Final After Action Report

Catawba Nuclear Station
Radiological Emergency Preparedness Exercise
Exercise Date: October 27, 2020

February 26, 2021

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Executive Summary

On October 27, 2020, 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 Catawba Nuclear Station. The evaluations of out of sequence activities conducted during the week of February 24-27, 2020, are also included in this report.

Catawba Nuclear Station, operated by Duke Energy, is located in South Carolina on the western shore of Lake Wylie, approximately six miles north of Rock Hill, South Carolina. The emergency planning zone encompasses portions of York County in South Carolina and Mecklenburg and Gaston Counties in North Carolina. Host counties include Cherokee, Chester, Lancaster, and Union Counties in South Carolina, and Cleveland and Union Counties in North 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 Catawba 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 February 15-16, 1984.

Officials and representatives from participating agencies and organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them during the exercise. State and local emergency response organizations responded to the simulated radiological emergency as they would in a pandemic environment. They were able to demonstrate their ability to protect the health and safety of the public and emergency workers from radiological hazards while simultaneously preserving workforces by maintaining social distancing due to the SARS-CoV-2/COVID-19 public health crisis. State and local agencies were able to support emergency operations centers virtually while emergency management leadership shared information and effectively integrated emergency support.

The Federal Emergency Management Agency did not identify any level 1 or level 2 findings during the exercise. One level 2 finding from the 2018 Catawba Nuclear Station exercise was corrected during this exercise. The finding concerned the inability to monitor the expected population within a 12-hour period at the Chester County Reception Center demonstration. This year, well-trained staff demonstrated there were adequate personnel and equipment to effectively conduct the mission.

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
2020 Catawba Nuclear Station Radiological Emergency Preparedness Exercise

Type of Exercise
Full Scale Exercise

Exercise Date
October 27, 2020

Exercise Out-of-Sequence Dates
February 24-27, 2020

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

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

Mission
Response

Scenario Type
Partial Participation Plume Exposure Pathway Radiological Emergency

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the 2020 Catawba Nuclear Station Exercise:

State of South Carolina:

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 Service
South Carolina Department of Agriculture
South Carolina Department of Transportation

South Carolina Risk County:

York County Emergency Management

South Carolina Host Counties:

Cherokee County Emergency Management
Chester County Emergency Management
Lancaster County Emergency Management
Union County Emergency Management

State of North Carolina:

North Carolina Department of Public Safety, Division of Emergency Management
North Carolina Department of Public Safety, State Highway Patrol
North Carolina Department of Health and Human Services
North Carolina Department of Transportation
North Carolina Department of Agriculture and Consumer Services
North Carolina Wildlife Resources Commission

North Carolina Risk Counties:

Charlotte Mecklenburg Emergency Management Office
Gaston County Emergency Management

North Carolina Host County:

Cleveland County Emergency Management
Union County Emergency Management

Private Organizations:

American Red Cross
Duke Energy

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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), the annual letter of certification, and staff assistance visits, enabled 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 Catawba Nuclear Station to the Federal Emergency Management Agency Region IV by the State of South Carolina and involved local jurisdictions occurred on August 31, 1984, and by the State of North Carolina and involved local jurisdictions on September 5, 1984. Formal approval of the South Carolina and North Carolina radiological emergency response plans was granted by the Federal Emergency Management Agency on October 8, 1985, 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 States of South Carolina and North 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.

Operational Communications: Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

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 alert, notify, and mobilize response personnel and facilities; provide direction and control, make precautionary and protective action decisions, and implement those decisions.

- **Objective 2:** Demonstrate the ability to analyze and assess radiological hazards and make informed protective action recommendations.

- **Objective 3:** Demonstrate the ability to activate the prompt alert and notification system and provide accurate emergency information and instructions to the public and news media in a timely manner.

- **Objective 4:** Demonstrate the ability to receive, monitor, decontaminate, register, and provide for the temporary care of evacuees and emergency workers.

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.

Emergency Classification Level (ECL):	Time Utility to Declare:	Off Site Organizations to be Informed:
Start of Exercise	0800	0800
Alert	N/A	N/A
Site Area Emergency	0825	0840
Rad Release Begins	1031	1046
General Emergency	1046	1101
End of Exercise	1330	1330

This scenario provided for a very small release of radioactive material. Protective action guides were not exceeded offsite; however, plant conditions were sufficient for Catawba Nuclear Station to declare a General Emergency and for offsite response organizations to make protective action decisions. Winds were from 130° throughout the exercise. At General Emergency, the evacuation protective action recommendation from the utility affected zones in York County, South Carolina, and Mecklenburg County, North Carolina. An important aspect of this scenario was that it was a rapidly escalating event, with the initial emergency classification level declared by the utility being a Site Area Emergency. There was a little over two hours until declaration of a General Emergency.

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 October 27, 2020, plume exposure pathway exercise and out of sequence interviews and demonstrations the week of February 24-27, 2020.

Each jurisdiction and functional entity were 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 using 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 states of South Carolina and North Carolina and the risk counties demonstrated the capability to establish and maintain a unified and coordinated operational structure and process. The lead county and state integrated and supported all stakeholders throughout the exercise, even those positioned remotely due to SARS-CoV-2/COVID-19 restrictions. Both state and county emergency management staff used teleconferencing software to share information and coordinate protective actions. All parties participated in good discussions prior to approving any decisions, which facilitated the ability to implement the protective actions in a timely manner to protect the

health and safety of the public.

Operational Communication:

The States of South Carolina and North Carolina demonstrated the capability of timely communications in support of security, situational awareness, and operations among and between affected communities in the impact area and all response forces. The South Carolina Emergency Management Division established and facilitated a decision line call over a telephone and video conference platform to coordinate precautionary actions and protective action decisions. Key decision makers from the State of South Carolina and York County, along with the State of North Carolina and Gaston, Mecklenburg, and Union Counties, participated. Other support staff from the States of South Carolina and North Carolina; the South Carolina Department of Health and Environmental Control; and utility emergency operations facility liaisons were also represented on the decision line.

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. Public information staff in the states and counties prepared and delivered coordinated, prompt, and reliable information and instructions to the public and media. The states and all risk counties handled public inquiry and responded to any rumor trends.

Situational Assessment:

Dose assessment personnel from the States of South Carolina and North Carolina provided all decision makers with information regarding radiological conditions and protective action recommendations. The states' dose assessment teams coordinated actions, which allowed the decision makers to coordinate protective action decisions in a timely manner. States' liaisons located at the Duke Energy Emergency Operations Facility sought critical information and provided it to the offsite incident decision makers. Likewise, they made sure that the licensee was aware of the states' and local governments' precautionary and protective action decisions.

Environmental Response/Health and Safety:

The community demonstrated an impressive ability to monitor and decontaminate a large number of evacuees at multiple reception and congregate care centers in Cherokee, Chester, Lancaster, and Union Counties in South Carolina; and Cleveland County in North Carolina. Response teams demonstrated the ability to: direct 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 shelter areas. York County demonstrated their ability to establish multiple emergency worker decontamination stations where

emergency workers, emergency vehicles, and equipment were monitored for radiological contamination, decontaminated, and returned to service.

On-Scene Security, Protection, and Law Enforcement:

State and local law enforcement officers in both states were knowledgeable of their duties and radiological limits. All the jurisdictions and agencies involved in clearing Lake Wylie came together to discuss the entire process. Stakeholders were knowledgeable of how clearing of the lake and river would be coordinated and executed to establish access control. Plan updates were agreed upon to refine the operation.

Critical Transportation:

York 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:

Demonstrations of the ability to provide services and accommodations for evacuees at reception and congregate care centers occurred in Cherokee, Chester, Lancaster, and Union Counties in South Carolina; and Cleveland County in North Carolina. County and state personnel in coordination with volunteer agencies demonstrated the ability to ensure evacuees were not contaminated and were provided necessary resources for those 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 leadership successfully demonstrated the ability to provide incident management and coordination to the affected communities. Leadership demonstrated the capability in response to a simulated radiological emergency at the Catawba Nuclear Station. The state warning point received the initial notification of a Site Area Emergency from Catawba Nuclear Station. Warning point staff notified the appropriate authorities and emergency operations staff in a timely manner. The state emergency operations center had enough space, equipment, and communication systems to support the management of the emergency. No communications failures or issues were observed during the demonstration.

The technical officer, assisted by the chief of preparedness and other key leadership, coordinated appropriate protective action decisions for emergency workers and the general public with North Carolina Emergency Management Division and all affected counties over a dedicated decision line. The technical officer facilitated unified protective action decision making among stakeholders using input and recommendations from Duke Energy and appropriate emergency support functions. During the exercise, two protective action decisions were coordinated and implemented. The chief of operations successfully managed the minimally staffed state emergency operations center consisting of virtual and physical emergency support function staff. Staff were kept abreast of all emergency notification forms and other relevant emergency information.

South Carolina Highway Patrol staff successfully discussed management of the traffic and access control mission virtually during the exercise. The highway patrol staff successfully explained the location of applicable checkpoints; the conduct of troop safety and radiological briefings; distribution of equipment, dosimetry, potassium iodide, and instructions; and the involved support agencies.

For this capability the following radiological emergency preparedness criteria were met: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.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 joint information system, led by the South Carolina Chief of Public Information and External Affairs, was coordinated from within the South Carolina Joint Information Center, which was collocated with the South Carolina State Emergency Operations Center. The joint information system concept was successfully used by public information staff from the States of North and South Carolina; the risk counties of Gaston, Mecklenburg, and York; the host county, Union; and Duke Energy in order to cooperatively disseminate timely, accurate, and actionable information to the public in response to an incident at Catawba Nuclear Station.

Alert and notification of the State of South Carolina's joint information center staff was demonstrated in accordance with plans, procedures, and the extent of play agreement. Due to allowance of pre-positioning, members of the joint information center were quickly activated in order to deem the joint information system operational in a timely manner. Redundant communications systems were available for use and demonstrated throughout the exercise. Equipment and supplies within the South Carolina Joint Information Center were sufficient to support extended operations of the joint information system. The utility-supplied joint information line was used as the primary means of coordination and remained open for the duration of the exercise. The bridge line allowed for efficient coordination of public information, to include review of news releases and media teleconference pre-caucuses.

News releases were coordinated through the use of a public information officer email distribution list, the joint information line, and within the South Carolina State Emergency Operations Center. All four joint news releases were clear and accurate, correctly reflecting the coordinated protective action decisions made. Two Emergency Alert System messages were disseminated through the Integrated Public Alert and Warning System from the South Carolina State Warning Point in conjunction with siren activation; both messages were accurate and contained the elements required by the Federal Emergency Management Agency. The sirens were activated by York County in coordination with the state emergency operations center and joint information center.

For this capability the following radiological emergency preparedness criteria were met: 1.a.1, 1.d.1, 1.e.1, 5.a.1, and 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

Situational Assessment Capability Summary:

South Carolina Department of Health and Environmental Control personnel successfully demonstrated the ability to assess plant and radiological conditions and to provide sound recommendations to decision makers in response to a radiological incident at the Catawba Nuclear Station. Staff members were pre-positioned at the state emergency operations center in accordance with the extent of play agreement and responded promptly when notified of the incident, staffing emergency support functions 8 and 10.

Staff members frequently requested plant status information and clarifications from the utility liaison at the state emergency operations center and received updates from state personnel at the utility's emergency operations facility. The emergency response coordinator provided timely updates on radiological conditions to the state's technical officer. The dose assessment coordinator used available information on plant conditions to calculate dose projections using a dose assessment software program. He then compared the results to utility dose projections. When available, the dose assessment coordinator used field monitoring team data to refine dose projections.

The emergency response coordinator participated in conference calls with state and county decision makers, providing appropriate technical information and advice during discussions of protective actions.

Following the declaration of a General Emergency, staff set up a conference call with the responsible physicians from the two states to discuss potassium iodide for emergency workers. Due to the notification from the utility that a release was in progress and that utility field teams had detected elevated radiation levels, the physicians agreed that administration of potassium iodide for emergency workers was warranted. The coordination between the two physicians ensured that a consistent decision for all emergency workers was made.

Department staff in various locations used a dedicated chat group to post and access information to better maintain situational awareness. The chat group reduced the need to make multiple telephone calls to relay information. Cellular telephones, landline telephones, email, the state's emergency management software system, and handheld radios on the state's radio system were also used to communicate with department staff at other locations. The state emergency operations center was well equipped to support the emergency response, and staff members brought with them additional equipment and supplies such as laptop computers, maps, and procedures.

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

3.3.1.2 York County

Operational Coordination Capability Summary:

During the radiological emergency preparedness exercise, the York County Office of Emergency Management established and maintained a unified and coordinated operational structure and process that appropriately integrated all critical stakeholders and supported the execution of core capabilities. The York County Emergency Management Director and the Radiological Officer demonstrated their ability to carry out the essential management functions of the radiological response effort. They made appropriate protective action decisions, utilizing available resources and information. While responding to exercise injects such as traffic impediments and scenario conditions, including schools being in session and the ongoing SARS-CoV-2/COVID-19 pandemic, the leadership team prioritized the needs of York County citizens and the safety of emergency workers through the use of virtual response platforms.

Initial notification of an event at the Catawba Nuclear Station occurred via the dedicated telephone line. Subsequent changes to the Catawba Nuclear Station's emergency classification levels were relayed to emergency services personnel via email and the dedicated telephone line. A virtual response platform that incorporated landline telephones, cellular telephones, text messages, and email messages was simulated to alert and mobilize required response personnel for the county. Outside of the pandemic environment, these personnel would normally include emergency medical services, police, fire departments, school system, hospital, and public health personnel; however, York County leveraged effective use of virtual platforms to allow response personnel to participate virtually so as to remain compliant with pandemic precautions.

Plant status and classification levels were provided to response personnel within the emergency operations center through in-person briefings. These briefings allowed the emergency management director to provide county-wide situational awareness and solicit recommendations or concerns, while operational and logistical coordinators provided individual input. The virtual platform was also utilized to facilitate interagency communication and the official archive of documents for the response. Primary communication was accomplished using landline telephones, with back up

communications via cellular telephones, a virtual response platform, and various emergency services 800-mHz radio systems in use by first responders. All communications systems remained in operation during the exercise. The York County Emergency Operations Plan, radiological emergency plan, back-up route alerting plan, supplies, and equipment were readily available. Four computer-controlled wall-mounted video monitors were used to display information concerning plant status, emergency planning sectors maps, and other event related data. The York County Emergency Operations Center maintained a supply of dosimetry, survey instruments, and potassium iodide that was evaluated as part of the staff assistance visit in February 2020.

Decision makers maintained constant situational awareness to help facilitate the decision-making process. Utilizing meteorological conditions, impediment information, and recommendations discussed via the decision-making line, the York County Emergency Management Director made appropriate protective actions for emergency workers and the general public. The director and operations chief demonstrated excellent direction and control throughout the exercise. Protective action recommendations were discussed, and decisions were made in coordination with neighboring jurisdictions. The operations chief implemented actions by assigning tasks via virtual platform to the various emergency support functions responding virtually. The director ensured coordination was conducted with the York County Manager and with other counties and states as appropriate.

The York County Office of Emergency Management operations chief and radiological officer successfully demonstrated the appropriate issuance of dosimetry, potassium iodide, and ingestion procedures, and managed radiological exposure to emergency workers in accordance with the plans and procedures. Due to the emergency operations center's location within the 10-mile emergency planning zone of Catawba Nuclear Station, appropriate record-keeping of the potassium iodide dispensed to every emergency worker in the York County Emergency Operations Center was maintained and demonstrated. A radiological briefing including exposure limits was provided to the participants, and a simulated permanent record dosimeter, a simulated potassium iodide tablet, and the York County Radiation Exposure Record form were given to each emergency worker. The operations chief/radiological officer also identified how dosimetry and potassium iodide would be distributed to emergency workers at their stations through delivery provided by county law enforcement. During the exercise, the decision was made for emergency workers to ingest potassium iodide. Each emergency worker filled out the form accordingly, while being reminded by the operations chief/radiological officer of the precautions of ingesting potassium iodide.

Through interview, the York County Office of Emergency Management and Public Health officials successfully implemented protection action decisions for individuals with disabilities and those with access and functional needs. Lists were provided confirming those who had requested transportation assistance during an emergency and the needs of individuals. The database is updated yearly and was secured in the county emergency operations center. During an evacuation of any zone or residential area where persons with access and functional needs lived, the transportation-dependent list would be assigned to the Emergency Support Function 1 transportation coordinator who would coordinate assistance.

York County School officials discussed the implementation of protective actions for schools and their ability to provide timely information to parents, the general public, and the media on the status of protective actions for schools. As a precaution, the schools' relocation centers would be contacted and prepared to receive students and staff. Schools proactively called for an early dismissal of their students. Parents/guardians would be notified to pick up their students following the Site Area Emergency declaration. Through interview, the county transportation coordinator discussed how school bus drivers would be briefed on the use of and need for emergency worker exposure control as well as the relocation site for students and staff, if needed.

York County Law Enforcement Officers discussed the ability to provide appropriate traffic and access control to pre-designated areas. Accurate instructions would be provided to traffic and access control personnel in a timely manner. Through an interview with the York County Sheriff's Office, the officer provided information regarding actions taken by the traffic and access control staff to modify protective actions strategies when necessary. South Carolina Highway Patrol and York County law enforcement officers were prepared to implement traffic control and were knowledgeable of how to handle impediments to the evacuation and emergency worker identification verification. Additionally, York County law enforcement personnel successfully identified and resolved a simulated impediment to one of the evacuation routes on Hands Mill Highway at Campbell Road. The impediment was resolved two hours before an evacuation of the emergency planning zone had been ordered. Traffic and access control personnel coordinated with county emergency medical services York County Public Works, and the South Carolina Highway Patrol to simulate removal of the impediment and rerouting of traffic as needed. Response personnel provided updated information to the public information group when the accident had been resolved.

For this capability the following radiological emergency preparedness criteria 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:

York County Emergency Management Division personnel successfully provided the initial activation of prompt alert and notification of the public and assured that it was completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. A silent test of the siren system simulated the sounding of sirens for Gaston and Mecklenburg Counties in North Carolina and York County in South Carolina. All sirens were activated successfully during the silent test. The notification portion of the activation was provided by South Carolina Emergency Management Division utilizing Emergency Alert System messages through coordination with the counties. Each message was sent to South Carolina and North Carolina radio stations

During the exercise, an interview was conducted with the York County Sherriff's Office and York County Fire Department personnel and they discussed how completion of the backup alert and notification of the public would be conducted following detection of a failure of the primary sirens. Siren activation propagation and coverage maps were observed and discussed with York County response personnel. The county's procedures observed were found to be a sufficient, alternate method of notification to the residents in the affected area where a siren may have failed.

The York County Public Information Officer, with support of a public information group that included public information officers from other jurisdictions within the county, successfully demonstrated the capability to provide accurate emergency information and instructions to the public and the news media in a timely manner. The York County public information group produced and distributed two news releases during the Catawba Nuclear Station exercise; in coordination with the South Carolina Emergency Management Division, four news releases were produced and distributed. The news releases were received and distributed from the joint information center by email.

York County maintained a call center for management of communications from concerned citizens and was staffed with one person who received one call on the public advisory telephone line. One call was also received by the York County Sheriff's Office Public Information Officer who was also monitoring social media platforms. The officer demonstrated the use of social media to inform the public and control the spread of misinformation or rumors using an online platform tool. All calls were logged and properly routed to appropriate agencies when required. Critical communication and responses to public inquiries were vetted through the emergency management director prior to actions from the public information officer. Two Emergency Alert System messages were coordinated and reviewed through the decision line conference call by all affected jurisdictions prior to their simulated release from the South Carolina Emergency Operations Center. All messages and news releases contained the four Federal Emergency Management Agency requirements.

For this capability the following radiological emergency preparedness criteria were met: 5.a.1, 5.a.3, and 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:

York County School Districts consisting of York School District 1, Clover School District 2, Rock Hill School District 3, Fort Mill School District 4, and Winthrop University discussed their capability to protect students and staff in the event of a radiological emergency at Catawba Nuclear Station. School and district officials were professional and knowledgeable on all applicable plans and protective actions associated with protecting students and staff during a radiological event. They would be capable of maintaining care and positive control of students and staff and would have adequate transportation and communications assets available.

Each school district had sufficient plans in place to ensure that schools and parents/guardians would be notified of events and protective actions. Available communications capabilities included radios, landline phones, pagers, and various application-based systems for receiving and delivering notification among schools, district offices, the York County Office of Emergency Management, and parents/guardians. Additionally, York County Public Information Officers would be available to provide coordinated information to the public.

York County School District had enough transportation assets and available commercially licensed and qualified drivers to ensure the evacuation of school staff and students to the assigned reunification locations. Additional transportation assets would be available as needed. County law enforcement agencies would provide escort and security services to all bus convoys during transit. In the event of an order to shelter in place, each school district's protocols would ensure students' and staff accountability and safety. School district personnel also addressed the potential for early release and school cancellation.

For this capability the following radiological emergency preparedness criteria were 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

Environmental Response/Health and Safety Capability Summary:

York County representatives demonstrated their capability to monitor and decontaminate emergency workers and their vehicles and equipment at the designated emergency worker decontamination facilities including stations managed by Bethany-Santiago Fire Department and Lesslie Fire Department. Both fire stations were suitable to support the operations.

Monitoring and decontamination equipment used at the two facilities was transported from York County Office of Emergency Management storage areas. They had appropriate equipment for monitoring and decontaminating emergency personnel, vehicles, and equipment; additional supplies were available from the county storage facility. Six handheld radiation survey meters and a portal monitor were set up at each facility and operationally tested prior to use. Dosimetry kits were assembled and issued to workers; scribes in each work area tracked workers' radiation exposure and were responsible for recording exposures and reporting them to the radiological officers.

The facility setup and process demonstrated by response personnel allowed for smooth flow of emergency worker vehicles and personnel through monitoring and decontamination areas. This was accomplished using signs, verbal instructions, traffic cones, and markings to designate clean and contaminated areas. Initial monitoring

personnel and decontamination teams were well-trained and demonstrated well thought out procedures for processing incoming field emergency workers and their equipment. When interviewed, workers were able to explain administrative dose limits and how to use dosimetry for radiological exposure control.

For this capability the following radiological emergency preparedness criteria were met: 1.a1, 1.b.1, 1.d.1, 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 Cherokee County

Environmental Response/Health and Safety Capability Summary:

Staff from Cherokee County Emergency Agency, along with representatives from Gaffney Fire Department, Cherokee County Sheriff's Office, Blacksburg Fire Department, and Cherokee County E911 Dispatch, successfully demonstrated the ability to monitor and decontaminate incoming evacuees in response to a simulated incident at Catawba Nuclear Station. Evacuees from York County emergency planning zone E-1 would be directed to Cherokee County for monitoring, decontamination, and congregate care. Gaffney Senior High School had enough space to conduct monitoring and decontamination of evacuees, as well accommodate vehicles. Equipment and supplies were sufficient to support reception center operations.

The demonstration began with a radiological briefing that provided exposure and contamination limits to the emergency workers followed by issuance of dosimetry. Emergency workers were knowledgeable of their exposure limits, and read their dosimetry as required. Group dosimetry was used, and radiological exposure was tracked and recorded by the radiological officer in a clean area. Though emergency workers followed procedures, checklists, and the briefing conducted, it was recommended that the dosimetry issued is capable of reading the provided administrative limits.

Equipment used at Gaffney Senior High School was transported from Cherokee County Emergency Management storage areas. They had appropriate equipment for monitoring and decontamination of evacuees allocated to this facility. One radiation survey meter and a portal monitor were set up and operationally tested prior to use in the initial monitoring area. Dosimetry was issued and the workers were able to explain their radiation exposure limits and how to read their direct reading dosimeter.

The setup of the facility, and the plans demonstrated by response personnel, allowed for smooth flow of evacuee vehicles and individuals through the monitoring and decontamination process. This was accomplished using signs, verbal commands, traffic cones, and markings to designate clean and contaminated areas. Facility personnel were well-trained and demonstrated well thought out procedures for processing incoming evacuees.

The estimated population in zone E-1 was 5878 individuals according to the York County plans. The Cherokee County Annex-S had outdated evacuee estimates; it should be updated to accurately reflect the projected 2020 census information from the York County plan. Based on the demonstrated monitoring times, they would be able to monitor 20% of the individuals allocated to this facility within 12 hours with one portal monitor. After monitoring, contaminated evacuees were appropriately escorted to male and female decontamination areas; clean evacuees were directed to the congregate care registration area.

The decontamination teams successfully demonstrated the ability to monitor and perform decontamination on radiologically contaminated evacuees. The teams followed procedures in setting up the respective locker/shower rooms adjacent to the gym. The team members were knowledgeable of their contamination and exposure limits. The team was able to describe methods to control contamination and to confiscate evacuees' clothes and possessions; however, the procedures did not specify methods for inventorying and performing potential spot decontamination of personal belongings. Proper decontamination techniques were explained through interview, and personnel were knowledgeable of procedures to follow in the event evacuees could not be decontaminated.

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

Representatives from the Cherokee County Department of Social Services, South Carolina Department of Health and Environmental Control, Cherokee County Health Department, Cherokee County Sheriff's Office, and the Northern South Carolina Chapter of the American Red Cross successfully demonstrated that they would be capable of providing care and sheltering of evacuees while ensuring contamination avoidance. Evacuees who were free of contamination were provided a green dot on their Evacuee Contamination Record form by the monitoring and decontamination staff, and were directed to the reception desk located just inside the main doors of the school's gymnasium/cafeteria wing. American Red Cross staff ensured that each arriving evacuee had a green dot on their Evacuee Contamination Record form indicating that they were not contaminated prior to being allowed to enter the shelter facilities. A Cherokee County Sheriff's Office deputy was present in the facility to provide security.

Cherokee County Health Department nursing staff was available to administer potassium iodide, if authorized, along with South Carolina Department of Health and Environmental Control. A medical treatment room, as well as mental health services, were available also. Cherokee County Emergency Medical Services was on standby at the exterior of the building in the event medical transport was necessary.

American Red Cross staff demonstrated their ability to provide feeding and sheltering. Facilities and supplies would be sufficient to support extended sheltering operations as necessary, to include feeding and sleeping necessities. The male and female locker rooms adjacent to the gymnasium used for sheltering were used for decontamination. Medical services within the facility would be available and staffed by the county health department. The American Red Cross would be able to provide psychological and spiritual counselling if required. Nearby American Red Cross chapters would be contacted in the event a shortage of supplies occurred.

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

3.3.1.4 Chester County

Environmental Response/Health and Safety Capability Summary:

The Chester High School was sufficient to support emergency response. The Chester County Emergency Management Director received a simulated notification from the York County Office of Emergency Management Director regarding an evacuation of York County. The notification of evacuation prompted the opening of the Chester County Reception and Congregate Care Center.

Chester High School offered plenty of space, lighting, restrooms, and ventilation. Cones, tape, and signage were used to control access and direct vehicles and evacuees through the monitoring station and into decontamination or the congregate care center, as appropriate.

Chester City and Chester County Fire Departments partnered together to operate the reception and congregate care center. Enough equipment, maps, displays, monitoring instruments, dosimetry, and other supplies necessary to support monitoring, decontamination, and registration of evacuees were available. All staff were provided a radiological and safety briefing prior to activation of the facility. Monitoring and decontamination staff wore their dosimetry properly, were able to explain exposure limits, and documented exposure on a radiological exposure record form.

Arriving evacuee vehicles were washed for exterior decontamination by entering a wash area. The drivers were instructed to slowly pull forward through an aerial master stream from a fire ladder truck. The stream thoroughly washed the hood, roof, and trunk. A piped misting system washed the sides and undercarriage of the vehicles. Once the vehicles were driven through the wash area, the drivers were directed to the vehicle monitoring station located in the east parking lot to meet the vehicle monitoring team escort.

Monitoring of evacuees was successfully demonstrated using two portal monitors, which were verified to be sufficient to monitor 20 percent of the assigned evacuee population in less than 12 hours. The monitoring station was large enough to handle the portal monitor and divert and separate clean from contaminated evacuees. A covered walkway provided necessary shelter from the elements for the portal monitor.

Male and female evacuee decontamination stations were set up in locker rooms adjacent to the congregate care center. Separate pathways were used to minimize cross contamination between clean and contaminated evacuees. Both the male and female decontamination teams demonstrated sound monitoring and decontamination techniques. In addition, they explained their actions, what they were looking for, survey meter alerts, and other dialog to ease the potential anxiety of evacuees.

For this capability the following radiological emergency preparedness criteria were met: 1.a.1, 1.b.1, 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: 12-18-6.a1-L.2-02

Condition: The set up and process used during the 2018 demonstration for monitoring and decontaminating evacuees would have precluded Chester County from being able to monitor the expected number of evacuees in a 12-hour period.

Resolution: Workers referenced the correct guidance for placing survey instruments into service and performed appropriate operational checks on all survey meters. Enough equipment and personnel were available to support the operation and the facility set up aided in quickly processing evacuees. Efficient processes were demonstrated for receiving, monitoring, and processing evacuees. It was determined that Chester County is capable of processing 20 percent of the expected population within 12 hours.

e. Prior Level 2 Findings - Unresolved: None

Mass Care Capability Summary:

The South Carolina Department of Social Services staff successfully demonstrated the ability to support mass care by establishing and maintaining a congregate care center at Chester High School. A team comprised of representatives from the South Carolina Department of Social Services, South Carolina Department of Health and Environmental Control, and the American Red Cross demonstrated the capability to register evacuees and provide services and accommodations consistent with planning guidelines.

A memorandum of understanding between Chester County and the Northern South Carolina Chapter of the American Red Cross authorized the American Red Cross to establish a shelter at the Chester County Reception and Congregate Care Center. The shelter had adequate space, lighting, restrooms, and ventilation, and included separate male and female restrooms with shower facilities. A total of nine shelters would be opened in the county to provide ample overflow capacity, if needed. Service animals would be allowed in the dormitory, but household pets would not.

For this capability the following radiological emergency preparedness criteria were met: 1.b.1, 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 Lancaster County

Environmental Response/Health and Safety Capability Summary:

The Lancaster High School was sufficient to support emergency response. A simulated request to set up the reception and congregate care center was received by the Lancaster County Emergency Manager from the York County Office of Emergency Management. The Lancaster County Emergency Manager notified emergency operations center staff and local response agencies to set up the reception and congregate care center at the Lancaster High School.

Lancaster High School was a new and modern facility. The portion of the school that served as the congregate care center was finished within the last two years and had not previously been used for exercises. The facility offered plenty of space, lighting, restrooms, and ventilation. Through interview, backup power was discussed; it was noted that the school did not have a generator.

The Lancaster County Fire Department arrived with sufficient equipment, maps, displays, monitoring instruments, dosimetry, and other supplies necessary to support monitoring, decontamination, and registration of evacuees. Staff were provided a radiological and safety briefing prior to activation of the facility. Monitoring and decontamination staff wore their dosimetry properly and were able to explain exposure limits, and they each documented exposure on a personal exposure card.

Staff demonstrated the ability to conduct exterior and interior evacuee vehicle monitoring. Sound monitoring techniques were used, and the appropriate forms completed. The high school had ample space to conduct vehicle monitoring and decontamination, as well as separate storage of the clean and contaminated vehicles.

Monitoring of evacuees was successfully demonstrated using one portal monitor, which was verified to be sufficient to monitor the expected evacuee population in less than 12 hours. The monitoring area was large enough to handle the portal monitor and divert and separate clean evacuees from contaminated evacuees. A covered walkway provided necessary shelter from the elements for the portal monitor.

One contaminated male and one contaminated female evacuee were routed into the appropriate locker rooms to be further monitored and decontaminated. Both locker rooms had monitoring instruments, dosimetry, and other supplies necessary to support monitoring and decontamination. Staff in the male and female locker rooms used paper walkways and cones to minimize cross contamination. The evacuees were successfully monitored, decontaminated, and routed into the congregate care center.

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

Lancaster County Emergency Management staff successfully demonstrated the ability to support mass care by establishing and maintaining a reception and congregate care center at Lancaster High School. A well-coordinated team comprised of representatives from the Lancaster County Department of Social Services, South Carolina Department of Health and Environmental Control, and the American Red Cross demonstrated the capability to register evacuees and provide services and accommodations consistent with planning guidelines. The reception center manager also ensured each evacuee had been monitored for contamination and was clean or decontaminated, as appropriate, prior to being allowed to enter the evacuee reception area.

The congregate care center was set up in the multi-purpose building gymnasium in accordance with the procedure. The area had adequate space, lighting, restrooms, and ventilation, including separate male and female restrooms with shower facilities. The facility was compliant with standards set forth in the Americans with Disabilities Act. Although not mobilized for this exercise, the Lancaster Police Department and Lancaster County Sheriff's Office would provide security and facility access.

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

3.3.1.6 Union County

Environmental Response/Health and Safety Capability Summary:

Staff and volunteers from Union County, South Carolina, demonstrated the ability to receive evacuees, assess radiological hazards, and provide decontamination while minimizing the spread of contamination. In doing so, they ensured evacuees' contamination levels were within established acceptable levels and prevented radiological contamination from entering the shelter area.

The facility was in poor condition. The women's locker room and showers contained mold, which could have prevented or delayed the facility's use in a real emergency. There were no facility maps, layout diagrams, signage, or step-by-step instructions in the county procedures for facility setup. This could prevent the mission from being carried out as planned during a real-world incident by any individuals other than those who have been trained. The lack of signage and clear visual instructions demonstrated during the exercise could present challenges to evacuees when navigating the facility. Due to inclement weather, the vehicle operation was demonstrated through interview. The vehicle operations team explained how evacuees' vehicles would be parked and marked if an evacuee was contaminated. They also explained how they would escort evacuees to the initial monitoring station in the reception center.

The Union County Reception Center Incident Commander managed emergency workers' radiological exposure. He provided a radiological safety briefing to all staff covering radiological exposure control, exposure limits, and record keeping. Group dosimetry was issued and used for each workstation. Workers were familiar with the equipment, administrative limits, and recording requirements. One emergency worker donned partial personal protective equipment consisting of disposable coveralls and two layers of gloves.

Five emergency workers staffed the initial monitoring station at the reception center, including two portal monitor operators, one recorder, one escort, and a supervisor. The team properly performed an operational check of the instrument prior to beginning operations. They were familiar with the instrument and its use. It took approximately five minutes to fully process four evacuees. While the county maintained the ability to monitor the expected population within programmatic requirements, it was recommended to refine and streamline processes to accomplish the task in a more efficient manner. Male and female decontamination teams were set up in a set of locker rooms adjacent to the monitoring area and reception center. Dual access points helped minimize cross contamination by allowing contaminated evacuees to enter the decontamination area from outside of the building, and then exit through the interior once decontamination was complete. Both teams were familiar with monitoring equipment and decontamination techniques; however, evacuee monitoring was performed much quicker than the 1-2 inches per second denoted in the guidelines. Evacuees were monitored in a "Z" pattern; however, county procedures described a different monitoring technique.

Due to inclement weather, the extent of play agreement was modified by controllers without consultation with evaluators or clear instructions to participants. This caused confusion in demonstration expectations by both evaluators and exercise participants. The large amount of simulations diminished the overall effectiveness of the exercise. Furthermore, exercise controllers were observed coaching participants during the demonstration, making it challenging to assess the capabilities of the response team. Several missteps with monitoring and processes were identified during the exercise; those missteps were corrected through interview or remedial training. However, the procedures need to be updated and deconflicted to provide clear guidance to workers. In addition, while team leads were proficient with facility and equipment processes, other team members were not and could greatly benefit from additional training and subsequent drills. Subsequent drills should also require physical setup and significantly less simulation to demonstrate the county's ability to ensure public health and safety would be protected during a real-world incident.

For this capability the following radiological emergency preparedness criteria 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:

Union County Emergency Management successfully demonstrated the ability to support mass care by establishing and maintaining a congregate care facility at the Union High School Complex. A well-coordinated team comprised of representatives of Union County Department of Social Services; South Carolina Department of Health and Environmental Control; and the American Red Cross demonstrated the capability to register and provide services and accommodations consistent with planning guidelines. The congregate care manager demonstrated procedures to ensure that each evacuee had been monitored for contamination and was clean or decontaminated as appropriate prior to being allowed to enter the congregate reception area.

The congregate care center was set up in the gymnasium area in accordance with Union County Reception Center Monitor and Decontamination guidelines. The area had adequate space, furnishings, lighting, ventilation, and separate male and female restrooms with shower facilities to shelter over 1,000 evacuees from York County. The facility was compliant with standards set by the Americans with Disabilities Act. Union County Law Enforcement Officers secured access into the facility and communications were provided by Union Amateur Radio Club.

For this capability the following radiological emergency preparedness criteria 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

3.3.2 North Carolina Jurisdictions

3.3.2.1 State of North Carolina

Operational Coordination Capability Summary:

The North Carolina State Emergency Response Team successfully established and maintained a unified and coordinated operational structure, both internally within the state emergency operations center and externally in support of the South Carolina Emergency Management Division in response to a simulated radiological incident at the Catawba Nuclear Station.

The state emergency operations center was located inside the North Carolina State Joint Forces Headquarters; it was a secure facility with redundant safeguards. The building had multiple entrances that remained locked and were under observation by security personnel. The state emergency operations center itself was access controlled and monitored by security personnel. Due to the SARS-CoV-2/COVID-19 pandemic, each person entering was required to complete a temperature check and answer a series of questions.

Key state emergency operations center staff were pre-positioned in accordance with the extent of play agreement. Those staff and state officials were still notified by the chief watch officer. The state emergency operations center was declared operational at a Level 2 following the Site Area Emergency declaration. Due to the SARS-CoV-2/COVID-19 pandemic, the state emergency operations center was minimally staffed with the majority of staff participating virtually. There were 24-hour staffing rosters available should the incident require support for multiple operational periods.

The primary communications system used between the utility and state was a dedicated internal line provided by the utility. Other means of communications included tele- and video-conferencing systems, 800 megahertz radios, electronic mail, commercial and cellular telephones, and an incident management software system. There were no operability or connectivity issues observed during the operational period. The facility also had ample equipment and supplies to support emergency operations. There were multiple rooms off the state emergency operations center, but only four were used during the operational period. Wall-mounted television monitors, a projection screen, and maps were displayed to provide situational awareness.

The state emergency response team leader-maintained direction and control for the State of North Carolina. Following an emergency classification level change, a checklist review meeting was scheduled. In preparation for this meeting, the state emergency response team leader and operations, plans, and logistics sections chiefs completed notifications and response actions. During the meeting, the technical advisor read aloud the checklist and the state emergency response team leader and section chiefs verbally acknowledged whether a notification or response action was in progress or complete.

Within a few minutes of each checklist review meeting, the South Carolina Emergency Management Division Technical Officer initiated a unified decision line call. The call included officials from the State of South Carolina; State of North Carolina; Catawba Nuclear Station risk and host counties; and utility liaisons. During these calls, current response actions were mentioned, protective action recommendations were considered, and joint protective action decisions were made.

In addition, two shift briefs were conducted and included officials from North Carolina state agencies, risk and host counties, and utility liaisons. The plans chief led the meeting and reviewed administrative details, activation level, current weather, and lifeline status. The technical advisor provided a radiological emergency preparedness briefing with input from the radiation protection section chief and utility liaison, especially when exposure control and ingestion of potassium iodide were considered for emergency workers and the general public. In addition, the first responder, emergency services, human services, and infrastructure representatives provided an update on response actions within their respective functional areas. The state emergency response team leader concluded the briefs with final guidance and direction.

Establishment of access and traffic control points and identification and resolution of evacuation route impediments remained a county function during the exercise. A state emergency response team member with the North Carolina State Highway Patrol was interviewed about the management and support of access and traffic control points and evacuation route impediments. Through interview, it was noted that the state emergency response team member was knowledgeable of the appropriate plans and procedures and knew with whom to coordinate.

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

North Carolina Emergency Management Public Information Officers, through the joint information system/center, successfully demonstrated the capability to coordinate and disseminate reliable and timely information to the public and media in response to a simulated radiological incident at the Catawba Nuclear Station.

News releases developed by the North Carolina Emergency Management Public Information Officers via the joint information system contained the required Federal Emergency management Agency elements, were timely, signed by appropriate authorities, and logged before dissemination. All releases included a request for the public to stay tuned for additional information. News releases were disseminated through the incident management system, and electronic mail and facsimile machine distribution lists. The North Carolina Emergency Management Public Information Officers developed and disseminated two news releases before the joint information system was activated. Four additional news releases were disseminated following the joint information system activation.

Public inquiry staff were provided with access to the incident management system, media briefings, emergency preparedness brochure, news releases, talking points, handouts, and fact sheets to accurately and appropriately respond to the public. All media inquiries were promptly referred to the utility's media inquiry line. A total of five injected calls were received by the North Carolina 211 public inquiry representative.

For this capability the following radiological emergency preparedness criteria were met: 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

Situational Assessment Capability Summary:

North Carolina Department of Health and Human Services, Division of Health Service Regulation, Radiation Protection Section personnel demonstrated the ability to perform dose assessments and provide protective action recommendations in response to a radiological incident at Catawba Nuclear Station. The team evaluated radiological and plant conditions and provided the state and counties with relevant information concerning the magnitude of the radiation hazard to emergency workers and the general public. The section chief for radiation protection relied on dose assessment, field team coordination, and logistics support from the virtual staff. The section chief was physically located in the North Carolina State Emergency Operations Center and used collaboration software, portable radio, cellular telephone, and other computer electronic communication methods to communicate with the remainder of the team during this exercise.

The radiation protection section chief demonstrated effective virtual coordination and concurrence with the North Carolina Department of Agriculture representative for farming and livestock precautionary actions, and with the State of North Carolina Health Director for the potassium iodide ingestion decision for emergency workers. Dose assessments performed by the section team were in acceptable agreement with the licensee dose projections. The process used by the section team for the emergency notification form updates and development of protective action recommendations was successful in ensuring that all necessary parties were involved. Prior to the decision line telephone call with North Carolina and South Carolina partners, the section chief confirmed receipt from North Carolina Emergency Management, forwarded the message to team members, concurred with the necessary state departments, and sent protective action recommendations to South Carolina for information.

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

3.3.2.2 Western Branch Office – Regional Coordination Center

Operational Coordination Core Capability Summary:

The Western Branch Office – Regional Coordination Center Branch Manager and staff effectively demonstrated the capability to establish and maintain a unified and coordinated operation that integrated county stakeholders in response to a radiological incident. Alert, notification, and mobilization of emergency personnel was accomplished in a timely manner. Due to current pandemic concerns, partial staffing was accomplished via virtual assignment locations. The Western Branch Office – Regional Coordination Center Branch Manager demonstrated appropriate direction and control. The branch manager/incident commander conducted timely updates and briefings and considered staff input in decision making. An internet-based virtual meeting platform was used to include virtual staff in meetings and provide for their input of information critical to the organization's emergency response.

The western branch office had multiple means of communications, to include digital and commercial land lines, cellular telephones, internet access, and electronic mail. Backup communications included facsimile machines, 800 megahertz radios and satellite telephones. Coordination calls and discussions among North Carolina, South Carolina, and risk counties concerning protective actions were accomplished using an internet-based virtual meeting platform. An electronic incident management system was used to maintain situational awareness and as a resource tracker for assistance requests.

The western branch office was well equipped to support emergency operations with computers, office equipment, displays, and supplies. Multiple electronic projections were used to display incident management tracking, a 10-mile emergency planning zone map, and virtual meeting platform information. The facility had adequate dosimetry and potassium iodide for issuance if it were necessary to deploy personnel into the emergency planning zone.

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

3.3.2.3 Mecklenburg County

Operational Coordination Capability Summary:

Mecklenburg County Office of Emergency Management staff successfully demonstrated the ability to effectively manage their emergency operations center in the event of a radiological emergency at the Catawba Nuclear Station. The emergency operations center staff was able to alert, notify, and mobilize staff members and activate the facility quickly in order to respond to a radiological event. The new facility was large and had enough supplies and equipment to accommodate and sustain a full activation. Primary and backup communications equipment operated properly, including several other backup methods.

The director ably directed emergency response actions throughout the exercise. He gathered pertinent information from his staff and other sources, analyzed it, and made appropriate decisions. He facilitated effective discussions with staff to make informed decisions and to conduct operations to evacuate the general population from the 10-mile emergency planning zone. The emergency operations center manager conducted periodic staff briefings which kept the staff informed of emergency conditions and plant status. The operations officer demonstrated extensive technical knowledge of radiological emergency response actions, and he kept the director informed throughout the exercise to enable appropriate decisions.

Appropriate measures were taken to ensure all emergency operations center staff and agency emergency workers had enough dosimetry, potassium iodide, monitors, and procedures. Binders containing instructions were available to all staff. Radiological exposure management and control for emergency workers was well thought out and implemented effectively.

Protective actions were implemented (simulated) by school officials for early release from schools and for students to be relocated, dependent on schools being in-person or using virtual learning. Persons with access or functional needs were identified by registry and would follow local county decisions, as discussed with the Mecklenburg County Department of Health and Human Services and Disability Determination Services. Additional resources could have been coordinated through non-government organizations as needed.

Traffic and access control point management was demonstrated by interview. An emergency worker kit and traffic and roadblock documents would be issued for each point showing location, operational phases, communication methods, exposure control and administrative limits, and recordkeeping. The interview included an impediment discussion wherein law enforcement officers were knowledgeable of the area and evacuation routes and were fully capable of identifying and resolving impediments as necessary.

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

Mecklenburg County Emergency Operations Center staff demonstrated the ability to accomplish primary alerting of the public in an efficient and timely manner. On two occasions, the Mecklenburg County Policy Group concurred with North Carolina, South Carolina, York County, and Gaston County on protective actions. The group then coordinated siren activation times; Emergency Alert System message selection and dissemination; and National Weather alerts with the states and counties.

Early in the exercise, emergency management personnel conducted a silent test of the Mecklenburg County sirens; all sirens were operational. Mecklenburg County had redundant alert systems available to notify the entire county or specific regions of the county. Systems included, but were not limited to, the use of various agency vehicles for route alerting, telephone calls, and social media.

Public information staff provided accurate emergency information and instructions to the public and the news media in a timely manner. The public information officer demonstrated an uncanny ability to monitor and utilize a host of communication systems to provide county personnel and the general public timely and accurate information. Pre-scripted templates were used to prepare four Mecklenburg County press releases. Each press release was reviewed by senior leadership before being released. The public information officer also reviewed joint information system news release drafts and provided input regarding county actions.

In addition, the public information officer monitored several social media sites and provided information to the county 3-1-1 information staff and tracked message trends; there were no social media trends identified during this demonstration.

For this capability the following radiological emergency preparedness criteria were met: 5.a.1, 5.a.3, and 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

3.3.2.4 Gaston County

Operational Coordination Capability Summary:

Gaston County Emergency Management and Fire Services staff successfully demonstrated the ability to respond to a radiological emergency at the Catawba Nuclear Station and ensure the safety of the general public and county emergency workers. A modified emergency operations center staffing plan was implemented to provide additional measures of health and safety during the current SARS-CoV-2/COVID-19 public health emergency. The modified plan reduced the number of staff participating in-person and leveraged a variety of technologies to allow others to participate virtually.

Procedures to alert and notify personnel were successfully demonstrated. Exercise participants were pre-positioned in the area in accordance with the extent of play agreement and reported to their duty stations upon receipt of an automated notification system message. The Gaston County 911 Communications Center Technical Supervisor was interviewed regarding the mobilization of emergency personnel. The newly acquired mass notification system was used to make timely notifications to notify and activate the emergency operations center staff. The notification system was pre-loaded to notify appropriate responders by providing messages to their pagers, work phones, cell phones, and email addresses.

The emergency operations center and Gaston County 911 Communications Center facilities were sufficient to support emergency response. The facilities had adequate space, office furnishings, lighting, ventilation, and restrooms available. Backup power would be provided by an auxiliary generator for extended emergency use. The emergency operations center had redundant communication systems, to include the utility-provided dedicated notification and decision line, 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 support. A variety of maps, graphic displays, and monitors were used to support operations in the emergency operations center. An electronic incident management system was utilized to document and share Gaston County-specific information via online electronic message boards created and utilized by all the

participating jurisdictions.

The Gaston County Emergency Management Director successfully accomplished direction and control and made timely decisions in response to current incident conditions. The director ensured all response activities were coordinated between appropriate agencies as authorized in a timely manner with a SARS-CoV-2/COVID-19 and public safety emphasis. Throughout the exercise, the director participated in all decision line conference calls and discussed decisions with staff. Based on available information from the utility liaisons and state radiological data, the director provided county concurrence for all protective recommendations and media messages. Emergency operations center command staff worked effectively to gather, analyze, and present emergency information to the staff during periodic emergency operations center briefings. Briefings kept the staff informed of emergency conditions and plant status and included updates from activated agencies of their current priorities, activities, and any unmet needs. Overall, the staff demonstrated they were very knowledgeable of their roles/responsibilities and subject matter expertise.

A sufficient supply of potassium iodide, dosimetry, and monitoring equipment was maintained at the emergency operations center for emergency workers. The emergency management planner adequately described methods for equipping emergency workers with appropriate equipment. Agency representatives were knowledgeable of radiological exposure control for emergency workers. During interview discussion, a representative from the Gaston County Health Department adequately explained how potassium iodide would be provided to the general public residing within the 10-mile emergency planning zone. Enough equipment and supplies were available at the emergency operations center for extended operations.

Gaston County Emergency Operations Center staff effectively demonstrated through interview, their ability to provide transportation and implement protective actions for individuals with disabilities and access/functional needs including schools within their area of the 10-mile emergency planning zone. A current list of special needs population was available for review by the evaluator.

The Gaston County School's Director of Safety discussed school relocation and methods for parent notification. He explained that a precautionary early dismissal of students would have been implemented at site area emergency. Due to SARS-CoV-2/COVID-19 , schools were only at 50% capacity each day of the week, which would help reduce the time needed to dismiss or relocate students if required.

Through interview with a Gaston County Police Department representative, the capability to establish effective traffic and access control, and to respond appropriately to impediments on evacuation routes within their jurisdiction was adequately demonstrated. Staff members were knowledgeable and effectively ensured the safety of the public and emergency workers during traffic and access control activities.

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

Gaston County staff demonstrated the ability to effectively coordinate reliable public alerts and warnings while providing prompt, action-oriented information to the public in a timely manner. This was accomplished through a variety of systems, including six sirens and a mass notification phone/text/email system. Two Emergency Alert System messages that included information and instructions for the public was coordinated for release by the South Carolina State Warning Point with the first siren sounding.

Through interview with a representative of the Gaston County Sheriff's Office, it was adequately explained how backup notifications would be accomplished in areas where a siren failed. Planning for notifications in the area was discussed and would be accomplished within a reasonable time following the failure of any or all parts of primary alert and notification systems.

Frequent communication between the public information officers in the Gaston County Emergency Operations Center and the joint information system ensured all were continuously updated on both anticipated and actual public information products. A county public information liaison represented Gaston County in the joint information system, which aided the timely flow of public information and messaging.

For this capability the following radiological emergency preparedness criteria were met: 5.a.1, 5.a.3, and 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

3.3.2.5 Cleveland County

Environmental Response/Health and Safety Capability Summary:

Staff from Cleveland County Emergency Management Agency and volunteers from Oak Grove Volunteer Fire Department, Kings Mountain Volunteer Fire Department, and Bethany Volunteer Fire Department successfully demonstrated the capability to provide monitoring, decontamination, and reception of evacuees at Kings Mountain High School. Equipment and monitoring instruments were sufficient to support emergency operations. They also demonstrated that emergency worker exposure could be tracked appropriately. Due in inclement weather, exterior displays and barriers were not set up; however, the county would be able to provide enough supplies as necessary. Further, portions of vehicle monitoring, and decontamination were demonstrated through interview due to weather as well.

Kings Mountain High School had ample space to conduct vehicle monitoring, decontamination, and storage of clean and contaminated vehicles. The vehicle monitoring and decontamination process was conducted in accordance with plans and procedures. Each vehicle monitor worker properly demonstrated monitoring techniques on each vehicle as recommended. It was explained through interview that security would be provided by Kings Mountain Police Department and posted at the contaminated vehicle impoundment area to ensure that contaminated vehicles were securely stored. Drivers of the vehicles would be escorted to the personnel monitoring station located at the entrance to the high school.

Emergency workers were provided a radiological and safety briefing prior to activation of the facility. Contamination and exposure limits were provided to the workers; however, the limits were inconsistent with procedures and documentation. Emergency workers were able to properly demonstrate wear of their dosimetry and were able to explain the limits provided to them as well as documentation of exposure on their personal exposure card. Potassium iodide was not distributed to workers due to the facility's location outside of the 10-mile emergency planning zone.

Initial monitoring of evacuees was successfully demonstrated using one portal monitor, which was verified to be sufficient to monitor the estimated evacuee population of 2,106. The monitoring area was large enough to handle the portal monitor and separation of clean and contaminated evacuees, and an overhang provided necessary shelter from the elements.

The male and female decontamination teams successfully demonstrated monitoring and decontamination of a contaminated evacuee and their personal items. The Cleveland County Reception and Congregate Care Center had appropriate space, adequate resources, and trained personnel to provide decontamination. Equipment and supplies were adequate to support decontamination operations at the facility and were consistent with this location's role in the reception and congregate care center. The

decontamination monitors were knowledgeable of their exposure limits and reporting requirements; they read and recorded their dosimetry readings at appropriate intervals provided to them during the emergency worker briefing. Procedures were followed appropriately, and proper monitoring techniques were demonstrated.

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

Nursing staff from the Cleveland County Health Department, along with volunteers from the Cleveland County Chapter of the American Red Cross, successfully demonstrated their ability to provide temporary care and sheltering of evacuees while ensuring contamination avoidance. Security would be provided by the Kings Mountain Police Department to ensure contaminated evacuees would not be allowed to enter the facility. Upon registration, individuals were required to present the form obtained from the initial monitoring area, and the decontamination area as necessary, in order to obtain a wristband denoting they were clear of contamination. Potassium iodide, if authorized, would be obtained, dispensed, and tracked by the Cleveland County Health Department.

A current memorandum of understanding between Cleveland County and the American Red Cross would allow for mass care of evacuees in the event of an incident at Catawba Nuclear Station. Facilities and supplies would be sufficient to support extended sheltering operations as necessary, to include feeding, showering, and sleeping necessities. Medical services would be available within the facility and staffed by the county health department. Overflow within the facility would be available if shelter needs increased, and any shortage in sheltering supplies could be procured from a regional American Red Cross warehouse in Gastonia, North Carolina.

For this capability the following radiological emergency preparedness criteria 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

3.3.3 Joint Operations

3.3.3.1 Joint Information System

Public Information and Warning Capability Summary:

The joint information system concept was successfully used by public information staff from the States of North and South Carolina; the risk counties of Gaston, Mecklenburg, and York; the host county, Union; and Duke Energy in order to cooperatively disseminate timely, accurate, and actionable information to the public in response to an incident at Catawba Nuclear Station. The joint information system, led by the South Carolina Chief of Public Information and External Affairs, was coordinated from within the South Carolina Joint Information Center, which was collocated with the South Carolina State Emergency Operations Center.

Alert and notification of public information staff was demonstrated in accordance with plans, procedures, and the extent of play agreement. Due to allowance of pre-positioning, members of the joint information system were quickly activated in order to deem the joint information system operational in a timely manner. Redundant communications systems and appropriate equipment and supplies were available for use and demonstrated throughout the exercise. The utility-supplied joint information line was used as the primary means of coordination and remained open for the duration of the exercise. The bridge line allowed for efficient coordination of public information, to include review of news releases and media teleconference pre-caucuses.

Excellent coordination of utility, state, and county public information representatives attributed to the successful joint information system demonstration. News releases were coordinated using a public information officer email distribution list, the joint information line, and within the South Carolina State Emergency Operations Center. All four joint news releases were clear and accurate, correctly reflecting the coordinated protective action decisions made. One corrected news release was necessary to remedy incorrect zone descriptions; however, efficient coordination allowed for the expedient dissemination of the edited news release.

Regular public information line meetings were used to relay information from decision line calls and coordinate prior to media telebriefings. Prior to each telebriefing, a pre-caucus was held among the joint information system representatives to coordinate conduct of the telebriefings as well as information to be relayed to the media and the public. The telebriefings, conducted virtually through a web conference platform due to

the pandemic environment was highly effective in delivering accurate information and instructions. Information delivered from each spokesperson was informative and consistent with protective action decisions. Use of an agenda would be helpful in guiding the media telebriefings to remain consistent with pre-caucus discussions.

Public inquiry was handled by offsite response organizations at their respective locations. One rumor was addressed by the utility representative during the second media telebriefing. Any additional rumors and trends would be discussed among the public information staff and addressed appropriately at the telebriefings. Impediments to evacuation were handled at the local level and did not require public messaging from within the joint information system.

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

3.3.3.2 Emergency Operations Facility

Operational Coordination Capability Summary:

The South Carolina Emergency Management Division and North Carolina Emergency Management liaisons in the licensee's emergency operations facility demonstrated the ability to provide firsthand situational information to their respective agencies in support of the Catawba Nuclear Station.

Upon arrival to the facility, the liaisons established multiple lines of communications with their parent agencies. This included cell phone, email, video web conferencing applications, and access to their agencies incident management software systems. The liaisons utilized several different virtual platforms to obtain and pass relevant information. These virtual tools provided a valuable conduit to the liaisons in completing their tasks.

Working closely with licensee's personnel, they sought critical information that helped them understand the severity of the accident and provided that information in a timely manner to the offsite incident decision makers. Likewise, they jointly made sure that the licensee was aware of the state's and local government precautionary and protective action decisions.

The liaisons performed all tasks flawlessly during the exercise which allowed for the successful execution of this core capability.

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

3.3.3.3 Operational Communications

Operational Communication Summary:

The States of South Carolina and North Carolina demonstrated the capability of timely communications in support of security, situational awareness, and operations among and between affected communities in the impact area and all response forces. The South Carolina Emergency Management Division established and facilitated a decision line call over a telephone and video conference platform to coordinate precautionary actions and protective action decisions. Key decision makers from the State of South Carolina; York County; the State of North Carolina; and the counties of Gaston, Mecklenburg, and Union participated. Other support staff from the States of South Carolina and North Carolina; the South Carolina Department of Health and Environmental Control; and utility emergency operations facility liaisons were also represented on the decision line.

The decision line was established by the South Carolina Emergency Management Division following declaration of Site Area Emergency and was maintained throughout the exercise. The decision line was primarily used to coordinate precautionary actions and protective action decisions, validate successful activation of sirens, and confirm receipt of Emergency Alert System messages. Further, facilitated discussions to maintain situational awareness also occurred for the benefit of stakeholders. Participants were provided frequent opportunities to brief on significant activities, raise unmet needs, and query other jurisdictions. Notably, real-world factors not explicitly part of exercise play were considered by key leaders. Discussions were observed regarding temporary changes to school populations due to the current global pandemic and coordination with local elections boards due to early voting was in progress, demonstrating a commitment to the health and safety of the public by directly addressing novel challenges to emergency response.

For this capability the following radiological emergency preparedness criteria were met: 1.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

Section 4: Conclusion

Overall, the exercise was a success. Officials and representatives from the States of South Carolina and North Carolina; the risk counties of York, South Carolina, and Mecklenburg and Gaston, North Carolina; the host counties of Cherokee, Chester, Lancaster, and Union, South Carolina, and Cleveland and Union, North Carolina; and Duke Energy, as well as numerous volunteers, participated in the exercise. The cooperation and teamwork of the participants were evident throughout all phases of the exercise.

State and local emergency response organizations responded to the simulated radiological emergency as they would in a pandemic environment. They were able to demonstrate their ability to protect the health and safety of the public and emergency workers from radiological hazards while simultaneously preserving workforces by maintaining social distancing due to the SARS-CoV-2/COVID-19 public health crisis. State and local agencies were able to support emergency operations centers virtually from remote locations. Emergency management leadership shared information and effectively integrated emergency support.

The Federal Emergency Management Agency wishes to acknowledge the efforts of the many individuals who participated and made this exercise a success. State and local emergency response organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them.

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Appendix A: Exercise Timeline

DATE: October 27, 2020 **SITE**: Catawba Nuclear Station (012)

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken								
		SC-SEOC	SC Dose Assessment	York County	NC-SEOC	NC Dose Assessment	Western Branch Office	Mecklenburg County	Gaston County	SC/NC JIC/JIS
Unusual Event	-	-	-	-	-	-	-	-	-	-
Alert	-	-	-	-	-	-	-	-	-	-
Site Area Emergency	0820	0829	0839	0832	0829	0829	0829	0829	0832	*0907
General Emergency	1046	1058	1059	1057	1058	1058	1058	1058	1102	*1144
Simulated Rad. Release Started	1046	1058	1059	1057	1058	1058	1058	1058	1102	*1141
Simulated Rad. Release Terminated	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Facility Declared Operational	0909	0847	0847	0836	0854	0854	0859	0845	0840	0900 (JIC) 0838 (JIS)
Declaration of State of Emergency	South Carolina	0953	1118	1118	1118	1118	1118	1118	1118	0953
	North Carolina	0937	0937	0937	0937	0937	0937	0937	0937	*1009
	Local	-	-	1016	-	-	0938-Meck	0930	-	*0932-Meck *1046-York
Exercise Terminated	1300	1307	1307	1304	1302	1302	1300	1304	1319	1304
Precautionary Actions: Animals on stored feed; hunting/fishing ban; waterway clearing		0912	0912	0912	0912	0912	0912	0912	0912	*0931
1st Protective Action Decision: Stay tuned		0912	0912	0912	0912	0912	0912	0912	0912	*0931
1st Siren Activation		0925	0925	0925	0925	0925	0925	0925	0925	0925
1st EAS Message: Stay tuned		0930								0930
1st NWS Message		0930								0930
2nd Protective Action Decision: Shelter: E2, F2, F3 Evacuate: A0, E1, F1		1126	1126	1126	1126	1126	1126	1126	1126	*1144
2nd Siren Activation		1141	1141	1141	1141	1141	1141	1141	1141	1141
2nd EAS Message: Evacuate/Shelter in place		1141		1141	1141	1141	1141	1141	1141	1141
2nd NWS Message				1141				1141		1141
KI Ingestion Decision: South Carolina: EW in 10-mile EPZ; Not for public		1126	1126	1126	-	-	-	-	-	-
North Carolina: EW in 10-mile EPZ; Not for public		-	-	-	1126	1126	1126	1126	1126	-

* Time of public messaging

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Appendix B: Exercise Key Leaders and Evaluators

Acting Technological Hazards Branch Chief: J.T. Ackermann

Acting Section Chiefs: Matthew Bradley (Central)/Libby Adkins (North)

Administrative Support: Erin McCarty

1. **Evaluator Assignments, Exercise Week, October 26-29, 2020:**

Location/Venue	Evaluation Team	Core Capability Evaluated
State of South Carolina: SCEMD Director- Mr. Kim Stinson		
SEOC	*Quintin Ivy	Operational Coordination Operational Communication
SC JIC	* P.J. Nied	Public Information & Warning
SC JIS (*Virtual*)	*Libby Adkins	Public Information & Warning
Dose Assessment	*John Fill	Situational Assessment
Duke Energy EOF	*Bob Spence	Operational Coordination
York County: EM Director- Mr. Chuck Haynes		
EOC	Russell Bergmann Meg Swearingen	Operational Coordination Public Information & Warning On-Scene Security, Protection, and Law Enforcement
State of North Carolina: NCEM Director- Mr. Michael Sprayberry		
SEOC	*Erica Houghton Danny Loomis Debra Rembert	Operational Coordination Operational Communication Public Information & Warning
NC JIS (*Virtual*)	*Libby Adkins	Public Information & Warning
NCEM, Western Branch Office – RCC	*Marcy Campbell	Operational Coordination
Dose Assessment Radiation Protection	Jill Leatherman	Situational Assessment
Mecklenburg County: EM Director- Chief Wike Graham		
EOC	*Michael Dolder Gene Taylor James Greer	Operational Coordination Public Information & Warning On-Scene Security, Protection, and Law Enforcement
Gaston County: EM Director- Chief Kevin Gordon		
EOC	*Roy Smith Steve Watt	Operational Coordination Public Information & Warning On-Scene Security, Protection, and Law Enforcement

2. **Evaluator Assignments, Out of Sequence Week, February 24-28, 2020:**

Location/Venue	Evaluation Team	Core Capability Evaluated
York County: EM Director- Mr. Chuck Haynes		
School Interviews	*DeShun Lowery Quintin Ivy Lorenzo Lewis Robert Nash	Critical Transportation
EWD (OOS Leslie Fire Department February 25, 2020)	*Quintin Ivy Marcy Campbell Lorenzo Lewis Cheryl Weaver	Environmental Response/Health and Safety
EWD (OOS Bethany Fire Department February 26, 2020)	*Quintin Ivy Marcy Campbell Mike Henry Lorenzo Lewis	Environmental Response/Health and Safety
Chester County, South Carolina: Director- Mr. Eddie Murphy		
RCCC (OOS Gaffney Senior High School February 27, 2020)	*Libby Adkins Ronald Bonner Robert Walker Roger Winkelmann	Environmental Response/Health and Safety Mass Care Services
Cherokee County, South Carolina: Director- Mr. Rick Peterson		
RCCC (OOS Chester Senior High School February 26, 2020)	*Erica Houghton Ronald Bonner Herbert Massie John Wills Robert Walker	Environmental Response/Health and Safety Mass Care Services
Lancaster County, South Carolina: Director- Mr. Darren Player		
RCCC (OOS Lancaster High School February 25, 2020)	*Erica Houghton Ronald Bonner Herbert Massie Roy Smith John Wiecjorek	Environmental Response/Health and Safety Mass Care Services
Union, South Carolina: Director- Mr. Rob Fraim		
RCCC (OOS Union County High School February 24, 2020)	*Robert Nash Erica Houghton Quintin Ivy Roy Smith	Environmental Response/Health and Safety Mass Care Services
Cleveland County: EM Director- Mr. Perry Davis		
RCCC (OOS Kings Mountain High School February 24, 2020)	*Libby Adkins Mike Henry Robert Walker Cheryl Weaver John Wills John Wiecjorek	Environmental Response/Health and Safety Mass Care Services

Appendix C: Extent-of-Play Agreements

South Carolina Extent of Play Agreement

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.

Offsite Response Organizations (ORO)	Page #
State of South Carolina	1
State Emergency Operations Center (SEOC)	1
Dose Assessment	3
Emergency Operations Facility (EOF) Liaison	5
Waterway Clearance	5
Joint Information System (JIS)	7
York County	10
Emergency Operations Center (EOC)	10
Schools	15
Emergency Worker Decontamination (EWD)	16
Cherokee, Chester, Lancaster, Union Counties	18
Reception Center (RC)	18
Congregate Care (CC)	21

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 can be at their duty station or in the same room prior to notification. SERT alert and notification will be simulated. In response to the COVID pandemic, the SEOC will only be staffed by key personnel from SCEMD and DHEC all other SERT members will be made available virtually.

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 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: If a non-participating agency cannot or will not be present in the SEOC, a call can be made to a known contact within that agency or organization as needed.

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.

Note: State and County decision makers will use the WebEx conference bridge line to conduct protective action discussions/decision making among OROs. Duke Emergency Management Network (DEMNet) will be used for notifications and conducting siren activations.

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.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: Operational Communications
Definition: Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

Capability Target: 1.d.1 Communications Equipment (Interstate Communications)
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:

- The capability to manage the communications systems and ensure that all message traffic is handled without delays that might disrupt emergency operations.

- Participating agencies include: North Carolina; South Carolina; York County, SC; Gaston County, NC; and Charlotte/Mecklenburg Counties, NC.

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.

Exception: All siren soundings will be conducted via silent test.

Exception: York County silent test will simulate siren sounding for Gaston and Charlotte/Mecklenburg Counties.

Dose Assessment

Note: DHEC Dose Assessment will be located at the SEOC for the dress rehearsal and evaluated exercise.

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).

SC DHEC Dose Assessment will demonstrate the following Critical Tasks:
- The capability to 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).

SC DHEC Dose Assessment 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).

SC DHEC Dose Assessment will provide verification via demonstration that their equipment, dosimetry, KI, and other supplies are sufficient 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 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).

SC DHEC Dose Assessment 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.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).

SC DHEC Dose Assessment 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).

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

Emergency Operations Facility (EOF) Liaisons

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: 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 and SC DHEC Liaisons 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 discussion took place OOS at York MACC on 2/26/2020 @ 1000

Core Capability: On Scene Security, Protection and Law Enforcement
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 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: If a non-participating agency cannot or will not be present in the SEOC, a call can be made to a known contact within that agency or organization as needed.

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 and PRDs will be simulated by props.

Capability Target: 3.d.1. Implementation of Traffic and Access Control
Appropriate traffic and access control are 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:

- The capability to 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 can be at their duty station or in the same room 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).

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

- 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 communicate alternate routes to evacuees, as appropriate.

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).

ESF-15 (Public Information) 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.

Exception: All siren soundings will be conducted via silent test.

Exception: The primary means of public notification is through the Integrated Public Alert and Warning System (IPAWS). An EAS and/or WEA alert will be sent through SCEMD's Code Red system. Local radio and television stations monitoring EAS will also broadcast information throughout the upstate operational area. SCEMD will use standard

EAS procedures for activating emergency notification messages. Messages will be coordinated with the North Carolina Emergency Management Agency and South Carolina will be responsible for sending emergency notifications to residents of North Carolina and South Carolina.

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.

Note: ESF-15, in coordination with the Executive Group, will determine the need for a press conference based on the scenario. If the scenario dictates that protective actions for the general public are warranted, a simulated executive level press conference, including mock media, will be conducted at the State JIC. Members of ESF-15 and/or the Executive Group will represent the Governor and other agency heads who are not participating. Due to time constraints, subsequent press conferences will not be conducted every time new protective actions are made or revised. In lieu of follow-on press conferences, ESF-15 may brief members of the media one-on-one.

RISK COUNTY
York County

EOC

<u>Core Capability: Operational Coordination</u>

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).

York County will demonstrate the following Critical Tasks:

- The capability to receive notification of an incident from the licensee; 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 can be at their duty stations. In response to the COVID pandemic the EOC will only be staffed by York County Personnel, all other EOC personnel will be made available virtually.

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).

York County 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 Simmel 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).

York County 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).

York County will demonstrate that each EOC has sufficient equipment, maps and displays to perform the assigned role.

Exception: Quantities of KI, equipment, and equipment calibration and testing are verified during Staff Assistance Visits (SAVs). SAVs we completed on February 24-28, 2020.

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).

York County 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.

Exception: York County Public Health officials will be available virtually during the exercise.

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).

York County 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.

Exception: York County Public Health officials will be available virtually during the exercise.

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).

York County 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.

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).

York County 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.
- 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.

Exception: York County Public Health officials will be available virtually during the exercise.

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).

SC DHEC will discuss the following Critical Tasks:

- The capability to make KI available to institutionalized individuals and 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.

Exception: York County Public Health officials will be available virtually during the exercise.

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).

York County will demonstrate the following Critical Tasks:

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

Exception: York County Public Health officials will be available virtually during the exercise.

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).

York County/York County School Officials will demonstrate the following Critical Tasks:

- The ability to implement precautionary and/or protective action decisions for students.
- The capability 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.

Exception: York County School officials will be available virtually during the exercise.

Capability Target: 3.d.1. Implementation of Traffic and Access Control
Appropriate traffic and access control are 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).

York County 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.

Exception: York County Law Enforcement officials will be available virtually during the exercise.

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).

York County ESF-13 (Law Enforcement) and State 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.

Exception: York County Law Enforcement officials will be available virtually during the exercise

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).

York County 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: York County silent test will simulate siren sounding for Gaston and Charlotte/Mecklenburg Counties.

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).

York County will demonstrate/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).

York County 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.

Schools

Note: School interviews were conducted out of sequence on 2/25/2020 at the following times and locations:

Date & Time	District	School
0900	York 1	York Intermediate
0945	York 1	York High/FDJC
1100	Clover 2	Clover High/Clover ATC
1145	Clover 2	Bethel Elementary
0830	Rock Hill 3	York Road Elementary
0915	Rock Hill 3	Applied Technology Center
1000	Rock Hill 3	Northwestern High
1045	Rock Hill 3	Mt. Gallant Elementary
1130	Rock Hill 3	Rosewood Elementary
0830	Fort Mill 4	Orchard Park Elementary
0915	Fort Mill 4	Fort Mill High
1000	Fort Mill 4	Springfield Elementary
1045	Fort Mill 4	Nation Ford High
1130	Fort Mill 4	Fort Mill Middle
1215	Fort Mill 4	Catawba Ridge High
1330	University	Winthrop University

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).

York County School Officials 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.

Emergency Worker Decontamination (EWD)

EWD facilities were evaluated as follows:

Date & Time	County	Facility
2/25/2020 @ 1800	York	Lesslie FD
2/26/2020 @ 1800	York	Bethany FD

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).

York County will discuss the following Critical Tasks:

- The capability to 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.

Capability Target: 1.b.1. Facilities
Facilities are sufficient to support the emergency response. (NUREG-0654/REMA-REP-1, G.2.a; H.3; J.10.h; J.12; K.5.b).

York County will demonstrate the availability of facilities to support emergency operations.

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).

York County 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).

York County will demonstrate that the EWD facilities' equipment and supplies are sufficient and consistent with the assigned role.

Exception: Quantities of KI, equipment, and equipment calibration and testing are verified during Staff Assistance Visits (SAVs). SAVS were completed February 24-28, 2020.

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).

York County 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.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).

York County will demonstrate the following Critical Tasks:

- The capability to monitor emergency worker personnel and their equipment and vehicles for contamination.
- The capability to make decisions on the need for decontamination of personnel, equipment, and vehicles based on trigger/action levels and procedures.
- The process of checking the instruments for proper operation before use.
- Monitoring procedures for a minimum of two emergency workers, their equipment, and one vehicle.
- Provisions for separate showering and same-sex decontamination.
- Provisions for limiting the spread of contamination.
- Provisions to separate contaminated and uncontaminated individuals, provide changes of clothing for those with contaminated clothing, and store contaminated clothing and personal belongings to prevent further contamination of emergency workers or facilities.
- The capability to register emergency workers upon completion of the monitoring and decontamination activities.

Exception: Decontamination of emergency workers will be simulated.

HOST COUNTIES
Cherokee, Chester, Lancaster, and Union Counties

Reception Center
RC/CC facilities were evaluated as follows:

Date & Time	County	Facility
2/24/2020 @ 1800	Union	Union HS Complex
2/25/2020 @ 1600	Lancaster	Lancaster HS
2/26/2020 @ 1800	Chester	Chester HS
2/27/2020 @ 1800	Cherokee	Gaffney Sr. HS

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).

Cherokee, Chester, Lancaster and Union Counties will discuss the following Critical Tasks:

- The capability to 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.b.1. Facilities
Facilities are sufficient to support the emergency response. (NUREG-0654/REMA-REP-1, G.2.a; H.3; J.10.h; J.12; K.5.b).

Cherokee, Chester, Lancaster and Union Counties will demonstrate the availability of facilities to support emergency operations.

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).

Cherokee, Chester, Lancaster and Union Counties 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 (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).

Cherokee, Chester Lancaster, and Union Counties will demonstrate that the reception center(s) have sufficient equipment and supplies to perform the assigned role.

Exception: Quantities of KI, equipment, and equipment calibration and testing are verified during Staff Assistance Visits (SAVs). SAVs are scheduled for February 24-28, 2020.

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).

Cherokee, Chester, Lancaster and Union 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).

Cherokee, Chester, Lancaster and Union Counties will demonstrate the following Critical Tasks:

- The process of checking the instruments for proper operation before use.
- Radiological monitoring and decontamination, 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 register evacuees upon completion of the monitoring and decontamination activities.
- Provisions for limiting the spread of contaminations
- Provisions to separate contaminated and uncontaminated evacuees, provide changes of clothing for those with contaminated clothing, and store contaminated clothing and personal belongings to prevent further contamination of evacuees or facilities.

Exception: Decontamination of evacuees will be simulated.

Note: Chester County will resolve a Level 2 Finding issued during the 2018 Catawba Exercise. RC/CC demonstration will occur at Chester HS in accordance with the 8-year exercise cycle.

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.b.1. Facilities
Facilities are sufficient to support the emergency response. (NUREG-0654/REMA-REP-1, G.2.a; H.3; J.10.h; J.12; K.5.b).

Cherokee, Chester, Lancaster and Union Counties will demonstrate the availability of facilities to support 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).

Cherokee, Chester, Lancaster, and Union Counties will demonstrate that the congregate care facility's equipment and supplies are sufficient and consistent with the assigned role.

Exception: Quantities of KI, equipment, and equipment calibration and testing are verified during Staff Assistance Visits (SAVs). SAVs are scheduled for February 24-28, 2020.

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).

SC DHEC Public Health personnel 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).

Cherokee, Chester, Lancaster and Union Counties will demonstrate the following Critical Tasks:

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

Cherokee, Chester, Lancaster and Union Counties 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.

North Carolina Extent of Play Agreement

FOR THE CATAWBA NUCLEAR STATION GRADED EXERCISE 2020
OCTOBER 27, 2020

Purpose

This Extent of Play Agreement (XPA) identifies the conditions that will be used to develop, conduct, control, and evaluate the Catawba Nuclear Station graded exercise, as agreed to by the members of the Catawba Task Force and the Exercise Director for North Carolina Division of Emergency Management.

Executive Summary

Unless otherwise noted, all activities will be fully demonstrated in accordance with respective plans and procedures as they would be in an actual emergency. North Carolina Emergency Management (NCEM) must provide these plans, guides, and procedures to Federal Emergency Management Agency (FEMA) by 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 NCEM Controller and FEMA Evaluator.

On October 27, 2020, the State of North Carolina and Mecklenburg, Gaston, and Union counties will demonstrate a partial participation plume exposure pathway exercise for the 10-mile emergency planning zone of the Catawba Nuclear Station, to include the evaluation of out of sequence activities conducted the week of February 22-26, 2020. The Catawba Nuclear Station is located in northwest York County, South Carolina.

The purpose of the exercise is to assess the level of state and local preparedness in responding to an incident at the Catawba Nuclear Station. It will be conducted in accordance with Federal Emergency Management Agency policies and guidance concerning the exercise of state and local radiological emergency response plans and procedures. Officials and representatives from participating agencies and organizations will demonstrate knowledge of their emergency response plans and procedures and successfully implementing them during the exercise. The evaluation of out of sequence activities will include: staff assistance visits; traffic control points; backup route alerting; protective actions for schools; reception and congregate care centers; emergency worker and vehicle monitoring and decontamination; and waterway warning.

Identified Exercise Objectives and Core Capabilities	
Exercise Objectives	**Aligned Core Capability**
Demonstrate the ability to alert, notify, and mobilize response personnel and facilities; provide direction and control, make precautionary and protective action decisions and implement those decisions.	Operational Coordination, On-Scene Security Protection & Law Enforcement, Critical Transportation
Demonstrate the ability to activate the prompt alert and notification system and provide accurate emergency information and instructions to the public and news media in a timely manner.	Public Information & Warning
Demonstrate the ability to receive, monitor, decontaminate, register and provide for the temporary care of evacuees and emergency workers.	Environmental Response Health & Safety, Public Health, Healthcare, and Emergency Medical Services, Mass Care

Target: Protective Action Decision Making

Critical Task: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers (EWs) including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654 C.6; J.10.e, f; K.4 Criterion 2a1).

Critical Task: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy) (NUREG-0654 A.3; C.4, 6; D.4; J.9; J.10.f, m Criterion 2b2).

Target: Emergency Notification and Public Information

Critical Task: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP Guidance (Timely: The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 6, 7; Criterion 5a1).*

Critical Task: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 7; G.3.a; G.4.a, c; Criterion 5b1).

***FEMA Requirements**
• *Identify the state or local government organization and the official with the authority for providing the emergency alert system (EAS) alert and message.*
• *Identify the commercial nuclear power plant and a statement that an emergency exists.*
• *Must make reference to Radiological Emergency Preparedness (REP) specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency.*
• *Include a closing statement asking the affected and potentially affected population to stay tuned to this EAS station(s) for additional information. This additional information (when necessary) could be in the form of a "Special News Broadcast" that would follow the EAS message as soon as possible.*

NCEM: Agreed.

• State Emergency Response Team (SERT) members may be pre-positioned at the start of the exercise. This includes liaisons at the South Carolina Emergency Operations Center (EOC) and the utility's Common Emergency Operations Facility (EOF). SERT members who will respond in same building as their regular workspace can be in that building. SERT members who are responding from a different location than their workspace may preposition themselves in the parking lot.
• The State will assume direction and control if requested by the counties.
• Siren activation will be simulated by the counties. The State does not have the ability to activate sirens.
• Critical Tasks will be demonstrated from the management perspective- for example, how to manage traffic control points consistent with current conditions and protective action decisions. Traffic control may be demonstrated by interview with the State Highway Patrol during OOS activities.
• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.
• North Carolina will be the back-up to South Carolina for EAS broadcasts.

NCEM Western Branch Office/Regional Coordination Center- West

***Core Capability:* 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.

• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.

Target: Emergency Operations Management

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Target: *Protective Action Decision Making*

Critical Task: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

NCEM: Agreed.

• SERT members who will respond in same building as their regular workspace can be in that building. SERT members who are responding from a different location than their workspace may preposition themselves in the parking lot.
• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.

Radiation Protection Section (RPS) Dose Assessment and the Division of Public Health (DPH)

***Core Capability:* 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.

Target: Protective Action Recommendation Making

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of potassium iodide (KI), is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654 C.6; J.10.e, f; K.4 Criterion 2a1).

Critical Task: Appropriate PARs are based on available information on plant condition, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions (NUREG-0654 I. 10; Supp. 3; Criterion 2b1).

Critical Task: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (NUREG-0654 A.3; C.4, 6; D.4; J.9; J.10.f, m; Criterion 2b2).

RPS and DPH: Agreed.

• RPS and DPH members who will respond in same building as their regular workspace can be in that building. RPS and DPH members who are responding from a different location than their workspace may preposition themselves in the parking lot.
• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.

Joint Operations- NCEM Emergency Operations Facility (EOF) Liaison

Core Capability: **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.

Target: Protective Action Decision Making

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654 C.6; J.10.e, f; K.4 Criterion 2a1).

Critical Task: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (NUREG-0654 A.3; C.4, 6; D.4; J.9; J.10.f, m Criterion 2b2).

NCEM: Agreed.

• SERT members who will respond in same building as their regular workspace can be in that building. SERT members who are responding from a different location than their workspace may preposition themselves in the parking lot.

Joint Operations- Joint Information System (JIS)

Core Capability: **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.

Target: Emergency Operations Management

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Target: Emergency Notification and Public Information

Critical Task: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 7; G.3.a; G.4.a, c; Criterion 5b1).

NCEM and Counties: Agreed.

• This is a two-state exercise involving South Carolina and North Carolina. South Carolina will have the lead for public information during this exercise.
• North Carolina Public Information will be demonstrating the use of a JIS in this exercise; they will not be demonstrating the use of a JIC. North Carolina PIOs will be at their home base and use virtual platforms to collaborate and send messaging as related to the exercise events.
• During this exercise, at least two press releases will be prepared with simulated release.
• At least one press briefing will be demonstrated. This briefing may be done in-person or via conference call or other electronic/ virtual means.
• PIO members who will respond in same building as their regular workspace can be in that building. PIO members who are responding from a different location than their workspace may preposition themselves in the parking lot.
• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.

Joint Operations- Waterway Warning Lake Wylie

Core Capability: **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 all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.

Target: Emergency Notification and Public Information

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG- 0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1).

NCEM and Counties: Agreed.

• Duke Energy may conduct a radiological emergency response training prior to the demonstration.
• The demonstration will be a command and control tabletop/discussion. No boat or aircraft operations will occur.

Lake Wylie Waterway Warning Participants (NC Only):

North Carolina Wildlife Resources Commission,
Law Charlotte-Mecklenburg Police Department
*Gaston County Sheriff's Office

Date/Time: 26 Feb 2020 10:00
Locations: York County SC MACC

*These agencies will be participating for training and courtesy evaluation only.

County Jurisdictions - Risk Counties: Mecklenburg and Gaston Risk County Emergency Operations Centers

Core Capability: **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.

Target: Emergency Operations Management

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: Facilities are sufficient to support the emergency response (NUREG-0654/FEMA-REP-1, 1.b.1; G.3.a; H.3; J.10.h; J.12; K.5.b). 1.b.1. Mecklenburg County only

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Target: Protective Action Decision Making

Critical Task: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654 C.6; J.10.e, f; K.4 Criterion 2a1).

Critical Task: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (NUREG-0654 A.3; C.4, 6; D.4; J.9; J.10.f, m Criterion 2b2).

Critical Task: Protective action decisions are made, as appropriate, for groups of persons with disabilities and access/functional needs (NUREG-0654 D.4; J.9; J.10.d, e; Criterion 2c1).

Target: Protective Action Implementation

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG- 0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654 J.10.e, f; Criterion 3b1).

Critical Task: Protective action decisions are implemented for persons with disabilities and access/functional needs other than schools within areas subject to protective actions (NUREG- 0654 J.10.c, d, e, g; Criterion 3c1).

Critical Task: OROs/School officials implement protective actions for schools (NUREG-0654 CJ.10.c, d, e, g; Criterion 3c2).

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1).

Critical Task: Impediments to evacuation are identified and resolved (NUREG-0654 J.10.k; Criterion 3d2).

Core Capability: **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.

Target: Emergency Notification and Public Information

Critical Task: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP Guidance (Timely: The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG- 0654 E.5, 6, 7; Criterion 5a1).*

Critical Task: Backup alert and notification of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system (NUREG-0654 E.6; Appendix 3.B.2.c; Criterion 5a3).

Critical Task: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 7; G.3.a; G.4.a, c; Criterion 5b1).

Risk Counties: Agreed.

• Siren operations will be simulated. A single county may sound all the sirens, in this case, counties may demonstrate siren operations through discussion.

• At least one traffic impediment will be injected in North Carolina. The appropriate authority will identify alternate routes and inform the public.

• County personnel members who will respond in same building as their regular workspace can be in that building. County personnel members who are responding from a different location than their workspace may preposition themselves in the parking lot.

• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.

***FEMA Requirements**
1. Identify the state or local government organization and the official with the authority for providing the EAS alert and message.
2. Identify the commercial nuclear power plant and a statement that an emergency exists.
3. Must make reference to REP specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency.

4. Include a closing statement asking the affected and potentially affected population to stay tuned to this EAS station(s) for additional information. This additional information (when necessary) could be in the form of a "Special News Broadcast" that would follow the EAS message as soon as possible.

Risk County Protective Actions for Schools

Core Capability: **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.

Target: Protective Action Implementation

Critical Task: OROs/School officials implement protective actions for schools (NUREG-0654 CJ.10.c, d, e, g; Criterion 3c2).

Risk Counties: Agreed.

• School operations will be demonstrated by discussion during OOS or on exercise day at the EOC.
• County personnel members who will respond in same building as their regular workspace can be in that building. County personnel members who are responding from a different location than their workspace may preposition themselves in the parking lot.
• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.

County Jurisdictions – Host Counties: Cleveland and Union Host County Emergency Operations Centers (Union County only)

Core Capability: **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.

Target: Emergency Operations Management

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Target: Protective Action Decision Making

Critical Task: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654 C.6; J.10.e, f; K.4 Criterion 2a1).

Target: Protective Action Implementation

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG- 0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654 J.10.e, f; Criterion 3b1).

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1).
Critical Task: Impediments to evacuation are identified and resolved (NUREG-0654 J.10.k; Criterion 3d2).

Core Capability: **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.

Target: Emergency Notification and Public Information

Critical Task: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 7; G.3.a; G.4.a, c; Criterion 5b1).

***FEMA Requirements**
1. Identify the state or local government organization and the official with the authority for providing the EAS alert and message.
2. Identify the commercial nuclear power plant and a statement that an emergency exists.
3. Must make reference to REP specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency.
4. Include a closing statement asking the affected and potentially affected population to stay tuned to this EAS station(s) for additional information. This additional information (when necessary) could be in the form of a "Special News Broadcast" that would follow the EAS message as soon as possible.

Union County: Agreed.

• County personnel members who will respond in same building as their regular workspace can be in that building. County personnel members who are responding from a different location than their workspace may preposition themselves in the parking lot.
• Exercise participants who are working remotely will be available for interviews by FEMA representatives via phone.
• Operations during the day of the exercise are for training and evaluation purposes only.

Host County Incident Command Post – (Cleveland County only)

Core Capability: **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.

Target: Emergency Operations Management

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations.
Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Target: Protective Action Decision Making

Critical Task: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs (NUREG-0654 C.6; J.10.e, f; K.4 Criterion 2a1).

Target: Protective Action Implementation

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG- 0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654 J.10.e, f; Criterion 3b1).

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1)
Critical Task: Impediments to evacuation are identified and resolved (NUREG-0654 J.10.k; Criterion 3d2).

Core Capability: **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.

Target: Emergency Notification and Public Information

Critical Task: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 7; G.3.a; G.4.a, c; Criterion 5b1).

***FEMA Requirements**

1. Identify the state or local government organization and the official with the authority for providing the EAS alert and message.
2. Identify the commercial nuclear power plant and a statement that an emergency exists.
3. Must make reference to REP specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency.
4. Include a closing statement asking the affected and potentially affected population to stay tuned to this EAS station(s) for additional information. This additional information (when necessary) could be in the form of a "Special News Broadcast" that would follow the EAS message as soon as possible.

Cleveland County: Agreed.

• Cleveland County will not activate their EOC. An ICP was established at their Reception Center.

Joint Operations- Traffic Control Points (TCPs) Setup and Operation

Core Capability: **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 all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.

Target: Protective Action Implementation

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1).
Critical Task: Impediments to evacuation are identified and resolved (NUREG-0654 J.10.k; Criterion 3d2).

Risk Counties and North Carolina State Highway Patrol: Agreed-

• Demonstration was conducted by interview during OOS week.

Backup Route Alerting

Core Capability: **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.

Target: Emergency Notification and Public Information

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG- 0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: Backup alert and notification (waterway warning as applicable) 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 E.6; Appendix 3.B.2.c; Criterion 5a3).

Risk County: Agreed.

• County will provide an emergency response vehicle and emergency workers to perform backup route alerting in the event of a simulated siren failure.
• Charlotte-Mecklenburg will demonstrate during out of sequence week:

Mecklenburg County:

Date/Time: 2/27/2020 (1800) 2/27/2020 (1800)
Location: Pineville VFD Steele Creek VFD
108 Church Street 13225 South Tryon Street
Pineville, NC 28134 Charlotte, NC 28278

Emergency Worker, Vehicle and Equipment Decontamination (EWD) Operations (Mecklenburg)

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

Target: Support Operations and Facilities

Critical Task : Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG- 0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: The facility/ORO has adequate procedures and resources to accomplish monitoring and decontamination of emergency workers and their equipment and vehicles (NUREG-0654 K.5.a, b; Criterion 6b1).

Mecklenburg County: Agreed.

• Mecklenburg County will demonstrate during OOS week for training and courtesy evaluation only.

Date/Time: 2/27/2020 (1700)
Location: CFD Special Ops Warehouse
3140 Yorkmont Road, Suite 100
Charlotte, NC 28219

Reception Centers (Cleveland and Union Counties)

Core Capability: **Environmental Response or Health and Safety:** 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.

Target: Support Operations and Facilities

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Critical Task: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees (NUREG-0654 A.3; C.4; J.10.h; J.12; Criterion 6a1).

Congregate Care Centers (Cleveland and Union Counties)

Core Capability: **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**.**

Target: Support Operations and Facilities

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1).

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Critical Task: KI and appropriate instructions are made available in case a decision to recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654 J.10.e, f; Criterion 3b1).
Critical Task: 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; J.10.h; J.12; Criterion 6c1).

Cleveland and Union Counties: Agreed.

• Cleveland County will demonstrate during out of sequence week (Graded).

Date/Time: 2/24/2020 (1700)
Location: Kings Mountain High School
500 Phifer Rd.
Kings Mountain, NC 28086

• Union County will demonstrate during out of sequence week (Courtesy)

Date/Time: 2/25/2020 (1800)
Location: Marvin Ridge High School
2825 Crane Rd.
Waxhaw, NC 28173

Meeting Times

a. North Carolina State Exercise Briefing:

Via WebEx.
Date/time: TBD

b. Participant's Critique:

TBD
Date/time: TBD

c. Public Briefing:

TBD
Date/Time: 11:00