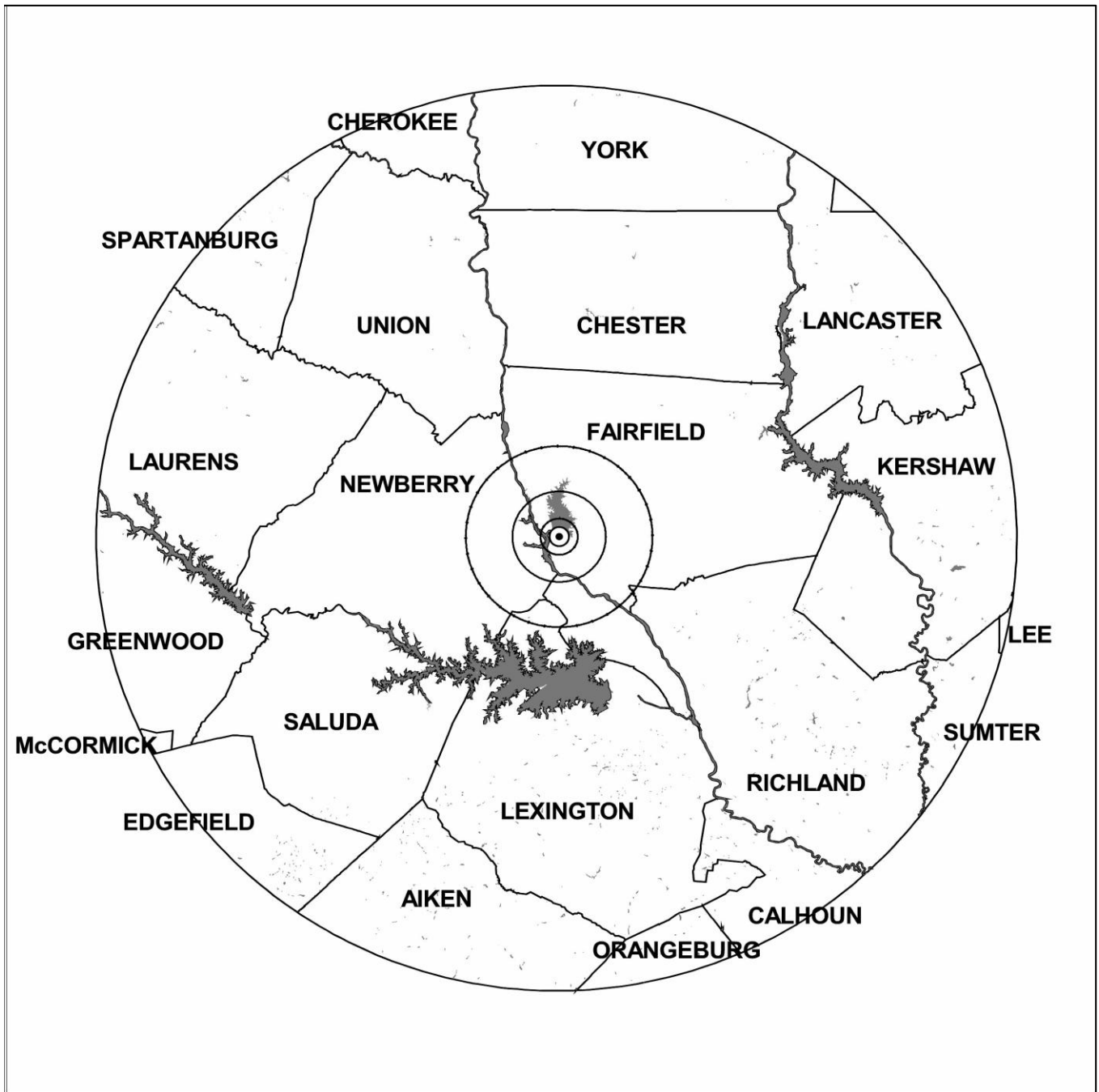
Traffic will be routed North along US Highway 321 North to White Oak Conference Center.

TACP #4 SC 34 (Newberry Road) and US Highway 321 Bypass North (3 deputies)

Traffic will be routed North along US Highway 321 North to White Oak Conference Center.

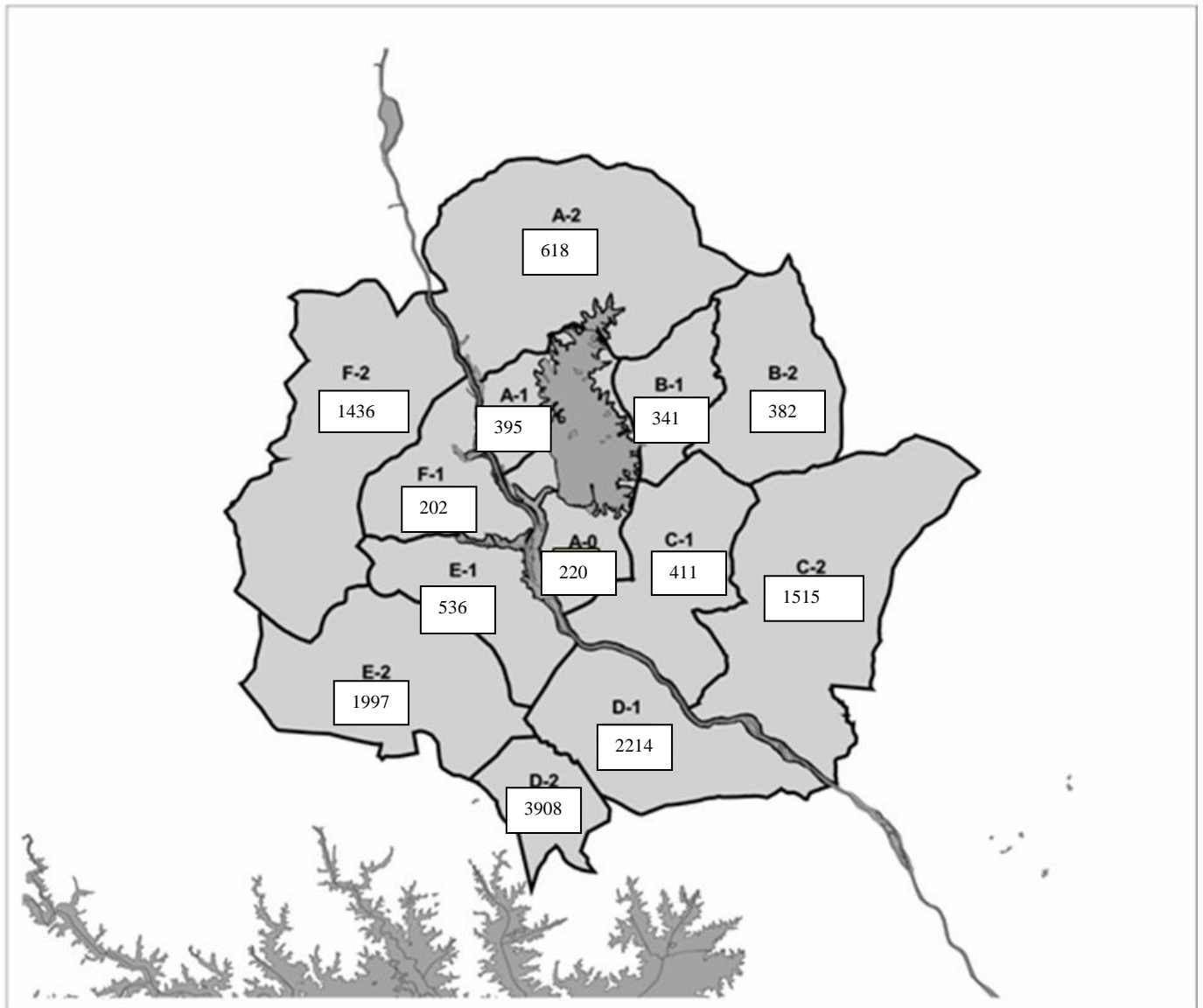
NOTE: All road barricades and detour signs will be stored at the Department of Transportation Maintenance Shop in Winnsboro. These signs will be transported to the appropriate locations by the Maintenance Personnel when notified by the Fairfield County Sheriff’s Department that an emergency road detour is needed at the V.C. Summer Nuclear Station.

**ATTACHMENT 3 TO ANNEX Q
50-MILE EPZ, VC SUMMER NUCLEAR STATION**



ATTACHMENT 4 TO ANNEX Q

POPULATION DISTRIBUTION MAP, 10-MILE EPZ, VC SUMMER NUCLEAR STATION



ATTACHMENT 5 TO ANNEX Q--FNF
Traffic Capacities for Evacuation Routes.

Evacuation Route
Hourly Vehicle Capacity

S.C. 213 EB
1,500

S.C. 215 SB
1,500

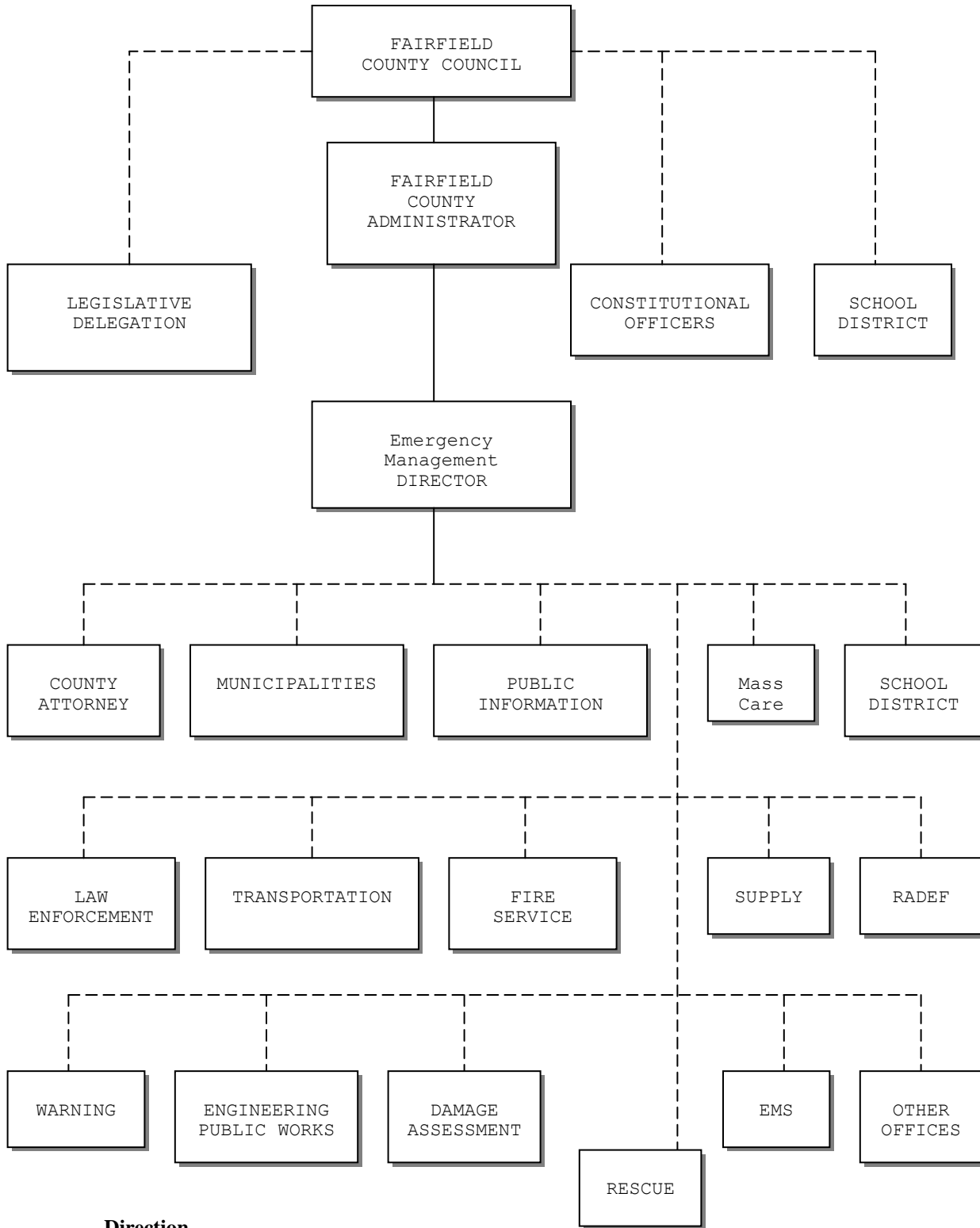
U.S. 26 EB
2,000

S.C. 176 WB
1,500

S.C. 34 WB
1,500

U.S. 26 WB
2,000

APPENDIX 1 TO ANNEX Q, FNF ORGANIZATION CHART



_____ **Direction**
 - - - - - **Coordination**

TAB A TO APPENDIX 1 TO ANNEX Q--RESPONSIBILITY SUMMARY TABLE

<u>FUNCTION</u>	<u>AGENCY</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Command & Control	Fairfield County Council	X	X
	Fairfield County Administrator		X
	Emergency Management Director		X
	Chiefs, Co. Emergency Services		X
Warning (<i>Radio-logical Emergency Response</i>)	Emergency Management Director	X	
	VC Summer Nuclear Station		X
	Radio & TV Stations		X
	SC Educational Network		X
	State Law Enforcement Division (<i>SLED</i>) (<i>When Requested</i>)		X
	Municipalities		X
Notification Communications	Emergency Management Director	X	
	Utilities		X
	Telephone Companies		X
	Local Government & Municipalities		X
	Chiefs, County Emergency Services		X
Public Information	PIO Officer (<i>County</i>)	X	
	Emergency Management Director		X
	Fairfield Co. Administrator		X
	Local Newspapers	X	
	TV & Radio Serving Companies		X
	Municipalities		X
	Utility		X
Accident Assessment (<i>Nuclear Accident</i>)	SC Dept of Health & Environmental Control (<i>DHEC</i>)	X	
	RAP & IRAP (<i>upon request</i>)		X
	Emergency Management Director		X
Social Services (<i>EWS</i>)	Co. Dept of Social Services	X	
	School Districts		X
	County Red Cross		X
	Salvation Army (<i>when available</i>)	X	
Fire Service	Fire Marshal, Fire Services	X	
	Local Fire Departments		X
	SC Forestry Commission		X
	SC Office of the Fire Marshal		X
Adjacent Counties (<i>Mutual Agreement</i>)			X
Rescue Service	Chief, Rescue Service	X	
	Local Rescue Squads		X
	SC Wildlife & Marine Resources		X
	SC Forestry Commission		X
	SC Aeronautics Commission		X
SC Civil Air Patrol (<i>Mutual Agreement</i>)			X

TAB A TO APPENDIX 1 TO ANNEX Q--RESPONSIBILITY SUMMARY TABLE (CONTINUED)

<u>FUNCTION</u>	<u>AGENCY</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Traffic Control, Security & Law Enforcement	Fairfield County Sheriff	X	
	Municipal Police Forces		X
	State Law Enforcement Div.		X
	SC Wildlife & Marine Resources		X
	SC Highway Patrol		X
	SC Army National Guard (If Available)		X
Emergency Medical Services (EMS)	Director, County Emergency Medical Service	X	
	County Rescue Service		X
	County Ambulance Services		X
	Hospitals (Serving EPZ)		X
	Adjacent Counties (<i>Mutual Agreement</i>)		X
Transportation	Co. School Bus Maintenance Supervisor	X	
	Local Trucking Firms		X
	SC Public Service Comm.		X
	SC Aeronautics Commission		X
	SC Adjutant General		X
	Adjacent Counties (<i>Mutual Agreement</i>)		X
Protective Response	Fairfield Co. Administrator	X	
	County Emergency Welfare Services		X
	Sheriff's Office		X
	Emergency Management Director Chiefs, County Emergency Services	X	X
Radiological Exposure Control	SC Dept. of Health & Environmental Control (<i>DHEC</i>)	X	
	Emergency Management Director		X
	Fairfield Co. Administrator		X

APPENDIX 2 TO ANNEX Q--PROCEDURES FOR ALERTING AND NOTIFYING RESIDENTS AND WARNING TEAMS OF THE 10-MILE EPZ

A. Purpose

Specify the standard operating procedures for alerting and advising the population of the 10-mile EPZ.

B. Procedures

1. Receipt of Warning:

- a. If an immediate General Emergency occurs at the VCSNS, authorized personnel will notify the Fairfield County Public Safety Answering Point- by Electric Switch System Exchange (ESSX) a dedicated ring-down telephone system, or radio on frequency 460.400 MHz.
- b. The telecommunicator on duty will verify that the caller is authorized to issue emergency messages by consulting the Authentication Code List.
- c. If there is doubt about the call, the telecommunicator will telephone the VCSNS for confirmation.
- d. If the Prompt Alert and Notification System (siren) system is accidentally sounded, the warning point will immediately notify the radio and television stations servicing the Fairfield County area to broadcast sample releases No. 11 in Annex D, Public Information.

Notification will be as follows:

Radio/TV Stations

WCOS-FM 97.5	(803) 343-1100	(Columbia)
WIS-TV 10	(803) 799-1010	(Columbia)
WCTV-3	(803) 635-6459	(Winnsboro)

- e. *See Appendices 1 and 2 to Annex C.*

2. Dissemination of the Warning:

- a. Upon confirmation of an immediate General Emergency, the telecommunicator will immediately notify/advise any one of the following Fairfield County officials:

Director, Emergency Management Department
County Sheriff
County Sheriff's Department Chief Deputy
County Administrator

Each of these officials has the authority to activate the siren alert systems.

APPENDIX 2 TO ANNEX Q--PROCEDURES FOR ALERTING AND NOTIFYING RESIDENTS AND WARNING TEAMS OF THE 10-MILE EPZ (Continued)

C. Siren Alert System

A fixed siren alert system has been installed in the ten-mile EPZ.

D. Emergency Alert System

The EAS must be activated along with the alert siren system. Information advising the population of protective actions will be given out over the EAS. *See Annex D, Public Information.*

E. Alternate Method of Notifying The Population of The 10-Mile EPZ

1. Should problems develop with the siren alert system, warning teams would proceed immediately to pre-assigned areas utilizing mobile sirens, loudspeakers and horns to notify the public of the situation.
2. Warning teams consist of the following along with assigned areas of responsibility:

Sector	Population	
A-0	220	Jenkinsville/Monticello Fire Department
A-1	395	Blair Fire Department
A-2	618	Blair Fire Department
B-1	341	Jenkinsville/Monticello Fire Department
B-2	382	Jenkinsville/Monticello Fire Department
C-1	411	Greenbrier/Bethel Fire Department and Sub-Station
C-2	1515	Greenbrier/Bethel Fire Department and Sub-Station

3. Notification of Warning Teams:
 - a. Rescue--Pager or telephone
 - b. Fire Departments--Radio or telephone
 - c. Police Departments--Radio or telephone
 - d. All units above can be contacted/controlled from Fairfield County EOC and/or the Emergency Management Departments Communication Room.

F. Warning Messages To Be Disseminated Will Consist of One of The Following:

1. Attention--A radiological accident occurred at the VC Summer Nuclear Station at *(date/time)* that could cause harm to persons in this neighborhood. You are requested to stay inside your homes and businesses with doors and windows closed. Turn on your radio or TV to receive further information.
2. Attention--A radiological accident occurred at the VC Summer Nuclear Station at *(date/time)* that could cause harm to persons in this neighborhood. We urge people to leave their homes or businesses in a safe, orderly manner and report to the White Oak Conference Center. Turn on your radio or TV to receive further information.

**APPENDIX 2 TO ANNEX Q--PROCEDURES FOR ALERTING AND NOTIFYING
RESIDENTS AND WARNING TEAMS OF THE 10-MILE EPZ (*Continued*)**

3. Attention--The Governor of S.C. has declared a state of emergency due to an accident at the VC Summer Nuclear Station at (*date/time*). You are requested to begin movement to the White Oak Conference Center in accordance with instructions listed in the VC Summer Nuclear Station brochure and information furnished by radio and TV stations.

G. Public Information

1. The Emergency Management Director/County Administrator will direct the PIO to activate the Emergency Public Information System and to issue appropriate messages.
2. The fullest coverage by Media and EAS will be utilized to convey the public warning and follow-up messages.

TAB A TO APPENDIX 2 TO ANNEX Q--WARNING MESSAGE--NUCLEAR FACILITY TO STATE/LOCAL GOVERNMENT

EMERGENCY NOTIFICATION: NUCLEAR FACILITY TO STATE/LOCAL GOVERNMENT

Instructions:

A. For Sender:

1. Complete Part I for the Initial Warning Message.
2. Complete Parts I and II for follow-up messages.

B. For Receiver: Utilize Green Warning Message Form which follows:

AUTHENTICATION CODE LIST FOLLOWS THIS PAGE--ANNEX Q

VC SUMMER 'GREEN SHEET:EMERGENCY NOTIFICATION' FOLLOWS THIS SHEET ANNEX

TAB B TO APPENDIX 2 TO ANNEX Q--GENERAL ALERT LIST

ADDRESS/TITLE

County Administrator
P. O. Drawer 60
Winnsboro, SC 29180

Director, Emergency Management Department
P. O. Drawer 60
Winnsboro, SC 29180

County Sheriff
P.O. Box 387
Winnsboro, SC 29180

Fairfield County Council Chairman
P.O. Drawer 60
Winnsboro, SC 29180

WCOS-FM Radio Station
316 Greystone Blvd
Columbia, SC 29201

Emergency Medical Service
P.O. Box 620
Winnsboro, SC 29180

DSS Coordinator
P.O. Box 210
Winnsboro, SC 29180

Chief, Rescue Squad
522 N. Vanderhorst Street
Winnsboro, SC 29180

Superintendent of Education
1226 US Highway 321 By S
Winnsboro, SC 29180

Communications Officer (EM Director)
P. O. Drawer 60
Winnsboro, SC 29180

Transportation Officer
P. O. Drawer 60
Winnsboro, SC 29180

Director, Public Works
2067 US Highway 321 By N
Winnsboro, SC 29180

Damage Assessment
115 Congress Street
Winnsboro, SC 29180

Legal Advisor
229 S. Congress Street
Winnsboro, SC 29180

Mayors of Municipalities

Mayor of Winnsboro
S. Congress Street
Winnsboro, SC 29180

Mayor of Ridgeway
Palmer Street
Ridgeway, SC 29130

Managers of Municipalities

City Manager, Winnsboro
Congress Street
Winnsboro, SC 29180

****ALL TELEPHONE NUMBERS ARE KEPT CURRENT IN OUR COUNTY ALERT LIST SOP,
DISTRIBUTED TO APPROPRIATE AGENCIES.***

TAB C TO APPENDIX 2 TO ANNEX Q--SOUTH CAROLINA ELECTRIC AND GAS POWER COMPANY CALENDAR FOLLOWS

APPENDIX 3 TO ANNEX Q—INDUSTRIES AND SCHOOLS IN THE 10-MILE EPZ IN FAIRFIELD COUNTY

SCHOOLS

McCrorey Liston Elementary School
1978 State Highway 215 South
Blair, S.C. 29015

Kelly Miller Elementary School
255 Kelly Miller Road
Winnsboro, S.C. 29180

1. Kelly Miller Elementary School

Evacuation Route: Kelly Miller Rd. to State Hwy. 269 to US Hwy 321 N to Mobley Rd. to White Oak Conference Center.
Population: 313
Planning Zone: C-2
Telephone: 635-2961/4564 (*Fax*)
Principal: Kathy Woodard
Reception Center: White Oak Conference Center

2. McCrorey Liston Elementary School

Evacuation Route: SC Hwy 215 S to Newberry Rd. to US Hwy 321 N to Mobley Rd. to White Oak Conference Center
Population: 354
Planning Zone: A-2
Telephone: 635-9490
Principal: Chandra Bell
Reception Center: White Oak Conference Center

APPENDIX 4 TO ANNEX Q--LAW ENFORCEMENT SOP

The security identification that will be used to control egress and ingress to deposition area in the case of a nuclear incident is as follows:

Law Enforcement--All bonafide uniforms, including the South Carolina National Guard uniform, will be honored. Plain clothes officers will be issued a yellow badge with the letters "LE" clearly visible marked on it as a sequential number by which it is issued. There will be a corresponding placard for the automobile dashboard.

Staff Support--All agencies with personnel involved in support of an incident, but neither law enforcement nor plant employees, will be issued a green badge with the letters "SS", also to be sequentially numbered by which it will be issued. There will be a corresponding placard for the automobile dashboard.

Facility Personnel--Each facility will be issued a large block of yellow and black lapel badges that are to be issued to their people by the sequential number. These will also have clearly visible the traditional nuclear emblem. They are to be pre-issued only to the key emergency personnel and to the other employees as they come to work. There will likewise be a corresponding placard for the automobile dash.

News Media--The State of South Carolina issues to media representatives a permanent press pass with photograph. Names will be recorded on computer for quick security check. There will be temporary press ID's issued at the time of an incident with an expiration date affixed to it for media persons not previously issued one.

Civilians--A pass for evacuees to enter their premises in the evacuated area for the purpose of tending to urgent duties, such as feeding livestock, will be available. It is a orange badge and is sequentially numbered. An accompanying placard for the automobile dashboard will be distributed. Both will be issued from the EOC with a time limitation specified for remaining in the evacuated area.

All of the ID's will be issued by number and they will be audited periodically.

APPENDIX 5 TO ANNEX Q—RADIATION EXPOSURE RECORD

NAME _____

AGE _____

HOME ADDRESS _____

SOCIAL SECURITY NUMBER _____

AGENCY/ORGANIZATION NAME _____

TLD NUMBER _____

CAUTION: RAD EXPOSUE LIMITS

Call Back Value	0.1R
Turn Back Value	1R
Protecting Valuable Property	2R
Life Saving	5R

DATE	DOSIMETERY SERIAL NUMBER	INITIAL READING	FINAL READING	TOTAL SHIFT EXPOSURE

<p>Dosimetry Instructions</p> <ol style="list-style-type: none"> 1. Charge dosimeter prior to initial use. 2. Keep dosimeter on your person while on duty. 3. Read dosimeter every 15-30 minutes. 4. Report immediately any reading greater than 0.1R (100 mR). 	<p>Record Keeping</p> <ol style="list-style-type: none"> 1. Record initial & final dosimeter reading at end of each shift. 2. Calculate exposure by subtracting the initial from the final reading. Record exposure. 3. Recharge dosimeter & complete steps 1 & 2 for each successive shift. Add accumulated exposures & record total 4. At end of incident, turn-in Radiation Exposure Record to supervisor or parent organization.
--	---

DATE _____ TOTAL EXPOSUE _____

SIGNATURE _____

TAB A TO APPENDIX 5 TO ANNEX Q—RADIOLOGICAL EXPOSURE CONTROL FOR THE GENERAL PUBLIC

A. U.S. Environmental Protection Agency (EPA) Protective Actions Guides (PAGs)

1. The PAGs for response during the early phase of an incident are summarized in ***Table A***.
2. Because radioactive releases may involve different radionuclides, the resulting risk may be greater for one body system than another. The PAGs take these differences into account, resulting in different measures for PAGs depending on the body system at greatest risk: whole body, skin, or thyroid.
3. The whole body PAG is expressed in terms of the projected sum of the effective dose equivalent (EDE) from external radiation and the committed effective dose equivalent (CEDE) incurred from inhalation of radioactive materials from exposure and intake during the early phase. The sum of EDE and CEDE is expressed as the Total Effective Dose Equivalent (TEDE). Supplementary guides are specified in terms of committed dose equivalent to the thyroid and dose equivalent to the skin. The PAG for the administration of stable iodine is specified in terms of the committed dose equivalent to the thyroid from radio iodine.
4. When projected doses have the potential to exceed the PAG, the decision whether to recommend evacuation, sheltering, or administration of KI should be made.

TABLE A
PAGs for the Early Phase of a Nuclear Accident

Protective Action	PAG (projected dose)	Comments
Evacuation (or sheltering ^a)	1 rem ^b	Evacuation (or, for some situations, sheltering) should normally be initiated at 1 rem
Administration of stable iodine (KI)	5 rem ^c	Requires approval of DHEC

^a Sheltering may be the preferred protective action when it will provide protection equal to or greater than evacuation, based on consideration of factors such as source term characteristics, and temporal or other site specific conditions.

^bThe sum of the effective dose equivalent resulting from exposure to external sources and the committed effective dose equivalent incurred from all significant inhalation pathways during the early phase. Committed dose equivalents to the thyroid and to the skin may be 5 and 50 times larger, respectively.

^c Committed dose equivalent to thyroid from radio iodine.

TAB B TO APPENDIX 5 TO ANNEX Q—RADIOLOGICAL EXPOSURE CONTROL FOR EMERGENCY WORKERS

A. Emergency Workers

Emergency workers are those individuals who, by virtue of their duties, will assist others to avoid radioation exposure and will protect lives and property, all other individuals should be considered members of the general public. Workers who may incur increased levels of exposure under emergency conditions may include those employed in law enforcement, firefighting, radiation protection, civil defense, traffic control, health services, environmental monitoring, transportation services, and animal care. In addition, selected workers at institutional, utility, and industrial facilities, and at farms and other agribusiness may be required to protect others, or to protect valuable property during an emergency. The above are examples-not designations-of workers that may be exposed to radiation under emergency conditions.

B. Dose limits for Emergency Workers

1. The EPA issued guidance for emergency worker dose limits, which were provide as TEDE values. These limits are the sum of the external , or EDE , and Internal, CEDE, doses to the emergency workers during the response to the incident. However, during an emergency response, the CEDE portion of the TEDE cannot be measures to ensure that the emergency workers TEDE does not exceed the EPA dose limits.
2. The State of South Carolina has developed administrative dose limits, identified in the second column of **Table B**, that are set lower than those recommended by EPA. Emergency workers monitor their external dose using a direct or self-reading dosimetry. Limiting the emergency workers external dose to these administrative limits provides reasonable assurance that after including the internal dose, the emergency workers TEDE will likely not exceed the relevant dose limit. Other protective measures available to emergency workers are enumerated in **Table B**.

TABLE B
Guidance on Dose Limits for Workers Performing Emergency Services

EPA Dose Limit ^a (rem)	SC Administrative Dose Limit ^b (R)	Activity	Condition
5 rem	1 R	All	
10 rem	2 R	Protecting valuable property	Lower dose not practicable
25 rem	5 R	Lifesaving or protection of large populations	Lower dose not practicable
>25 rem	>5 R	Lifesaving or protection of large populations	Only on a voluntary basis to person fully aware of the risks involved

^a Sum of external EDE and CEDE to non-pregnant adults from exposure and intake during an emergency situation. Workers performing services during emergencies should limit dose to the lens of the eye to three times the listed value and dose to any other organ (including skin and body extremities) to ten times the listed value. These limits apply to all doses from an incident, except those received in unrestricted areas as members of the public during the intermediate phase of the incident.

^b Exposure as measured with a direct or self-reading dosimeter.

Note: Report immediately any exposure ≥ 0.1 R or 100 mR.

APPENDIX 6 TO ANNEX Q--PROCEDURES TO IMPLEMENT THE FAIRFIELD COUNTY RER PLAN

NUREG-0654 Criteria II P:7

1. Palmetto Health Richland Operational Procedures.
2. Spent Fuel Transportation Plan--VC Summer Nuclear Station Radiation Emergency Plan--prepared by SCE&G Company.
3. Engineering Study for Radio--Controlled Outdoor Siren Alerting System for VCSNS--Prepared by Federal Signal Corporation.
4. Standing Operations Procedures, State Emergency Operations Center, Emergency Management Division, Office of the Adjutant General.
5. Local Government Radio/Signal Operating Instructions, Emergency Management Division, Office of the Adjutant General.
6. Emergency Health Plan for South Carolina, South Carolina Department of Health and Environmental Control.

APPENDIX 7 TO ANNEX Q--RADIOLOGICAL DECONTAMINATION

A. General

1. Radiological decontamination is the reduction or removal of contaminating radiological material from structures, areas, objects or persons. The object is to reduce the contamination to an acceptable level with the least expenditure of labor and materials, and with radiation exposure to decontaminate personnel commensurate with the urgency of the task.
2. Decontamination procedures will be implemented on the recommendations of DHEC.

B. Execution

1. Decontamination operations will be established at the following locations and be under direction of the County Radiological Officer:
 - a. White Oak Conference Center

C. Procedures

1. The method of decontamination will depend upon the type and extent of contamination.
2. Personnel and Clothing: As described in Tab A.
3. Decontamination of food and water will be conducted under the technical advice/supervision of DHEC.
4. Contaminated areas will be roped off and marked as: *Caution--Radioactivity*.
5. Decontamination Action Levels will be in accordance with Annex 6—SCORERP Basic Plan.
 - a. Personnel—300 cpm or greater
 - b. Vehicles—300 cpm or greater

D. Disposal

1. Contaminated clothing will be placed in sealed containers for decontamination or disposal. Run-off water from washing vehicles and equipment will be disposed of in one of the manners listed below:
 - a. Water with low level contamination may be disposed of in storm sewers or running water (stream or river).
 - b. Retain the water in holding tanks or pond-type storage for treatment and disposal.
2. Personnel detailed to perform decontamination will record their dosimeter reading after each task performed.

3. A list of commercial facilities in the state capable of washing decontaminated clothing will be made available by the DHEC.

TAB A TO APPENDIX 7 TO ANNEX Q--PERSONNEL DECONTAMINATION PROCEDURES

Decontamination of Personnel:

- A. Contaminated persons should wash with mild, non-abrasive soap and warm water, i.e., a thorough shower should be sufficient. Emphasis should be placed on any specific spots found to be contaminated in the monitoring process. Also, special attention should be given to the hair, hands and fingernails.
- B. After thorough cleansing, the individual will be monitored again. If some contamination still remains, the individual should shower again. If monitoring after the second thorough cleansing indicates that the contamination is still present, DHEC should be notified for referral to the nearest facility capable of treating contaminated persons.
- C. Care should be taken that persons who are decontaminated do not become re-contaminated by dressing in contaminated clothing. If an individual does not have contamination free clothing, then clothing should be issued until such time as the clothing can be decontaminated or other suitable arrangements made.
- D. Persons with contaminated wounds will be referred to an appropriate medical facility for radiation decontamination and treatment.

TAB B TO APPENDIX 7 TO ANNEX Q-- VEHICLE DECONTAMINATION PROCEDURES

Decontamination of Vehicle:

NOTE: Decontamination of the interior of vehicles is not required. Quarantine any vehicle with an interior dose rate in excess of 300 CPM.

1. Use a water spray. Wear a rain suit/coat, rubber boots and latex gloves to keep dry and to avoid contamination.
2. Work from top to bottom, and upwind to downwind to avert recontamination. Flush entire outside surface of vehicle initially, then;
 - a. Flush specific location previously determined to be contaminated.
 - b. Flush insides of front and rear wheel wells.
 - c. Flush grille/radiator.
 - d. Flush engine compartment.
 - e. Flush tires and wheel wells.

NOTE: Ensure water from decontamination activities runs directly to a storm sewer or other sewer or drain system. Do not allow water to stand in low spots or areas where exposure to individual may occur.

3. Re-monitor the vehicle and revise the vehicle decontamination record. Quarantine vehicles that cannot be decontaminated to a dose rate of less than 300 CPM.
4. Place vehicle decontamination record in the vehicle and forward the original to the county emergency management director.

APPENDIX 8 TO ANNEX Q--LETTERS OF AGREEMENT

**See file in office for letters of agreement.*

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS

I. PURPOSE

The purpose of this procedure is to outline the steps and to identify resources necessary to ensure a timely response for evacuation of schools located within the ten-mile EPZ for VC Summer Nuclear Station (VCSNS).

SCOPE

This procedure will address only the schools located in the ten-mile EPZ and the procedures necessary to evacuate, transport and account for students and staff who are to be or have been evacuated.

II. OBJECTIVES

A. The objectives of these procedures are as follows:

1. To ensure alerting schools in a timely manner of possible conditions at VCSNS.
2. To identify resources necessary for evacuation of facilities.
3. To identify primary reception center locations.
4. To identify primary evacuation routes.
5. To identify additional resources and to update on an annual basis, or as necessary, and to ensure all components of procedures are in a ready status.

III. GENERAL DISCUSSION

The critical element for individual schools is to define as specific as possible the elements necessary to implement their plan with assistance from local government. In this regard each school located within a ten-mile EPZ of VCSNS should develop specific planning standards or procedures as identified by Items A through E and all other Attachments.

A. School Information

TAB A will provide specific information regarding school name, address, telephone number, principal's and/or assistant principal's name, zone location and school population for current year, evacuation routes and assigned reception centers.

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (*CONTINUED*)

B. Transportation Information--General

1. School buses will be the primary means of transportation. Activity buses and other supporting vehicles may be used. Students driving to school will be permitted to drive their own cars out of the area. The principal will inform student drivers to proceed in their own vehicles to reception locations. However, it is noted that some students may have to return home to pick up other family members.
2. Teachers and other staff personnel will be requested to drive their own vehicles to the shelter location and assist principals and school staffs in accountability of students; however, there should be at least one staff member assigned to each bus load of evacuating students.
3. Each school will be assisted in traffic and crowd control by a law enforcement official of Fairfield County.
4. All buses will be loaded to maximum, safe capacity and will be used in the most efficient manner.
5. Specific bus needs on evacuation transportation information for Fairfield Schools are identified in TAB B.

C. Alert and Notification--General

Upon proper notification and confirmation that an incident has occurred at VCSNS, each school's principal, or authorized designee, shall implement and/or activate the plans, procedures and a course of action that ensures the safety and welfare of students and staff. *See TAB D*

1. Notification to the schools informing that an incident has occurred at VCSNS will be via one of the following:
 - a. Telephone call from VCSNS representative.
 - b. Telephone call from Emergency Operations Center (*EOC*).
 - c. Radio-equipped vehicle.
 - d. Tone alert radio--to be monitored at all times during school hours on school days. This tone alert radio is part of the Emergency Alert System (*EAS*).
 - e. Fairfield County Warning Point.

2. The primary means of alert and notification to the schools, the school system and to local government will be the telephone system.

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (CONTINUED)

3. After receipt of notification by the affected schools, the schools will make the following alert and notification contacts and advise contact points of their course of action.
 - a. Superintendent of Schools or Assistant.
 - b. Transportation System Director or Assistant.
 - c. EOC Representative.
 - d. County Warning Point.
4. The alert and notification process, as identified in 3a and 3b above, will ensure that resources are activated or placed on standby to implement the school plan and procedures. The alert and notification procedures will also include the internal procedures to activate school resources and manpower. (*See TAB C for Department/Agency Alert and Notification listing.*)

D. Evacuation/Shelter--General

Severity of conditions at nuclear power stations can range from minor condition, with no recommended action, to a slowly escalating condition, that allows team decisions at area superintendent or superintendent level. Fast-breaking conditions could occur that require immediate action by the principal or designee. If time permits, the normal channels for evacuation procedures will be followed.

1. Based upon time constraints and/or the severity of conditions at the nuclear power station, the authority to evacuate the school will be as follows:
 - a. Superintendent of Fairfield County Schools.
 - b. Fairfield County School District Representative in EOC.
 - c. School principal or designee.
 - d. Fairfield County Warning Point.
2. The primary evacuation routes for Fairfield County schools are identified in TAB A of this annex.
3. If an evacuation order is given, teachers and other school staff personnel will be requested to drive personal vehicles to the local shelter and assist in accountability of students; however, there should be at least one staff member assigned to each bus leaving the school.
4. Students will be allowed to drive their personal vehicles. However, the students should be directed to a reception location to ensure accountability.

5. Each school will be assisted in traffic and crowd control by a law enforcement officer from local or state government.

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (*CONTINUED*)

6. Shelter:

The reception center for each school affected by an incident at VCSNS is identified in TAB A.

- a. All reception centers will be staffed with trained personnel to ensure the safety and welfare of evacuees.
- b. Special attention will be given to school children, especially kindergarten and elementary grades. In addition, classes and age groups will try to be maintained in order to create a more comfortable environment.
- c. All evacuees should report to reception centers to expedite reuniting children with families and to be assigned a shelter location.
- d. Students living outside the 10-mile EPZ boundary but attending one of the schools listed in TAB A will proceed to the reception center with the school population.
- e. Students attending a school outside the 10-mile EPZ boundary but reside inside the 10-mile EPZ will immediately report this information to their teacher(s). The teacher(s) should contact appropriate school officials for assistance.
- f. Students identified in *e.*, above, will stay in school until school closes or until they are picked up by a parent or guardian, or they can be transported to the reception center location designated by County Emergency Plans.
- g. The principal, staff and support personnel will report to the reception center manager and provide information as requested to provide assistance in reception center operations as the assistance relates to the schools.
- h. Parents or guardians will report to the reception center to pick up student, however, parents or guardians are NOT to drive through or attempt to drive into the 10-mile EPZ once the zone is secure.

E. General Concerns and Guidelines

1. Once a bus driver has left the 10-mile EPZ, the bus will be permitted to re-enter the affected area only if driven by an adult driver. Adult bus drivers may re-enter the affected area on a voluntary basis, only if the bus has no student passengers. No buses will be permitted back into the EPZ unless multi-trips are necessary.

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (CONTINUED)

1. The Transportation System or Fairfield County School District should develop resource locations if deemed necessary. These resources, as a minimum, should be available on short notice and consist of the following:
 - a. Tow truck--one only--Contact County Law Enforcement Center to dispatch.
 - b. Gasoline truck--one only.
 - c. Mechanics with truck--two each.
 - d. School buses with adult drivers--five.
3. Each school principal of schools within the 10-mile EPZ should develop that school's own internal procedures and have a response team to carry out components of school basic planning document.
4. The procedures, both internal and otherwise, should be exercised on an annual basis to ensure workability and to identify any weaknesses.
- **5. It is the responsibility of school system personnel to notify the Fairfield County Emergency Management Department of any changes in school population and resources, and any other school-related data that would have a direct bearing on this document.
6. Attachments may change on an annual basis. In addition, the internal school procedures may change on an annual basis. It is for this reason that a review of attachments and procedures should occur at least once per year.

IV. SPECIFIC SCHOOL PLAN CHECK-OFF LIST

A. The actions identified by this check-off list are designed to enhance the safety and welfare of the students, staff, principal and teachers in the event of an accident/incident at VC Summer Nuclear Station. This check-off list represents a procedural approach to emergency planning for the schools and is meant to provide guidance in the development of detailed planning documents for individual schools.

B. NOTIFICATION (SEE TAB D)

Notification is a two-part process with the primary element being the initial notification to the schools. The examples below represent a sample check list for the notification process:

1. Notification Source

- a. Telephone Call: _____
- b. Tone Alert Radio (EAS): _____
- c. Other (Identify): _____

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (CONTINUED)

2. Notification Verified

- a. Name: _____
- b. Telephone Number: _____

3. Internal Notification

- a. P.A. System: _____
- b. Other (*Identify*): _____

The steps outlined in Section II above should be completed by the first staff member who is contacted or made aware that a condition has occurred at a nuclear power station. All other actions of the school should be taken by the principal or his/her designee.

- C. Based upon the protective action recommendation given by the caller, the EAS, the school representative or by local government, the following actions should be implemented:

1. Shelter In-Place

The principal or designee should select one or more of the information messages below and make a school announcement concerning the following actions:

- a. All students will remain in classroom. DO NOT go outside your building.
- b. Teachers and staff should close all windows and doors leading to the outside.
- c. Custodial staff should shut off all fans, air conditioners, forced-air heating systems or any ventilation system which lead to the outside.
- d. The cafeteria staff will shut off fans and other ventilation systems which lead to the outside.
- e. If possible, the interior section of the building should be considered the best inside shelter location.
- f. Make sure that all outside activities are secured and that outside classes seek an inside room.

If time and conditions permit: students, staff, teachers and other school personnel will proceed to classrooms or other rooms or spaces identified as shelter locations or areas. A survey should be conducted at each school facility to identify the areas of safety. A sample of safe areas in school buildings is attached. Locations such as basements and interior rooms or spaces would be the most desirable for safety. These areas should be marked and a listing maintained. The attached sheet will provide a sample format for listing the rooms or spaces.

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (CONTINUED)

2. Evacuation of Schools

If the schools are to be evacuated, the principal or designee will implement the following actions:

- a. Announce (*over the P.A. system*) the course of action the school will take. Develop a message that suits your needs.
- b. Have students report to their classrooms or home rooms.
- c. Teachers will take a roll call to account for all students and secure report cards.
- d. At the discretion of the principal, students will clear their desks, lockers and closets of all personal items, with consideration of time factor.

3. Transportation

The transportation resource should be pre-established to expedite the evacuation process.

- a. TAB B identifies the number of school buses necessary to evacuate the schools located within the 10-mile EPZ.
- b. The principal or designee at each school should appoint a bus supervisor to review the needs identified in TAB B. This review should be done at the start of each new school year.
- c. The bus supervisor will maintain a listing of bus numbers assigned to the school and will be responsible for assigning the school rooms to a specific bus and order in which the buses will be loaded. *See TAB B-1* for sample format of bus assignments.
- d. The principal at each school will assign one teacher or school staff member to each bus.
- e. These buses are kept on location throughout the school day with teachers who are qualified to operate them.
- f. All buses should be loaded to the maximum safe capacity and driven by available on-site drivers (*i.e., assigned drivers or qualified teachers*).
- g. County law enforcement officers will be dispatched to lead the bus convey out of the 10-mile EPZ, thus maintaining continuous radio contact with the EOC.

APPENDIX 9 TO ANNEX Q, FAIRFIELD COUNTY EMERGENCY PLAN FOR VC SUMMER NUCLEAR STATION--SCHOOL EMERGENCY PLAN FOR NUCLEAR PLANTS (*CONTINUED*)

- h. All staff members, teachers and students who drive their own cars will be instructed to go directly to the reception center location.
- i. The reception center locations and primary routes are identified in attachments as follows: *See Tab A.*

TAB A TO APPENDIX 9 TO ANNEX Q--TRANSPORTATION RESOURCES FOR FAIRFIELD COUNTY SCHOOLS

- | | | |
|---------------------------------------|--------------------|---|
| 1. Kelly Miller Elementary School: | Buses Required: | 5 |
| | Buses on Hand: | 5 |
| | Buses Transferred: | |
| | Transfer Location: | |
|
 | | |
| 2. McCrorey Liston Elementary School: | Buses Required: | 5 |
| | Buses on Hand: | 5 |
| | Buses Transferred: | |
| | Transfer Location: | |

TAB A-1 TO APPENDIX 9 TO ANNEX Q

SCHOOL _____

RECEPTION CENTER: _____ DEPARTURE TIME: _____

Classroom Bus No.	Order of Assigned	Teacher Assigned Loading	Primary=P Alternate=A
----------------------	----------------------	-----------------------------	-----------------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

TAB B TO APPENDIX 9 TO ANNEX Q--FAIRFIELD COUNTY EMERGENCY RESPONSE DEPARTMENTS

Fairfield County Emergency Management Department

Fairfield County Sheriff's Department

Fairfield County Emergency Medical Service

Fairfield County Fire Service

Fairfield County Rescue Squad

TAB C TO APPENDIX 9 TO ANNEX Q--NOTIFICATION MESSAGE

NOTIFICATION SOURCE

1. TELEPHONE CALL: _____
2. TONE ALERT RADIO (*EAS*): _____
3. OTHER (*IDENTIFY*): _____

NOTIFICATION VERIFIED

1. NAME: _____
2. TELEPHONE NUMBER: _____

INTERNAL NOTIFICATION (*MADE BY PRINCIPAL OR DESIGNEE*)

1. P.A. SYSTEM: _____
2. OTHER (*IDENTIFY*): _____

*****INSTRUCTIONS*: THIS FORM SHOULD BE COMPLETED BY THE FIRST STAFF
MEMBER WHO IS CONTACTED OR MADE AWARE THAT A CONDITION
HAS OCCURRED AT THE V.C. SUMMER NUCLEAR STATION**