

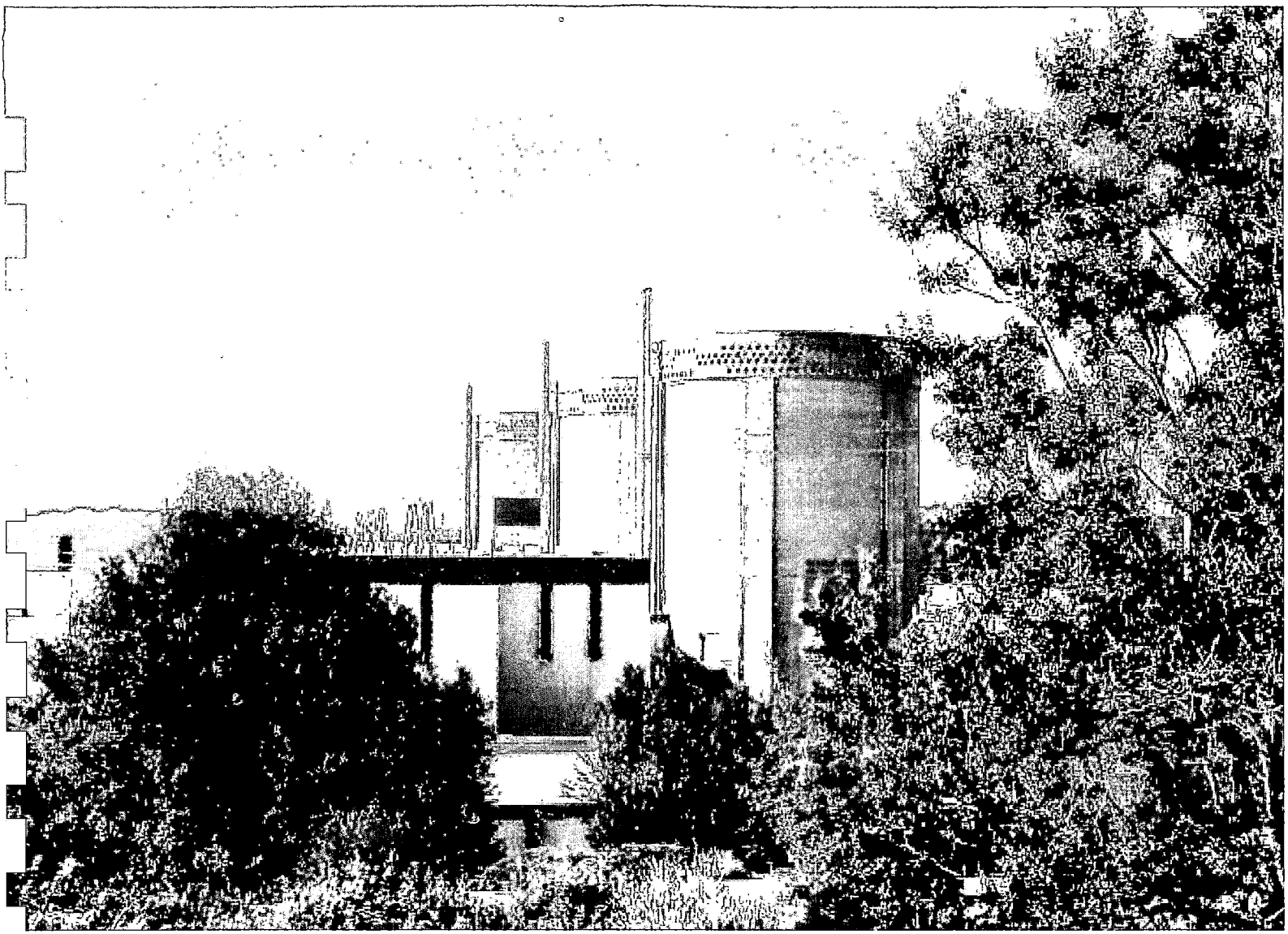
# Final After Action Report

Oconee Nuclear Station  
Radiological Emergency Preparedness Exercise  
Exercise Date: August 14, 2018

*February 12, 2019*



**FEMA**



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## **Executive Summary**

On August 14, 2018, the United States Department of Homeland Security, Federal Emergency Management Agency Region IV Radiological Emergency Preparedness Program staff evaluated a plume-exposure-pathway exercise in the 10-mile emergency planning zone for the Oconee Nuclear Station. The evaluations of out of sequence activities conducted on the weeks of June 18 and August 6, 2018, are also included in this report.

The Oconee Nuclear Station is located in eastern Oconee County, approximately eight miles northeast of Seneca, South Carolina and is operated by Duke Energy. The Oconee Nuclear Station emergency planning zone is divided into 13 emergency response zones. The emergency planning zone encompasses parts of Oconee and Pickens Counties. Host counties include Anderson and Greenville Counties in South Carolina.

The Federal Emergency Management Agency's overall objective of the exercise was to assess the level of state and local preparedness in responding to a radiological emergency at the Oconee Nuclear Station. The Federal Emergency Management Agency evaluated the exercise in accordance with their policies and guidance concerning the exercise of state and local radiological emergency response plans and procedures. The qualifying emergency preparedness exercise was conducted on March 7 and 8, 1982.

Officials and representatives from participating agencies and organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them during the exercise. The Federal Emergency Management Agency did not identify any level 1 findings, however two level 2 findings were identified. The first finding involved the issuance of a potassium iodide order and providing clear concise directions for emergency workers and the general public. The second finding dealt with the proper control of draft news release versions and ensuring public information was clearly delineated.

A level 2 finding from the 2016 Catawba Nuclear Station exercise was corrected. The level 2 finding concerned improper dosimetry and potassium iodide tracking for Department of Health and Environmental Control personnel.

The Federal Emergency Management Agency wishes 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 was evident throughout all phases of the exercise.

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## Section 1: Exercise Overview

### 1.1 Exercise Details

**Exercise Name**

2018 Oconee Nuclear Station, Plume-Exposure-Pathway Federal Emergency Management Agency Radiological Emergency Preparedness Program Evaluated Exercise

**Type of Exercise**

Full-Scale Exercise

**Exercise Date**

August 14, 2018

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

Weeks of June 18 and August 6, 2018

**Locations**

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

**Program**

Department of Homeland Security, Federal Emergency Management Agency  
Radiological Emergency Preparedness Program

**Mission**

Response

**Scenario Type**

Plume-Exposure-Pathway Full Participation, Radiological Emergency Preparedness Exercise

### 1.2 Exercise Planning Team Leadership

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## Radiological Emergency Preparedness Program

After Action Report

2018 Oconee Nuclear Station

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### 1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the 2018 Oconee Nuclear Station exercise.

#### **State of South Carolina Jurisdictions:**

South Carolina Office of the Adjutant General, Emergency Management Division  
South Carolina Department of Health & Environmental Control  
South Carolina Department of Public Safety – South Carolina Law  
Enforcement Division  
South Carolina Highway Patrol  
South Carolina Department of Natural Resources  
South Carolina Department of Social Services  
South Carolina Department of Transportation  
South Carolina Department of Mental Health  
Clemson University Public Information  
Clemson University Extension Animal Control  
South Carolina State Army National Guard

#### **South Carolina Risk Jurisdiction:**

##### **Oconee County**

Oconee County Emergency Services  
Oconee County Hazardous Materials Team  
Oconee County Sheriff's Office  
Department of Health Environmental Control  
Oconee County Public Works  
Oconee County Department of Mental Health  
Seneca Police Department  
Oconee County Emergency Medical Services  
Oconee Memorial Hospital, Oconee Finance  
Clemson Area Transit  
Special Needs Volunteers  
Oconee County Procurement  
Walhalla Fire Department

##### **Pickens County**

Pickens County Emergency Management  
Pickens County Health Department  
Pickens County Emergency Medical Services  
Pickens County School District  
Pickens County Sheriff's Department,  
Pickens County Rescue Squads  
Pickens County HazMat Team  
Pickens County 911

**South Carolina Support Jurisdictions:**

**Anderson County**

Anderson County Sheriff's Department, Emergency  
Management Division  
Anderson County Hazardous Materials Team  
Civil Emergency Response Team  
MedShores Emergency Medical Services  
AnMed Health Hospital  
Anderson County Division of Social Services  
Anderson County Animal Control and Animal Shelter  
Greenville Health System  
Department of Mental Health

**Greenville County**

Greenville County Office of Emergency  
Management  
Greenville County Sheriff's Office  
Greenville County Emergency Medical Services  
Greenville Technical College  
Greenville County Explorer Emergency  
Management Post #466  
Wade Hampton Fire Department (Incident  
Control)  
South Carolina Public Health Reserve Corps  
Reserve Corp Health Professionals  
Greenville Health System

**Private Organizations:**

American Red Cross  
Salvation Army  
Radio Amateur Civil Emergency Service

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## Section 2: Exercise Design Summary

### 2.1 Exercise Purpose and Design

The Federal Emergency Management Agency administers the Radiological Emergency Preparedness Program pursuant to the regulations found in Title 44 Code of Federal Regulation parts 350, 351, and 352. Title 44 Code of Federal Regulation part 350 codifies sixteen planning standards that form the basis for radiological emergency response planning for State, tribal, and local governments impacted by the emergency planning zones established for each nuclear power plant site in the United States. United States Nuclear Regulatory Commission regulations also codify the sixteen planning standards for the licensee. Title 44 Code of Federal Regulation Part 350 sets forth the mechanisms for the formal review and approval of State, tribal, and local government radiological emergency response plans and procedures by the Federal Emergency Management Agency. 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 abilities to implement their 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 response plans and procedures and verification of the periodic requirements set forth in *"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980* (NUREG-0654/FEMA-REP-1) through the annual letter of certification and staff assistance visits enables the Federal Emergency Management Agency to provide a statement with the transmission of this final after action report to the United States 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 response plans for the Oconee Nuclear Station to the Federal Emergency Management Agency Region IV by the State of South Carolina and involved local jurisdictions occurred on May 7, 1982. Formal approval of the South Carolina radiological emergency response plans was granted by the Federal Emergency Management Agency on February 23, 1983, under Title 44 Code of Federal Regulation Part 350.

## 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 methodology, the exercise objectives meet the Radiological Emergency Preparedness Program requirements and encompass the Radiological Emergency Preparedness Program emergency preparedness evaluation areas. The critical tasks to be demonstrated were negotiated with the State of South Carolina and the participating counties. The core capabilities scheduled for demonstration during this exercise were as follows:

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

**Situational Assessment:** Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

**Public Information and Warning:** 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.

**Environmental Response/Health and Safety:** Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.

**On-Scene Security, Protection, and Law Enforcement:** 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 response personnel engaged in lifesaving and life-sustaining operations.

**Critical Transportation:** Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.

**Mass Care Services:** Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.

These core capabilities, when successfully demonstrated, meet the exercise objectives.

The objectives for this exercise were as follows:

Objective 1: Demonstrate the ability to provide direction and control and make protective action decisions through the state emergency operations center, county emergency operations centers, and field activities by exercise play and discussion of plans and procedures.

Objective 2: Demonstrate the ability to provide protective action decisions affecting state and county emergency workers and public through exercise play and discussions of plans and procedures.

Objective 3: Demonstrate the ability to provide and implement protective actions for state and county emergency workers and public through exercise demonstration.

Objective 4: Demonstrate the ability to perform plume-phase field measurements and analysis utilizing State field teams through exercise play and discussion of plans and procedures.

Objective 5: Demonstrate the ability to activate the prompt alert and notification system utilizing the prompt notification system and emergency alert system through exercise play.

Objective 6: Demonstrate the effectiveness of plans, policies, and procedures in the joint information system for joint (public and private sectors) emergency information communications.

Objective 7: Demonstrate the ability to monitor, decontaminate, register, and shelter evacuees and emergency workers.

Objective 8: Demonstrate the ability to provide dose projection and protective action recommendations for the plume phase.

**2.3 Scenario Summary**

The following is a brief summary of the scenario developed by the utility to drive exercise play. Actual exercise times and events may have differed from those shown below.

<b>Emergency Classification Level (ECL):</b>	<b>Time Utility to Declare:</b>
Start of Exercise	0700
ALERT	0721
SITE AREA EMERGENCY	0921
RELEASE START	1045
GENERAL EMERGENCY	1136
UPDATED PARS DUE TO WIND SHIFT	1251
TERMINATION	1400

### 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 August 14, 2018, plume-exposure-pathway exercise and out of sequence interviews and demonstrations during the weeks of June 8 and August 6, 2018.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities and the underlying criteria as delineated in the Federal Emergency Management Agency Radiological Emergency Preparedness Program Manual dated January 2016. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following terms:

- M: Met (no unresolved level 1 or level 2 findings assessed and no unresolved findings from prior exercises)
- 1: Level 1 finding assessed
- 2: Level 2 finding assessed or an unresolved level 2 finding(s) from a prior exercise
- P: Plan issue
- N: Not demonstrated

#### 3.2 Summary Results of Exercise Evaluation

The Homeland Security Exercise and Evaluation Program 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. Core capabilities form the foundation of the Federal Emergency Management Agency Region IV Radiological Emergency Preparedness Program evaluations. 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. Section 3.3 of this report contains each jurisdiction's standalone capability summary.

**Operational Coordination:** Key leadership personnel in the state of South Carolina and the risk counties demonstrated the capability to establish and maintain a unified and coordinated operational structure and process. With the exception of the finding involving the protective action decision making process for potassium iodide, all parties participated in discussions prior to approving any decisions. The risk counties and the state integrated and supported all stakeholders throughout the exercise.



**Situational Assessment:** The State of South Carolina dose assessment personnel provided all decision makers with information regarding radiological conditions and protective action recommendations. The state's dose assessment teams coordinated actions, which allowed the decision makers to coordinate protective action decisions in a timely manner.

**Public Information and Warning:** Alert and notification of the public was simulated. The simulation included siren activation, emergency alert system message broadcasts and follow-on supplemental media releases. The public information staff in the state and counties prepared and delivered information and instructions to the public and media. However, a finding was identified concerning the proper control of draft news releases and ensuring the public information was clearly delineated. The state and all risk counties handled public inquiry and responded to any rumor trends.

**Environmental Response/Health and Safety:** The Department of Health and Environmental Control Field Monitoring Team Coordinator effectively used numerous maps, and communications capabilities to support field monitoring team activities. The coordinator was familiar with dose limits for emergency worker exposure control and the approval process for exceeding exposure limits if it became necessary.

The field monitoring teams performed ambient radiation measurements and collected air samples for particulate and airborne radioiodine at pre-determined monitoring points. Team members were knowledgeable of equipment operations, dose limits, and sampling procedures.

Anderson and Greenville County emergency workers demonstrated the ability to: direct simulated evacuees to enter the reception area; monitor vehicles and evacuees for radiological contamination; perform radiological decontamination of evacuees; and ensure all evacuees had been monitored and decontaminated prior to entering the reception and shelter area.

Oconee and Pickens County emergency workers demonstrated their ability to perform radiological monitoring and decontamination of emergency workers and vehicles.

**On-Scene Security, Protection and Law Enforcement:** State and local law enforcement officers were knowledgeable of their duties and radiological limits. South Carolina Department of Natural Resources officers were knowledgeable of how to coordinate clearing of the lake and how to establish access control.

**Critical Transportation:** Pickens County School District personnel participated in interviews concerning the ability to implement protective actions and safeguard students and faculty. Faculty and staff were knowledgeable of all options to ensure the safety and well-being of their students.

**Mass Care:** A demonstration of the ability to provide services and accommodations for evacuees at a reception and congregate care center occurred in Anderson and Greenville Counties. County and state personnel in coordination with volunteer agencies demonstrated the ability to ensure simulated evacuees were not contaminated and provided necessary resources for any evacuees who may have required shelter or other emergency services.

### **3.3 Jurisdictional Summary Results of Exercise Evaluation**

#### **3.3.1 South Carolina Jurisdictions**

##### **3.3.1.1 State of South Carolina**

**Operational Coordination Capability Summary:** South Carolina Emergency Management Division staff mobilized the State Emergency Response Team and activated the state emergency operations center in response to a simulated incident at the Oconee Nuclear Station. They maintained accurate situational awareness throughout the incident, facilitated a unified response, and coordinated with stakeholders to provide incident support.

The state warning point supervisor notified and mobilized response staff in a timely manner using an automated notification program. Multiple communication systems were demonstrated successfully. Backup methods of communication were available if needed. The state emergency operations center had adequate monitors, displays, maps, equipment, and supplies to support emergency operations.

The chief of operations and the technical operations lead provided continuous situational awareness and direction and control within the emergency operations center by conducting frequent briefings. The State Emergency Response Team facilitated the protective action decision process on decision line calls. Emergency support function leads kept stakeholders informed of incident status and supported the decision making process. State technical staff and the utility liaison thoroughly discussed protective action recommendations prior to the decision line calls. This process allowed state representatives to provide informed protective action recommendations to risk counties. Although this worked seamlessly throughout most of the exercise, Emergency Support Function 8 did not provide a clear, concise protective action recommendation for the ingestion of potassium iodide by the public. The potassium iodide memorandum did not clearly designate who was to ingest potassium iodide.

An interview with Emergency Support Function 13 personnel demonstrated their ability to coordinate and manage state traffic control points, law enforcement support, and waterway warning. Each were equipped with their plans for reference. They were aware of law enforcement activities at the county level and were ready to provide assistance if necessary.

For this capability, the following radiological emergency preparedness criterion were met: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 3.d.1, 3.d.2.

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

**Situational Assessment Capability Summary:** South Carolina Department of Health and Environmental Control personnel demonstrated the ability to assess radiological, meteorological, and plant conditions in response to a radiological incident at Oconee Nuclear Station. Staff members responded promptly when notified of the Alert for Emergency Support Functions 8 and 10 at the South Carolina State Emergency Operations Center. The facility and the team had adequate equipment, communications, and supplies to support emergency operations.

The emergency response coordinator provided direction to the Emergency Support Function 10 team members. The team gathered information for changing plant conditions to assess the radiological release. The team's response was appropriate to changing meteorological conditions, including a wind shift affecting additional emergency response zones. Based on dose calculations and field team data the emergency response coordinator recommended getting approval for the ingestion of potassium iodide from the Public Health Director.

Emergency Support Function 8 personnel obtained approval for recommendation of the use of potassium iodide from the Director of the Department of Health and Environmental Control's designee by telephone call. The initial potassium iodide recommendation memorandum was unclear concerning whether potassium iodide should just be released or ingested and by whom. This resulted in confusion for the State Emergency Response Team in the decision making process and therefore, additional clarification was requested. The Public Health Director designee then issued a second recommendation memo. This memo was used by the State Emergency Response Team to make the decision for emergency workers and the general public in evacuated zones to ingest potassium iodide.

Field team coordination was performed at the mobile operations center. The lead liaison was in contact with the mobile operations center and relayed significant information from the state emergency operations center. The exposure control clerk monitored field team exposure throughout the exercise.

The dose assessment coordinator performed dose projection calculations and briefed the emergency response coordinator. Throughout the exercise, the dose assessment coordinator relied on the emergency notification forms to obtain dose projection information. Review of the actual dose assessment runs would have provided a more independent assessment of the projected doses used to make protective action decisions.

For this capability, the following radiological emergency preparedness criterion were met: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, and 4.a.2

**a. Level 1 Finding:** None

**b. Level 2 Finding:** 42-18-2.b.2-L.2-01

**Criterion:** *Critical Task 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 potassium iodide, if ORO policy) (NUREG-0654 A.3; C.4, 6; D.4; J.9; J.10.f, m Criterion 2b2).

**Condition:** The State Emergency Response Team and the South Carolina Department of Health and Environmental Control failed to implement a clear, concise decision-making process with the necessary coordination to the risk counties regarding the protective action decision for the public to use/ingest potassium iodide.

**Possible Cause:** The possible causes to this issue include but are not limited to:

1. The South Carolina Operational Radiological Emergency Response Plan, Annex 6, designates the Director of the South Carolina Department of Health and Environmental Control serves as the authority to issue the "order" to take potassium iodide.
2. The South Carolina Operational Radiological Emergency Response Plan, Annex 6, Attachment A provides recommendations for potassium iodide use during a nuclear power plant emergency.
3. Clarification regarding whether the South Carolina Department of Health and Environmental Control has the responsibility or authority to make a protective action recommendation or a protective action decision as it specifically pertains to the ingestion of potassium iodide for the general public.
4. Clarification of the potassium iodide memo between the State Emergency Response Team and Department of Health and Environmental Control took a long time and delayed the protective action decision.
5. The State Emergency Response Team did not ensure the risk counties received the correct potassium iodide protective action decision.

**Analysis:** At 1120 Emergency Notification Form #7 declaring a General Emergency at the Oconee Nuclear Station was received at the State of South Carolina Emergency Operations Center. The State Emergency Response Team started their protective

action recommendation and decision process for emergency workers and the general public.

Part of this process was to discuss the release of radioiodine and determine if the public should be instructed to ingest potassium iodide to offset the effects of the radioiodine. According to the South Carolina Operational Radiological Emergency Response Plan, the responsibility to issue the "order" for the general public to ingest potassium iodide rested solely with the Director of the South Carolina Department of Health and Environmental Control. The State Emergency Response Team expected to receive an "order" or protective action decision from the Director of South Carolina Department of Health and Environmental Control instructing the public to ingest potassium iodide.

The initial document received was titled "Recommendation for the Use of Potassium Iodide (KI) During a Nuclear Power Plant Emergency." This document explained the rationale for using potassium iodide and the doses associated with the protective action guides for various age-based population groups. The recommendation stated:

*"For the protection of the public health, the Director has designated the undersigned public health physician to issue the recommendation for potassium iodide release primarily to prevent thyroid disease, and the physician concurs that environmental data indicates a public health threat exists for exposure to radioactive iodide as a result of a release from a fixed nuclear facility or other radiological event. Therefore, the designated public health physician hereby issues this recommendation to the Emergency Management Division, other partner agencies, and the general public."*

As seen from the above passage the "recommendation" did not indicate what was to be done. The affected area was not identified nor were the actions to be taken enumerated. The State Emergency Response Team, Oconee, and Pickens Counties did not know what they were supposed to do with this ambiguous "recommendation." Therefore the protective action decision concurred on at 1147 did not include any information regarding the ingestion of potassium iodide for the general public or emergency workers.

At 1207 the State Emergency Response Team requested clarification from the Department of Health and Environmental Control concerning the potassium iodide memorandum. A simulated siren activation and the second Emergency Alert System message were sent without clarification of the potassium iodide memorandum at 1205 and 1208 respectively. At 1214 a second potassium iodide memorandum was received from the Department of Health and Environmental Control. This memorandum recommended that the general public and emergency workers in evacuated zones ingest potassium iodide. Press release #5 was issued at 1228 which informed the public of the decision for individuals in the evacuation zones to ingest potassium iodide. The potassium iodide decision was not clearly delineated to the

counties. Oconee County understood the decision was for the general public and emergency workers to ingest potassium iodide while Pickens County only had emergency workers ingest potassium iodide.

Another confusing aspect of the potassium iodide recommendation was the verbiage used throughout the memorandum. In some instances, the word "administer" was used in regards to potassium iodide, while in another sentence the word "release" was used. The South Carolina Department of Health and Environmental Control in the state emergency operations center responsible for the protective action decision used the terms "ingest or take" interchangeably. There was very little clarity in the state emergency operations center, which could lead to confusion for the general public regarding the ingestion of potassium iodide. After a second potassium iodide memorandum was transmitted from South Carolina Department of Health and Environmental Control to the South Carolina State Emergency Operations Center for action, the urgency to release the information to the joint information system for public distribution left the team failing to conduct any coordination with the risk counties to ensure awareness of the decision and issuance of appropriate orders per plans and procedures.

**Reference:**

1. State of South Carolina, Operational Radiological Emergency Response Plan, Annex 6 (Radiological Exposure Control), part V. (Radiological Exposure Control for the Public), subpart D. page 6-6 (Thyroid Blocking Agents)
2. Radiological Emergency Preparedness Program Manual, Part III (REP Program Demonstration Guidance), Subpart C. (Exercise Demonstration), Assessment Area 2 (Precautionary and Protective Action Decision Making), Assessment Area 3 (Protective Action Implementation)

**Effect:** The South Carolina Department of Health and Environmental Control potassium iodide decision process led to issues with: the General Emergency protective action decision making process; the ability to coordinate with the risk counties on the decision to ingest potassium iodide; and the ability to provide prompt information to the general public on the protective action decision to ingest potassium iodide.

**Recommendation(s):** The following recommendations are provided:

1. Review and revise plans as necessary to clearly delineate the responsible authority for making the protective action decision for the ingestion of potassium iodide.
2. Draft and approve a clear and concise pre-scripted message from the public health official articulating the protective action decision or recommendation for the ingestion of potassium iodide.

- a. Have the clear and concise protective action decision for ingestion of potassium iodide in the first paragraph of the memo. The current memo format contains the decision in the last paragraph.
  - b. The protective action decision memorandum should be no more than one paragraph and clearly state the specific decision or recommendation.
  - c. The sections of the current South Carolina Department of Health and Environmental Control memorandum including: Background, Indications, Assessment, and Public Health Recommendations may provide too much information in a simple protective action decision memorandum. Additional information would be available on the website for the public to view.
3. Decide on a single set of verbiage to articulate the ingestion of potassium iodide for both emergency workers and the general public. Having multiple words that could potentially mean the same thing could cause confusion: i.e., ingest vs issue, release vs administer, take vs ingest.
- a. If a citizen is evacuating, does “take” mean they take their potassium iodide with them when they leave or does it infer a different meaning?
  - b. What does “release” mean to a citizen?
  - c. “Administer” is a common term in the health care world, but may not be a common term to the general public.
4. The State Emergency Response Team must discuss all protective action decisions with the counties, including the decision to ingest potassium iodide, and then disseminate the signed order per the plan.
- a. If there is a wind shift, and additional zones are added to the original evacuation order, then the South Carolina Department of Health and Environmental Control shall make an additional potassium iodide decision to add in the additional zones. This decision should be discussed on the Duke Emergency Management Network line with State Emergency Response Team and the risk counties. This will also have to be promulgated via press releases and press briefing(s) to ensure the information is disseminated to the general public.
- c. **Not Demonstrated:** None
- d. **Prior Level 2 Findings – Resolved:** None
- e. **Prior Level 2 Findings - Unresolved:** None

**Environmental Response, Health, and Safety Core Capability Summary:**

**Field Monitoring Teams:** The South Carolina Department of Health and Environmental Control staffed two field monitoring teams: Bravo and Charlie. The two field monitoring teams successfully demonstrated procedures to take field radiation measurements and collect air samples that were used to calculate projected doses and make protective action recommendations.

Team members were repositioned and responded to the Mobile Operations Center located at the National Guard Armory in Clemson, South Carolina.

The teams had proper equipment to measure ambient radiation levels, and to collect and analyze particulate and radioiodine air samples. The two teams also had proper supporting equipment including vehicles, personal protective equipment, dosimetry, sample packaging supplies, maps and current procedures. Although the team had suitable radiation survey equipment, the ionization chamber survey meter was bagged with an opening cut above the beta shield. The ionization chamber survey meter has an air-filled chamber and radioactive air can enter the detector chamber if it is not bagged tightly.

Portable radios, cellular telephones and satellite telephones were successfully used to communicate with the Mobile Operations Center and the Field Monitoring Team Director. No communication difficulties were observed.

All team members were provided appropriate electronic and permanent record dosimetry. Team members read their dosimetry at twenty-minute intervals. Their radiation exposure was managed and tracked by the site safety officer in the mobile operations center. They had sufficient potassium iodide tablets for team members and simulated swallowing the potassium iodide when instructed to do so. Ingestion of potassium iodide was promptly reported to the mobile operations center to document on dose tracking records. By interview, team members explained radiation exposure limits and how potassium iodide was used to reduce radiation dose to the thyroid.

Field monitoring teams Bravo and Charlie were given assignments to monitor radiation levels at specific locations downwind of Oconee Nuclear Station. Teams used radiation survey instruments to locate the radioactive plume. They took radiation measurements at approximately six inches and four feet above the ground to determine if they were in the plume and had located an appropriate place to collect an air sample. The teams took particulate and iodine air samples, as directed by the field monitoring team director.

Procedures did not require teams to record air sample collection start and end times on the sample control form. Laboratory staff need this information for sample analysis. Procedures should be modified to ensure the sample collection time information was recorded. Teams moved to suitable low-background locations to determine if any significant amounts of radioactivity was collected on the sampling media. Teams promptly reported the results for use in calculating dose projections. The field



monitoring teams transferred the samples to relay teams for transport to the mobile laboratory.

For this capability, the following radiological emergency preparedness criterion were met: 1.a.1, 1.d.1, 1.e.1, 3.a.1, 4.a.3

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

#### **Mobile Operations Center**

Personnel from the South Carolina Department of Health and Environmental Control demonstrated the ability to provide guidance and direction for field team monitoring during a simulated radiological release at the Oconee Nuclear Station.

The mobile operations center personnel received telephone and email messages alerting them to report to the facility with supplies and equipment necessary to support field team activities. Personnel and equipment were prepositioned in accordance with the extent of play agreement and were sufficient to support operations.

The operations coordinator, field director, and safety officer ensured all personnel had proper dosimetry and potassium iodide for exposure monitoring and control. The mobile operations team tracked the field teams' dosimetry results and ingestion of potassium iodide. The field director and coordinator closely monitored the field teams' dosimetry results and directed them to areas to reduce their exposure.

The field director used data from the utility field teams, emergency notification forms, and the state dose assessment team to direct the field teams to locations to monitor the radiological release. The field director properly analyzed field team survey results to direct the field teams to take additional radiological surveys and an air sample. The field director ensured the samples were transported to the mobile laboratory for expedited analysis to support dose assessment and for analyzing the radiological release.

For this capability, the following radiological emergency preparedness criterion were met: 1.a.1, 1.d.1, 1.e.1, 2.a.1, 3.a.1, 4.a.2

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

**d. Prior Level 2 Findings – Resolved:** 12-16-3.a.1-L.2-02

**Condition:** Radiation dose tracking for emergency workers at the South Carolina mobile operations center was not effectively managed. Group dosimetry was used, however, individuals were not issued individual permanent record dosimeters. Field team relays were not issued potassium iodide prior to deploying into the field. There was no programmatic method to track emergency worker ingestion of potassium iodide.

**Resolution:** Department of Health and Environmental Control personnel used a computer system to track the issuance of all dosimetry and potassium iodide. When field teams reported dosimetry results and when they notified the Mobile Operations Center that they had ingested potassium iodide the results and times were logged in the computer system. All personnel including relay team members were issued direct-reading dosimeters, permanent-record dosimeters, and potassium iodide. Although the location was outside of the 10-mile emergency planning zone a direct-reading dosimeter and permanent-record dosimeter were positioned in the facility and the safety officer monitored the readings.

**e. Prior Level 2 Findings - Unresolved:** None

**Public Information and Warning Capability Summary:** South Carolina Emergency Management Division staff played a key role in quickly alerting and notifying the public of emergency instructions. The primary alert and notification method consisted of sirens and the Emergency Alert System. Sirens were activated locally by the risk counties, and Emergency Alert System messages were generated and provided to media by the South Carolina Emergency Management Division Chief of Public Information and External Affairs.

The State Emergency Response Team Technical Operations Lead facilitated public alerting by coordinating a time and countdown for simultaneous siren system activation with the risk counties. The South Carolina Emergency Management Division Chief of Public Information and External Affairs generated Emergency Alert System messages following protective action decisions and sent them to the local primary radio station to be broadcasted three minutes after siren activations. The messages accurately reflected the protective decisions for evacuations but did not include protective actions for potassium iodide. The South Carolina Emergency Management Division Chief of Public Information and External Affairs coordinated closely with the local primary radio station engineer to ensure messages were received and broadcasted as instructed. If the station engineer was not available, messages could have been broadcasted directly from the state emergency operations center using the integrated public alert and warning system.

For this capability, the following radiological emergency preparedness criterion were met: 5.a.1.

**a. Level 1 Finding:** None

- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Level 2 Findings – Resolved:** None
- e. **Prior Level 2 Findings - Unresolved:** None

### **Joint Information System**

**Public Information and Warning Capability Summary:** The joint information system was comprised of public information officers located in the local joint information center in Pickens County, and the state joint information center in Columbia, South Carolina. The risk counties were represented in the local joint information center.

The public information officers and their support staff from the offsite response organizations demonstrated the ability to provide information to the public. Most emergency public information was clear, accurate, and consistent with coordinated decisions. However, some press releases contained inaccurate or incomplete information concerning protective actions.

The joint information system was activated in accordance with established procedures following the Alert emergency classification level declaration. The facilities adequately provided the public information officers operational space, communications, and internet information sharing capabilities. Necessary office equipment, maps, displays, and supplies were available to support emergency operations for extended periods (if required). All systems were sufficient to support the response and operated without failure during the exercise.

Interaction, cooperation, and coordination among onsite and offsite response organizations was observed in developing news releases and conducting press conferences. Public inquiry hotlines were established by the offsite response organizations at their respective locations. Rumors and trends were identified and discussed among the public information officers and dispelled at press conferences.

For this capability, the following radiological emergency preparedness criterion were met: 1.a.1, 1.d.1, and 1.e.1

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** 42-18-5.b.1-L.2-02

**Criterion:** Public Information and Warning, Emergency Notification and Public Information, 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 urgency and without undue delay) (Criterion

5b1).

**Condition:** The capability to provide accurate and verified public messaging, as demonstrated, was challenged.

**Possible Causes:** The possible causes to this issue include but are not limited to:

1. Version control for news releases was non-existent. News releases were circulated in "draft" form on official South Carolina Emergency Management Division news release letterhead and contained a news release number, but the printed copy of the news release did not indicate that the copy was a draft copy.
2. Confusing language in the public health order and protective action recommendations.

**Analysis:** The protective action decision made at 1147 was to evacuate zones A0, A1, A2, E1, F1 and F2. The decision did not include any zones for shelter in place. The sirens were sounded at 1205 and an EAS message was broadcast at 1208. Shortly after noon news release number 4 was posted in the South Carolina Joint Information Center, indicating release to the media and was also given to the public inquiry staff. The subject line stated "Some Residents to Evacuate; Others Should Remain Indoors." This release listed the evacuation routes for 12 emergency planning zones [A-0; A-1; A-2; B-1; B-2; C-1; C-2 Central; C-2 Clemson; E-1; E-2; F-1 and F-2] as the zones to be evacuated. The news release also stated that "residents in the following areas are advised to take shelter indoors and remain there until further notice" and listed zones A-0; A-1; A-2; B-1; B-2; C-1; C-2 Central; C-2 Clemson; E-1; E-2; F-1 and F-2, plus D-1 and D-2. While one may assume that given the content of the news release the news release was a draft, the news release did not contain any information that stated it was a draft and not one released to the media and the public, as indicated by being posted in the SC JIC and the public inquiry area.

The protective action decision, however, was to evacuate zones A-0; A-1; E-1; F-1; A-2 and F-2. At the time the news release was posted in the state joint information center and provided to the Public Information Phone System operators, emergency planning zones B-1 and B-2 had not been ordered to evacuate.

A revised version of news release number 4, time stamped 12:08 p.m., and with the same subject line, "Some Residents to Evacuate; Others Should Remain Indoors", was distributed among the county emergency operation centers. This version contained the correct list of the six emergency planning zones to be evacuated and contained no language about sheltering in place.

The subject heading on news release number 5 [“Residents Near Oconee Nuclear Station Should Ingest Potassium Iodide”] instructed residents of the six emergency planning zones ordered to evacuate to ingest potassium iodide. The news release, time stamped at 12:28 p.m., also listed the aforementioned emergency planning zones.

The initial memo from South Carolina Department of Health and Environmental Control did not clearly designate who was to ingest/take/administer/release potassium iodide. It was not identified if the intent of the recommendation was for all residents in the 10-mile emergency planning zone, or only for residents in the evacuating zones. This caused further confusion and necessary clarification, which further delayed the decision. Another confusing aspect of the potassium iodide recommendation was the verbiage used throughout the memo. In some instances, the word “administer” was used in regards to potassium iodide, while in another sentence the word “release” was used. The South Carolina Department of Health and Environmental Control in the emergency operations center responsible for the protective action decision used the terms “ingest or take” interchangeably. After a second potassium iodide memo was transmitted from South Carolina Department of Health and Environmental Control to the South Carolina Emergency Operations Center for action, the urgency to get the information to the joint information system for release to the public left the team failing to conduct proper coordination.

News release number 6, “Additional Residents Near Oconee Nuclear Station Must Evacuate”, time stamped at 1:18 p.m., stated that residents of two additional emergency planning zones, B-1 and B-2, were to evacuate; however, no mention was made of potassium iodide ingestion for those evacuees. This news release also included emergency planning zone C-2 as an evacuated zone. This zone was never included in any protective action decision. Clemson University had instructed its students and staff to evacuate the campus as a precautionary action, but this action was never included in a protective action. Further, no mention was made in Emergency Alert System messages in regards to the ingestion of potassium iodide for the two added emergency planning zones.

Although draft news releases were sent by email they were attached as a Word Document. Copies of draft news releases were printed at the county emergency operations centers for review and approval. These drafts did not contain any markings which would tell a reader that they were drafts. All drafts had a control number, release number, and time of release filled in at the top of each copy. This information could lead anyone reading the news release to believe that they were reading the approved version. An example of this was the four different versions of news release #5 that were printed out at a county emergency operations center. All four had a control number, release number, and date and time of release on the top of the news release. The documents did not have any markings or statement that would have indicated the releases were drafts.

**Effect(s):** No specific language directed to the evacuees of the two additional emergency planning zones concerning ingesting potassium iodide could lead to confusion, which could potentially adversely impact public health and safety.

If copies of draft news releases were not properly controlled by public information personnel, incorrect protective action information could be disseminated to the general public. This contradictory protective action information could lead to confusion or lack of credibility with the media and the general public. One draft news release was posted on the board in the State Emergency Operations Center for distribution and viewing by the press and rumor control personnel.

A previously evacuated zone (Zone A-2 in emergency alert system message #2 and news release #4) was not included in a subsequent news release (#6) even though it was included in emergency alert system messages (#2 and #3). The change in status for this zone was not discussed during press briefings. This zone had previously been instructed to evacuate and ingest potassium iodide. Residents in this zone would be confused as to what, if any, protective actions they should take.

Residents in Zone C-2 would have read the news release and evacuated when there was no reason for them to evacuate. Zone C-2; was not included in any emergency alert system messages, was not included in any protective action decision, and was not discussed during any press briefings. The evacuation of Clemson University was discussed but not the evacuation of residents in Zone C-2.

The Public Information Phone System operators were given information that was contradictory to information sent to the counties, and presumably to the mass media. One potential result could be residents receiving conflicting information from the mass media versus the Public Information Phone System telephone number. This could lead to indecision of residents, potentially endangering the health and safety of the public.

**Reference:**

1. NUREG-0654 E.5, 7; G.3.a, G.4.a,b,c
2. Radiological Emergency Preparedness Manual, January 2016, 5.b.1
3. South Carolina Operational Radiological Emergency Response Plan, Annex 3, Concept of Operations D.1
4. SC Exercise News Release Number 4 issued at 12:08 [Some Residents to Evacuate; Others Should Remain Indoors]
5. Emergency Alert System (EAS) Message number 2 issued at 12:08
6. SC Exercise News Release Number 5 issued at 12:28 [Residents Near Oconee Nuclear Station Should Ingest Potassium Iodide]
7. SC Exercise News Release Number 6 issued at 13:18 [Additional Residents Near Oconee Nuclear Station Must Evacuate]

**Recommendation(s):**

- Ensure “draft” news releases distributed for review clearly state somewhere on the news release that they are draft – either as a header and footer or a watermark.
- When relying on pre-scripted news releases, closer attention to detail must be followed to ensure the message is correctly modified to reflect the protective action decision prior to its release.
- Edits and approval of news releases should be done in writing (either by initial on a paper copy or by email) in order to document edits and approvals.
- Include previous protective actions that are still in effect with any new protective action decisions.

c. **Not Demonstrated:** None

d. **Prior Level 2 Findings – Resolved:** None

e. **Prior Level 2 Findings - Unresolved:** None

**Emergency Operations Facility****Operational Coordination Capability Summary:**

The South Carolina Emergency Management Division and the South Carolina Department of Health and Environmental Control provided liaisons to the Duke Energy corporate Emergency Operations Facility in Charlotte, North Carolina. The presence of these liaisons provided for the essential flow of information between Duke Energy and the decisions makers of the respective response organizations operating in the State and risk county emergency operations centers. The liaisons followed applicable procedures and performed their respective duties in an efficient and professional manner, thereby ensuring that state and county decision makers were kept up to date with accurate and timely information.

The liaisons worked closely with Duke Energy personnel in the emergency operations facility to obtain the current plant conditions at the Oconee Nuclear Station and to provide that information in a timely manner to the state emergency operations center. The respective liaisons also effectively facilitated the flow of information to various queries and requests between the utility, state, and county agencies. For example, the South Carolina Emergency Management Division liaisons provided prompt information to Duke Energy personnel in the emergency operations facility regarding roadway conditions. This information included the occurrence of a simulated hazardous materials transportation accident on a primary evacuation route that had the potential to impact the evacuation of non-essential site personnel and the general public from that portion of the emergency planning zone.

The South Carolina Department of Health and Environmental Control liaison knowledgeably interacted with utility dose assessment personnel. He ensured information; including plant conditions, radiological monitoring, and the results of dose modeling, was communicated to the state dose assessment staff operating at the state emergency operations center. The South Carolina Department of Health and Environmental Control liaison also communicated information that allowed for the coordinated command and control of state and utility field teams.

For this capability, the following radiological emergency preparedness criteria was met: 2.b.1.

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

#### **Waterway Clearance**

**On Scene Security, Protection, and Law Enforcement Core Capability Summary:** Representatives from the South Carolina Department of Natural Resources and the Clemson Police Department discussed their procedures and coordination protocols for clearing Lake Keowee following an incident at the Oconee Nuclear Station. All officers demonstrated their familiarity and knowledge of the plans, as well as the resources that would be required to clear the lake under a variety of circumstances. The officers discussed the issuance of appropriate exposure control equipment, and they were prepared to provide just in time training to those responding. All responding departments had access to interoperable communications and could coordinate operations on a common channel. The South Carolina Department of Natural Resources had the responsibility for directing the operation and would provide assignments to other responders depending on lake conditions and population.

For this capability, the following radiological emergency preparedness criterion were met: 1.a.1, 1.d.1, 1.e.1, 3.a.1, 3.d.1

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



**EAS/LP-1**

**Public Information and Warning Capability Summary:** Representatives of WFPC radio station were able to receive information from the state and risk counties and broadcast an Emergency Alert System message in response to a simulated radiological emergency at the Oconee Nuclear Station. The demonstration was conducted in conjunction with a monthly siren test. WFPC was the local primary one radio station for Oconee and Pickens Counties. The radio station's director of technical operations participated in a countdown for siren activation and received notification of siren activation by the Pickens County Emergency Management Director. The test Emergency Alert System message was recorded live and lasted approximately one minute and eleven seconds. The message automatically repeated itself every 15 minutes and was successfully decoded for visual notification in both English and Spanish via the local television station. The director demonstrated a wealth of knowledge from years of practical experience and had trained engineers in the process for conducting alert and notification activities.

For this capability, the following radiological emergency preparedness criteria was met: 5.a.1.

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

**3.3.1.2 Oconee County**

**Operational Coordination Capability Summary:** The command group and staff of the Oconee County Emergency Operations Center successfully demonstrated their ability to establish and maintain a unified and coordinated operational structure and process that appropriately integrated all critical stakeholders. The county emergency management staff successfully alerted, notified and mobilized key emergency support functions and command group staff in a timely manner utilizing an electronic notification system. The emergency operations center was well equipped with computer systems, software, supplies, displays and dosimetry to support emergency response activities. Primary and secondary communications were available and functioned without issue.

The county director and staff demonstrated a coordinated leadership approach in order to manage the emergency response. The director coordinated local response actions with the county administrator, who was present throughout the demonstration. The director also coordinated all protective action decisions with the South Carolina Emergency Management Division, Pickens County, and Anderson County. The operations chief

received critical emergency decisions from the director and held frequent briefings with the emergency operations center staff in order to implement emergency protective actions and maintain the staff's situational awareness. Emergency support functions within the emergency operations center discussed plans and processes concerning persons with disabilities. No schools were in session during the exercise. Traffic and access control and impediments to evacuation were discussed and implemented within the scope of the demonstration. All personnel were sufficiently trained and used plans, procedures, and coordinated efforts to support responding to a radiological emergency at the Oconee Nuclear Station.

For this capability, the following radiological emergency preparedness criterion 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.c.2, 3.d.1, and 3.d.2.

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

**Public Information and Warning Capability Summary:** The Oconee County Emergency Operations Center, public information staff successfully demonstrated the capability to conduct primary alerting and notification of the public and provide accurate emergency information and instructions to the public and the news media in a timely manner.

The Oconee County Radiation Safety Officer successfully demonstrated primary alerting of the public during a silent test of the Oconee County siren system. A real-world siren communication failure occurred during the demonstration, but was resolved through coordination with the utility resulting in successful activation in the system. Oconee County personnel demonstrated initiation of trouble shooting protocol to ensure the siren system functioned as designed during the silent test. Three alert and notification sequences were conducted. Emergency Alert System messages were selected and coordinated by participants using the decision line. Emergency Alert System messages were sent to the local primary radio station by the State.

Waterway warning of Lake Keowee was successfully coordinated between the South Carolina Department of Natural Resources representative in Oconee County and Oconee County Emergency Services personnel. Additionally, warning of High Falls Campground was sufficiently discussed through coordination with the county administrator and a representative of Oconee County Parks and Recreation. It was confirmed through interview that emergency information was provided to all personnel, to include transients in the location, in the form of fliers and signage near boat landings.

Pre-scripted and recently updated news releases were used for timely news release production. Information coordination, final version authorization, and distribution procedures were closely followed by the public information staff as part of a joint information system. The County Public Information Officer team produced four news releases.

For this capability, the following radiological emergency preparedness criterion 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 Level 2 Findings – Resolved:** None
- e. **Prior Level 2 Findings - Unresolved:** None

**Critical Transportation Capability Summary:** Oconee County School District staff discussed their ability to implement protective actions for the students and staff of James M. Brown Elementary School and Ravenel Elementary School, which are located within the 10-mile emergency planning zone of Oconee Nuclear Station. An interview was conducted with the district's director of transportation, a school bus driver, and the principals of each school. During the interview, school officials discussed actions they would take based on a variety of protective action decisions. They were well versed with their plans and procedures and protective actions were well defined. There were sufficient transportation assets available to relocate students and faculty. Appropriate capabilities for notifying parents and redundant methods of maintaining accountability of students were discussed. During the interview, there were no identified gaps in personnel or resources needed to implement their plans. Additional resources were identified if the need arose.

For this capability the following radiological emergency preparedness criterion was met: 3.c.2.

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

#### **Emergency Worker Decontamination**

**Environmental Response/Health and Safety Capability Summary:** The Oconee

County Hazardous Materials Team demonstrated their ability to perform radiological monitoring and decontamination of emergency workers and their vehicles. Team members were familiar with their duties and worked well together to accomplish the mission.

A detailed safety briefing was provided to facility staff that gave an overview of the operation and safety considerations. The emergency worker decontamination facility used a color coded system for identifying the three stations set up to support operations. The first station had blue labels and consisted of initial vehicle washing, decontamination and monitoring. The second station had green labels and consisted of secondary vehicle monitoring and personnel radiation monitoring. The personnel decontamination showering tent and secondary personnel monitoring station had red labels. This color coding allowed workers to ensure proper materials and equipment were supplied to the correct locations.

Appropriate exposure control equipment, personal protective equipment, survey meters, and supplies were issued. The teams at each station demonstrated that they were familiar with their roles and responsibilities. Each station had signs posted detailing the procedures to assist facility workers with their duties. Some of the posted procedures were unclear, however staff were able to seek clarifications when needed. Exposure monitoring and recording was conducted at regular intervals, and workers were knowledgeable of their limits.

The staff who were responsible for monitoring vehicles, personnel, and equipment were familiar with the survey meters and used them effectively. They performed operational checks in accordance with procedures and determined a background reading before monitoring operations began. All vehicles were washed as they entered the facility using a high-pressure water system and a portal monitor with a vehicle kit was used for initial vehicle monitoring.

For this capability, the following radiological emergency preparedness criterion were met: 1.e.1, 3.a.1, and 6.b.1.

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

### 3.3.1.3 Pickens County

**Operational Coordination Capability Summary:** Pickens County emergency management officials successfully demonstrated the ability to respond to a radiological emergency at the Oconee Nuclear Station and to protect the safety of emergency workers and the general population. The emergency management director demonstrated an automated electronic notification method to alert the emergency operations center staff to respond in a timely manner. The director and deputy director proceeded to effectively gather emergency information and analyze it, and then make appropriate decisions throughout the exercise. Periodic briefings kept the staff informed of emergency conditions and plant status, and the staff periodically briefed the status of their actions to maintain effective internal coordination. The Clemson University liaison kept the director and deputy director informed of protective actions being taken at the university.

The emergency operations center had multiple communication systems to include computer internet access, electronic mail, commercial land lines, cell phones, and other hand-held electronic devices. Backup communications also included facsimile machines, 800 megahertz radios, and amateur radio systems. Status calls and discussions among the risk counties and state concerning protective actions were coordinated using dedicated notification and conference lines. Sufficient equipment and supplies were available for extended operations as required.

Agency representatives were knowledgeable of appropriate dosimetry, potassium iodide, and procedures to ensure radiological exposure control for emergency workers. The staff performed effective planning to evacuate persons identified with access/functional needs, and to evacuate school children and staff to safety. Law enforcement representatives provided details on traffic control points, clearing impediments, and the county's role in waterway warning on Lake Keowee. Staff members were knowledgeable and effectively used checklists from county plans to protect the health and safety of the public and emergency workers. County leadership was only aware of potassium iodide ingestion by emergency workers, and not the general population, during the exercise.

For this capability, the following radiological emergency preparedness criterion 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.c.2, 3.d.1, and 3.d.2.

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

**Public Information and Warning Capability Summary:** The Pickens County Emergency Operations Center public information staff demonstrated the capability to properly activate sirens and provide public information for the emergency planning zone.

The emergency management director successfully demonstrated sounding the sirens (simulated) on three occasions. Backup alert and notification of the public was demonstrated through an interview with a senior representative from the county rescue squad. Emergency workers who would perform the tasks would be equipped with dosimetry, potassium iodide, location maps, and provided a situation briefing. The process and plans were determined to be a viable alternative method to notify affected areas of the Pickens County emergency planning zone.

Issuance of accurate emergency information and instructions for the public and the news media was demonstrated. A total of five news releases were issued in a timely manner and contained all required information. Rumor control was performed at the Pickens County emergency operations center. Twenty-four calls were fielded which answered various inquiries from residents and the local media. Trends were tracked and public information personnel informed of the rumors.

For this capability, the following radiological emergency preparedness criterion 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 Level 2 Findings – Resolved:** None
- e. **Prior Level 2 Findings - Unresolved:** None

**Critical Transportation Capability Summary:** Personnel from the school district discussed their ability to implement protective actions for the students and staff of A.R. Lewis Elementary School and Daniel High School. During the interview, school officials discussed actions they would take based on a variety of protective action decisions. They were well versed with their plans and procedures and protective actions were well defined. There were sufficient transportation assets available to relocate the students and staff. Appropriate capabilities for notifying parents and methods for maintaining accountability of students were discussed. There were no gaps in personnel or resources needed to implement their plans that were identified during the interview.

For this capability the following radiological emergency preparedness criteria was met: 3.c.2.

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

- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Level 2 Findings – Resolved:** None
- e. **Prior Level 2 Findings - Unresolved:** None

**On-Scene Security and Protection Capability Summary:** The Pickens County Emergency Operations Center and the South Carolina Department of Natural Resources had ample supplies, response equipment, communications equipment and dosimetry to support waterway warning and lake clearing response activities in a timely manner. Department of Natural Resources officers coordinate waterway warning operations with the Pickens County Sheriff's deputies.

Department of Natural Resources officers successfully demonstrated their ability to coordinate and manage waterway warning and lake clearing response through interview. The officers stated there were a minimum of six boats and nine officers available to perform lake clearing activities. The officers were knowledgeable of the lake and instructions to provide boaters to warn them to leave the area. Primary means of communications was cell phone or marine radio depending on location backed up by agency cell phone, email, and landline phones.

Emergency worker exposure control for the South Carolina Department of Natural Resources personnel was discussed at the Pickens County Emergency Operations Center. Dosimetry and potassium iodide and appropriate instructions were available for emergency workers. The officer was familiar with exposure control turn back values, dosimetry, potassium iodide usage, and records for emergency workers.

For this capability the following radiological emergency preparedness criteria were met: 1.e.1, 3.a.1, 3.d.1.

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

#### **Traffic Control Points**

The South Carolina Highway Patrol demonstrated the ability to issue appropriate dosimetry, potassium iodide, manage radiological exposure to highway patrol officers, establish traffic control points, and identify and resolve impediments to evacuation in response to an incident at the Oconee Nuclear Station. The capability was determined by

interview at the Pickens County Emergency Operations Center with a South Carolina Highway Patrol law enforcement officer.

The officer was equipped with appropriate equipment, maps, and other supplies sufficient to support operations, to include informational materials needed to safely and expediently establish the traffic control points. Management of exposure to emergency workers was described through radiological safety briefings and issuance of dosimetry and potassium iodide. He demonstrated the ability to complete appropriate exposure record forms and proper routing of completed documentation. The ability to rapidly identify and clear impediments to the flow of traffic was also discussed.

For this capability, the following radiological emergency preparedness criterion were met: 3.d.1 and 3.d.2

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

#### **Emergency Worker Decontamination**

**Environmental Response/Health and Safety Capability Summary:** The Pickens County Hazardous Materials Team demonstrated their ability to perform radiological monitoring and decontamination of emergency workers and their vehicles. Team members were familiar with their duties and worked well together to accomplish the mission.

The dedicated emergency worker decontamination facility lay out was organized and well thought out. A detailed safety briefing was provided to facility staff that gave an overview of the operation and safety considerations. Appropriate exposure control equipment, personal protective equipment, survey meters, and supplies were issued. Four stations were set up to support operations. The teams at each station were familiar with their roles and responsibilities. Each station had signs posted detailing the proper procedures to assist facility workers with their duties. The safety officer reminded staff to monitor exposure control equipment at regular intervals and he recorded their results.

The staff who were responsible for monitoring vehicles, personnel, and equipment were familiar with the survey meters and used them effectively. They performed operational checks in accordance with procedures and determined a background reading before monitoring operations began. The survey meter operators used proper techniques throughout the monitoring process and were able to interpret the meter face and explain the scales. The staff responsible for decontamination used effective methods for



removing contamination. Vehicles and equipment were scrubbed with brushes using soap and water. Personnel were provided thorough instructions about how to best remove contamination while showering.

For this capability, the following radiological emergency preparedness criterion were met: 1.e.1, 3.a.1, and 6.b.1.

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

#### 3.3.1.4 Anderson County

**Environmental Response/Health and Safety Capability Summary:** The Anderson County Hazardous Materials Team and many other supporting agencies demonstrated their ability to provide monitoring, decontamination, and registration of evacuees prior to entry into the mass care shelter located at TL Hannah High School. Vehicles entering the facility were quickly sorted into parking areas based on their occupants' contamination levels. Evacuees exiting the vehicles were properly monitored for contamination and decontaminated if necessary.

All staff at this facility took great care to ensure evacuees were free of contamination while also taking appropriate steps to minimize cross contamination. There were signs, tape, and barricades located throughout the facility to assist with the organized flow of evacuees. All survey meters had been calibrated and were operationally checked prior to use. Emergency workers were knowledgeable of exposure control equipment and knew their administrative limits. During the exercise the workers were reminded via radios to periodically check their dosimeters and report the readings to the safety officer.

The reception center facility had appropriate space, adequate resources, and enough trained personnel to successfully accomplish this mission. There was a tremendous turnout of support by county agencies and volunteers for this exercise.

For this capability, the following radiological emergency preparedness criterion were met: 1.d.1, 1.e.1, 3.a.1, and 6.a.1.

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

**d. Prior Level 2 Findings – Resolved:** None

**e. Prior Level 2 Findings - Unresolved:** None

**Mass Care Capability Summary:** Anderson County Emergency Management, Anderson-Oconee-Pickens Department of Mental Health, South Carolina Department of Health and Environmental Control, South Carolina Department of Social Services, and South Carolina Public Health Reserve Corps, and American Red Cross personnel demonstrated the capability to provide life-sustaining services to populations affected by an incident at the Oconee Nuclear Station. Hydration, feeding, sheltering, and supporting reunification efforts were the focus of the operations for the congregate care facility at TL Hanna High School.

South Carolina Department of Health and Environmental Control staff members demonstrated the distribution of potassium iodide to evacuees. Appropriate instructions and dosages were given to evacuees. Sufficient quantities of potassium iodide were stored at the local health department and would be brought to the reception and congregate care center following an emergency at the Oconee Nuclear Station. Additional quantities of potassium iodide were stored in other county health departments and at the regional office should supplementary amounts be needed.

American Red Cross personnel demonstrated the ability to provide services and accommodations for evacuees at the TL Hanna High School shelter. American Red Cross staff members verified that evacuees had been monitored for contamination and, if necessary, had been decontaminated before entering the facility. Meals and health services would be provided at the shelter, as well as the opportunity for evacuees to provide personal contact information for the American Red Cross “Safe and Well” website to aid reunification efforts.

For this capability, the following radiological emergency preparedness criterion were met: 1.e.1, 3.b.1, and 6.c.1.

**a. Level 1 Finding:** None

**b. Level 2 Finding:** None

**c. Not Demonstrated:** None

**d. Prior Level 2 Findings – Resolved:** None

**e. Prior Level 2 Findings - Unresolved:** None

### 3.3.1.5 Greenville County

**Environmental Response/Health and Safety Capability Summary:** Wade Hampton Fire Department and Greenville County Sheriff's Office personnel demonstrated the monitoring and decontamination procedures of vehicles and evacuees at the Wade Hampton High School reception and congregate care center during an out of sequence activity on June 21, 2018. The entire facility was set up and ready to receive evacuees, but incoming severe thunderstorms made outdoor activities unsafe for the exercise. All outside equipment was packed up and outdoor activities were thoroughly discussed but not demonstrated.

Personnel wore appropriate protective clothing, were familiar with dosimetry reading and recording requirements, and were knowledgeable of administrative dose limits. Workers properly used portal monitors and handheld survey instruments to detect radiological contamination and demonstrated appropriate decontamination procedures on evacuees. The survey meter operators used good techniques throughout the monitoring process and were able to interpret the meter face and explain the scales. They worked as a team to ensure procedures were followed and contaminated evacuees were processed appropriately. Workers provided excellent communication with the evacuees to explain the process and keep everyone as calm as possible.

Command staff discussed changes that could be made if inclement weather was present for a real event. The facility had sufficient space and options for layout changes if needed.

For this capability, the following radiological emergency preparedness criterion were met: 1.e.1, 3.a.1, and 6.a.1

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

**Mass Care Capability Summary:** Greenville County Emergency Management, South Carolina Department of Social Services, South Carolina Department of Health and Environmental Control, South Carolina Public Health Reserve Corps, and American Red Cross personnel demonstrated the capability to provide life-sustaining services to populations affected by an incident at the Oconee Nuclear Station. Hydration, feeding, sheltering, and supporting reunification efforts were the focus of the operations for the congregate care facility at Wade Hampton High School.

South Carolina Department of Health and Environmental Control staff members demonstrated the distribution of potassium iodide to evacuees. Appropriate instructions and dosages were given to evacuees. Sufficient quantities of potassium iodide were stored at the local health department and would be brought to the reception and congregate care center following an emergency at the Oconee Nuclear Station. Additional quantities of potassium iodide were stored in other county health departments and at the regional office should supplementary amounts be needed.

American Red Cross personnel demonstrated the ability to provide services and accommodations for evacuees at the Wade Hampton High School shelter. American Red Cross staff members verified that evacuees had been monitored for contamination and, if necessary, had been decontaminated before entering the facility. Meals and health services would be provided at the shelter, as well as the opportunity for evacuees to provide personal contact information for the American Red Cross Safe and Well web site to aid reunification efforts.

For this capability, the following radiological emergency preparedness criterion were met: 1.e.1, 3.b.1, and 6.c.1.

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

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#### **Section 4: Conclusion**

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 exercise objectives were met. The Federal Emergency Management Agency identified two level 2 findings. The first level 2 finding involved the protective action decision making process for potassium iodide at the state emergency operations center, and the second level 2 finding involved control of draft information and the accuracy of emergency public information from the joint information system.

The Federal Emergency Management Agency wishes 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 was evident throughout all phases of the exercise.

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**Appendix A: Exercise Timeline**

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken				
		SC-SEOC	SC DOSE ASSESSMENT	OCONEE COUNTY EOC	PICKENS COUNTY EOC	JIC/JIS
Unusual Event	NA	NA	NA	NA	NA	NA
Alert	0714	0726	0726	0724	0724	NA
Site Area Emergency	0913	0920	0920	0924	0917	0917
General Emergency	1111	1120	1120	1120	1120	1120
Simulated Rad. Release Started	1053	1120	1120	1120	1120	1120
Simulated Rad. Release Terminated		Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Facility Declared Operational		0750	0750	0810	0822	0825
Declaration of State of Emergency						
State		0950	0950	0950	0950	1030
Local		0950/0949	0950/0949	0950	0949	0950
Exercise Terminated		1414	1414	1414	1414	1414
Precautionary Actions:						
1 <sup>st</sup> Protective Action Decision: Stay tuned		0942	0942	0942	0942	0942
1 <sup>st</sup> Siren Activation		0950	0950	0950	0950	0950
1 <sup>st</sup> EAS Message		0953	0953	0953	0953	0953
2 <sup>nd</sup> Protective Action Decision: Evacuate: A0, A1, A2, E1, F1, F2		1147	1147	1147	1147	1147
2 <sup>nd</sup> Siren Activation		1205	1205	1205	1205	1205
2 <sup>nd</sup> EAS Message		1208	1208	1208	1208	1208
3 <sup>rd</sup> Protective Action Decision: Evacuate: Add B1, B2		1240	1240	1241	1242	1247
3 <sup>rd</sup> Siren Activation		1250	1250	1250	1250	1250
3 <sup>rd</sup> EAS Message		1253	1253	1253	1253	1253
KI Decision:						
Public		1214	1147	1200	Unknown	1228
Emergency Workers		1214	1147	1200	1203	1228



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

**Regional Assistance Committee Chair:** Randall Hecht

**Section Chiefs:** Lawrence Robertson/J.T. Ackermann

**Site Specialists:** Joe Harworth/Matthew Bradley

**Exercise Support:** Caitlin Bergstrom/Melonie McGuire-Johnson

Location	Evaluation Team	Capability & Activity
<b>Joint Operations</b>		
Local JIC	Elizabeth Adkins Roy Smith	Public Information & Warning
EOF	John Pelchat	Situational Assessment
LP-1 Radio Station (OOS 1000 July 11)	Quintin Ivy	Public Information & Warning
<b>State of South Carolina</b>		
Director: Mr. Kim Stenson		
SEOC / State JIC	Matt Bradley, Lorenzo Lewis, Andrew Seward, Thomas Hegele	Operational Coordination Public Information & Warning
Dose Assessment	Jill Leatherman	Situational Assessment
MOC	Joe Harworth	Environmental Response/Health & Safety
Mobile Radiological Laboratory	Keith Earnshaw	Environmental Response/Health & Safety (curtesy evaluation)
Field Monitoring Team 1	Marcy Campbell	Environmental Response/Health & Safety
Field Monitoring Team 2	David Stuenkel	Environmental Response/Health & Safety
<b>Risk Counties</b>		
<b>Oconee County</b>		
Director: Mr. Scott Krein		
EOC	Quintin Ivy, Deshun Lowry, PJ Neid	Operational Coordination Public Information & Warning

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Protective Actions for Schools (OOS 1000 Aug. 7 @ OC School District)	Matt Bradley	Critical Transportation
Waterway Clearance (OOS 1000 June 19 @ Oconee County EOC)	Matt Bradley	On Scene Security and Protection
EWD (OOS 1800 June 19 @ Oakway FD)	M. Bradley, G. Bryson, L. Lewis, W. Cushman, J. Harworth	Environmental Response/Health & Safety

**Pickens County**

Director: Ms. Denise Kwiatek

EOC	Mike Dolder, Gerald McLemore, Glenda Bryson	Operational Coordination Public Information & Warning On Scene Security and Protection
Protective Actions for Schools (OOS 1400 Aug. 7 @ Pickens County EOC)	Matt Bradley	Critical Transportation
EWD (OOS 1800 June 18 @ )	M. Bradley, G. Bryson, L. Lewis, W. Cushman, J. Harworth	Environmental Response/Health & Safety

**Host Counties**

Anderson County

Director: Mr. David Baker

Reception Center & Congregate Care (OOS 1800 June 20 @ TL Hannah High School)	M. Bradley, G. Bryson, L. Lewis, W. Cushman, J. Harworth	Environmental Response/Health and Safety Mass Care
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**Greenville County**

Director: Mr. Damon Hubber

Reception Center & Congregate Care (OOS 1800 June 21 @ Wade Hampton High School)	M. Bradley, G. Bryson, L. Lewis, W. Cushman	Environmental Response/Health and Safety Mass Care
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## Appendix C: Extent-of-Play Agreement

### Extent of Play Agreement

Oconee Nuclear Plant 2018 Full Participation  
Radiological Emergency Preparedness (REP) Exercise

Unless otherwise noted, all activities will be fully demonstrated in accordance with respective plans and procedures as they would be in an actual emergency. South Carolina Emergency Management Division (SCEMD) must provide these plans, guides and procedures to Federal Emergency Management Agency (FEMA) NLT 60 days before the exercise. If an activity 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). In some cases, a task may be listed as “demonstrate/discuss” to indicate that actions may be completed or discussed via interview as the scenario dictates. Any activity to be evaluated out-of-sequence (OOS), during staff assistance visits (SAVs), and/or by discussion will be clearly identified. 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.

<b>Offsite Response Organizations (ORO)</b>	<b>Page #</b>
<b>State of South Carolina</b>	<b>1</b>
State Emergency Operations Center (SEOC)	1
Dose Assessment	4
Mobile Operations Center (MOC)	5
Field Teams	8
Mobile Laboratory	10
Emergency Operations Facility (EOF) Liaisons	12
Waterway Clearance	12
Joint Information System (JIS)	14
Emergency Alert System (EAS)/LP-1	16
<b>Risk Counties (Oconee and Pickens Counties)</b>	<b>17</b>
Emergency Operations Center (EOC)	17
Schools	22
Traffic Control Points (TCPs)	23
Emergency Worker Decontamination (EWD)	25
<b>Host Counties (Anderson and Greenville Counties)</b>	<b>27</b>
Reception Center (RC)	27
Congregate Care (CC)	29

**STATE OF SOUTH CAROLINA**

**State Emergency Operations Center (SEOC)**

**Core Capability: Operational Coordination**

**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: 1.a.1. Alert, Notify, Mobilize

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).

South Carolina Emergency Management Division (SCEMD) will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident from the licensees; verify the notification; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The activation of facilities for immediate use by mobilized personnel upon their arrival.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty station but may be pre-positioned in the area prior to notification.**

Capability Target: 1.c.1. Direction and Control

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.2; C.4, 6).

State Emergency Response Team (SERT) members at the SEOC will demonstrate the following Critical Tasks:

- The ability to carry out the essential management functions of the response effort.
- The ability to prioritize resource tasking and replace/supplement resources.

**Exception: All coordination telephone calls should occur in accordance with plans and procedures; however, the simcell may substitute for non-participating agencies.**

Capability Target: 1.d.1. Communications Equipment

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).

SCEMD will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

SCEMD will demonstrate that the SEOC has sufficient equipment, maps and displays to perform the assigned role.

Capability Target: 2.b.2. Protective Action Decisions for the General Public

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 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 SERT will demonstrate the following Critical Tasks:

- The capability to make both initial and subsequent precautionary and/or protective action decisions in a timely manner appropriate to the incident.
- The capability to change protective actions based on the combination of the following factors: subsequent dose projections, field monitoring data, or information on plant conditions, magnitude of ongoing threat, the response, and/or site conditions.
- The capability to make decisions on the distribution and administration of KI to supplement sheltering and evacuation.
- The capability to communicate the results of decisions to all the affected locations.

Capability Target: 3.b.1. Implementation of KI Decision for Institutionalized and General Public

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).

ESF-8 (Public Health) will discuss the following Critical Tasks:

- The capability to make KI available to members of the general public.
- The capability to accomplish distribution of KI consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take it.

Capability Target: 3.d.1. Implementation of Traffic and Access Control

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).

ESF-16 (Traffic Management) will demonstrate/discuss the following Critical Tasks:

- The capability to select, establish, and staff appropriate traffic and access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner.
- The capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.

Capability Target: 3.d.2. Impediments to Evacuation and Traffic and Access Control. Impediments to evacuation are identified and resolved (NUREG-0654/FEMA-REP-1, J.10.k).

ESF-16 (Traffic Management) will demonstrate/discuss the capability to identify and take appropriate actions concerning impediments to evacuation, including re-routing of traffic and coordination with the JIS to communicate alternate routes to evacuees, as appropriate.

**Core Capability: Public Information and Warning**

**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: 5.a.1. Initial Activation of Prompt Alert and Notification System. 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).

The SERT will demonstrate the capability to coordinate siren activation followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume exposure pathway EPZ. The procedures to broadcast the message will be fully demonstrated as they would in an actual emergency up to the point of transmission.

**Dose Assessment**

**Core Capability: Situational Assessment**

**Definition:** Provide all decision-makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Capability Target: 1.a.1. Alert, Notify, Mobilize

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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty station but may be pre-positioned in the area prior to notification.**

Capability Target: 1.d.1. Communications Equipment

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).

SCDHEC will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

SCDHEC will demonstrate that they have sufficient equipment, maps and displays to perform the assigned role.

Capability Target: 2.b.1. Protective Action Recommendations (PARs)

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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to develop PARs for decision-makers based on available information and recommendations provided by the licensee, as well as field monitoring data if available.
- The capability to independently validate dose projections.
- The capability to use any additional data to refine projected doses and exposure rates and revise the associated PARs.



Capability Target: 2.b.2. Protective Action Decisions for the General Public

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).

SCDHEC will demonstrate the provision of additional PARs based on dose projections, field monitoring data, and information on plant conditions.

**Mobile Operations Center (MOC)**

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

**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: 1.a.1. Alert, Notify, Mobilize

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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel in the MOC will begin preparations at 0730. Evaluation of the MOC will begin at this time.**

Capability Target: 1.d.1. Communications Equipment

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).

SCDHEC will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

SCDHEC will demonstrate that the MOC has sufficient equipment, maps and displays to perform the assigned role.

Capability Target: 2.a.1. Emergency Worker (EW) Exposure Control

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 SCDHEC emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654/FEMA-REP-1, C.6; J.10e, f; K.3.a; K.4).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to comply with SCDHEC emergency worker exposure limits.
- The capability to make decisions concerning authorization of exposure levels in excess of pre-authorized levels and the number of SCDHEC emergency workers receiving radiation doses above pre-authorized levels.
- The capability to make decisions on the distribution and administration of KI as a protective measure for SCDHEC emergency workers based on the established PAGs for KI administration.

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control

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 for emergency workers is maintained (NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to provide SCDHEC emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, KI, and instructions on the use of these items.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to SCDHEC emergency workers consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take.

**Note: This is a re-demonstration to resolve a Level 2 finding issued during the 2016 Catawba exercise.**

Capability Target: 4.a.2 Field Team Management

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).

SCDHEC will demonstrate the capability to brief Field Monitoring Teams (FMTs) on predicted plume location and direction, plume travel speed, and exposure control procedures before deployment.

### **Field Teams**

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

**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: 1.a.1. Alert, Notify, Mobilize

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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty station but may be pre-positioned in the area prior to notification.**

Capability Target: 1.d.1. Communications Equipment

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).

SCDHEC will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

SCDHEC will demonstrate that field teams have sufficient equipment, maps and displays to perform the assigned role.

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control  
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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to provide SCDHEC emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to SCDHEC emergency workers consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take.

Capability Target: 4.a.3. Field Team Monitoring/Measurement/Record of Ambient Radiation  
Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low-background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media (NUREG-0654/FEMA-REP-1, A.1.d; A.2.a, b; A.2; C.4, 6).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to make and report measurements of ambient radiation to the field team coordinator, dose assessment team, or other appropriate authority.
- The capability to obtain an air sample for measurement of airborne radioiodine and particulates, and to provide the appropriate authority with field data pertaining to measurement.

**Exception: DHEC Field teams may demonstrate taking an air sample in the field prior to reaching sampling trigger levels if the scenario will not allow time for a full demonstration of the process.**

**Mobile Laboratory – COURTESY EVALUATION**

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

**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: 1.a.1. Alert, Notify, Mobilize

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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty station but may be pre-positioned in the area prior to notification.**

Capability Target: 1.d.1. Communications Equipment

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).

SCDHEC will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

SCDHEC will demonstrate that the mobile laboratory has sufficient equipment, maps and displays to perform the assigned role.

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control

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).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to provide SCDHEC emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to SCDHEC emergency workers consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take.

Capability Target: 4.c.1. Laboratory Operations

The laboratory is capable of performing required radiological analyses to support protective action decisions (NUREG-0654/FEMA-REP-1, C.1, 3; J.11).

SCDHEC will demonstrate the following Critical Tasks:

- The capability to follow appropriate procedures for receiving samples, including logging information, preventing contamination of the laboratory, preventing buildup of background radiation due to stored samples, preventing cross contamination of samples, preserving samples that may spoil, and keeping track of sample identity.
- The capability to prepared samples for conducting measurements.
- Appropriate equipment to provide, upon request, timely analyses of media of sufficient quality and sensitivity to support assessments and decisions anticipated.
- Staff must be qualified in radio analytical techniques and contamination control procedures.

## **EOF Liaisons**

### **Core Capability: Situational Assessment**

**Definition:** Provide all decision-makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Capability Target: 2.b.1. Protective Action Recommendations (PARs)

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).

SCEMD Liaison and the SCDHEC Liaison will demonstrate the following Critical Tasks:

- The capability to provide enhanced flow of information between the utility and offsite response organizations.
- The ability to ensure state and county decision-makers and utility personnel are kept up-to-date with accurate and timely information.

**Waterway Clearance**

**Note: Waterway Clearance was an out of sequence discussion held at the Clemson DNR office on June 19<sup>th</sup> at 1000. The address is 311 Natural Resources Dr, Clemson, SC 29631.**

**Core Capability: On Scene Security Protection**

**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: 1.a.1. Alert, Notify, Mobilize

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).

SC Department of Natural Resources (SCDNR) will discuss the following Critical Tasks:

- The capability to receive notification of an incident; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The ability to identify and request additional resources or identify compensatory measures.

Capability Target: 1.d.1. Communications Equipment

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).

SCDNR will discuss the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

SCDNR will provide verification via discussion that their equipment, dosimetry, KI, and other supplies are sufficient to perform the assigned role.

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control

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).

SCDNR will discuss the following Critical Tasks:

- The capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- Procedures to monitor and record dosimeter readings and manage radiological exposure control.
- Procedures for when administrative exposure limits and turn-back values are reached.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to emergency workers consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take.
- The basic knowledge of procedures for using KI.

**Exception: KI will be simulated.**

Capability Target: 3.d.1. Implementation of Traffic and Access Control

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)

SCDNR will discuss the following Critical Tasks:

- The capability to select, establish, and staff appropriate access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner.
- The capability to provide instructions to access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.
- Accurate knowledge of their roles and responsibilities including verifying emergency worker identification and access authorization to the affected areas.

**Joint Information System (JIS)**

**Core Capability: Public Information and Warning**

**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: 1.a.1. Alert, Notify, Mobilize**

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).

ESF-15 (Public Information) will demonstrate the following Critical Tasks for the State JIC/JIS:

- The ability to staff and maintain 24-hour operations.
- The capability to activate the State JIC for immediate use by mobilized personnel upon their arrival.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty station but may be pre-positioned in the area prior to notification.**

**Capability Target: 1.d.1. Communications Equipment**

At least two communications systems are available, at least one 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).

ESF-15 (Public Information) will demonstrate the following Critical Tasks For the State JIC/JIS:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

**Capability Target: 1.e.1. Equipment & Supplies to Support Operations**

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).

ESF-15 (Public Information) will demonstrate that the State JIC has sufficient equipment, maps and displays to perform the assigned role.

**Capability Target: 3.d.2. Impediments to Evacuation and Traffic and Access Control**

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

ESF-15 (Public Information) will demonstrate/discuss the capability to respond to evacuation impediments during the evacuation and communicate alternate evacuation routes to the general public.

**Capability Target: 5.b.1. Emergency Info and Instructions for Public and the Media**

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).

ESF-15 (Public Information) will demonstrate the following Critical Tasks:

- The ability to provide emergency information and instructions to the public and media in a timely manner following the initial alert and notification (not subject to specific time requirements).
- The capability to ensure that emergency information that is no longer valid is rescinded and not repeated by broadcast media.
- The capability to ensure that current emergency information is repeated at pre-established intervals.
- The capability to provide timely, accurate, concise, and coordinated information to the news media for subsequent dissemination to the public.
- The capability to respond appropriately to inquiries from the news media.
- The capability to deal with calls received via the public inquiry hotline.
- The capability to provide or obtain accurate information for public inquiry callers or make appropriate referrals.
- The capability to ensure that emergency information and instructions are consistent with PADs made by appropriate officials.
- The capability to ensure that emergency information contains all necessary and applicable instructions to assist the public in carrying out the PADs provided.
- The capability to conduct timely and pertinent media briefings and distribute media releases as the incident warrants.
- The capability to develop emergency information in a non-English language when required.

#### **EAS/LP-1**

**Note: This will be demonstrated during out-of-sequence activities on July 11, 2018 at the WFBC-FM 93.7 LP-1 station.**

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

**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: 5.a.1. Initial Activation of Prompt Alert and Notification System  
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).

The LP-1 (WFBC-FM 93.7) will discuss the following Critical Tasks:

- The capability to provide initial and subsequent messages to populated areas (permanent resident and transient) throughout the 10-mile plume exposure pathway EPZ.
- The capability to broadcast an instructional message on a 24-hour basis, including verification of provisions for backup power or an alternate station.

**Exception: Sirens will be sounded as part of the quarterly siren test and a test EAS message will be sent.**

## **RISK COUNTIES**

**Oconee and Pickens Counties**

## **EOC**

### **Core Capability: Operational Coordination**

**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: 1.a.1. Alert, Notify, Mobilize

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).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident from the licenses; verify the notification; contact, alert, and mobilize key emergency personnel in a timely manner.
- The ability to staff and maintain 24-hour operations.
- The activation of facilities for immediate use by mobilized personnel upon their arrival.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty stations but may be pre-positioned in the area prior to notification.**

Capability Target: 1.c.1. Direction and Control

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.2; C.4, 6).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The ability to carry out the essential management functions of the response effort.
- The ability to prioritize resource tasking and replace/supplement resources.

**Exception: All coordination telephone calls should occur in accordance with plans and procedures; however, the simcell may substitute for non-participating agencies.**

Capability Target: 1.d.1. Communications Equipment

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).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

Oconee and Pickens Counties will demonstrate that each EOC has sufficient equipment, maps and displays to perform the assigned role.

**Exception: KI was evaluated at the Oconee and Pickens Counties SAVs on March 6-7 of 2018.**

Capability Target: 2.a.1. Emergency Worker (EW) Exposure Control

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.10e, f; K.3.a; K.4).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The capability to comply with emergency worker exposure limits.
- The capability to make decisions concerning authorization of exposure levels in excess of pre-authorized levels and the number of emergency workers receiving radiation doses above pre-authorized levels.
- The capability to make decisions on the distribution and administration of KI as a protective measure for emergency workers based on the established PAGs for KI administration.

Capability Target: 2.b.2. Protective Action Decisions for the General Public

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 use of KI, if ORO policy) (NUREG-0654/FEMA-REP-1, A.3; C.4, 6; D.4; J.9; J.10.f, m).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The capability to make initial and subsequent precautionary and/or protective action decisions in a timely manner appropriate to the incident.
- The capability of decision-makers to change protective actions based on the combination of the following factors: subsequent dose projections, field monitoring data, or information on plant conditions, magnitude of ongoing threat, the response, and/or site conditions.
- The capability to communicate the results of decisions to all the affected locations.

Capability Target: 2.c.1. Protective Action Decisions for Access/Functional Needs  
PADs are made, as appropriate, for groups of people with disabilities and those with access/functional needs (NUREG-0654/FEMA-REP-1, D.4; J.9; J.10.d, e).

Oconee and Pickens Counties will discuss the following Critical Tasks:

- The capability to alert and notify all public school systems/districts of emergency conditions that are expected to or may necessitate protective actions for students.
- The ability to conduct the decision-making process taking those with disabilities and access/functional needs (e.g., nursing homes, correctional facilities, licensed day cares, mobility-impaired individuals, and transportation-dependent individuals) into account.
- The capability to make prompt decisions on protective actions for students.

**Note: Schools in Oconee and Pickens Counties will not be in session during the dress rehearsal or exercise.**

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control.

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 for emergency workers is maintained (NUREG-0654/FEMA-REP-1, J.10.e; K.3.a, b; K.4).

Oconee and Pickens Counties will discuss the following Critical Tasks:

- The capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to emergency workers consistent with decisions made.
- The capability to disseminate instructions on using KI for those advised to take.

Capability Target: 3.c.1. Implementation of PADs for Access/Functional Needs

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

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The capability to alert and notify persons with disabilities and access/functional needs, including hospitals/medical facilities, and mobility-impaired and transportation-dependent individuals.
- The capability to provide resources for persons with disabilities and access/functional needs.

Capability Target: 3.d.1. Implementation of Traffic and Access Control

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).

Oconee and Pickens Counties ESF-16 (Traffic Management) will discuss the following Critical Tasks:

- The capability to select, establish, and staff appropriate traffic and access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner.
- The capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.
- The capability to demonstrate accurate knowledge of their roles and responsibilities, including verifying emergency worker identification and access authorization to the affected areas.

Capability Target: 3.d.2. Impediments to Evacuation and Traffic and Access Control

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

Oconee and Pickens Counties ESF-16 (Traffic Management) will demonstrate/ discuss the capability to respond to impediments with re-routing of traffic during the evacuation and coordination with the JIC/JIS to communicate alternate evacuation routes.

**Core Capability: Public Information and Warning**

**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: 5.a.1. Initial Activation of Prompt Alert and Notification System

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).

Oconee and Pickens Counties will demonstrate/discuss the capability to provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume exposure pathway EPZ.

**Exception: Sounding of sirens will be simulated.**

**Capability Target: 5.a.3. Backup Alert and Notification**

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).

Oconee and Pickens Counties will discuss backup alert and notification procedures utilized in the event of a siren failure.

**Capability Target: 5.b.1. Emergency Info and Instructions for Public and the Media**

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).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The ability to provide emergency information and instructions to the public and media in a timely manner following the initial alert and notification (not subject to specific time requirements).
- The capability to ensure that emergency information that is no longer valid is rescinded and not repeated by broadcast media.
- The capability to ensure that current emergency information is repeated at pre-established intervals.
- The capability to provide timely, accurate, concise, and coordinated information to the news media for subsequent dissemination to the public.
- The capability to respond appropriately to inquiries from the news media.
- The capability to deal with calls received via the public inquiry hotline.
- The capability to provide or obtain accurate information for public inquiry callers or make appropriate referrals.
- The capability to ensure that emergency information and instructions are consistent with PADs made by appropriate officials.
- The capability to ensure that emergency information contains all necessary and applicable instructions to assist the public in carrying out the PADs provided.
- The capability to conduct timely and pertinent media briefings and distribute media releases as the incident warrants.
- The capability to develop emergency information in a non-English language when required by the plans/procedures.

**Schools**

**Note: School interviews will be conducted out of sequence at the following times and locations:**

Day/Date & Time	County	School
7 August 2018 @ 1000	Oconee	James M. Brown Elementary School 414 South Pine Street, Walhalla, SC 29691
7 August 2018 @ 1000	Oconee	Seneca High School 414 South Pine Street, Walhalla, SC 29691
7 August 2018 @ 1400	Pickens	AR Lewis Elementary School 1509 Walhalla Hwy, Pickens, SC 29671

**Core Capability: Critical Transportation**

**Definition:** Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.

Capability Target: 3.c.2 Implementation of PADs for Schools

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

Oconee and Pickens Counties School Administration will discuss the following Critical Tasks:

- The ability of school systems/districts (these include public and private schools, kindergartens, and preschools) to implement precautionary and/or protective action decisions for students.
- The capability of officials of the school system(s) to develop and provide timely information to OROs for use in messages to parents, the general public, and the media on the status of protective actions for schools.

**Traffic Control Points (TCPs)**

**Core Capability: On Scene Security Protection**

**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: 1.a.1. Alert, Notify, Mobilize

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).



Pickens County ESF-16 (Traffic Management) will discuss the following Critical Tasks:

- The capability to receive notification of an incident; contact, alert, and mobilize key emergency personnel in a timely manner
- The ability to staff and maintain 24-hour operations.
- The ability to identify and request additional resources or identify compensatory measures.

**Exception: Personnel cannot be at their duty stations but may be pre-positioned in the area prior to notification.**

Capability Target: 1.d.1. Communications Equipment

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).

Pickens County ESF-16 (Traffic Management) will demonstrate/discuss the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

Pickens County ESF-16 (Traffic Management) will provide verification via discussion that their equipment, dosimetry, KI, and other supplies are sufficient to perform the assigned role.

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control

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).

Pickens County ESF-16 (Traffic Management) will demonstrate/discuss the following Critical Tasks:

- The capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- Procedures to monitor and record dosimeter readings and manage radiological exposure control.

- Procedures for when administrative exposure limits and turn-back values are reached.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to emergency workers consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take.
- The basic knowledge of procedures for using KI.

Capability Target: 3.d.1. Implementation of Traffic and Access Control

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)

Pickens County ESF-1 (Transportation) ESF-16 (Traffic Management) will demonstrate/ discuss the following Critical Tasks:

- The capability to select, establish, and staff appropriate traffic and access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner.
- The capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.
- Accurate knowledge of their roles and responsibilities, including verifying emergency worker identification and access authorization to the affected areas.

Capability Target: 3.d.2. Impediments to Evacuation and Traffic and Access Control

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

Pickens County ESF-16 (Traffic Management) demonstrate/ discuss the capability to respond to impediments to evacuation with re-routing of traffic during the evacuation and coordination with the JIC/JIS to communicate alternate evacuation routes.

**Emergency Worker Decontamination (EWD)**

**Note: EWD facilities were demonstrated out of sequence at the following times and locations:**

Day/Date & Time	County	Facility
18 June 2018 @ 1800	Pickens	186 Prison Camp Road (DOT/Stockade) Pickens, SC 29671
19 June 2018 @ 1800	Oconee	Oakway Fire Department - Oconee Co. Station 1 171 School House Road, Westminster, SC 29693

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

**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: 1.d.1. Communications Equipment

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).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations

Capability Target: 1.e.1. Equipment & Supplies to Support Operations

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).

Oconee and Pickens Counties will demonstrate that equipment and supplies are sufficient and consistent with the assigned role.

**Exception: Quantities of KI, equipment, and equipment calibration and testing were verified during Staff Assistance Visits (SAVs) on March 6-7, 2018.**

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control

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).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- Procedures to monitor and record dosimeter readings and manage radiological exposure control.
- Procedures for when administrative exposure limits and turn-back values are reached.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to emergency workers consistent with decisions made.

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- The capability to formulate and disseminate instructions on using KI for those advised to take.
- The basic knowledge of procedures for using KI.

Capability Target: 6.b.1. Monitor Decontamination of EWs/Equipment & Vehicles  
 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).

Oconee and Pickens Counties will demonstrate the following Critical Tasks:

- The capability to monitor emergency worker personnel and their equipment and vehicles for contamination.
- The capability of the monitoring staff to make decisions on the need for decontamination of personnel, equipment, and vehicles based on trigger/action levels and procedures.
- The capability to perform operational checks on monitoring equipment before use.
- Monitoring procedures for a minimum of two emergency workers, their equipment, and one vehicle.

**Exception: Decontamination of emergency workers was simulated.**

**HOST COUNTIES**

**Anderson County and Greenville County**

**Reception Center**

**Note: RC/CC facilities were demonstrated at the following times and locations:**

Day/Date & Time	County	Facility
20 June 2018 @ 1800	Anderson	TL Hanna High School 2600 SC-81 Anderson, SC 29621
21 June 2018 @ 1800	Greenville	Wade Hampton High School 100 Pine Knoll Dr, Greenville, SC 29609

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

**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: 1.d.1. Communications Equipment

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).

Anderson and Greenville Counties will demonstrate the following Critical Tasks:

- A primary system and at least one backup system are fully functional at all times.
- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

Capability Target: 1.e.1. Equipment & Supplies to Support Operations.

Equipment, maps, displays (to include diagram of the reception center), 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).

Anderson and Greenville Counties will demonstrate that they have sufficient equipment and supplies to perform the assigned role.

**Exception: KI and Equipment numbers were validated at SAVs on March 6-7, 2018.**

Capability Target: 3.a.1. Implementation of Emergency Worker Exposure Control

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).

Anderson and Greenville Counties will demonstrate the following Critical Tasks:

- The capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.
- Procedures to monitor and record dosimeter readings and manage radiological exposure control.
- Procedures for when administrative exposure limits and turn-back values are reached.
- The capability to determine whether to replace workers, authorize workers to incur additional exposures, or other actions related to exposure limits.
- The capability to accomplish distribution of KI to emergency workers consistent with decisions made.
- The capability to formulate and disseminate instructions on using KI for those advised to take.
- The basic knowledge of procedures for using KI.

Capability Target: 6.a.1. Monitor Decontamination/Registration of Evacuees

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).

Anderson and Greenville Counties will demonstrate the following Critical Tasks:

- Radiological monitoring, decontamination, and registration facilities for evacuees utilizing at least one-third of the resources available at the facilities as necessary to monitor 20% of the population within a 12-hour period. A minimum of six evacuees must be monitored per station.
- The capability to perform an operational check on monitoring equipment before use.

**Exception: Decontamination of evacuees was simulated.**

**Congregate Care**

**Core Capability: Mass 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: 1.e.1. Equipment & Supplies to Support Operations  
 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).

Anderson and Greenville Counties will demonstrate that the congregate care facility's equipment and supplies are sufficient and consistent with the assigned role.

Capability Target: 3.b.1. Implementation of KI Decision for Institutionalized and General Public  
 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).

Anderson and Greenville Counties ESF-8 (Health and Medical Services) will demonstrate the following Critical Tasks:

- The capability to make KI available to members of the general public.
- The capability to accomplish distribution of KI consistent with decisions made.
- The capability to disseminate instructions on using KI for those advised to take it.

Capability Target: 6.c.1. Temporary Care of Evacuees  
 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).

Anderson and Greenville Counties ESF-6 (Mass Care) will demonstrate the following Critical Tasks:

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- The capability to provide care services to simulated evacuees.
- The capability to ensure that evacuees, service animals, and vehicles have been monitored for contamination and decontaminated as appropriate before registering and entering the facility.

Anderson and Greenville Counties ESF-6 (Mass Care) will discuss the availability of supplies (e.g. cots, blankets, and food supplies) and verify by providing a list of sources for such items and estimated quantities.