# **APPENDIX 2**

# (SOUTH CAROLINA OPERATIONAL RADIOLOGICAL EMERGENCY RESPONSE PLAN)

# TO THE SOUTH CAROLINA EMERGENCY OPERATIONS PLAN

# I. INTRODUCTION

- A. The South Carolina Operational Radiological Emergency Response Plan (SCORERP) provides for the guidance, coordination, and utilization of State and other resources in support of affected county government(s) off-site operations during an emergency resulting from a radiological incident at a Nuclear Power Plant (NPP) in the State or a contiguous state.
- B. The plan is written in accordance with the planning standards contained in NUREG-0654, FEMA REP-1, REV. 2.
- C. Implementation of the protective actions and procedures in this plan provide reasonable assurance of the protection of the health and safety of the populace surrounding NPPs in or bordering South Carolina.

#### II. PURPOSE

- A. Provide the framework and coordination for an effective radiological emergency response effort between federal, state, and local government agencies and the NPP industry.
- B. Protect the lives and property of citizens and reduce human suffering resulting from an NPP incident.
- C. Coordinate and provide public warning, direction and control to all citizens including, but not limited to official statements (news releases) and Emergency Alert System (EAS) messages.
- D. As required, support local government response operations with timely and effective deployment of State resources and the coordination of federal resources.
- E. Coordinate restoration and recovery operations.

# III. SCOPE

- A. The SCORERP complements and interfaces with the South Carolina Emergency Operations Plan (SCEOP) and addresses those areas, responsibilities, processes, or actions that are specific for an incident at an NPP and are not covered in the SCEOP.
- B. The pre-planned response actions for each Emergency Classification Level (ECL), as well as protective actions delineated herein, are compatible with those of the SCEOP.

- C. The SCORERP addresses the actions of county and State government(s) and support organizations conducting off-site operations during an emergency resulting from an incident at an NPP(s) in the State or contiguous states.
- D. This plan does not specifically address responses to incidents resulting from radiological shipments throughout the State or incidents resulting from terrorist attacks on facilities other than NPPs. These are covered in local and SC Department of Environmental Services (SCDES) hazmat response plans or State Law Enforcement Division (SLED)'s Terrorism Operations Plan, respectively.
- E. For the purposes of this plan and for response to an incident, the Department of Energy's Savannah River Site (SRS) is treated in the same manner as an NPP.
- F. This plan does not incorporate emergency planning for the Naval Nuclear Power Training Unit (NPTU) in Charleston, SC. The South Carolina Emergency Management Division (SCEMD), in conjunction with NPTU and SCDES, maintains a separate emergency plan for incidents occurring at NPTU. Based on estimates by NPTU and SCDES, a significant radiological accident at NPTU is highly unlikely and the area of projected impact is within the boundaries of the naval facility (i.e., Joint Base Charleston).

# IV. SITUATION

- A. Vulnerability Analysis
  - 1. There are four (4) commercial NPPs and one (1) federal facility within the State of South Carolina, which could affect the State's territory and citizens.
    - a. The four (4) NPPs within South Carolina are Catawba Nuclear Station, Oconee Nuclear Station, Robinson Nuclear Plant, and V.C. Summer Nuclear Station. The NPPs are in York, Oconee, Darlington, and Fairfield Counties, respectively.
    - b. The federal facility (i.e., SRS) is located on land in Aiken, Allendale, and Barnwell Counties.
  - 2. NPPs in neighboring states which could affect the State's territory and citizens are:
    - a. Vogtle Electric Generating Plant in Burke County, Georgia
    - b. Brunswick Nuclear Power Plant in Brunswick County, North Carolina
    - c. McGuire Nuclear Station in Mecklenburg County, North Carolina

- 3. All but five (5) of the State's 46 counties fall within the 10-mile or 50-mile emergency-planning zone of at least one NPP. These five counties are Beaufort, Berkeley, Charleston, Dorchester, and Georgetown.
  - a. Counties not within the emergency planning zones can be affected by a NPP emergency.

# B. Hazard Analysis

- 1. A radiological incident at one of South Carolina's or an adjacent state's NPP could present an off-site hazard to residents and property.
- 2. Any radiological accident that presents off-site radiological hazards could involve the jurisdictions of two (2) or more local governments and conceivably the involvement of two (2) or more states. Therefore, State and/or federal assistance will be required to provide the necessary direction, coordination, and support.
- 3. The likelihood of a major accident resulting in a significant release of radiation offsite is remote.
- 4. The likelihood of a radiological accident occurring at multiple NPPs concurrently is remote.
- 5. See the South Carolina Hazard Mitigation Plan, Hazard Risk Assessment Section for more detailed information.

# V. FACTS

- A. The Nuclear Regulatory Commission (NRC) requires that approved state and local government radiological emergency response plans exist for an NPP to be operationally licensed or to continue operation.
- B. In accordance with 44 CFR 350.5 (b), FEMA reviews the State, local, and tribal radiological emergency plans, and preparedness. Approved plans and preparedness "must be determined to adequately protect the public health and safety by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency."

# VI. ASSUMPTIONS

- A. A major accident at an NPP will result in a significant release of radiation offsite.
- B. There could be radiological accidents occurring concurrently at multiple NPPs.
- C. The response to an NPP emergency would require assets beyond those available to

- State and local governments.
- D. A major NPP accident resulting in an extensive release of radioactive materials will affect multiple city, county, and State jurisdictions.
- E. South Carolina will be under a State of Emergency.
- F. A major NPP accident may result in large numbers of displaced people that can quickly overwhelm local and state authorities.
- G. Large numbers of people may be left temporarily or permanently without housing and will require long-term housing assistance.
- H. The response capabilities of local jurisdictions may be overwhelmed. Local first responders may be among those affected, impacting their ability to perform their duties.
- I. In a major NPP accident, the response will follow a prescribed process.
  - 1. The local jurisdiction will establish an initial response utilizing the Incident Command System (ICS) to control and direct the first response.
  - 2. The State will coordinate support for local and regional resources.

# VII. CONCEPT OF OPERATIONS

#### A. Direction and Control

#### 1. Federal

- a. The NRC is the responsible federal agency for the oversight of emergency preparedness within the confines (on-site) of commercial NPPs and for coordinating response to incidents at, or caused by, these facilities.
- b. The Department of Homeland Security (DHS) is the primary federal authority for domestic incident management, including preventing, preparing for, responding to, and recovering from terrorist attacks.
- c. FEMA is the responsible federal agency for oversight of emergency preparedness outside the confines (off-site) of commercial NPPs and is responsible for coordinating all federal Emergency Support Functions (ESFs) and Recovery Support Functions for all-hazards incidents.
- d. The Department of Energy (DOE) is responsible for coordinating

the federal response to a nuclear/radiological incident at a DOE facility (e.g., SRS) or involving DOE materials.

# 2. State

- a. The Governor of South Carolina or his/her designee (normally the Director of SCEMD), in coordination with other State, federal, and local agencies, will coordinate the State's response to an incident at an NPP.
- b. SCEMD is the lead state agency for coordinating the State's offsite consequence management response to an incident at an NPP.
  - (1) SCEMD is responsible for coordinating State government's activities with affected local governments, other states and federal agencies as appropriate.
  - (2) SCEMD will establish and direct the State Emergency Operations Center (SEOC). The State Emergency Response Team (SERT) will coordinate the off-site Radiological Emergency Response (RER) activities of State agencies, local governments, federal agencies, and contiguous states.
- c. SCDES is the lead state agency for the evaluation and assessment of the consequences of a radiological incident during a radiological emergency response.
  - (1) SCDES conducts and/or coordinates all technical radiological emergency response operations for the state of South Carolina in response to an incident at an NPP.
  - (2) SCDPH under the South Carolina Code of Laws, Title 44, Chapter 4, Article 1; Section 44-4-100 thru 570 (Emergency Health Powers Act), exercises unique authorities and responsibilities for coordinating the state's response to a Public Health Emergency.
- d. SLED is the lead state agency for coordinating the State's offsite response to terrorist acts, to include Hostile Action Based (HAB) incidents, against NPPs.
- e. South Carolina Department of Agriculture (SCDA) coordinates and directs the assessment and, if necessary, embargo of food and feed products (minus livestock and poultry) in response to an incident at an NPP.

- f. Clemson University Livestock-Poultry Health (CULPH) coordinates and directs the assessment and, if necessary, quarantine of livestock and poultry in response to an incident at an NPP.
- g. Non-food agricultural commodities, wildlife, and fisheries may fall under the jurisdiction of other state agencies within ESF-17. Specific authorities lacking for the control of agricultural commodities in an incident at an NPP and thus requiring emergency authorities are outlined in Annex 7.
- 3. The chief elected official and/or the county emergency management director or other designated county official provides county and local government direction and control in accordance with established plans, procedures and/or local ordinances.
- 4. The NPP operator is responsible for direction and control of on-site radiological response and safety procedures within the confines of the facility.
- B. Emergency Classification Levels
  - 1. In accordance with NUREG-0654/FEMA REP-1, Rev. 2, radiological accidents can be categorized into one (1) of four (4) ECLs.
    - a. Notification of Unusual Event (NOUE)
    - b. Alert (ALERT)
    - c. Site Area Emergency (SAE)
    - d. General Emergency (GE)
  - 2. The ECL determines the degree of licensee, State and local response as outlined in Attachment B (Emergency Classification Levels). State and local officials will determine off-site response based on recommendations from ESF-10 (Environmental and Hazardous Materials Operations) and/or the NPP.
  - 3. Definitions and actions taken at each ECL can be found in Attachment B.
- C. Protective Action Guidelines (PAGs)
  - 1. The U. S. Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) establish protective action guidelines (PAGs) for use by State and local officials.

- 2. PAGs are dose guidelines that trigger protective actions such as evacuation, staying indoors, ingestion of potassium iodide (KI), limiting emergency worker exposure, relocation, and reentry.
- 3. For further guidance, see the EPA PAG Manual 400/R-17/001.

# D. Emergency Planning Zones

- 1. Emergency Planning Zones (EPZs) are geographic areas surrounding a NPP for which emergency plans/procedures exist to ensure prompt and effective actions occur to protect the health and safety of the public in the event of an incident at an NPP.
- 2. Plume Exposure Pathway EPZ
  - a. The Plume Exposure Pathway EPZ is approximately 10 miles in radius from each NPP and is based on the following considerations from NUREG-0654, FEMA-REP-1, Rev. 2:
    - (1) Projected doses from the traditional design basis accidents would not exceed Federal PAG levels outside the zone.
    - (2) Projected doses from most core melt sequences would not exceed Federal PAG levels outside the zone.
    - (3) For the worst core melt sequences, immediate lifethreatening doses would generally not occur outside the zone.
    - (4) Detailed planning within approximately 10 miles would provide a substantial base for expansion of response efforts to a larger area, if necessary.
  - b. In accordance with the planning guidance contained in NUREG 0654, FEMA REP-1, REV. 2, each NPP 10-mile (i.e., Plume Exposure Pathway) EPZ is further subdivided into Protective Action Zones.
    - (1) Protective Action Zones are defined by prominent natural (rivers and lakes) or man-made (roads) physical features to outline their boundaries. They are further defined by landmark descriptions recognizable to area residents.
    - (2) They are designed to facilitate notification and effective dissemination of information, guidance, and selective protective actions for residents and transients within those

zones in the event of a radiological emergency.

- 3. Ingestion Exposure Pathway Emergency Planning Zone
  - a. The Ingestion Exposure Pathway Emergency Planning Zone (IPZ) is the area within an approximate 50-mile radius centered on the NPP and is based on the following considerations:
    - (1) The downwind range within which contamination may potentially exceed the PAGs is limited to about 50 miles from an NPP because of wind shifts during the release and travel periods.
    - (2) Atmospheric iodine (i.e., iodine suspended in the atmosphere for long periods) may be converted to chemical forms that do not readily enter the ingestion exposure pathway. Much of the particulate material in a radioactive plume would have been deposited on the ground within about 50 miles from the NPP.
    - (3) The likelihood of exceeding ingestion exposure pathway PAG levels at 50 miles is comparable to the likelihood of exceeding plume exposure pathway PAG levels at 10 miles.
  - b. Annex 7 (Ingestion Pathway Emergency Planning Zone) and the SCDES South Carolina Technical Radiological Emergency Response Plan (SCTRERP) contain specific information on IPZ responsibilities, environmental sampling procedures, Protective Action Recommendation (PAR) determination and implementation procedures.

# E. Phases of Response

- 1. Offsite response to a radiological incident at an NPP is divided into three phases: Early, Intermediate, and Late.
- 2. Early Phase is the beginning of a radiological incident for which immediate decisions for effective use of protective actions are required and must therefore be based primarily on the status of the radiological incident and the prognosis for worsening conditions. This phase may last from hours to days.
  - a. Alert and Notification
    - (1) Plant personnel make the initial determination of each ECL based on parameters established in emergency action level

classification procedures. Once the ECL is determined, the NPP will provide emergency notification to the State and county warning points within 15 minutes.

Actions taken by the plant can be found in Attachment B, listed by ECL.

- (2) Annex 1 (Alert and Notification Procedures) contains the procedures to alert federal, State, and local government agencies.
- (3) SCEMD and the counties will use a combination of fixed and/or mobile sirens and the Integrated Public Alert and Warning System (IPAWS), which includes both EAS and WEA notifications, but is not limited to emergency alerts via commercial broadcast stations and to personal mobile devices in accordance with their Site-Specific plan to alert the residents of each 10-mile EPZ.
- (4) The counties, either individually or in coordination with the NPP/SCEMD, may activate siren systems and IPAWS at any ECL to advise the public of plant emergency conditions.
- (5) When PADs are made by the appropriate State and county officials, clear and concise notifications will be promptly disseminated via IPAWS, in accordance with the SC IPAWS Plan, the State Warning Point Standard Operating Procedures (SOP) and Annex 3 (Public Information).
- (6) While the SEOC is operational, the SEOC Chief of Operations, in coordination with impacted counties, will make the decision to activate siren systems and/or IPAWS. Once the decision is made, the SEOC Technical Officer or the Situation Unit Leader will coordinate siren sounding and/or IPAWS activation with ESF-15 and participating radio stations.
- (7) Sample IPAWS messages are found in Annex 3 (Public Information), Attachment B. In the event of an SAE or GE where the SEOC is not yet operational, local governments have the ability to coordinate the activation of the public alert system (fixed or mobile sirens and/or electronic tone alert radios) in the 10-mile EPZ and broadcast notification information via the EAS or IPAWS.
- (8) To ensure public understanding of emergency protective

action instructions, promptly upon completion of IPAWS message broadcast, the SCEMD Public Information Officer (PIO) will publish and transmit an emergency news release containing familiar landmark descriptions of all zones where protective actions are required to participating media stations and the South Carolina Educational Television Network (SCETV).

- (a) Descriptions of familiar landmarks throughout each 10-mile EPZ protective action zone are contained in Site-Specific Plans.
- (b) Sample news releases are found in Attachment C to Annex 3 (Public Information).
- b. Activation of Emergency Facilities
  - (1) SCEMD will consider activating the SEOC when an ALERT ECL is received from the NPP. SCEMD will activate the SEOC when an SAE or GE ECL is received.
    - (a) The SEOC will activate in a timely manner and will be capable of protracted operations. The SEOC will staff in accordance with the SCEOP, SEOC SOP and Site-Specific Plans.
    - (b) The SCEMD Director will determine the SEOC Operational Condition (OPCON) level as described in the SCEOP.
    - (c) The SEOC will maintain communications with contiguous states and FEMA Region 4.
    - (d) The SEOC will continue operations until the emergency is terminated or until recovery efforts have advanced to the point where direct State coordination is no longer required.
  - (2) Risk counties will consider activating their EOCs at the ALERT ECL. Risk counties will activate their EOCs at the SAE or GE ECL.
  - (3) Host counties will activate their EOCs as needed or upon request of affected Risk counties or SCEMD.
  - (4) The Governor's Deputy Chief of Staff for Communications

or the SCEMD Public Information Director will direct the activation of a Joint Information Center (JIC)/Joint Information System (JIS), as needed, in accordance with Annex 15 (Public Information) of the SCEOP and the Site-Specific Plans.

- (5) The Directors of SCDES and SCDPH or designee will direct the activation of agency emergency operations facilities as needed, in accordance with plans and procedures.
- (6) During a HAB event, local law enforcement will establish an Incident Command Post (ICP), as needed, to direct local, state, and federal law enforcement assets.
- c. Activation of Radiological Emergency Response Plans

State and local governments will activate their RER plans as warranted by the ECL and in accordance with Attachment B (Response Actions by ECL).

- d. Protective Action Decision Making Process
  - (1) Protective actions are based primarily on plant conditions and dose projections in the absence of actual environmental measurements.
    - (a) ESF-10 will establish an environmental monitoring and sampling program to verify the accuracy of projections.
    - (b) Specific examples of Early Phase protective actions can be found in Section G.
  - (2) Based on dose assessment data and/or the potential for plant conditions to further deteriorate, ESF-10 in coordination with the SERT will provide PARs to the Governor or the Governor's designee.
  - (3) At the GE ECL, the affected NPP will issue PARs to the impacted state(s) and counties.
  - (4) The Executive Group will coordinate with all impacted counties and the Governor's office to obtain consensus on the PARs. Once the members of the decision-making chain agree, the appropriate parties will implement the PADs.

- (5) If the urgency of the emergency is such that there is insufficient time or information for ESF-10 to make independent PARs based on dose assessment models, designated county officials will implement NPP recommended PARs without review and direction from the Governor or the Governor's designee.
- (6) PADs will be implemented in accordance with the Site-Specific plans and county RER plans and procedures.

#### e. Protective Actions

# (1) Evacuation

- (a) In the event conditions at an NPP degrade to the point an evacuation of all or a portion of a 10-mile EPZ is required, the Governor will issue an Evacuation Order based on the technical assessment of plant conditions by ESF-10 and the recommendations of the Executive Group and counties.
- (b) Upon notification that a Governor's Evacuation Order has been issued, affected counties will initiate local evacuation procedures as outlined in each county's Emergency Operations Plan (EOP) and the Site-Specific Plan.
- (c) If circumstances warrant (i.e., a rapid and substantial degradation of the level of safety at an NPP), the incident commander or local officials may order and implement an immediate evacuation.
- (d) The affected county(s) will conduct evacuations over pre-designated routes to reception centers and shelters located at least 5 miles beyond the NPP.
- (e) The NPPs annually distribute copies of materials to be used in directing evacuation (including but not limited to maps showing evacuation zones, evacuation routes, reception centers and shelters, etc.) to all residents and businesses within each 10-mile EPZ.
- (f) Copies of these materials are maintained by affected State and county emergency management agencies.

- (g) ESF-16 (Emergency Traffic Management) will coordinate evacuation routes and traffic management in accordance with Annex 16 (Emergency Traffic Management) of the SCEOP and the Site-Specific Plans.
  - [1] At SAE or as directed by the SEOC Chief of Operations, ESF-16 (Emergency Traffic Management), in coordination with local law enforcement agencies, will:
    - [a] Occupy Traffic Control Points (TCP) designated in respective Site-Specific plans.
    - [b] Establish roadblocks 2 (two)-miles from the NPP to restrict access to the facility either by road or water.
  - [2] At SAE or as directed by the SEOC Chief of Operations, ESF-16 (Emergency Traffic Management), will coordinate with the SC Department of Natural Resources (SCDNR) on who will coordinate the clearance of all lakes and waterways within the 10-mile EPZ.
- (h) Access to evacuated zones will be granted only to facility employees, emergency workers and government officials (e.g., representatives of the NRC) needing to access the area with a bona fide need.
- (i) The various NPPs have prepared evacuation time studies for each 10-mile EPZ, and these studies are a part of the individual NPP emergency plan. Portions of these studies (e.g., population densities, evacuation times and route capacities) have been excerpted from NPP emergency evacuation plans and are included in county EOPs or the Site-Specific Annexes.
- (2) Go Inside, Stay Inside, Stay Tuned/Shelter-In-Place
  - (a) A protective action that may be warranted in situations where evacuation poses a greater risk of exposure or physical harm. This includes going

indoors, monitoring local media along with official, verified online sources.

- [1] There may be a need to close all windows and doors and turn off heating and air equipment or close exterior vents.
- [2] See Annex 3 of the SCORERP for example messaging.

# (3) Potassium Iodide

- (a) Potassium Iodide (KI) is a prophylactic compound containing stable iodine that blocks the uptake of radioactive iodine when taken as instructed.
- (b) KI only blocks radioactive iodine, offers no protection for other radionuclides, and should not be used as a substitution for evacuation.
- (c) KI may be distributed to emergency workers, members of the public, and institutional residential facilities without specific authorization.
- (d) Recommended PARs may include a recommendation to ingest KI applicable to emergency workers, mobility-impaired populations (includes institutionalized populations which cannot be evacuated before plume exposure), and members of the general public in the impacted areas who cannot evacuate before plume exposure.
- (e) The designated SCDPH Public Health Physician, in consultation with ESF-8 and ESF-10, may recommend ingestion of KI. A written recommendation will be provided to the Executive Group and counties for a PAD in accordance with Section VI.F.1.d(4).
  - [1] Emergency workers will be notified of PADs through the incident response chain of command.
  - [2] Institutionalized individuals will be notified through the respective staff of the various facilities.

- [3] The public will be notified via public instructions/public information announcements.
- (f) Nothing herein is intended to supersede the authority of counties or state agencies to distribute KI to their own emergency workers.
- (4) Consider protective actions for the IPZ as detailed in Annex 7 (Ingestion Pathway Emergency Planning Zone).
- 3. Intermediate Phase is the period beginning after the source and releases have been brought under control (has not necessarily stopped but is no longer growing) and reliable environmental measurements are available for use as a basis for decisions on protective actions and extending until these additional protective actions are no longer needed. This phase may overlap the early phase and late phase and may last from weeks to months.
  - a. Protective Action Recommendations
    - (1) PARs are based on dose projections and the analysis of field samples of air, soil, water, and vegetation at predetermined locations within the 10-mile EPZ.
    - (2) See Annex 7 (Ingestion Pathway Emergency Planning Zone) for IPZ protective actions.
  - b. Radiological Assessment
    - (1) ESF-10 will coordinate the evaluation of the restricted zone.
    - (2) ESF-10, along with federal officials, will estimate the total population dose received during the atmospheric release period following the accident.
    - (3) As warranted by the ECL, ESF-10 will assess the situation by evaluating reported radiological release data from the impacted NPP, analyzing field environmental sampling data, and consulting with the NRC.
    - (4) ESF-10 will establish a comprehensive long-term monitoring program to determine actual environmental exposure levels. Results of the monitoring will be used to estimate potential exposure of occupants and verify dose projections. The results may also provide the basis for additional protective actions.

- (5) ESF-10 will advise SCEMD when return or reentry can be initiated for specific evacuated areas. SCEMD will then recommend to the Governor the date and times these activities should begin. With the Governor's concurrence, SCEMD will notify RER organizations and local governments to proceed with return and reentry.
- (6) ESF-10 will advise SCEMD of those areas that are highly contaminated and those areas in which the contamination levels require the population to be temporarily or permanently relocated. State and federal agencies will assist in locating temporary or permanent housing for these individuals.

# c. Reentry

- (1) Workers or members of the public going into a relocation or radiological contaminated areas on a temporary basis under controlled circumstances.
- (2) Limited entries into access-controlled areas will be permitted for the performance of emergency services and to provide food and water to livestock within the area.
- (3) Decisions to allow reentry into an evacuated area require a thorough assessment of the radiological situation.
- (4) SERT and county personnel are responsible for making reentry recommendations for approval and authorization by the Governor.
- (5) ESF-10 will determine the feasibility of reentry into evacuated areas based on the radiological assessment and recommend the appropriate actions to the Governor or designee.
- (6) ESF-10 will provide guidance to local officials on the technical aspects of reentry procedures (e.g., exposure levels with estimated stay times, appropriate personal protective equipment, general radiological safety information, etc.).
- (7) SCEMD will relay the Governor's decision and ESF-10's guidance regarding reentry to the appropriate county emergency management director(s).
- (8) Local officials will coordinate reentry into controlled areas

in accordance with county plans and SOPs.

- (9) Local officials will ensure individuals reentering a controlled area:
  - (a) Receive a safety briefing and appropriate personal protective equipment prior to entry.
  - (b) Are limited to the dose limits in Annex 6 (Radiological Exposure Control).
  - (c) Are given a brief explanation of the hazards within the area and, if practical, escorted within the area by an emergency worker.
- (10) Appropriate county EOCs will forward copies of controlledaccess Direct Reading Dosimeter (DRD) records for everyone entering the controlled area to ESF-10 daily for review and dissemination to ESF-8 as needed.
- (11) Appropriate county EOCs will forward controlled-access Permanent Record Dosimeters (PRDs) for everyone entering the controlled area to SCEMD.
- (12) SCEMD will utilize contractual support to process the PRDs. Results will be submitted to ESF-10 to be analyzed. SCEMD will provide the analyzed results to the appropriate county personnel for retention.
- (13) State, local, and private entities with emergency workers entering access-controlled areas will retain records in accordance with their policy and procedures.
- (14) ESF-13 (Law Enforcement), in coordination with and in support of local law enforcement, will establish and enforce Access Control Points.
- (15) ESF-10, along with federal, state, and local assets will monitor the controlled area boundaries to detect the spread of contamination.

#### d. Relocation

(1) Relocation is the removal or continued exclusion of people (households) from contaminated areas to avoid chronic radiation exposure.

- (2) ESF-10 will recommend contamination limits or exposure limits based on EPA Protective Action Guidelines. The Governor in consultation with the Executive Group will determine acceptable contamination limits.
- (3) ESF-10 will coordinate radiological surveys to determine which areas or properties are not contaminated or can be decontaminated to acceptable limits.
- (4) The Executive Group will initiate a process for determining whether and under what circumstances property contaminated above acceptable contamination limits can be reoccupied.
- (5) The SC Housing Recovery Support Function in accordance with the SC Recovery Plan (SCRP) will manage relocation.
- (6) People who are relocated or cannot return to reside in their homes or properties may reenter the restricted zone, as determined by ESF-10, to gather and move items from their properties if the property is below acceptable contamination levels.
- 4. Late Phase is the period beginning when recovery actions designed to reduce radiation levels in the environment to acceptable levels commenced and ending when all recovery actions have been completed. This phase may extend from months to years. A PAG level, or dose to avoid, is not appropriate for long-term cleanup.
  - a. Post-Incident Recovery
    - (1) The state, local and federal governments will develop a joint recovery plan for the accident.
    - (2) ESF-10 will provide technical guidance, after consultation with representatives from the NRC, EPA, the Advisory Team for the Environment, Food and Health, and the utility, for the development of the joint recovery plan. The basis for this guidance is found in Annex 7 (Ingestion Pathway) and the SCTRERP.
    - (3) ESF-10 is responsible for the following tasks. Outside resources may assist with the performance of any or all of them:
      - (a) Provide guidance to the Recovery Task Force

- regarding health physics, radiation safety, decontamination methods and materials, exposure limits, regulatory requirements associated with radioactive materials, and disposal of radionuclides.
- (b) Review and ensure the state regulatory conditions are met as they pertain to the recovery plan.
- (c) Determine areas, buildings, equipment, etc. that need to be decontaminated.
- (d) Coordinate monitoring and decontamination (as necessary) of persons, vehicles, and equipment leaving the restricted zone.
- (e) Coordinate decontamination of essential offsite facilities and their access routes. Perform periodic contamination checks and decontaminate as needed.
- (f) Require radioactive waste to be packaged, stored, shipped, and disposed of in accordance with applicable regulations. Inspect as necessary to ensure compliance.
- (g) Perform post-decontamination surveys, as appropriate; to verify return exposure guidelines and decontamination plan requirements are met.
- (h) Recommend release of portions of the restricted zone, buildings, equipment, etc. to unrestricted use when decontamination plan criteria requirements are met.
- (i) Advise county officials regarding the temporary or permanent return of area residents and local workers to the restricted zone.
- (j) Periodically monitor areas adjacent to restricted zones to determine the effectiveness of contamination control measures to the environment.
- (k) Establish a long-term environmental sampling and monitoring program.
- (l) Continue coordination with ESF-15 operations to provide periodic information updates to affected

persons.

- (m) Coordinate actions with the Recovery Task Force.
- (4) Environmental monitoring activities are likely to continue for many years following a major release of radioactive materials.
  - (a) Periodically, due to weathering and radioactive decay, additional portions of the relocation zone will be eligible for release to unrestricted use.
  - (b) As this occurs, portions of the recovery organization may be temporarily reactivated on an as needed basis.
- (5) Some restricted zones may remain because of the presence of long-term or permanent uncorrectable contamination at levels hazardous to public health.
- (6) Humanitarian relief, short-term recovery efforts, and long-term recovery efforts will be conducted in accordance with the SCRP.
- (7) The SEOC will continue to aid local governments and individuals with recovery operations including housing, employment, damage assessment and reimbursement of costs as outlined in the SCRP.
- b. Decontamination/Reoccupancy
  - (1) A decontamination plan will be utilized to guide recovery activities as part of the overall recovery plan.
  - (2) The decontamination plan will be established in coordination with affected counties, ESF-10, ESF-8, ESF-17, SCEMD, and federal response resources. The plan will address decontamination of people, service animals and pets, buildings and structures, land, agricultural products, and all other contaminated materials.
    - (a) The affected counties will establish decontamination points in the buffer zone, with coordination from ESF-10, ESF-17, and augmented with resources from the Federal Radiological Monitoring and Assessment Center (FRMAC).

- [1] ESF-13 will coordinate decontamination point access control with local officials before establishment.
- [2] Decontamination points will be used to prevent cross contamination to non-restricted zones.
- (b) The decontamination of buildings and structures will be conducted in accordance with critical infrastructure and key resource priorities and coordinated with local, state, and federal partners.
- (3) ESF-10 will approve the decontamination plan prior to its implementation.
- (4) An NRC or agreement state licensee authorized to perform decontamination and radioactive waste management will implement the plan.
- (5) ESF-10 will maintain oversight and situational awareness of decontamination activities with assistance from federal response agencies.
- (6) Reoccupancy is the return of households and communities to relocation areas during the cleanup process, at radiation levels acceptable to the community.
  - (a) A Reoccupancy plan will be established in coordination with affected counties, ESF-10, ESF-8, ESF-17, SCEMD, and federal response resources following the decontamination plan establishment and approval.

# c. Return

- (1) Return is the permanent resettlement in evacuation or relocation areas with no restrictions, based on acceptable environmental and public health conditions.
- (2) ESF-10 will recommend limitations as appropriate to meet return phase exposure guidelines and update recommended restrictions when conditions change.
  - (a) Return exposure guidelines express limits in terms of dose commitment. An area or building is considered

to meet return exposure guidelines if environmental monitoring results and/or laboratory analysis of radionuclides show that direct exposure and inhalation of re-suspended particles during continuous occupancy will not result in a dose greater than 2 rem during the first year and 500 mrem during any subsequent year.

- (b) Some areas or buildings may not meet return exposure guidelines for unrestricted occupancy. Should this occur, occupancy or use restrictions will be necessary.
- (3) ESF-10 is responsible for the following tasks with the return of persons to former relocation zone areas. Outside resources may assist with the performance of any or all of them:
  - Calculate first and subsequent (a) year dose commitments for each building or area to be occupied. Use the calculated values to determine if area and/or building exposures are within return phase exposure guidelines. Worker exposure calculations should consider anticipated building or area occupancy factors. Such factors should not be applied to residential areas, because there is no reasonable means available for controlling the percentage of time that individuals remain in their homes.
  - (b) Provide guidance to the Recovery Task Force regarding the return of persons to former relocation zone areas. Recommend limitations as appropriate to meet return phase exposure guidelines.
  - (c) Recommend that use restrictions are posted in the restricted zone and other affected areas. Update restrictions when conditions change.
  - (d) Monitor areas adjacent to remaining restricted zones to determine if contamination is being spread beyond zone boundaries. Require decontamination as necessary to maintain exposures within return exposure guidelines.
  - (e) Monitor occupied areas and buildings to verify dose projections and determine the need for additional

- protective action recommendations.
- (f) Recommend appropriate measures to reduce or eliminate the effects of contamination.
- (4) County governments will ensure that use restrictions are posted in the restricted zone and other affected areas. Update restrictions when conditions change.
- (5) All agencies supporting ESF-15 will continue news center operations to assure that affected persons receive periodic information updates.
- d. Termination. Activities of the formal recovery organization may be terminated once the following conditions have been met:
  - (1) The restricted zone has been surveyed.
  - (2) Work under the decontamination and recovery plan has been completed to a point where continued effort is not cost effective.
  - (3) Long term exposures have been calculated for residences and places of employment where some significant potential for exposure continues to exist.
  - (4) Occupancy or use limitations have been posted for all buildings and areas where continued restrictions are necessary.
  - (5) Residents and workers have been afforded the opportunity to return to all areas for which restrictions have been lifted.
  - (6) Relocation to permanent or long-term temporary facilities has been accomplished for those persons who could not be allowed to return following completion of work under the formal decontamination plan.
- e. For further guidance, see the FEMA REP 1 Rev. 2 Program Manual and the EPA PAG Manual 400/R-17/001.
- F. Radiological Monitoring/Exposure Control
  - 1. ESF-10 will coordinate radiological monitoring operations as delineated in Annex 10 (Environmental and Hazardous Materials Operations) of the SCEOP and the Site-Specific Plans.

- 2. ESF-10 will deploy radiological field monitoring team(s) with equipment necessary to detect and measure radiation exposure, airborne radioactive materials and deposited radioactive materials on the ground.
- 3. ESF-10 will use field data gathered to identify the radioactive plume and project or determine potential dose to the public and emergency workers.
- 4. Based on comparisons of projected or actual dose measured and EPA Protective Action Guidelines, ESF-10 will make PARs to state and local government decision makers [see Annex 6 (Radiological Exposure Control)].
- 5. The SERT will coordinate incident assessment and dose projection information and provide the information to affected counties and state RER agencies.
- 6. County emergency management directors and state RER agency directors are responsible for monitoring the exposures received by their respective emergency workers and for ensuring exposures do not exceed dose limits as specified in Annex 6 (Radiological Exposure Control), Table B.
- 7. All 10-mile EPZ emergency workers, or emergency worker teams, will be provided personal dosimetry [i.e., DRDs and Permanent Record Dosimeters (PRD)] and KI prior to leaving the designated assembly area. Emergency workers will periodically read and maintain a record of individual radiation exposures in accordance with the procedures outlined in Annex 6 (Radiological Exposure Control), Attachment C.
- 8. Throughout the incident, ESF-10 will monitor both state and local emergency worker accumulated doses and projected stay times to ensure prompt and accurate protective action guidance is provided.

# G. Joint Information System

- 1. ESF-15 (Public Information) will coordinate public information operations in accordance with Annex 15 (Public Information) of the SCEOP, Annex 3 (Public Information) of this Plan, and the Site-Specific Plans.
- 2. The state will use a Joint Information System (JIS) to coordinate public information for distribution through the news media.
- 3. The Governor's Deputy Chief of Staff for Communications or the SCEMD Chief of Public Information, as the designated representative for all state government public information responsibilities, will control, direct and coordinate State government's participation in the JIS, including the establishment of a JIC as needed.

- 4. Federal, State, local and utility public information personnel will be encouraged to participate in the JIS to coordinate the release of all emergency information.
- 5. If necessary, SCEMD may deploy an ESF-15 (Public Information) representative for coordinating with affected organizations.

# H. Emergency Transportation

- 1. Emergency transportation services are the primary responsibility of the affected county.
- 2. County procedures and the means for the evacuation of residents who may be immobilized through institutional confinement or other factors are contained in county EOPs.

# I. Law Enforcement

- 1. After initial response operations, ESF-13 (Law Enforcement), in cooperation with State and local law enforcement agencies, ESF-10, and SCDA, will develop and implement plans for maintaining access control to evacuated areas, and for permanent or long-term access control to restricted areas [See Annex 7 (Ingestion Pathway Emergency Planning Zone)].
- 2. In support of recovery operations, ESF-13 will assist ESF-17 with the development and implementation of plans to embargo or restrict transportation of contaminated food, animal and/or agricultural products.

#### J. Medical

- 1. ESF-8, in conjunction with the NPP and affected counties, has identified medical facilities having the capability to treat contaminated injured or exposed individuals. ESF-8 maintains a list of these medical facilities.
- 2. Annex 5 (Health and Medical Support) contains policies and procedures for the provision of medical and public health support.

# VIII. DISASTER INTELLIGENCE AND COMMUNICATIONS

- A. See Section VI (Disaster Intelligence and Communications) and Annex 2 (Communications) of the SCEOP.
- B. ESF-2 (Communications) will coordinate communications support operations in accordance with Annex 2 (Communications) of the SCEOP and the Site-Specific Plans.

- C. Radio Officers and Radio Operators
  - 1. Radio officers and radio operators from supporting commissions, agencies and departments remain under direct control of their own office when operating and maintaining state-owned equipment in any facility outside the SEOC.
  - 2. Within the SEOC, radio operators will report to the State Warning Point (SWP) manager or the Chief of Operations in his/her absence.

# D. Telephone

- 1. Telephone is the primary means of communications between mobile and fixed locations.
- 2. During the initial phase of the disaster, forward deployed units and personnel will use cellular telephones extensively. Every agency must ensure they have adequate mobile telephone resources to support their communications for the first 72 hours of any event.
- 3. Subsequent operations may be conducted from fixed telephone devices once service has been established at required forward locations.
- 4. In the event telephone communications fail, Local Government Radio (LGR), the Palmetto 800 system, or other available radiotelephone networks will be used as the backup system until reliable telecommunications are restored.
- E. Radio procedures will conform to established FCC regulations and licensure for operating base or mobile radio station. All communications over LGR and/or 800 MHZ will be in "plain language" or "clear text."
- F. The NPP Emergency Coordinator or his designated assistant will control on-site communication activities. The NPP Technical Support Center/Emergency Operations Facility (TSC/EOF) and State government will maintain communications by the following means:
  - 1. Existing and specially installed telephones in the SEOC/SWP.
  - 2. Each NPP will have a radio and antenna installed to operate on the SCEMD frequencies. This radio will provide backup communication with the SEOC and affected counties.
- G. A listing of State-level communications systems available at the SEOC/SWP can be found in the SCEOP, Section VII (Disaster Intelligence and Communications).

- H. Communications between primary RER agencies are also possible on permanently installed SCEMD LGR and 800MHz radios and satellite radiotelephones in SCEMD vehicles.
- I. Communications with North Carolina and Georgia are possible through the following means:
  - 1. The FEMA National Radio System (FNARS) has terminals installed in the State EOCs of North and South Carolina and Georgia. This radio system provides voice or teletype communication between the three state governments.
  - 2. South Carolina's Palmetto 800 Network can communicate with North Carolina's Statewide Radio system known as VIPER via talk group patches. Patches are facilitated through shared radio resources co-located at several radio towers. Any cross-system patching must be coordinated through ESF-2 at the State level between SC and NC prior to a patch being established.
  - 3. The National Warning System (NAWAS) has terminals located at the SWPs and at the EOCs of Georgia, North Carolina, and South Carolina.
  - 4. Duke Energy Corporation's Duke Emergency Management Network (DEMNet) has terminals in North and South Carolina EOCs.
  - 5. The Vogtle/SRS Emergency Notification Network (ENN) has terminals in the SEOC, Georgia Emergency Management and Homeland Security Agency (GEMHSA) EOC, and GEMHSA forward EOC (FEOC).
  - 6. Commercial, satellite and cellular telephones.
- J. During an NPP incident, communications with Federal Response Organizations will be conducted over the following systems:
  - 1. Commercial telephone
  - 2. FNARS
  - 3. South Carolina can communicate directly with the Department of Energy in Aiken, SC by State NAWAS and SCEMD LGR Network.

# IX. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

#### A. General

1. See Section IX (Organization and Assignment of Responsibilities) of the SCEOP for the general roles and responsibilities to all hazards, for State and

- Federal agencies in preparation, response, and recovery from a disaster impacting the State.
- 2. SCEMD is the lead state agency for coordinating the state's offsite response to an incident at an NPP. SCEMD is responsible for coordinating State government activities with those of affected local governments, other states, and federal agencies as appropriate.
- 3. SCDES and SCDPH will be involved in all state NPP emergencies, regardless of severity, due to assigned responsibilities and the probable requirements for special techniques, equipment, and technically trained personnel.
- 4. Detailed information on SCEMD, SCDES, SCDPH, and the state organization for emergency response may also be found in Attachment A (RER Organizational Chart), the SCTRERP and in the SCEOP.
- 5. A summary of the State Primary and Support agency responsibilities is found in Attachment A (RER Organizational Chart); Tab C (RER Primary and Support Responsibilities); and Table 3 (State Emergency Support Functions Responsibilities Assignments) to the SCEOP.
- 6. Responsibilities specific to the protection of the public from contaminated food and water can be found in Annex 7 (Ingestion Exposure Pathway Zone).
- B. Emergency Support Functions
  - 1. ESF-5 (Emergency Management)
    - a. SCEMD
      - (1) Prepare and maintain state operational RER plans and procedures for State areas that can be affected by an NPP in South Carolina, Georgia, and North Carolina.
      - (2) Assist local governments in preparing and maintaining local RER plans.
      - (3) Prepare and maintain Site-Specific Plans for each NPP in the state.
      - (4) Exercise primary responsibility and authority for the release of information relating to the off-site impact of an NPP incident, requirements for off-site protective actions, activation of IPAWS, and operational/technical activities of

- state response forces with pre-established plans.
- (5) Coordinate protective actions ordered by the Governor, to include evacuation as well as recovery/reentry in coordination with ESF-10 (Environmental and Hazardous Materials Operations).
- (6) Provide a 24-hour notification system with the licensee, the State Emergency Response Team (SERT), and affected counties.
- (7) Maintain communication with DHS FEMA Region 4 and contiguous states.
- (8) Recommend protective action measures to affected counties in coordination with ESF-10 (Environmental and Hazardous Materials Operations).
- (9) Maintain and coordinate the Radiological Equipment and Personnel Redistribution (REPR) Standard Operating Procedures (SOPs).
- (10) Coordinate with SCDES Nuclear Response Section for the RER training of State and local government personnel.
- (11) Coordinate with ESF-10, ESF-8, the affected counties (as applicable), and the NPP to schedule pre-exercise meetings and develop NPP exercise scenarios.
- (12) Conduct RER drills and exercises as specified in NUREG-0654/FEMA REP-1, REV. 2, 44 C.F.R. Section 350 and State Regulations 58-1 and 58-101, SC Code of Regulations.
- (13) Maintain liaison with each nuclear facility to ensure RER procedures are compatible.
- (14) Schedule/coordinate federal RER courses for State and local RER personnel.
- (15) Coordinate and conduct evaluation critiques for each NPP exercise.
- (16) Secure and maintain appropriate letters of agreement.
- (17) Provide SCEMD LGR radios to counties in the 10-Mile EPZ, the JICs, and the NPPs within resource limits.

- (18) Provide annual training and/or information briefings for news media, including state and local PIOs, to acquaint them with the JIS, State and local RER plans, media communications, and measures to protect the public against radiation exposure.
- (19) Provide information, technical expertise, and advocacy to support the request for a Federal Disaster Declaration as outlined in the SCRP in accordance with the Stafford Act.
- (20) Coordinate with public and private sectors to deliver services to the impacted population according to the Price-Anderson Act.
- (21) Provide coordination of short and long-term recovery priorities and needs assessments in counties with the South Carolina Recovery Task Force (SCRTF) as detailed in the SCRP.
- (22) In coordination with federal agencies and SC Department of Commerce, assist with the collection of information on the physical and economic impact of the incident.
- 2. ESF-10 (Environmental and Hazardous Materials Operations)

#### a. SCDES

- (1) Obtain and coordinate, under prearranged agreements, radiological assistance resources from the federal government, other states, and the nuclear industry as necessary through FRMAC, SMRAP, and EMAC.
- (2) Recommend distribution and ingestion of KI, in coordination with ESF-8 (Health and Medical Services), to the general population, radiological emergency workers, and those persons unable to evacuate promptly within 10 miles of each NPP.
- (3) Coordinate and direct the periodic reading and evaluation of dosimeters used by field monitoring and sampling personnel in accordance with SCSTROP.
- (4) Coordinate sample collection, processing, evaluation, and the public release of sampling data through the JIC/JIS.
- (5) Coordinate the State IPZ response [see Annex 7 (Ingestion

- Pathway Emergency Planning Zone)].
- (6) Prepare and update the supporting SCTRERP and South Carolina Standard Technical Radiological Operating Procedures (SCSTROP).
- (7) Maintain a radiological hazard dose assessment capability and provide radiological technical support, coordination, and guidance for the state.
- (8) Monitor agency emergency worker performance to assure compliance with exposure limits and radiation safety.
- (9) Identify forward staging areas (i.e., National Guard armories) for mobile laboratory and field monitoring team (FMT) operations.
- (10) Support a 24-hour incident notification system with SCEMD.
- (11) Provide one representative to the affected NPP emergency operations facility during exercises and actual incidents.
- (12) Provide one technical liaison for each risk and host county. The County Emergency Director will decide where the liaison will be assigned in the county. This is a SCDES technical liaison position intended to provide guidance to the County; not to supplement county staff personnel.
- (13) Maintain technical advisory capability with any activated county EOC within the affected area.
- (14) Provide oversight of decontamination and radiological waste disposal procedures in accordance with regulatory authority.
- (15) Provide water supply and dairy information required for sampling and monitoring.
- (16) Respond to radioactive waterborne releases that threaten public water supply.
- (17) Review state, local, and licensee RER plans.
- (18) Assist SCEMD with providing basic radiological emergency response training to state and local emergency

workers as requested.

- (19) Participate in training programs conducted by NPPs for radiological monitoring teams, as requested.
- (20) Provide PARs.
- (21) Direct radiological monitoring efforts in the 10-Mile EPZ and the 50-Mile IPZ.
- (22) Provide periodic briefings to the Governor, SCEMD Director, and SERT on the status of the incident and offsite response efforts.
- (23) Provide radiological impact data summaries and consult with other state and local agencies and public officials regarding reentry and recovery concerns. Establish long-term monitoring systems with FRMAC to ensure public safety.
- (24) Provide technical guidance and recommend parameters for recovery, reentry, and return activities, and identify restricted areas through sample analysis, monitoring, and data collection.
- (25) See SCTRERP for additional technical responsibilities.
- 3. ESF-1 (Transportation)
  - a. Department of Transportation (SCDOT)

Maintain updated lists of railroads and airports impacted by NPP 10-mile EPZs.

- b. Rail: ORS Airports: SC Aeronautics Commission
  - (1) Coordinate with ESF-12 for notification of railroads operating in the 10-mile EPZ of an NPP incident.
  - (2) Coordinate notification of Federal Aviation Administration (FAA) of an NPP incident.
- c. SC Aeronautics Commission
  - (1) Coordinate temporary flight restrictions as needed.

- (2) Coordinate, with the counties, barriers to transportation resulting from an NPP incident.
- (3) Support evacuation orders as prescribed in Site-Specific plans.
- 4. ESF-2 (Communications)
  - a. Department of Administration

Coordinate communications support operations.

- 5. ESF-4 (Firefighting)
  - a. Department of Labor Licensing and Regulation
    - (1) Coordinate decontamination assistance in support of ESF-10 (Environmental and Hazardous Materials Operations).
    - (2) Maintain contact with all Forestry Commission elements in the affected counties.
    - (3) Provide personnel and equipment to support response operations, as requested.
    - (4) Monitor agency emergency worker performance to assure compliance with exposure limits and radiation safety.
- 6. ESF-6 (Mass Care)
  - a. SCDSS (South Carolina Department of Social Services)
    - (1) Coordinate, with impacted counties, SCDSS, and the Red Cross reception centers and shelters that are at least 5 miles beyond the boundaries of each NPP plume exposure emergency planning zone.
    - (2) Coordinate mass care operations.
    - (3) Coordinate security for reception centers and shelters if needed.
    - (4) Maintain a list of all SCDSS licensed childcare facilities within the 10-mile plume exposure pathway EPZ of each NPP. Verify that each center has radiological emergency evacuation plans and provide them with training and

technical assistance as needed.

(5) Provide a uniform procedure for registration of evacuees at all relocation centers/shelters.

# b. Red Cross

- (1) Help train personnel in congregate sheltering operations. Training includes Shelter Fundamentals, Shelter Supervisor, and other classes as needed.
- (2) Provide a uniform procedure for registration of evacuees at all relocation centers/shelters.

# 7. ESF-8 (Health and Medical Services)

#### a. SCDPH

- (1) Recommend distribution and ingestion of KI, in coordination with ESF-10, to the general population, radiological emergency workers, and those persons unable to evacuate promptly within 10 miles of each NPP.
- (2) Coordinate emergency medical services for the pre-hospital care of contaminated injured or exposed emergency workers operations in accordance with Annex 8 (Health and Medical Services) of the SCEOP and the Site-Specific Plans.
- (3) Coordinate local and backup hospitals having the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately prepared to handle contaminated individuals.
- (4) Coordinate the transport of victims of radiological accidents to medical support facilities.
- (5) Develop, coordinate, and obtain Memorandums or Letters of Agreement with designated hospitals regarding their capability to receive and care for contaminated injured individuals.
- (6) Monitor agency emergency worker performance to assure compliance with exposure limits and radiation safety.
- (7) Maintain statewide list of Emergency Medical Services (EMS) providers.

(8) Maintain a current list of statewide hospitals that will evaluate and/or treat contaminated injured individuals.

# 8. ESF-13 (Law Enforcement)

# a. SLED

- (1) Coordinate law enforcement support operations in accordance with Annex 13 (Law Enforcement) of the SCEOP and the Site-Specific Plans.
- (2) Coordinate general law enforcement activities including, but not limited to, providing security for evacuated areas, shelters, and reception centers.
- (3) Identify personnel who may be called on to serve as radiological emergency workers during an NPP incident.
- (4) Coordinate training for personnel to serve as radiological emergency workers during an NPP incident.
- (5) Monitor agency emergency worker performance to assure compliance with exposure limits and radiation safety.
- (6) Coordinate access control for NPPs and restricted zones as needed.
- (7) Support evacuation orders or other law enforcement activities as prescribed in Site-Specific plans.
- (8) During a HAB or security event, coordinate, and direct State law enforcement activities.
- (9) During a HAB or security event, provide approval authority for State public information.

# b. SCDNR

Coordinate clearance and security of NPPs, waterways, and forests.

# 9. ESF-14 (Recovery)

#### a. SCEMD

(1) Coordinate recovery support operations in accordance with

Annex 14 (Initial Recovery and Mitigation) of the SCEOP.

# 10. ESF-15 (Public Information)

# a. SCEMD

- (1) See Annex 15 (Public Information) to the State Emergency Operations Plan.
- (2) See Annex 3 (Public Information) to SCORERP.

# 11. ESF-16 (Emergency Traffic Management)

- a. Department of Public Safety
  - (1) Coordinate the provision of TCPs in the 10-mile EPZ as deemed necessary in the Site-Specific Plans.
  - (2) Coordinate State transportation resources for the rapid movement of dosimetry and radiological monitoring equipment to impacted areas requiring reinforcement, as needed, in accordance with the REPR SOP.
  - (3) Maintain alternate Warning Point capability.
  - (4) Monitor agency emergency worker performance to assure compliance with exposure limits and radiation safety.
  - (5) Identify and coordinate training for personnel to serve as radiological emergency workers during an NPP incident.
  - (6) Support evacuation orders or other law enforcement activities as prescribed in Site-Specific plans.

# 12. ESF-17 (Agriculture and Animal)

# a. CULPH

- (1) See Annex 7 (Ingestion Exposure Pathway Zone) to the SCORERP.
- 13. ESF-19 (Military Support)
  - a. SC National Guard (SCNG)
    - (1) Coordinate provisions for the use of SCNG armories, if

- available, to support ESF-10 forward staging areas (i.e., mobile laboratory and FMT operations).
- (2) Monitor agency emergency worker performance to assure compliance with exposure limits and radiation safety.
- (3) Coordinate 43rd CST support to response as needed.
- (4) Maintain agreement with SCDES for the usage of National Guard armories during NPP emergencies.

# 14. ESF-24 (Business and Industry)

- a. Department of Commerce
  - (1) In coordination with other State agencies and organizations, communicate with businesses in and around the impacted area regarding incident specific information, as appropriate (i.e., restrictions, evacuation, reentry, return, etc.).
  - (2) Coordinate the collection of information on physical and economic impacts to business, industry, and tourism.
  - (3) In coordination with other State and federal agencies and SCEMD, compile an assessment on the physical and economic impact of the incident to business, industry, and tourism.

# C. Local

- 1. County and municipal emergency response agencies in concert with local government public service and private support agencies carry out a variety of actions and activities in support of a radiological emergency.
- 2. County and municipal actions may include, but are not limited to:
  - a. Direction and Control
  - b. Alert and Notification
  - c. Communications
  - d. Public Information
  - e. Accident Assessment

- f. Health and Medical Services
- g. Mass Care
- h. Fire and Rescue
- i. Traffic Control
- i. Law Enforcement
- k. Transportation
- 1. Radiological Exposure Control

# 3. County Government

- a. Maintain liaison and continuous communications with the NPP until relieved of responsibility by the SEOC.
- b. Provide representatives to the SEOC or maintain communications as required.
- c. Prepare local NPP RER Plans and update as required.
- d. Execute Mutual Assistance Agreements as required.
- e. Execute RER Plans.
- f. Monitor county emergency worker performance to assure compliance with exposure limits and radiation safety.
- g. Provide reception center and shelter operations as tasked in Site-Specific Plans.
- h. Provide Mass Care services to evacuees as tasked in Site-Specific Plans.
- i. Provide animal decontamination operations as stated in county RER plans.
- j. Conduct local RER exercises and drills.
- k. Provide an authorized spokesperson/representative to support public information activities.
- 1. Alert and notify the public in accordance with pre-established plans.

- m. Provide logistical support and assistance to FMT upon request.
- n. Provide radiological monitoring and decontamination station(s) for evacuees and emergency workers.
- o. Issue dosimeters and KI to emergency personnel when required and provide just-in-time training as necessary.
- p. County organizations and responsibilities are further defined in each county's EOP.

#### D. Nuclear Power Plants

- 1. Prepare and maintain on-site RER Plans in accordance with NRC guidance and regulations.
- 2. Make the initial notification to the SWP and counties of declared radiological incidents.
- 3. Maintain 24-hour redundant communication capability with the SWP, the SCDPS backup Warning Point, and with local governments in the 10-mile EPZ.
- 4. Recommend protective actions to the State and counties.
- 5. Assist in off-site radiological assessment/monitoring in coordination with ESF-10.
- 6. Provide JIC facilities equipment and communications for State and local government public information organizations.
- 7. Provide liaison to the SEOC and County EOCs upon activation.
- 8. Assist with technical response training for off-site response personnel as necessary.
- 9. Secure and update letters of agreement with local government emergency services that will provide on-site assistance, including quick access to protected areas.
- 10. Provide annual training/information briefing for local news media in conjunction with the State.
- 11. Coordinate the development of exercise scenarios in conjunction with SCEMD, SCDES NRS, and SCDPH.

- 12. Prepare and update a public information brochure to be distributed throughout the 10-mile EPZ on an annual basis.
- 13. Maintain liaison with the State and local governments to assure procedures are compatible.
- 14. Coordinate with local governments to establish a designated near-site ICP or alternate ICP as needed.
- 15. Provide dosimetry to emergency workers responding to incidents on-site when required.

# E. Federal

- 1. The federal organization for emergency response to a radiological incident is coordinated under the Nuclear/Radiological Incident Annex (NRIA) to the Response and Recovery Federal Interagency Operational Plans.
- 2. The NRIA, which is in effect when more than one federal agency responds to a radiological emergency, designates the NRC as the primary federal authority if the affected facility is licensed by the NRC or an Agreement State. As such, the NRC coordinates the assessment of potential and actual radiological consequences and the federal positions on protective actions. Federal positions normally include assessments by the Environmental Protection Agency (EPA), DOE, the Department of Health and Human Services (HHS), and the U.S. Department of Agriculture (USDA). DOE is the primary Federal authority for DOE facilities at Savannah River Site.
- 3. Federal response may include the Federal Bureau of Investigation (FBI) in the event of a terrorist or Hostile-Action Based (HAB) incident.
- 4. FEMA promotes overall coordination among federal organizations, coordinates non-radiological activities, and serves as a source of information on the status of the total federal response.
- 5. DOE coordinates assistance through the Radiological Assistance Program (RAP).
  - a. DOE, Savannah River Operations Office, is the designated point of contact for requesting federal radiological assistance under RAP.
  - b. See Annex 9 (Letters of Agreement and Memorandums of Understanding), Memorandum of Understanding Among Department of Energy Savannah River Operations Office, the South Carolina Emergency Management Division, and the South Carolina Department of Health and Environmental Control.

- 6. The federal government will provide non-technical assistance from the Joint Field Office (JFO) and technical assistance from the FRMAC.
- 7. See Annex 8 (Interstate and Federal Agency Response Support).

# F. Supporting Organizations

- 1. Assistance from additional supporting organizations will be requested as needed.
- 2. See Annex 9 (Memorandums of Understanding and Letters of Agreement) for the following specific agreements:
  - a. State of North Carolina Letter of Agreement, States of North and South Carolina.
  - b. State of Georgia Letter of Agreement, States of Georgia and South Carolina.
  - c. Dominion Energy MOU Between SCEMD, SCDHEC and Dominion Energy.
  - d. Duke Energy Corporation MOU Among SCEMD, SCDHEC and Duke Energy Company.
  - e. Georgia Power Company/Southern Nuclear Operating Company MOU Between SCEMD, SCDHEC and Georgia Power Company.
- 3. See Attachment D (MOUs, MOAs, and Other Agreements) to the SCEOP for the following specific agreements:
  - a. Red Cross Memorandum of Understanding between The Red Cross and the State of South Carolina, dated June 2018.
  - b. The Salvation Army Memorandum of Understanding between The Salvation Army (A Georgia Corporation) and the South Carolina Emergency Management Division, dated December 11, 2009.

# X. ADMINISTRATION, LOGISTICS, AND FINANCE

- A. Administration, logistics and finance operations and actions are described in the SCEOP and the Site-Specific Plan.
- B. Emergency Operations Centers are located at the following sites:
  - 1. State Emergency Operations Center: 2779 Fish Hatchery Road, West

Columbia, SC 29172.

2. SCDES Disaster Coordination Team: 2600 Bull Street, Columbia, SC 29201.

# XI. CONTINUITY OF GOVERNMENT

See Continuity of Government in the SCEOP.

# XII. CONTINUITY OF OPERATIONS (COOP)

See Continuity of Operations in the SCEOP.

# XIII. PLAN DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE

- A. SCEMD will coordinate the development and revision of the RER plans with State and local agencies and with each NPP.
- B. SCEMD will conduct annual reviews of the SCORERP and attached plans, MOUs and LOAs, and revise/update as required. If major changes occur that could affect State or local disaster operations prior to the annual review, SCEMD will coordinate and publish the necessary changes required to address the issues.
- C. State agency directors are responsible for developing and maintaining current plans and/or SOPs for their organizations' assigned RER functions, including contingency plans.
- D. The Director/Coordinator of the county emergency management organization will coordinate the development and revision of local RER plans with local government agencies.
- E. This plan is effective upon receipt by RER organizations and will be executed upon notification of an NPP emergency.

# XIV. AUTHORITIES AND REFERENCES

See Attachment C (Authorities and References) to the SCEOP.

# XV. GLOSSARY AND ACRONYMS

See Attachment B (Acronyms and Glossary) to the SCEOP.