



**FEMA**

NOV 04 2016

Leonard Wert, Regional Administrator – RII  
State and Local Government Affairs  
US Nuclear Regulatory Commission  
245 Peachtree Center Avenue, Suite 1200  
Atlanta, Georgia 30303

Dear Mr. Wert:

Enclosed is a copy of the final exercise report for the May 11, 2016, partial participation plume phase exercise of the offsite radiological emergency response plans site-specific to the Vogtle Electric Generating Plant. This report, prepared by our Radiological Emergency Preparedness (REP) staff, addresses the evaluation of the plans and preparedness for the States of Georgia and South Carolina, as well as affected local governments. Copies of this report will be forwarded to the States of Georgia and South Carolina.

Based on the results of this exercise and our review of radiological emergency planning, training, and equipment provided in the Annual Letters of Certification for 2015, the offsite radiological emergency response preparedness for the States of Georgia and South Carolina, and the affected local jurisdictions site-specific to the Vogtle Electric Generating Plant can be implemented. They are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site.

Title 44 Code of Federal Regulations, Part 350, approval of the offsite radiological emergency response plans and preparedness for the states of Georgia and South Carolina will remain in effect.

Should you have any questions, please contact Conrad Burnside at 770-220-5486.

Sincerely,

A handwritten signature in black ink, appearing to read "Gracia B. Szczech".

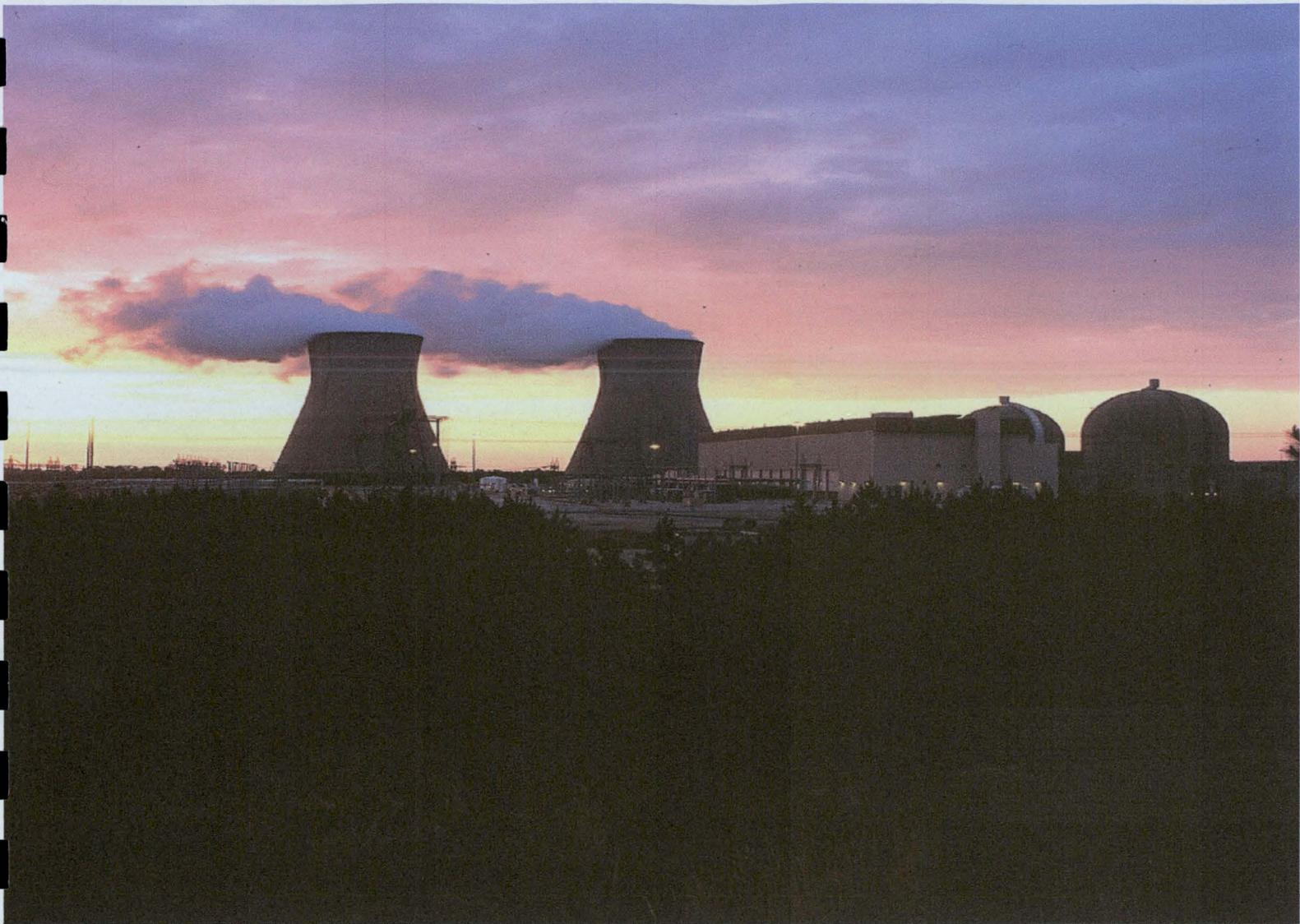
*Gr*  
Gracia B. Szczech  
Regional Administrator

Enclosure

cc: Ms. Vanessa E. Quinn, Branch Chief  
Federal Emergency Management Agency Headquarters

NRC Headquarters Document Control Desk  
Washington, D. C. 20555-0001

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# Final After Action Report

Vogtle Electric Generating Plant

Radiological Emergency Preparedness Exercise

Exercise Date: May 11, 2016

*November 15, 2016*



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# Final After Action Report

Vogtle Electric Generating Plant  
Radiological Emergency Preparedness Exercise  
Exercise Date: May 11, 2016

*November 15, 2016*



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## **Executive Summary**

On May 11, 2016, the United States Department of Homeland Security, Federal Emergency Management Agency (FEMA) Region IV Radiological Emergency Preparedness Program staff evaluated a plume exposure pathway exercise in the 10-mile emergency planning zone for the Vogtle Electric Generating Plant (Plant Vogtle). The evaluation of out-of-sequence emergency worker decontamination and reception center/congregate care activities conducted in Allendale County on April 25, and Burke County on May 24 are included in this report.

Plant Vogtle is operated by Southern Nuclear, Southern Company's nuclear energy operating company. The plant is located in east central Georgia on the Savannah River, approximately twelve miles east of Waynesboro, Georgia. The 10-mile emergency planning zone (EPZ) encompasses portions of Burke County, Georgia, and Aiken, Allendale, and Barnwell Counties in South Carolina. A portion of the Department of Energy's Savannah River Site lies within the 10-mile EPZ and the Department of Energy is responsible for all actions on the site.

The purpose of the exercise was to assess the level of state and local preparedness in responding to a radiological accident at Plant Vogtle. It was conducted in accordance with FEMA policies and guidance concerning the exercise of state and local radiological emergency response plans and procedures. The previous federally evaluated exercise at this site was conducted on May 21, 2014. The qualifying emergency preparedness exercise was conducted on April 30 – May 1, 1986.

Officials and representatives from participating agencies and organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them during the exercise. All jurisdictions met their exercise objectives and successfully demonstrated the corresponding core capabilities identified in Section 2.2 of this report. Highlights of the exercise included a Burke County out-of-sequence demonstration of "early release with monitoring," a precautionary practice to vacate plant employees from operational units one and two, and workers at the construction site for Plant Vogtle units three and four. Two new emergency operations centers were evaluated for the first time in Aiken and Allendale counties.

The FEMA evaluation team did not identify any formal findings during the exercise or during out-of-sequence activities.

The Department of Homeland Security and FEMA wish to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. The professionalism and teamwork of the participants were evident throughout all phases of the exercise.

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**Section 1: Exercise Overview**

**1.1 Exercise Details**

**Exercise Name**

2016 Vogtle Electric Generating Plant Plume Exposure Pathway Partial Participation  
FEMA Evaluated Exercise

**Type of Exercise**

Full-Scale

**Exercise Date**

May 11, 2016

**Exercise Off-Scenario/Out-of-Sequence Dates**

April 25, 2016 (Allendale County, SC) and May 24, 2016 (Burke County, GA)

**Locations**

See the extent-of-play agreements in Appendix C for exercise locations.

**Sponsors**

Georgia Emergency Management and Homeland Security Agency  
935 East Confederate Avenue SE  
Atlanta, Georgia 30316

South Carolina Emergency Management Division  
2779 Fish Hatchery Road  
West Columbia, South Carolina 29172

Southern Nuclear Company  
40 Inverness Center Place  
Birmingham, Alabama 35242

**Program**

Department of Homeland Security/FEMA Radiological Emergency Preparedness  
Program

**Mission**

Response

**Scenario Type**

Plume Exposure Pathway Radiological Emergency Preparedness Exercise

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**1.2 Exercise Planning Team Leadership**

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**1.3 Participating Organizations**

Agencies and organizations of the following jurisdictions participated in the 2016 Plant Vogtle exercise:

**State Jurisdictions:**

Georgia Emergency Management and Homeland Security Agency

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Georgia Department of Natural Resources-Environmental Protection Division

Georgia State Patrol

South Carolina Office of the Adjutant General, Emergency Management Division

South Carolina Department of Health & Environmental Control

**Risk Jurisdictions:**

Burke County Emergency Management Agency

Burke County Sheriff's Office

Burke County Schools

Waynesboro Police Department

Aiken County Emergency Management Division

Allendale County Emergency Management Division

Barnwell County Emergency Management Division

**Private Organizations:**

American Red Cross

Salvation Army

Southern Nuclear Company

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## **Section 2: Exercise Design Summary**

### **2.1 Exercise Purpose and Design**

FEMA administers the Radiological Emergency Preparedness Program pursuant to the regulations found in Title 44 Code of Federal Regulation (CFR) parts 350, 351, and 352. 44 CFR 350 codifies sixteen planning standards that form the basis for radiological emergency response planning for the licensee and for state, tribal, and local governments impacted by the emergency planning zones established for each nuclear power plant site in the United States. 44 CFR 350 sets forth the mechanisms for the formal review and approval of State, tribal, and local government radiological emergency response plans and procedures by FEMA. One of the Radiological Emergency Preparedness Program cornerstones established by these regulations is the biennial exercise of offsite response capabilities. During these exercises, affected state, tribal, and local governments demonstrate their ability to implement plans and procedures to protect the health and safety of the public in the event of a radiological emergency at the nuclear plant.

The results of this exercise, together with review of the radiological emergency preparedness plans, procedures, and verification of the periodic requirements set forth in NUREG-0654/FEMA-REP-1, along with supplements through the annual letter of certification and staff assistance visits, enabled FEMA to provide a statement with the transmission of this final after action report to the Nuclear Regulatory Commission that the affected state, tribal, and local plans and preparedness are (1) adequate to protect the health and safety of the public living in the vicinity of the nuclear power facility by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency; and (2) capable of being implemented.

Formal submission of the radiological emergency preparedness plans for Plant Vogtle to FEMA Region IV by the States of Georgia and South Carolina occurred on September 24 and September 26, 1986, respectively. Formal approval of these plans was granted by FEMA on June 9, 1987.

### **2.2 FEMA Exercise Objectives and Core Capabilities**

Core capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items. Using the Homeland Security Exercise and Evaluation Program (HSEEP) methodology, the exercise objectives meet the Radiological Emergency Preparedness Program requirements and encompass the program's emergency preparedness evaluation areas. The critical tasks to be demonstrated were negotiated with the states of Georgia and South Carolina and the participating counties. The core capabilities scheduled for demonstration during this exercise were operational coordination, public information and warning, environmental response/health and safety, on-scene security and protection, and mass care. These core capabilities, when successfully demonstrated, meet the exercise

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objectives. The objectives for this exercise were as follows:

**Objective 1:** Demonstrate the ability to provide direction and control through county emergency operations centers, the Georgia State Operations Center, and the South Carolina State Emergency Operations Center; providing protective action decision-making for state and county emergency workers and the public through physical demonstration and discussion of plans and procedures.

**Objective 2:** Demonstrate the ability to physically implement protective actions for State and county emergency workers and the public through exercise demonstration.

**Objective 3:** Demonstrate the ability to perform analysis of field team data provided through exercise artificial injects by exercise controllers (no field teams were deployed).

**Objective 4:** Demonstrate the ability to activate the Alert and Notification System and the Emergency Alert System.

**Objective 5:** Demonstrate the effectiveness of plans, policies, and procedures in the joint information system and joint information center for communication of public and private sector emergency information.

**Objective 6:** Demonstrate the ability implement protective actions and mass care for state and local emergency workers and the public in out-of-sequence demonstrations.

### 2.3 Scenario Summary

The scenario was developed by the utility to drive exercise play. Actual exercise times and events may have differed from those shown below:

~0856, a NOTICE OF UNUSUAL EVENT will be declared due to unplanned loss of most or all safety system annunciation/indication in the control room. The unit one reactor will be manually or automatically tripped when the coolant level begins to fall, followed by failure of the 1B auxiliary feed water pump from overcurrent due to shaft seizure.

~0927, an ALERT will be declared due to annunciator failures and a transient (pump seizure). Reactor coolant system loop four will experience a loss of cooling accident and manual safety injection should be initiated. Containment pressure will slowly increase along with radiation levels in containment due to failure of the fuel cladding barrier.

~1027 an electrical bus will fail and the crew should declared a SITE AREA EMERGENCY based on the loss or potential loss of any two barriers (fuel cladding and the reactor cooling system). The reactor cooling system inventory will slowly reduce (500 gallons/minute) when steam generator #3 experiences a tube rupture. Finally, an

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atmospheric relief valve on steam generator #3 will fail to open, creating an unmonitored release path (the third barrier) to the environment.

~1126 the site will declare a GENERAL EMERGENCY based on condition FG-1, loss of two barriers, and the potential loss of a third barrier.

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## **Section 3: Analysis of Capabilities**

### **3.1 Exercise Evaluation and Results**

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the May 11, 2016 plume exposure pathway exercise and out-of-sequence interviews and demonstrations conducted in Allendale County on April 25, and in Burke County on May 24, 2016.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities and the underlying criteria as delineated in the FEMA Radiological Emergency Preparedness Program Manual dated January 2016.

### **3.2 Summary Results of Exercise Evaluation**

HSEEP evaluation methodology is an analytical process used to assess the demonstration of specific capabilities during an exercise. A capability provides a means to perform one or more critical tasks under specified conditions and to specific performance standards. The previously described core capabilities form the foundation of the FEMA Region IV REP program. The core capability summaries below provide an overall combined assessment of state and local jurisdictions based upon their collective demonstrated performance as it relates to the specific core capability. Each jurisdiction's standalone capability summaries are listed in Section 3.3 of this report.

**Operational Coordination:** Jurisdictions demonstrated this capability at different locations during the exercise, all jurisdictions managed, established and maintained a unified and coordinated operational structure and implemented processes to appropriately integrate all critical stakeholders and support to execute this capability. Operational Coordination was evaluated against the following capability targets:

- **Emergency Operations Management:** Jurisdictions effectively used procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner in accordance with their plans and procedures as modified by the exercise extent-of-play agreements. At least two, and often times more, communications systems were available and operational during the exercise, which enabled the jurisdictions to establish and maintain communication links with locations, state agencies and county departments outside their respective state operations centers, and local emergency operations centers. State and local emergency operations centers were well equipped and able to support and maintain operations for a prolonged period of time. Dosimetry, potassium iodide, and monitoring instruments were evaluated as part of the site's staff assistance visit.
- **Protective Action Decision Making:** State and county governments established direction and control at various locations to effectively respond to the event at Plant

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Vogtle. The decision makers used a collaborative process to reach protective action decisions for the general public and for groups of persons with disabilities and access/functional needs. The decision-making process included the consideration of appropriate factors both onsite and offsite. The collaborative discussions included representatives from the licensee and the Nuclear Regulatory Commission.

- **Protective Action Implementation:** During conference calls each decision maker discussed the agreed upon protective actions to be implemented by the risk counties. Emergency operations center staff provided the decision makers with local information and assessment of the county's evacuation routes and possible impediments to implementing evacuation orders for their respective evacuation zones. They also implemented precautionary protective actions for schools and persons with disabilities and access/functional needs. Risk county emergency operations center staffs discussed the evacuation of the residents, the opening of reception and congregate care centers, and the establishment of traffic and access control points.

**Public Information and Warning:** Representatives from the states, the local jurisdictions, and the licensee delivered coordinated, prompt, reliable, and actionable information to the whole community. They used a variety of methods, including both traditional and social media, to provide clear, consistent, accessible, and linguistically appropriate information regarding the event at Plant Vogtle, as well as the state and local governments' response and any protective actions recommended to the public. Public information and warning was evaluated against the following capability target:

- **Emergency Notification and Public Information:** The activation of the community's alert and notification system was completed in a timely manner following the decision to notify the public of an emergency situation at Plant Vogtle. Following successful activation of the siren system, the Emergency Alert System (EAS) messages were coordinated and disseminated by Burke County. Messages to the public included elements required by current FEMA REP Guidance. Appropriate information and instructions were disseminated with a sense of urgency and without undue delay. Burke County successfully explained their procedures for waterway warning and clearing, and backup alert and notification. Public information products were composed from prescribed templates and sent to the joint information center for coordination and release to media and public.

**Environmental Response/Health Safety/Mass Care:** This capability was demonstrated by the states' radiological health staff and through two out-of-sequence activities in accordance with the extent-of-play agreements. The state radiological health participants successfully demonstrated the ability to analyze the radiological hazard and make protective action recommendations. Emergency workers in Burke and Allendale Counties demonstrated radiological monitoring for the public and emergency workers and providing congregate care facilities for evacuees. Environmental Response/Health Safety was evaluated against the following capability target:

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- **Environmental Response/Health and Safety:** The states' radiological health personnel successfully demonstrated the ability to use available guidance and resources to analyze the simulated release of radiological material from Plant Vogtle. Personnel independently validated dose projections and used appropriate means, described in the plans and procedures, to develop protective action recommendations for decision-makers based on available information, including recommendations from the licensee and field monitoring data. Field teams (simulated) were managed to obtain sufficient information to help characterize the release and to control radiation exposure.
- **Out-of-sequence demonstrations of emergency worker decontamination and the establishment of reception center and congregate care functions in Allendale and Burke counties** were effective, and included appropriate demonstration of on-scene traffic/access control and security measures.
- **Field Measurement and Analyses:** Through agreement with FEMA, radiological monitoring field teams were not deployed. The states used exercise controllers and a field team coordinator in Burke County. Sufficient information was provided to local decision makers based on data artificially injected to field team coordination in the forward operating location adjacent to the Burke County Emergency Operations Center.

### 3.3 Jurisdictional Summary Results of Exercise Evaluation

#### 3.3.1 Georgia Jurisdictions

##### 3.3.1.1 State of Georgia

***Core Capability: Operational Coordination***

**Capability Targets: Direction and Control, Emergency Operations Management, Communications Equipment, Equipment and Supplies to Support Operations**

Georgia Emergency Management and Homeland Security Agency personnel established and maintained a unified and coordinated operational structure and process that appropriately integrated all critical stakeholders in response to a simulated radiological incident at Plant Vogtle.

Staff used effective procedures to perform incident notifications recall essential personnel and effectively integrated liaisons from South Carolina and Southern Nuclear. The staff was well trained, performed their duties in accordance with plans and procedures, and carried out coordinated responsibilities efficiently.

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Communication links were established and maintained with appropriate locations and operated properly. Equipment, maps, displays, and other supplies were sufficient to support emergency operations. Informative displays and maps placed throughout the facility helped staff remain aware of ongoing activities and enhanced situational awareness.

The Governor's authorized representative, the radiological subject matter expert, and the operations chief provided direction and control for the State of Georgia. A decision making process involving consideration of appropriate factors and necessary coordination was used to make protective action decisions for the general public, including the recommendation for the use of potassium iodide for emergency workers.

The following REP capability targets were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.2.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Public Information and Warning***

**Capability Targets: Emergency Notification and Public Information**

The Georgia Emergency Management and Homeland Security Agency public affairs staff successfully demonstrated the capability to notify and warn the public in response to a radiological emergency at Plant Vogtle.

The public information officer and public information staff in the state operations center used multiple means such as email, telephones, fax, and cell phones to coordinate with Burke County Emergency Management Agency, the state liaison at the joint information center (JIC), and adjacent jurisdictions to disseminate news releases and Emergency Alert System notifications to the media and the public. Two news releases were approved and issued from the state operations center prior to the activation of the JIC. All subsequent messages and information were reviewed and approved in accordance with prescribed procedures and proper authorities prior to dissemination, and all messages included the required information from FEMA REP guidance. The content of the messages was accurate, timely, and delivered with a sense of urgency and without undue delay.

The following REP capability targets were MET: 5.a.1 and 5.b.1.

- a. **Level 1 Finding:** None

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- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Environmental Response/Health and Safety***

**Capability Targets: Emergency Operations Management, Protective Action Decision Making, Field Measurement and Analysis**

The Georgia Department of Natural Resources Environmental Protection Division dose assessment staff were effectively alerted, notified, and mobilized. They successfully demonstrated dose assessment capabilities at the state operations center. Sufficient communications capabilities, equipment, and supplies were available to support emergency operations. The radiation emergency coordinator provided direction and control for the dose assessment function and state field monitoring teams.

The radiation emergency coordinator advised the state operations center management and Burke County to support timely and appropriate protective action decisions for the public and emergency workers. Effective exposure control measures were in place for the protection of emergency workers.

State field monitoring teams were managed to locate and characterize the offsite radiological release (field data was provided to the Field Team Coordinator by the controller). The radiation emergency coordinator coordinated with the utility technical liaison, South Carolina Department of Health and Environmental Control, and utility dose assessment staff at the emergency operations facility for determination of protective action recommendations.

The following REP capability targets were MET: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2 and 4.a.2

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

### 3.3.1.2 Burke County

#### *Core Capability: Operational Coordination*

#### **Capability Targets: Direction and Control, Emergency Operations Management, Communications Equipment, Equipment and Supplies to Support Operations**

Burke County Emergency Management Agency staff successfully demonstrated the ability to establish and maintain a unified and coordinated operational structure that integrated critical stakeholders and other key support agencies to provide an effective response to a radiological emergency at Plant Vogtle.

To improve the depth of knowledge in leadership positions, the deputy emergency management director assumed primary responsibility for direction and control of the emergency operations center. Upon notification of an ALERT, he mobilized administrative staff in accordance with their prescribing directives.

Staff quickly reported to the emergency operations center and efficiently established their individual workstations. Communication equipment was tested when staff arrived and functioned without failure. The emergency operations center displayed a variety of maps, computer displays, and informational boards.

The Burke County deputy director demonstrated swift and effective leadership of the emergency operations center through the escalation of the emergency classification levels. The deputy director participated in all conference calls and sought guidance from the radiation protection officer in the Burke County emergency operations center, as well as recommendations from the Georgia Emergency Management and Homeland Security Agency and the Department of Natural Resources-Environmental Protection Division personnel in the state operations center before agreeing to accept the licensee's protective action recommendation as the Burke County protective action decision. Burke County staff kept the deputy director informed of their actions and issues through exchange of interoffice message forms and scheduled briefings.

Consideration of traffic control points and an effective resolution of an impediment to evacuation was discussed with law enforcement and transportation officials in the Burke County Emergency Operations Center. Participants demonstrated a thorough understanding of options for efficient removal of impediments to evacuation.

Although the State of Georgia does not issue potassium iodide to the public, consideration was made to protect emergency workers and special populations from exposure to radioiodine. A state-approved dosimetry briefing was conducted prior to dispatching emergency workers into potentially affected zones, and previously dispatched emergency workers were notified to implement radiation protective measures by their respective liaisons in the emergency operations center when a GENERAL

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EMERGENCY was declared. Appropriate protective action decisions were discussed for protection of the general public and special populations during the exercise.

A field team coordinator, located in the Forward Emergency Operations Center adjacent to the Burke County emergency operations center, supported the exchange of simulated radiological data between the Georgia State Operations Center and the Burke County Emergency Operations Center.

The following REP capability targets were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Public Information and Warning***

**Capability Targets: Emergency Notification and Public Information, Backup Alert and Notification**

Burke County public information staff successfully demonstrated the capability to deliver coordinated, accurate, timely, and useful information to the media and the public. Upon notification of an ALERT, Burke County dispatched a public information officer to the JIC. Frequent communication between the public information officers in the Burke County Emergency Operations Center and the joint information center ensured the liaison was continuously updated on both anticipated and actual public information products.

Primary alerting and notification of the public was completed through simulated activation of sirens and tone alert radios. Law enforcement personnel in the emergency operations center explained the procedures for backup route alerting.

All messaging contained the essential elements of information from FEMA guidance. News releases were reviewed and approved by the Burke County Deputy Director in accordance with county plans and procedures prior to release from the joint information center. Subsequent public information instructions were clear and consistent with protective action decisions, and effectively relayed the protective actions the public would need to take.

Waterway warning, clearing, and subsequent closure of the Savannah River was discussed with participants from the Georgia Department of Natural Resources. The

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personnel effectively explained the options and actions they would take to clear the waterway.

The following REP capability targets were MET: 5.a.1, 5.a.3, 5.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Environmental Response/Health and Safety***

**Capability Targets: Environmental Response/Safety and Health, On-Scene Security Protection, Critical Transportation, Mass Care**

Reception and congregate care activities were demonstrated out-of-sequence on May 24, 2016, at the Burke County High School in Waynesboro, Georgia. Burke County Emergency Management Agency personnel, augmented by personnel from the American Red Cross and Plant Vogtle, demonstrated the ability to perform radiological monitoring and decontamination of vehicles, plant personnel, and emergency workers during the simulated radiological incident at Plant Vogtle.

In accordance with their plans, Burke County used their palatial school campus to demonstrate personnel monitoring, vehicle decontamination, and reception center/congregate care activities. Entry to the campus was identified by signs on the city's main north south bypass, and the expansive network of roads on the campus allows ample space to accommodate the expected traffic without creating backups on the bypass. Signs were posted to direct traffic to the entrance of the Burke County High School where two distinctly different aspects of personnel processing were demonstrated.

To demonstrate "early release with monitoring," a representative group of plant personnel, both permanent nuclear operations staff and the construction staff, processed through a personnel accountability control station. The outdoor station, thoughtfully designed to allow automated registration through the use of electronic scanning of identification cards, contained separate scanners for nuclear operations staff and the temporary construction workforce. Although just one portal monitor was exhibited, up to three additional portal monitors are available to support this activity, enough to satisfy FEMA guidance for the expected populations.

Traditional personnel monitoring of the public was demonstrated immediately inside the Burke County High School. Another portal monitor was established to detect

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radiological contamination of the people directed to report to the school. Although some familiar "bottlenecking" occurred at the entrance, the activity met FEMA guidance with one portal monitor.

All participants were knowledgeable and professional, and all activities were consistent with local plans and procedures. Personnel wore appropriate personal protective equipment and dosimetry, and were familiar with dosimetry reading and recording requirements. They also knew how to operate handheld survey instruments to detect radiological contamination. Participants demonstrated a good understanding of appropriate contamination action levels and decontamination procedures, as well as effective demonstration of on-scene security and traffic/access control.

Vehicle radiological assessment was demonstrated in an area adjacent to the high school. Suspect vehicles entered a straight processing line where occupant personal information was collected, and then slowly guided through a moderate pressure water spray to remove superficial contamination. Emergency workers then performed comprehensive vehicle assessment using handheld radiological monitors. Vehicles deemed free of contamination were allowed to exit the activity, and vehicles deemed contaminated were directed to the interior assessment station where personnel dressed in an appropriate level of personal protective equipment performed interior assessment of the vehicle.

The team leader communicated well with the emergency workers, who began the demonstration with good knowledge of plans but varying degrees of proficiency; however, performance progressively improved through the demonstration as participants became more familiar with the process.

For this capability the following REP criterion was MET: 1.e.1, 3.b.1, 6.a.1, 6.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Mass Care***

**Capability Targets: Provide Life-Sustaining Services and Shelter, Family Reunification Efforts**

An American Red Cross site/shelter manager, supported by Burke County School District employees, demonstrated the ability to meet the congregate care needs of evacuees during a radiological accident/incident at Plant Vogtle. All personnel worked together as a team and described their shared responsibilities in the establishment and management of the Burke County High School congregate care center.

The American Red Cross shelter manager stated that the shelter had been recently surveyed and the facility had a 2,050 person shelter capacity. It was evident that the shelter manager and the Burke County school district had coordinated on establishing and managing a safe shelter. All personnel demonstrated good knowledge of plans and procedures for their assigned responsibilities. The shelter manager described the availability of services available to assist evacuees, including limited medical and mental health support if required, and evacuees would be provided assistance in registering at the American Red Cross "Safe and Well" website. Food and clothing would be provided by the American Red Cross and the Salvation Army.

Service animals would be allowed in the shelter; other pets would be cared for by local animal shelters or through agreement with neighboring counties.

For this capability the following REP criteria were MET: 1.e.1, 3.b.1, and 6.c.1.

- a. **Level 1 Findings:** None
- b. **Level 2 Findings:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

**3.3.2 South Carolina Jurisdictions**

**3.3.2.1 State of South Carolina**

***Core Capability: Operational Coordination***

**Capability Targets: Direction and Control, Emergency Operations Management, Communications Equipment, Equipment and Supplies to Support Operations**

The South Carolina Emergency Management Division Operations Chief, with the support and authority of the division director, demonstrated the capability to establish and maintain a unified and coordinated command structure in response to an incident at Plant

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Vogtle. The operations chief and his staff coordinated with affected jurisdictions and stakeholders to achieve concurrence of protective action decisions.

Effective procedures and communication systems were employed to promptly alert, notify and mobilize key staff to activate the emergency operations center in a timely manner. Sufficient equipment and supplies were available to support emergency operations. Procedures and resources were in place to establish and manage traffic and access control points and reception and congregate care centers.

The coordination and concurrence on the implementation of protective action decisions for the general public and emergency workers was seamless. All staff were professional and knowledgeable.

The following REP capability targets were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 3.a.1, 3.d.1, 3.d.2.

- a. **Level 1 Findings:** None
- b. **Level 2 Findings:** None
- c. **Not Demonstrated:** None
- d. **Prior Level 2 Findings:** None

***Core Capability: Public Information and Warning***

**Capability Targets: Emergency Notification and Public Information, Backup Alert and Notification**

The South Carolina public information staff at the state emergency operations center successfully demonstrated the ability to conduct emergency public information and warning in collaboration with the State of Georgia and Aiken, Allendale, Barnwell, and Burke Counties in response to a radiological emergency at Plant Vogtle.

The primary method for alerting and notifying the public in the 10-mile emergency planning zone was activation of a series of fixed sirens and tone alert radios, followed by an instructional emergency alert system message and supplemental news releases. The state's lead public information officer and staff worked with the state's public information coordinator at the JIC to process and disseminate news releases.

Rumor control phone lines were staffed with volunteers from the state. The staff demonstrated good awareness and knowledge, and accurately provided the callers with updated information regarding the emergency.

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The following REP capability targets were MET: 5.a.1, 5.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

*Core Capability: Environmental Response/Health and Safety*

**Capability Targets: Emergency Operations Management, Protective Action Decision Making, Field Measurement and Analysis**

South Carolina Department of Health and Environmental Control personnel successfully demonstrated the ability to assess radiological and plant conditions and provide appropriate recommendations to decision makers in response to a radiological incident at Plant Vogtle.

The South Carolina Department of Health and Environmental Control staff were pre-positioned near the response facility and responded quickly when notified of the emergency. Dose assessment team members gathered the information necessary to understand plant conditions, potential release paths, and to assess the radiological impact. The planning section chief performed dose projection calculations, coordinated with the State of Georgia and the licensee, and briefed the emergency response coordinator. The emergency response coordinator presented protective action recommendations to state and county decision makers, and was able to explain the basis of the recommendations. The state emergency operations center dose assessment team had sufficient equipment, communications, and supplies to support emergency operations.

Dose assessment staff at the state emergency operations center explained through interview how they would work with mobile operations center personnel to manage field team assets to locate a radiological plume, take appropriate field measurements, and control radiation exposure to state field workers.

The following REP capability targets were MET: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 4.a.2

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None

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**d. Prior Findings:** None

**3.3.2.2 Aiken County**

***Core Capability: Operational Coordination***

**Capability Targets: Direction and Control, Emergency Operations Management, Communications Equipment, Equipment and Supplies to Support Operations**

Aiken County Emergency Management Division personnel and emergency operations center support staff successfully demonstrated the capability to establish and maintain a unified and coordinated operational structure and process while integrating all critical stakeholders. Emergency operations center staff were notified and mobilized in an efficient manner using a reverse calling system. The new emergency operations center was well designed and had sufficient equipment and communication capabilities for conducting operations and coordinating with stakeholders.

The emergency management coordinator kept staff aware of ongoing incident status through frequent staff briefings. Appropriate protective action decisions were made for emergency workers and the public in a timely manner. The Aiken County Emergency Management Coordinator used the decision line, a dedicated telephone conference call line, to successfully coordinate status and protective actions with the States of Georgia and South Carolina, the Savannah River site, and the other risk counties.

The Aiken County Sheriff's Office representative was prepared to establish and manage appropriate traffic and access control during the emergency if needed. When presented with a simulated traffic impediment, the Aiken County Sheriff's Office representative promptly identified and resolved the impediment.

The following REP capability targets were MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2.

**a. Level 1 Finding:** None

**b. Level 2 Finding:** None

**c. Not Demonstrated:** None

**d. Prior Findings:** None

***Core Capability: Public Information and Warning***

**Capability Targets: Emergency Notification and Public Information, Backup Alert and Notification**

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The Aiken County Emergency Management Division staff demonstrated the ability to coordinate the delivery of prompt, reliable, and actionable information to the public. Although no press releases, emergency alert system messages, or public notification system activations were initiated from this facility, products generated by other jurisdictions were coordinated through Aiken County via the decision line.

The Aiken County Emergency Management coordinator simulated notifying the point of contact for the private hunting preserve which incorporates the entire emergency planning zone in Aiken County. The point of contact maintains a record of accountability for users of the preserve.

The Aiken County public information officer fielded calls from the public and referred media inquiries to the JIC. An Aiken County 2-1-1 representative was available to assist in the handling of public inquiry calls.

The following REP capability targets were MET: 5.a.1, 5.b.1:

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

### 3.3.2.3 Allendale County

*Core Capability: Operational Coordination*

**Capability Targets: Direction and Control, Emergency Operations Management, Communications Equipment, Equipment and Supplies to Support Operations**

Allendale County demonstrated the ability to respond to an emergency at Plant Vogtle and protect the safety of the general public and responding emergency workers. The 9-1-1 supervisor at the county warning point was familiar with the protocols and associated checklists in the county plans. After notification, the director assessed the situation and initiated notification to mobilize the emergency operations center staff using an automated calling system.

County leadership displayed appropriate concern for the safety and well-being of all citizens and emergency workers. The emergency operations center staff was proactive and proceeded to implement required actions throughout the exercise. Periodic status reports maintained accurate situational awareness, and good communication among the

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staff helped complete actions rapidly. Law enforcement officers were fully prepared to establish and maintain appropriate traffic and access control measures.

The following REP capability targets were MET: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1, 3.d.2.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Public Information and Warning***

**Capability Targets: Emergency Notification and Public Information, Backup Alert and Notification**

The Allendale County Emergency Management Agency public information staff demonstrated the ability to inform the public about emergency conditions in a timely fashion. The director participated in discussions and ensured accurate resident evacuation information was disseminated by the public information officer. Frequent coordination with the JIC ensured accurate emergency information and instructions were disseminated to the public and the news media without delay.

The following REP capability targets were MET: 5.a.1, 5.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Environmental Response/Health and Safety***

**Capability Targets: Environmental Response/Safety and Health, On-Scene Security Protection, Critical Transportation, Mass Care**

Radiological monitoring and decontamination activities were demonstrated out-of-sequence on April 25, 2016, at the Allendale-Fairfax High School in Allendale, SC. Allendale Fire Department personnel and local volunteers demonstrated the ability to

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perform radiological monitoring and described decontamination procedures of vehicles and personnel (evacuees and emergency workers) during a simulated radiological incident at Plant Vogtle. The fire and health departments established administrative and operational monitoring stations outside the shelter facility for emergency workers and evacuees under guidance of the fire department's administrative lead, who provided an exceptional radiological safety brief.

All participants were knowledgeable and professional and all activities were consistent with local plans and procedures. Personnel wore appropriate protective clothing and dosimetry, and were familiar with dosimetry reading and recording requirements. They were also knowledgeable about the use of handheld survey instruments used to detect radiological contamination and how to record contamination levels. Personnel demonstrated a good understanding of contamination action levels and decontamination procedures. The site was sufficiently sized and had appropriate facilities to accommodate monitoring and decontamination activities. Vehicles processed through reception, monitoring and assessment, and determination for quarantine as appropriate. Personnel were processed in a timely fashion and participants were provided appropriate information and instructions. Personnel were also familiar with procedures for the disposition of contaminated equipment and supplies, and on-scene security and traffic/access control.

For this capability the following REP criterion was MET: 1.e.1, 3.b.1, 6.a.1, 6.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Mass Care***

**Capability Targets: Provide Life-Sustaining Services and Shelter, Family Reunification Efforts**

The American Red Cross, Central South Carolina Chapter, Aiken, South Carolina, supported by the Allendale County Department of Social Services, County Health Department, Allendale Fire Department, and local volunteers, successfully demonstrated the ability to provide temporary care of evacuees during a radiological incident at Plant Vogtle.

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All participants were knowledgeable and professional and all activities were conducted in accordance with local plans and procedures. Documentation was available that verified the shelter certification. The American Red Cross site manager was especially knowledgeable, proactive and fully aware of the full scope of the operation including the responsibilities and flow of the site. He and other American Red Cross staff worked seamlessly with the Allendale County Department of Social Services staff to register and provide shelter services to community residents evacuated from the emergency planning zone to the Allendale-Barnwell County reception and congregate care center. Health department personnel transitioned into the shelter with simulated potassium iodide for the evacuees.

All personnel worked together as a team, were professional and performed their duties in accordance with plans and procedures. The site manager explained that food, clothing, and lodging would be provided, and limited medical and mental health support would be on available as necessary. Evacuees would be provided assistance in registering in the American Red Cross "Safe and Well" website. Service animals would be allowed in the shelter and the needs of other pets would be addressed by local animal shelters, veterinarians and neighboring counties.

For this capability the following REP criterion was MET: 1.e.1, 3.b.1, 6.c.1.

- a. **Level 1 Findings:** None
- b. **Level 2 Findings:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

#### 3.3.2.4 Barnwell County

*Core Capability: Operational Coordination*

**Capability Targets: Direction and Control, Emergency Operations Management, Communications Equipment, Equipment and Supplies to Support Operations**

The Barnwell County Emergency Management staff demonstrated its ability to respond to a radiological emergency at Plant Vogtle and protect the safety of the general public and responding emergency workers.

The emergency operations center staff was proficient and implemented required actions throughout the exercise. Episodic updates maintained situational awareness, and enhanced communication among the emergency operations center staff.

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Plans and standard operating procedures were readily available to all emergency operations center staff on position laptops and binders. Document control team personnel expeditiously collected, logged, numbered, reproduced, and distributed messages to responsible emergency support functions for action.

Protective action decisions were coordinated between the States of Georgia and South Carolina and respective risk counties over a group conference/decision line. The Barnwell County emergency management director implemented protective action decisions without delay; follow-up actions were sequentially executed by the Barnwell County Sheriff's Office.

The South Carolina Department of Health and Environmental Control/ Environmental Quality Compliance Radiation Safety Officer, and the Barnwell County Emergency Management Director discussed emergency worker briefing details, dosimetry issues, implementation and ingestion of potassium iodide, management of radiological exposure to emergency workers, and trigger action levels, and emergency worker exposure records in accordance with the plans and procedures.

The following REP capability targets were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 3.a.1, 3.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

***Core Capability: Public Information and Warning***

**Capability Targets: Emergency Notification and Public Information, Backup Alert and Notification**

The Barnwell County Public Information Officer demonstrated frequent coordination with South Carolina staff at the joint information center. Calls regarding general evacuation information, emergency contact phone numbers, potassium iodide ingestion, and the extent of the emergency at the plant were answered accurately and expeditiously.

The Barnwell County Emergency Management Director demonstrated a simulated siren activation for public notification, and an interview was conducted with the Barnwell County Sheriff's Office and the South Carolina Department of Health and Environmental Control/ Environmental Quality Compliance. Staff correctly explained how the

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procedures for alerting zone H10 would be accomplished within 45 minutes.

The following REP capability targets were MET: 5.a.1, 5.a.3, 5.b.1

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

### 3.3.3 Joint Operations

#### 3.3.3.1 Joint Information System/Centers:

*Core Capability: Public Information and Warning*

**Capability Targets: Emergency Notification and Public Information**

Public information and instructions for the public and media were demonstrated in the JIC. Representatives from Burke County, the State of Georgia, the State of South Carolina, U.S. Nuclear Regulatory Commission, and Southern Nuclear participated from this venue. Emergency public messaging and instructions were prepared by each state's public information officer in the state emergency operations centers, approved by Governor's appointed representative respectively and disseminated to the local public and media from the joint information center. Messaging was consistent with the protective action decisions made during the exercise.

Media briefings were timely, accurate, and relevant. The public inquiry function provided appropriate information to correct false or inaccurate information throughout the exercise. These actions were demonstrated in accordance with each agency's plans and procedures.

The following REP capability targets were MET: 1.a.1, 1.d.1, 1.e.1, 5.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

### 3.3.3.2 Emergency Operations Facility

***Core Capability: Operational Coordination***

**Capability Targets:**

The Georgia Emergency Management and Homeland Security Agency, the South Carolina Emergency Management Division, and the South Carolina Department of Health and Environmental Control each provided a liaison to the Southern Nuclear Operating Company emergency operations facility in Birmingham, AL. The presence of the state liaisons at the emergency operations facility enhanced the flow of information between the utility and the offsite response organizations. The liaisons maintained communications with their respective agencies, promptly informing agency leaders of changes in plant conditions and actions taken by the utility. They also updated emergency operations facility personnel on protective actions taken by the offsite response organizations.

The following REP capability target was MET: 2.b.2.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Findings:** None

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### **Section 4: Conclusion**

The exercise was an overall success. Officials and representatives from the States of Georgia and South Carolina; the risk counties of Aiken, Allendale, Barnwell, and Burke; as well as numerous volunteers successfully demonstrated the ability to prepare for and respond to a radiological emergency at Plant Vogtle. The cooperation and teamwork of the participants was evident throughout all phases of the exercise. No findings were identified during this exercise.

The States of Georgia and South Carolina demonstrated effective leadership and support to the risk counties. Their ability to coordinate concurrent alert and notification to their respective jurisdictions, and coordinate the production of effective emergency public information resulted in news releases and media briefings that were accurate, timely, and useful.

Burke County demonstrated the ability to perform radiological monitoring of nonessential plant personnel when conditions at the plant began to degrade but before emergency conditions were imminent. Although the number of personnel was a small representation of the total work force during the construction of the new reactors, their efficiency suggests their efforts will meet FEMA guidance.

New emergency operations centers were staffed for their first evaluated REP exercise in Aiken County in South Carolina, further demonstrating the community-wide commitment to providing state-of-the-art facilities and tools for emergency managers.

Participation by local elected officials in both states helped expand the community's awareness of protective actions taken during radiological emergencies, and extensive use of cross training created an environment for increasing the depth of knowledge and experience within and amongst the respective staffs.

The Federal Emergency Management Agency wishes to acknowledge the efforts of the many individuals who participated and made this exercise a success. Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still, others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. State and local emergency response organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them.

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**Appendix A: Exercise Timeline**

2016 VEGP Plume Exercise Emergency Classification Level or Event	Time That Notification Was Received or Action Was Taken							
	Time Utility Declared	GEORGIA SOC/DOSE ASSESSMENT	JIC	BURKE COUNTY	SC-SEOC/DOSE ASSESSMENT	AIKEN COUNTY	ALLENDALE COUNTY	BARNWELL COUNTY
Unusual Event	0853	0855		0855	0855	0855	0855	0856
Alert	0919	0928	1005	0932	0930	0929	0934	0933
Site Area Emergency	1019	1025	1026	1026	1028	1026	1026	1026
General Emergency	1118	1129	1155	1133	1137	1134	1134	1135
Simulated Rad. Release Started	1118	1129	1155	1133	1137	1134	1134	1135
Simulated Rad. Release Terminated	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Facility Declared Operational		1005	1032	0933	1015	0947	1018	0925
Declaration of State of Emergency	Georgia	1110	1110	1115	1115			
	South Carolina		1113		1100	1100	1100	1100
	Local	1030	1029	1029	1100			
Exercise Terminated		1310	1310	1310	1310	1310	1310	1310
Precautionary Actions: Georgia: TFR and river closing		1043						
<b>1<sup>st</sup> Protective Action Decision:</b> Evacuate A, B-5, C-5, D-5, SRS		1148		1145	1150	1150	1150	1150
1 <sup>st</sup> Siren Activation		1155		1200	1155	1155	1155	1155
1 <sup>st</sup> EAS Message		1200		1205	1202	1202	1202	1202
1 <sup>st</sup> National Weather Service Activation		1205		1205	1205	1205	1205	1205
KI Decision: Georgia Emergency Workers		1145		1145				
South Carolina				1145	1145	1145	1145	1145

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**Appendix B: Exercise Evaluators and Team Leaders**

**Regional Assistance Committee Chair:** Conrad Burnside

**Section Chief:** Lawrence Robertson

**Site Specialist:** John D. Simpson

Location / Venue	Evaluation Team	Core Capabilities
<b>State of Georgia: REP Director – Stephen Clark</b>		
SOC/DOSE (Atlanta, Georgia)	Joe Harworth - FEMA Robert Nash - FEMA Brad McCree - ICF Lloyd Generette (OBS) – EPA Artra Cooper (OBS) - EPA	Operational Coordination Public Information and Warning Environmental Response/Health and Safety
JIC (Waynesboro, Georgia)	J.T. Ackermann - FEMA Erica Houghton - ICF	Public Information and Warning
<b>State of South Carolina: REP Director – Nathan Nienhius</b>		
SEOC/DOSE (Columbia, South Carolina)	Ron Shaw - FEMA Bob Spence - FEMA Marcy Campbell - ICF	Operational Coordination Public Information and Warning Environmental Response/Health and Safety
<b>RISK COUNTIES</b>		
<b>Burke County: EMD – Chief Rusty Sanders</b>		
EOC (Waynesboro, Georgia)	John D. Simpson – FEMA Drew Seward - FEMA Lorenzo Lewis – FEMA	Operational Coordination Public Information and Warning On Scene Security and Protection
<b>Aiken County: EMD – Paul Matthews</b>		
EOC (Aiken, South Carolina)	Matthew Bradley - FEMA Mark Dalton - ICF	Operational Coordination Public Information and Warning
<b>Allendale County: EMD – Gidget Stanley</b>		
EOC (Allendale, South Carolina)	Michael Dolder - FEMA Alex Sera - FEMA	Operational Coordination Public Information and Warning
<b>Barnwell County: EMD – Roger Riley</b>		
EOC (Barnwell, South Carolina)	Gerald McLemore - FEMA	Operational Coordination Public Information and Warning
<b>Emergency Operations Facility – Birmingham</b>		
<b>Out of Sequence Demonstration – Allendale</b> April 25, 2016	John Fill - FEMA Odin Spencer – FEMA J.T. Ackermann – FEMA	Operational Coordination Environmental Health/Safety Mass Care
<b>Out of Sequence Demonstration – Burke</b> May 24, 2016	Odin Spencer – FEMA J.T. Ackermann	Environmental Health/Safety Mass Care

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## **Appendix C: Georgia Extent-of-Play Agreement**

### **Alvin W. Vogtle Electric Generating Plant Partial Participation Exercise -May 11, 2016 State of Georgia / Burke County Extent of Play Agreement**

The purpose of the Plant Vogtle 2016 FEMA evaluated exercise is to demonstrate that a reasonable assurance exists that the State of Georgia, in coordination and cooperation with Burke County and other Offsite Response Organizations, and in conjunction with Southern Nuclear and Plant Vogtle personnel, can effectively protect the lives and property of the citizens residing, working, or traveling within the 10-mile Emergency Protection Zone surrounding Plant Vogtle.

All exercise activities will be demonstrated fully in accordance with respective-plans and procedures, as they would be in an actual emergency. The appropriate plans and procedures will be provided to FEMA for review no later than 90 days prior to the exercise.

This Extent of Play Agreement (EOPA) is written by exception. If it is not listed as an exception, it will be demonstrated as described in the plans, standard operating guides (SOGs) and/or standard operating procedures (SOPs). Any issue or discrepancy arising during exercise play may be re-demonstrated if allowed by the Regional Assistance Committee (RAC) Chairman (FEMA Region RIV) or as listed herein. This allowance may be granted if it is not disruptive to exercise play and is mutually agreed to by the Offsite Response Organization (ORO) Controller and FEMA Lead Evaluator.

In the event of a "real world" emergency exercise activities may be suspended and /or terminated based upon the specific needs and requirements of the actual emergency. Exercise controllers and evaluators will assess the situation and determine the most appropriate course of action.

Assessment Area: Emergency Operations Management

Capability Target: Mobilization

Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654/FEMA REP-1, A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; G.3.a; H.3, 4).

Participating agencies may pre-position response personnel in proximity to their assigned response location. Regardless of location, exercise participants will not be allowed to enter their assigned duty location prior to receiving notification that the exercise has begun and they are instructed to respond.

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

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Capability Target: Direction and Control.

Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654/FEMA REP-1, A.1.d; A.2.a, b; A.3; C.4, 6).

- ❖ State of Georgia in agreement
- ❖ Burke County in agreement

Capability Target: Communications Equipment

Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communication capabilities are managed in support of emergency operations.

- ❖ State of Georgia in agreement
- ❖ Burke County in agreement

Capability Target: Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, monitoring instruments, dosimetry, potassium, potassium iodide (KI) and other supplies are sufficient to support emergency operations. (NUREG-654/FEMA REP-1, H.7, 10; I.7, 8, 9; J. 10.a, b, e; J.11, 12; K.3.a; K.5.b).

Evaluation of equipment and supplies will be conducted out of sequence on the following dates:

Burke County EMA staff Assistance Visit on Tuesday, March 22, 2016.  
Burke County RCCC exercise on Tuesday, May 24, 2016.  
Burke County EWD exercise on Tuesday, May 24, 2016.

- ❖ State of Georgia in agreement
- ❖ Burke County in agreement

Assessment Area 2: Protective Action Decision Making.

Capability Target: Emergency Worker Exposure Control

Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including use of KI, is in place for emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or PAGs. (NUREG-0654/FEMA REP-1, C.6; J.10.e, f; K.3.a; K.4).

- ❖ State of Georgia in agreement
- ❖ Burke County in agreement

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Capability Target: Dose Radiological Assessment and PARs and PADs for the emergency event.

Criterion 2.b.1: Appropriate PARs are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions. (NUREG-0654/FEMA REP- I, I.10 and Supplement 3).

- ❖ State of Georgia in agreement
- ❖ Burke County in agreement

Capability Target: Dose Radiological Assessment and PARs and PADs for the emergency event.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654/FEMA REP-1, A.3; C.4, 6; D.4; J.9; J.10.f, m).

The State of Georgia does not provide KI to the General Public.

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

Capability Target: PADs for the Protection of persons with disabilities and access/functional needs.

Criterion 2.c.1: PADs are made, as appropriate, for groups of persons with disabilities and those with access functional needs (NUREG-0654/FEMA REP-1, D.4: J.9: J.10.d, e).

Implementation of protective actions for special populations will be demonstrated by interview with the Burke County EMA Director and / or local Public Health representatives within the Burke County EOC.

- ❖ Burke county in agreement with clarifications above.

Assessment Area 3: Protective Action Implementation.

Capability Target: Implementation of Emergency Worker Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to emergency workers in accordance with the plans/procedures.

Emergency workers periodically, and at the end of each mission, read their dosimeters and record the readings on the appropriate exposure record or chart. Appropriate record-keeping of the administration of KI to emergency workers is maintained. (NUREG-0654/FEMA REP-1, J.10.e; K.3.a, b; K.4).

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This capability to be demonstrated by interview. A Radiological Protection Officer Briefing will take place at the Burke County EOC. Emergency Workers will be available following the RPO briefing to demonstrate by interview how to operate / use the equipment they were issued and understand the directions / guidance given by the RPO.

❖ Burke County in agreement with clarifications above.

Capability Target: Implementation of KI Decisions for Institutionalized Individuals and the General Public.

Criterion 3.b.1: KI and appropriate instructions are made available in case a decision to recommend use of KI is made. Appropriate record-keeping of the administration of the administration of KI for institutionalized individuals and the general public is maintained. (NUREG-0654/FEMA REP-1, J.10.e, f).

There are no institutionalized individuals located within the Plant Vogtle 10-mile EPZ in Burke County, Georgia.

The State of Georgia does not provide KI to the general public

❖ State of Georgia in agreement with clarifications above.

❖ Burke County in agreement" with clarifications above.

Capability Target: Implementation of Protective Actions for persons with disabilities and access/functional needs.

Criterion 3.c.1: PADs are implemented for people with disabilities and those with access/functional needs other than schools within thin areas subject to protective actions (NUREG-0654/FEMAREP-1, J.10.c, d, e, g).

Implementation of protective actions for special populations will be demonstrated by interview with the Burke County EMA Director and / or local Public Health representatives within the Burke County EOC.

Access / Functional needs lists will be available in the Burke County EOC for FEMA evaluators review.

❖ Burke County in agreement with clarifications above.

Capability Target: Implementation of Protective Actions for persons with disabilities and access/functional needs.

Criterion 3.c.2: OROs/School officials implement protective actions for schools (NUREG-0654/FEMA REP-1, J.10.c, d, e, g).

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Implementation of protective actions for schools will be demonstrated through interview with the Burke County EMA Director and / or Burke County School Board representative located within the Burke County EOC.

- ❖ Burke County in agreement with clarifications above. Capability Target: Implementation of Traffic and Access Control.

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654/FEMA REP-1 A.3 · C.1, 4: J.10.g, j).

Demonstration regarding Traffic Control Points and River Clearance will be demonstrated by interview within the Burke County EOC by representatives of the agencies identified below:

Traffic Control Points -Burke County Sheriff's Department and Georgia State Patrol.

River Clearance -Ga DNR Law Enforcement.

- ❖ Burke County in agreement with clarifications above.

Capability Target: Implementation of Traffic and Access Control.

Criterion 3.d.2: Impediments to evacuation are identified and resolved (NUREG-0654/FEMA REP-1, J.10.k).

Demonstration of this criteria will consist of an interview with local law enforcement personnel and the Burke County EOC Director in response to information received through an exercise inject introduced within the Burke County 911 Center.

GEMA will coordinate criteria play in the exercise scenario to drive demonstration of this criteria.

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

Assessment Area 4: Field Measurement and Analysis.

Capability Target: Plume Phase Field Measurement and Analysis

Criteria 4.2: Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654/FEMA-REP-1, C.1; H.12; I.7, 8, 11; J.10.a).

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State of Georgia Field Teams will not be deployed during this exercise. However, a State of Georgia Field Team Coordinator will be located in the State FEOC, located immediately adjacent to the Burke County EOC. The Field Team Coordinator will serve as a liaison between Dose Assessment personnel in the SOC and the Burke County EOC.

Radiological dose assessment and analysis functions will be demonstrated by interview with Georgia DNR -Environmental Radiation Program personnel within the State Operations Center.

❖ State of Georgia in agreement with clarifications above.

Assessment Area 5: Emergency Notification and Public Information.

Capability Target: Activation of the Prompt Alert and Notification System.

Criterion 5.a.I: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current REP guidance (NUREG-0654/FEMA REP-I, E.5. 6, 7).

Procedures to broadcast the message will be demonstrated (simulated) up to the point of transmission. The alert signal will not be performed.

❖ Burke County in agreement with clarifications above.

Capability Target: Activation of the Prompt Alert and Notification System.

Criterion 5.a.3: Backup alert and notification of the public is completed within a reasonable time detection by the ORO of a failure of the primary alert and notification system (NURWG-0654/FEMA-REP-I, E.6, Appendix 3.B.2.c).

This capability to be demonstrated by interview with the Burke County EMA Director within the Burke County EOC.

❖ Burke County in agreement with clarifications above.

Capability Target: Emergency Information and Instructions for the Public and the Media.

Criterion 5.b.1: OROs provide accurate emergency information and instructions to the public and news media in a timely manner (NUREG-0654/FEMA REP-1, E.5, 7; G.3.a; G.4.a, c).

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Burke County EMA will deploy one public affairs staff member to the Plant Vogtle Joint Information Center, located in Waynesboro, Georgia.

The State of Georgia will pre-deploy a GEMA Public Affairs Officer (PIO), a public affairs staff member, and a GA-DNR Public Information Officer to the Joint Information Center, located in Waynesboro, Georgia.

GEMA Public Affairs representatives will participate in the State Operations Center to coordinate State and local joint press releases which are then provided to the GEMA PIO in the Joint Information Center for dissemination.

Local radio and television stations used for information dissemination by Burke County include the following:

WYFA (FM 100.9) in Waynesboro  
WBBQ (AM 1340 and FM 104.3) in Augusta  
Augusta television stations,  
Channels WJBF-6, WRDW -12 or WAGT-26

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

Assessment Area 6: Support Operations/Facilities

Capability Target: Monitoring, Decontamination, and Registration of Evacuees  
Criterion 6.a.1: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees. (NUREG-0654/FEMA-REP-1, A.3; C.4; J.10.h; J.12)

Burke County will conduct an evaluated Reception Center Exercise at the Burke County High School on Tuesday May 24, 2016.

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

Capability Target: Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles.

Criterion 6.b.1: The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles. (NUREG-0654/FEMA-REP-1, K.5.a, b).

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Burke County will demonstrate this capability during an Emergency Worker / Vehicle Decon exercise at the Burke County High School on Tuesday, May 24, 2016.

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

Capability Target: Temporary Care of Evacuees

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities. (NUREG-0654/FEMA-REP-1, J.10.h, J.12).

Burke County High School is a certified American Red Cross shelter.

This capability to be demonstrated during a RCCC / Shelter exercise at the Burke County High School on Tuesday, May 24, 2016.

- ❖ State of Georgia in agreement with clarifications above.
- ❖ Burke County in agreement with clarifications above.

## Appendix D: South Carolina Extent-of-Play Agreement

### Vogtle Electric Generating Plant Partial Participation Radiological Emergency Preparedness Exercise May 11, 2016

All activities will be demonstrated fully in accordance with respective plans and procedures as they would be in an actual emergency (FEMA must receive these plans, guides and procedures NLT 60 days before the exercise). This Extent of Play Agreement is written by exception. If it is not listed as an exception it will be demonstrated as described in the plans, standard operating guides (SOGs) and/or procedures (SOPs). Any issue or discrepancy arising during exercise play may be re-demonstrated if allowed by the Regional Assistance Committee (RAC) Chair or as listed herein. This allowance may be granted if it is not disruptive to exercise play and is mutually agreed to by the Offsite Response Organization (ORO) controller and FEMA evaluator.

**Core Capability:** Operational Coordination – State and County Emergency Operations Centers (EOCs) and Emergency Operations Facility (EOF).

**Definition:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

**Capability Target: Emergency Operations Management**

**Performance Measure:** Procedures to alert and notify personnel will be demonstrated and personnel will respond only upon notification. Identified communications will be operational. Equipment, monitoring instruments and dosimetry must be available and will be operational which includes an affixed current calibration and range of readings sticker if applicable; quantities of Potassium Iodide (KI) and expirations will be verified.

**Critical Task:** OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654/FEMA-REP-1, A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; H.3, 4; Criterion 1.a.1).

All state and local government personnel will be pre-positioned in the area prior to notification.

**Critical Task:** At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654/FEMA-REP-1, F.1, 2; Criterion 1.d.1).

State and county decision makers will use the Administrative Decision Line (ADL) to conduct protective action discussions/decision making. The Emergency Notification Network (ENN) Line will be the primary means of notifying off-site response personnel and the ADL will be the backup.

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**Critical Task:** Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1.e.1).

Quantities of KI are verified during Staff Assistance Visits (SAVs).

Quantities of equipment, their calibration/testing are verified during SAVs.

SAV locations, dates, and times are as follows:

**Aiken County EOC, 20 Apr 16 at 10:00 AM**  
**Allendale County EOC, 25 Apr 16 at 3:30 PM**  
**Barnwell County EOC, 26 Apr 16 at 1:00 PM**

**Capability Target: Protective Action Decision Making**

**Performance Measure:** Key personnel with leadership roles will provide direction and control; protective action decision (PAD) making will be demonstrated by the OROs.

**Critical Task:** Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654/FEMA-REP-1, A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1.c.1).

State direction and control will be at the State Emergency Operations Center (SEOC). County direction and control will occur at the County EOCs. All telephone calls to non-participating agencies will be made by calling the simulation cell (simcell). FEMA evaluator will be given access to the simcell as needed.

**Critical Task:** OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for Emergency Workers (EWs) including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654/FEMA-REP-1, C.6; J.10.e, f; K.4 Criterion 2.a.1).

In accordance with plans and procedures.

**Critical Task:** A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (NUREG-0654/FEMA-REP-1, A.3; C.4, 6; D.4; J.9; J.10.f, m Criterion 2.b.2).

In accordance with plans and procedures.

**Critical Task:** Protective action decisions are made, as appropriate, for groups of persons with disabilities and access/functional needs (NUREG-0654/FEMA-REP-1, D.4; J.9; J.10.d, e;

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Criterion 2.c.1).

In accordance with plans and procedures.

**Capability Target: Protective Action Implementation**

**Performance Measure:** Demonstrate the capability to implement EW exposure control; KI decision for institutionalized individuals and the general public; protective actions for persons with disabilities and access/functional needs; schools; traffic and access control and impediments to evacuation.

**Critical Task:** OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654/FEMA-REP-1, J.10.e, K.3.a, b, K.4; Criterion 3.a.1).

In accordance with plans and procedures during out-of-sequence activities at the reception centers.

**Critical Task:** KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654/FEMA-REP-1, J.10.e, f; Criterion 3.b.1).

KI distribution and recommendation to ingest KI for the general public will be discussed at county EOCs during the exercise.

**Critical Task:** PADs are implemented for persons with disabilities and access/functional needs other than schools within areas subject to protective actions (NUREG-0654/FEMA-REP-1, J.10.c, d, e, g; Criterion 3.c.1).

By discussion in each county EOC during the exercise.

**Critical Task:** OROs/School officials implement precautionary and/or protective actions for schools. (NUREG0654/FEMA-REP-1, J.10.c, d, e, g; Criterion 3.c.2).

Not Required - There are no schools in the 10-mile EPZ

**Critical Task:** Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.10.g, j; Criterion 3.d.1).

By discussion in each county EOC during the exercise.

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**Critical Task:** Impediments to evacuation are identified and resolved (NUREG-0654/FEMA-REP-1, J.10.k; Criterion 3.d.2).

By discussion in each county EOC during the exercise.

**Core Capability: Public Information and Warning** – State/County EOCs and Joint Information Center (JIC).

**Definition:** Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available.

**Capability Target: Emergency Notification and Public Information**

**Performance Measure:** Sirens and the EAS System will be activated in a timely manner to alert the general public along with waterway warning and back up route alerting in case of failure of the primary alert and notification system.

**Critical Task:** Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP Guidance (Timely: The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654/FEMA-REP-1, E.5, 6, 7; Criterion 5.a.1).

The State will coordinate Protective Action Decisions (PAD) with the impacted South Carolina county elected officials or designees and GEMA. South Carolina will coordinate with the impacted SC counties and GEMA during the simulated activation of the VEGP siren system in Barnwell County. All subsequent siren activations will be simulated. A “test message” EAS message will be transmitted to the Local Primary (LP-1) EAS station (WBBQ-FM (104.3), Augusta, GA). Broadcast of an EAS test message will be simulated and the process will be discussed. Only one EAS message will be sent, and others will be simulated via the JIS email distribution list developed by SCEMD PIOs. Copies of the simulated EAS messages and news releases will be provided to the FEMA evaluator at the SEOC.

**Critical Task:** Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system (NUREG-0654/FEMA-REP-1, E.6; Appendix 3.B.2.c; Criterion 5.a.3).

Backup route alerting procedures will be completed via interview with Barnwell County at the EOC during the exercise.

**Critical Task:** Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of

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urgency and without undue delay) (NUREG-0654/FEMA-REP-1, E.5, 7; G.3.a; G.4.a, c; Criterion 5.b.1).

The State, Aiken, Allendale, and Barnwell Counties will demonstrate the ability to disseminate accurate information and instructions to the public and news media through the Joint Information System (JIS). Public inquiry for the state will be demonstrated at the State Joint Information Center (JIC) located at 2779 Fish Hatchery Road, West Columbia, SC 29172. County public inquiries will be demonstrated at the respective county EOCs. Public inquiry personnel will provide the FEMA evaluator with a call log.

**Core Capability: Environmental Response/Health and Safety** – Dose, Emergency Worker Decontamination (EWD), Reception Center Congregate Care (RCCC).

**Definition:** Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

**Capability Target: Protective Action Decision Making**

**Performance Measure:** OROs authorized to send emergency workers into the plume exposure pathway EPZ must demonstrate a capability to assess and control the radiation exposure received by emergency workers and have a decision chain in place, as specified in the ORO's plans/procedures, to authorize emergency worker exposure limits to be exceeded for specific missions. As appropriate, OROs must demonstrate the capability to make decisions on the distribution and administration of KI as a protective measure for emergency workers. OROs must have the capability to independently project integrated dose from projected or actual dose rates and compare these estimates to the PAGs. OROs must have the capability to choose, among a range of protective actions, those most appropriate in a given emergency.

**Critical Task:** OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or Protective Action Guides (PAGs) (NUREG-0654/FEMA-REP-1, C.6; J.10.e, f; K.4 Criterion 2.a.1).

In accordance with plans and procedures.

**Critical Task:** Appropriate PARs are based on available information on plant condition, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions (NUREG-0654/FEMA-REP-1, I. 10; Supp. 3; Criterion 2.b.1).

In accordance with plans and procedures.

**Critical Task:** A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (NUREG-0654/FEMA-REP-1, A.3; C.4, 6;

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D.4; J.9; J.10.f, m; Criterion 2.b.2).

In accordance with plans and procedures

**Capability Target: Protective Action Implementation**

**Performance Measure:** OROs must demonstrate the capability to provide EWs (including supplemental resources) with the appropriate direct-reading and permanent record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.

**Critical Task:** OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654/FEMA-REP-1, J.10.e, K.3.a, b, K.4; Criterion 3.a.1).

DHEC: In accordance with plans and procedures during the exercise Counties: In accordance with plans and procedures during out-of-sequence activities at the reception centers.

**Critical Task:** KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals is maintained. (NUREG0654/FEMA-REP-1, J.10.e, f; Criterion 3.b.1).

In accordance with plans and procedures.

**Capability Target: Field Measurement and Analysis**

**Performance Measure:** OROs must demonstrate the capability to brief FMTs on predicted plume location and direction, plume travel speed, and exposure control procedures before deployment. Teams must be directed to take measurements at such locations and times as necessary to provide sufficient information to characterize the plume and its impacts.

**Critical Task:** Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG0654/FEMA-REP-1, C.1; H.12; I.7, 8, 11; J.10.a; Criterion 4.a.2).

By discussion during the exercise.

**Capability Target: Support Operations and Facilities**

**Performance Measure:** Radiological monitoring, decontamination, and registration facilities for evacuees and emergency workers must be set up and demonstrated as they would be in an actual emergency. For RCCC, OROs conducting this demonstration must have one-third of the resources (e.g., monitoring teams/instrumentation/portal monitors) available at the facility(ies) as necessary to monitor 20 percent of the population within a 12-hour period; this would include adequate space for evacuees' vehicles. A minimum of six evacuees must be monitored per station using equipment and procedures specified in the plans/procedures. The monitoring

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sequences for the first six simulated evacuees per monitoring team will be timed by the evaluators to determine whether the 12-hour requirement can be met. For EWD, monitoring of emergency workers does not have to meet the 12-hour requirement, however, appropriate monitoring procedures must be demonstrated for a minimum of two emergency workers and their equipment and at least one vehicle. Monitoring activities shall not be simulated; decontamination of evacuees, emergency workers and vehicles may be simulated and conducted by interview. Provisions for separate showering and same-sex decontamination must be demonstrated or explained. The staff must demonstrate provisions for limiting the spread of contamination; these provisions may be partially simulated to conserve resources. In addition, for any evacuee and emergency worker found to be contaminated, procedures must be discussed concerning handling of potential contamination of vehicles and personal belongings.

**Critical Task:** Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1.e.1).

Reception Centers to be evaluated are:

Aiken County: **South Aiken High School – 19 Apr 16 at 3:30 PM (Courtesy Evaluation)**  
Allendale County: **Allendale-Fairfax High School – 25 Apr 16 at 6:30 PM**

**Critical Task:** OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654/FEMA-REP-1, J.10.e, K.3.a, b, K.4; Criterion 3.a.1).

In accordance with plans and procedures during out-of-sequence activities at the reception centers.

**Critical Task:** KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals is maintained. (NUREG0654/ FEMA-REP-1, J.10.e, f; Criterion 3.b.1)

In accordance with plans and procedures during the SAV (see schedule on page 2).

**Critical Task:** The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees (NUREG-0654/FEMA-REP-1, A.3; C.4; J.10.h; J.12; Criterion 6.a.1).

In accordance with plans and procedures during out-of-sequence activities at the reception centers

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**Critical Task:** The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles (NUREG-0654/FEMA-REP-1, K.5.a, b; Criterion 6.b.1).

Emergency Worker Decon Sites to be evaluated:

Aiken County: **Redcliffe Elementary School – 19 Apr 16 at 10:00 AM (Courtesy Evaluation)**

Allendale County: **Allendale-Fairfax High School – 25 Apr 16 at 6:30 PM**

Barnwell County: **Barnwell Rural Fire Department – 26 Apr 16 at 10:00 AM**

**Core Capability: On-Scene Security and Protection** – Traffic Control Points (TCPs)

**Definition:** Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.

**Capability Target: Protective Action Implementation**

**Performance Measure:** Demonstrate the capability to select, establish and staff traffic control and access points; identify and resolve impediments to evacuation; distribute dosimetry and KI; and implement and manage EW exposure control.

**Critical Task:** Equipment (to include communications), maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654/FEMA-REP-1, H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1.e.1).

In accordance with plans and procedures.

**Critical Task:** OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654/FEMA-REP-1, J.10.e, K.3.a, b, K.4; Criterion 3.a.1).

Will be evaluated by discussion during out-of-sequence activities at the reception centers.

**Critical Task:** Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654/FEMA-REP-1, A.3; C.1, 4; J.10.g, j; Criterion 3.d.1).

TCPs to be evaluated by discussion during the exercise at the SEOC are:

**South Carolina HP: ATACP 1 (SCHP) Intersection of Brown Road (Route 2035) at Main Street (Route 5).**

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TCPs to be evaluated by discussion during the exercise at the County EOC are:

**Aiken County Sheriff: ATACP 3 (ACSO) Intersection of Main Street (Route 5) at McElmurray Farm Road (Route 63).**

**ATACP 5 (ACSO) Intersection of McElmurray Farm Road (Route 63) at Green Pond Road (Route 57).**

**Allendale County Sheriff: S-3 Intersection of Augusta Hwy (Route 125) at Millett Road.**

**Waterway Clearing:** Will be evaluated by discussion during the exercise at the SEOC

**Critical Task:** Impediments to evacuation are identified and resolved (NUREG-0654/FEMA-REP-1, J.10.k; Criterion 3.d.2).

Will be evaluated by discussion during the exercise at the SEOC/EOCs.

**Core Capability: Mass Care** – Reception/Congregate Care

**Definition:** Provide life-sustaining services to the affected population with a focus on hydration, feeding and sheltering to those who have the most need as well as support for reunifying families.

**Capability Target: Support Operations and Facilities**

**Performance Measure:** The evaluator will conduct a walk-through of the center to determine, through observation and inquiries, that the services and accommodations are consistent with applicable guidance. Congregate care staff must also demonstrate the capability to ensure that evacuees, service animals, and vehicles have been monitored for contamination, decontaminated as appropriate, and registered before entering the facility. Material that would be difficult or expensive to transport (e.g., cots, blankets, sundries, and large-scale food supplies) need not be physically available at the facility(ies). However, availability of such items must be verified by providing the evaluator a list of sources with locations and estimates of quantities.

**Critical Task:** KI and appropriate instructions are made available in case a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654/FEMA-REP-1, J.10.e, f; Criterion 3.b.1).

In accordance with plans and procedures during the SAV (see schedule on page 2).

**Critical Task:** Managers of congregated care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregated care

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facilities (NUREG-0654/FEMA-REP-1; J.10.h; J.12; Criterion 6.c.1).

In accordance with plans and procedures during out-of-sequence activities at the reception centers.