Department of Homeland Security
Region IV
3003 Chamblee-Tucker Road
Atlanta, Georgia 30341

FEMA

January 31, 2013

Victor M. McCree
Regional Administrator - RII
US Nuclear Regulatory Commission
One Marquis Tower
245 Peachtree Center Avenue, Suite 1200
Atlanta, Georgia 30303

Dear Mr. McCree:

Enclosed is a copy of the final exercise report for the October 30, 2012, plume exposure pathway exercise of the offsite radiological emergency response plans site-specific to the Catawba Nuclear Station (CNS). This report addresses the evaluation of the plans and preparedness for the States of South and North Carolina and the affected local governments. The Federal Emergency Management Agency (FEMA) Region IV staff prepared the final exercise report. Copies of this report will be forwarded by my staff to the States of South Carolina and North Carolina, FEMA Headquarters and NRC Headquarters.

The 10-mile Emergency Planning Zone (EPZ) includes portions of York County, South Carolina and Gaston and Mecklenberg Counties, North Carolina. Cherokee, Chester, Lancaster and Union Counties in South Carolina and Cleveland and Union Counties in North Carolina provide support to the EPZ counties. State, local and volunteer organizations demonstrated the ability to implement their emergency response plans and procedures.

Members of North Carolina's Emergency Management Division should be recognized for their ability to work around real-world problems due to Hurricane Sandy and still be able to successfully complete the exercise. The initiating event in this exercise was a simulated large scale magnitude earthquake that could have caused severe infrastructure damage in the EPZ. Therefore, players in South Carolina and North Carolina State and County EOCs used a 30 minute time-out during the exercise to discuss the emergency response ramifications of an earthquake as the initiating event.

South Carolina recently transitioned from conducting joint information operations at the Duke Joint Information Center (JIC) in Charlotte, North Carolina, to a Joint Information System (JIS) based at the State Emergency Operations Center (SEOC) in Columbia, South Carolina. The JIS worked well and the South Carolina and North Carolina Emergency Management staffs worked hard to ensure that each location was kept informed of the latest developments and decisions. This hard work was evidenced by the fact that all information provided to the mock media was timely and accurate.

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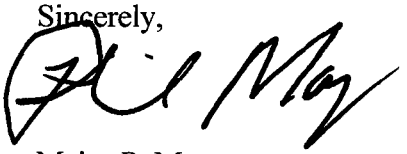
During this exercise FEMA did not identify any Deficiencies; however, two Areas Requiring Corrective Action (ARCA) were identified. Both ARCAs were identified during out-of-sequence activities in Union County, North Carolina. The first ARCA concerned inadequate equipment for: proper monitoring and decontamination of evacuees and providing appropriate radiological exposure control for emergency workers. The second ARCA concerned inadequate emergency worker training regarding the set up and operation of the reception center. FEMA will continue to monitor and assist the State of North Carolina in resolving these ARCAs. The correction of an ARCA identified during the 2008 CNS exercise concerning the inaccurate content of an Emergency Alert System Message issued by the State of North Carolina was successfully resolved during this exercise.

Based on the results of the exercise and FEMA's review of South Carolina and North Carolina's Annual Letters of Certification for 2011, the offsite radiological emergency response plans and preparedness for the States of South Carolina and North Carolina and the affected local jurisdictions site-specific to the CNS can be implemented and are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site. The Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the States of South Carolina and North Carolina site-specific to CNS granted for both States on October 8, 1985, will remain in effect.

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

Sincerely,



Major P. May
Regional Administrator

Enclosure

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Catawba Nuclear Station

After Action Report/ Improvement Plan

Exercise Date - October 30, 2012

Radiological Emergency Preparedness (REP) Program

FEMA

Published January 31, 2013

Catawba Nuclear Station

After Action Report/ Improvement Plan

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Catawba Nuclear Station
After Action Report/Improvement Plan

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EXECUTIVE SUMMARY

On October 30, 2012, the Department of Homeland Security, Federal Emergency Management Agency (FEMA) Region IV Radiological Emergency Preparedness (REP) Program staff evaluated a plume exposure pathway exercise in the emergency planning zone (EPZ) for the Catawba Nuclear Station. Issues concerning the restart of the plant led to the exercise being postponed from April 17, 2012 to October 30, 2012. The evaluation of out of sequence activities, which occurred during the weeks of March 26 – 30, 2012, in South Carolina and April 2 – 5, 2012, in North Carolina, are included in this report. The activities included: traffic control points; protective actions for schools; reception and congregate care centers; emergency worker and equipment monitoring and decontamination; and waterway warning.

FEMA's overall objective of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was conducted in accordance with FEMA's policies and guidance concerning the exercise of state and local radiological emergency response plans and procedures. The previous federally evaluated exercise at this site was conducted on March 9, 2010. The qualifying emergency preparedness exercise was conducted February 15-16, 1984.

Officials and representatives from the States of South Carolina and North Carolina; the risk counties of York, South Carolina and Charlotte-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 was evident throughout all phases of the exercise.

Members of North Carolina's Emergency Management Division should be recognized for their ability to work around real-world problems due to Hurricane Sandy and still be able to successfully complete the exercise. Players in South and North Carolina State and County EOCs used a 30 minute time-out during the exercise to discuss the emergency response ramifications of an earthquake as the initiating event. In addition, both South Carolina and North Carolina participants should also be recognized for successfully implementing a new Joint Information System for transmitting information to the general public and the media.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and

built upon, identify potential areas for further improvement, and support development of corrective actions.

The correction of an ARCA identified during the 2008 Catawba exercise that concerned the inaccurate content of an Emergency Alert System Message issued by the State of North Carolina was successfully demonstrated during this exercise.

FEMA identified two areas requiring corrective action (ARCA) during this exercise concerning activities in Union County, North Carolina. The first ARCA concerned the inadequate training of emergency workers in Union County. The second ARCA concerned the range of dosimeters issued to emergency workers and the inability of Union County to provide operable radiological monitoring equipment. Details on these ARCAs are documented in Section 3.3.1.6 of the Criteria Evaluation Summaries.

FEMA will work with the State of North Carolina to resolve these ARCAs ensuring that emergency workers are properly trained and that the equipment issued to emergency workers is appropriate and operable.

SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name
Catawba Nuclear Station

Type of Exercise
Plume

Exercise Date
October 30, 2012

Program
Department of Homeland Security/FEMA Radiological Emergency Preparedness Program

Scenario Type
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 Catawba Nuclear Station exercise:

State Jurisdictions

State of South Carolina, Office of the Adjutant General, Emergency Management Division
State of South Carolina, Department of Health & Environmental Control
State of South Carolina, Department of Public Safety - SLED, SCHP and DNR
State of South Carolina, Department of Social Services
State of South Carolina, Department of Transportation

State of North Carolina, Department of Public Safety, Division of Emergency Management
State of North Carolina, Department of Public Safety, State Highway Patrol
State of North Carolina, Department of Environment and Natural Resources
State of North Carolina, Department of Health and Human Services
State of North Carolina, Department of Transportation

Risk Jurisdictions

York County Emergency Management
York County Sheriff's Office
York County Schools
Bethany Fire Department
Lesslie Volunteer Fire Department
Charlotte-Mecklenburg Emergency Management
Charlotte-Mecklenburg Fire Department
Charlotte-Mecklenburg Police Department
Gaston County Emergency Management

Support Jurisdictions

Cherokee County, SC
Chester County, SC
Lancaster County, SC
Union County, SC
Cleveland County, NC
Union County, NC

Private Organizations

American Red Cross, Piedmont Chapter and Upper Palmetto Chapter

Federal Jurisdictions

Department of Commerce, National Weather Service

SECTION 2: EXERCISE DESIGN SUMMARY

2.1 Exercise Purpose and Design

DHS/FEMA administers the REP Program pursuant to the regulations found in Title 44 Code of Federal Regulation (CFR) parts 350, 351 and 352. 44 CFR 350 codifies 16 planning standards that form the basis for radiological emergency response planning for State, tribal and local governments, and the licensee impacted by the EPZs established for each nuclear power plant site in the United States. 44 CFR 350 sets forth the mechanisms for the formal review and approval of State, Tribal and local government RERPs and procedures by DHS/FEMA. One of the REP 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 RERPs and procedures and verification of the periodic requirements set forth in NUREG-0654/FEMA-REP-1 through the Annual Letter of Certification and staff assistance visit enables FEMA to provide a statement with the transmission of this final AAR to the NRC 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 RERPs for the Catawba Nuclear Station (CNS) to FEMA 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 RERPs was granted by FEMA on October 8, 1985, under 44 CFR 350.

A REP exercise was evaluated on October 30, 2012, and included evaluations of the out-of sequence activities held during the weeks of March 26 and April 2, 2012. Issues concerning the restart of the plant led to the exercise being postponed from April 17, 2012 to October 30, 2012.

2.2 Exercise Objectives, Capabilities and Activities

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 HSEEP methodology, the exercise objectives, which meet the Radiological Emergency Preparedness Program (REP) requirements and encompass the REP Program's Emergency Preparedness Evaluation Areas – elements and sub-elements were derived and negotiated with the States of South Carolina and North Carolina, York, Cherokee, Chester, Lancaster and Union Counties of South Carolina, and Charlotte-Mecklenburg, Gaston, Cleveland and Union Counties of North Carolina. These objectives and associated capabilities are as follows:

Objective 1: Demonstrate the ability to provide Emergency Operations Center management including Direction and Control through the Counties' and State Emergency Operations Centers. Capability - Emergency Operations Center (EOC) Management.

Objective 2: Demonstrate the ability to provide protective action decision-making for State and County emergency workers and public through exercise play and discussions of plans and procedures. Capability - EOC Management and Emergency Public Information and Warning.

Objective 3: Demonstrate the ability to physically implement protective actions for State and County emergency workers and public through exercise demonstration. Capability - EOC Management, Emergency Public Safety and Security Response, Citizen Evacuation and Shelter in Place, Hazardous Materials Response and Decontamination and Mass Care.

Objective 4: Demonstrate the ability to activate the Prompt Alert and Notification System utilizing the PNS/EAS System through exercise play. Capability - Emergency Public Information and Warning.

Objective 5: Demonstrate the effectiveness of plans, policies and procedures in the Joint Information Center (JIC) for public and private sector emergency information communications. Capability - Emergency Public Information and Warning.

2.3 Scenario Summary

Initial Conditions:

Unit 1 is at 100% power with 1B D/G (Diesel Generator) out of service for emergent maintenance.

Unit 2 is in Mode 5, Loops Filled, and Low decay heat after refueling. Both Unit 2 D/Gs are available; Unit 2 "A" Train Pumps in service. Unit 2 was Shutdown March the 18th at 0400 hrs.

00:04 Earthquake is felt in the Control Room/Simulator and "OBE Exceeded" Annunciator (Alarm) is received on 1AD-4, B/8, greater than 0.08G horizontal and 0.053G vertical. Earthquake damage to the switchyard results in a loss of "A" Train Offsite Power but 6900 Volt switchgear Tie Breakers perform a fast transfer and no 6900 Volt loads are lost. "Seismic system actuated" OAC alarm C1D2252. Effects of an earthquake are seen, felt and heard.
•3 Control Rods drop into the Core prompting a manual trip.
•Unit 1 is manually tripped at 0804 hrs.

00:19 OSM (Operations Shift Manager) declares an ALERT on Both Units
4.7. A.1 Natural and Destructive Phenomena Affecting the Plant Vital Area. OPERATING MODE: ALL
4.7.A.1-1 Valid "OBE Exceeded" Alarm

~01:25-~0155 States and counties plan a 30 minute time out to discuss what they would do in response to the earthquake. It is not the intent of this drill to test the Offsite Agency response to an earthquake but rather to an emergency at Catawba Nuclear Station. This timeout will be observed by FEMA but not graded.

02:07 Second earthquake which is greater than design basis occurs (Safe Shutdown Earthquake/SSE) and results in a small break Loss of Coolant Accident (LOCA) on 1C Cold Leg.

02:38 EC/EOF Director declares a Site Area Emergency.
4.1.S.3 Loss of Containment (4.1.C2-Loss) AND Loss OR Potential Loss of Any Other Barrier (4.1.N 2-Loss)

04:48 EC/EOF Director declares a General Emergency 4.1.G.2. Loss of Containment (4.1.C 2) AND Loss of NCS Barrier (4.1.N 2) AND Potential Loss of Fuel Clad Barrier (4.1.F.1)

05:37 Need for KI will be identified during Raddose run

05:45 Need for KI validated

06:00 Par Change Notification to Offsite Agencies

From exercise time 6-8 hrs The JIC and EOF (at a minimum essential EOF players will continue) will remain available to answer questions for the States and Counties. The States and Counties will be continuing with the Exercise in an effort to meet some of their objectives in the field that do not require the Simulator Crew, the TSC, OSC or a fully staffed EOF.

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 30, 2012 partial participation plume phase exercise and OOS activities. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following terms:

- Met (No Deficiency or ARCA(s) assessed and no unresolved ARCA(s) from prior exercise)
- ARCA(s) assessed or unresolved ARCA(s) from previous exercises
- Deficiency assessed
- Plan Issues
- Not Demonstrated

3.2 Summary Results of Exercise Evaluation

See section 3.3 Criteria Evaluation Summaries for the associated Capability Summaries for each jurisdiction.

Table 3.1 - Summary of Exercise Evaluation

DATE: 2012-10-30 SITE: Catawba Nuclear Station, SC M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		NC	NC JIC	Charlotte-Mecklenberg County	Gaston County	Cleveland County	Union County (NC)	SC	SC JIS	York County	Cherokee County	Lancaster County	JIS
Emergency Operations Management													
Alert and Mobilization	1a1	M	M	M	M			M	M	M			M
Facilities	1b1												
Direction and Control	1c1	M		M	M			M		M			
Communications Equipment	1d1	M	M	M	M	M		M	M	M			M
Equipment and Supplies to Support Operations	1e1	M	M	M	M	M	A	M	M	M	M	M	M
Protective Action Decision Making													
Emergency Worker Exposure Control	2a1	M		M	M			M		M			
Dose Assessment & PARs & PADs for the Emergency Event	2b1							M					
Dose Assessment & PARs & PADs for the Emergency Event	2b2	M			M			M		M			
PADs for the Protection of persons with disabilities and access/functional needs	2c1				M					M			
Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	2d1												
Radiological Assessment & Decision-making Concerning Post-Plume Phase Relocation, Reentry, and Return	2e1												
Protective Action Implementation													
Implementation of Emergency Worker Exposure Control	3a1	M		M		M	M	M		M	M	M	
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1			M		M	M			M			
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c1			M	M					M			
Implementation of Protective Actions for persons with disabilities and access/functional needs	3c2			M	M					M			
Implementation of Traffic and Access Control	3d1	M		M	M	M		M		M			
Implementation of Traffic and Access Control	3d2	M		M	M	M		M		M			
Implementation of Ingestion Pathway Decisions	3e1												
Implementation of Ingestion Pathway Decisions	3e2												
Implementation of Post-Plume Phase Relocation, Reentry, and Return Decisions	3f1												
Field Measurement and Analysis													
RESERVED	4a1												
Plume Phase Field Measurement and Analyses	4a2	M						M					
Plume Phase Field Measurement and Analyses	4a3	M											
Post Plume Phase Field Measurements and Sampling	4b1												
Laboratory Operations	4c1	M											
Emergency Notification and Public Info													
Activation of the Prompt Alert and Notification System	5a1	M		M	M			M		M			
RESERVED	5a2												
Activation of the Prompt Alert and Notification System	5a3			M	M					M			
Activation of the Prompt Alert and Notification System	5a4												

Emergency Information and Instructions for the Public and the Media	5b1	M	M	M	M			M	M	M			M
Support Operations/Facilities													
Monitoring, Decontamination, and Registration of Evacuees	6a1			M		M	A			M	M	M	
Monitoring and Decontamination of Emergency Workers and their Equipment and Vehicles	6b1			M						M			
Temporary Care of Evacuees	6c1					M	M				M	M	
Transportation and Treatment of Contaminated Injured Individuals	6d1												

3.3 Criteria Evaluation Summaries

3.3.1 North Carolina Jurisdictions

3.3.1.1 State of North Carolina

EOC Management:

The SEOC was activated three days prior to the exercise to respond to Hurricane Sandy and remained activated at the start of the exercise. NCEM and support agencies demonstrated their depth of personnel and resources by concurrently managing the ongoing natural hazard incident and the radiological exercise. The SEOC staff functioned well. The EOC had sufficient equipment and redundant communication capabilities to allow them to successfully support all operations.

During this exercise the responsibility for direction and control was retained by the counties and not transferred to the state, therefore the lead county remained in charge of decision making in coordination with the state. NCEM maintained a support and coordination role. The key leadership within the SEOC remained extremely flexible during the protective action decision (PAD) making process to ensure that a coordinated and unified decision was made and appropriate instructions provided to the public. When conflicts arose, they re-evaluated their recommendations and compromised with other decision makers. Staff briefings and round table discussions were conducted regularly throughout the exercise to inform staff of incident status and actions. The Radiation Protection Section Director consulted regularly with the Department of Public Health Director regarding recommendations for KI ingestion for both emergency workers and the public. Support agencies worked proactively to ensure resources and assets were in place in preparation of escalating events. North Carolina State Highway Patrol (NCSHP) maintained an awareness of traffic control point staffing, locations, and logistics.

Western Branch Office:

The North Carolina Western Branch Office (WBO) Manager demonstrated outstanding direction and control. With the help of the staff, informative briefings were conducted on the hour. The staff was able to perform their duties in a very professional manner. They were each knowledgeable in their areas of responsibility. The staff was instrumental in responding to the

real world event concerning Hurricane Sandy which struck the east coast. They were able to conduct the CNS Exercise and work the relief effort simultaneously.

The WBO had redundant communications capabilities and they operated successfully throughout the exercise. The initial call from the SEOC was received at 0830 by the Operations Chief on the primary phone line. The WBO Manager was able to coordinate with other participants by way of the Conference Line (CL), which was a dial up coded conference call established by the State of South Carolina.

The WBO staff was very pro-active, and supportive to the overall response effort. The WBO Manager and staff monitored protective action recommendations (PARs) and PADs. They were able to see the big picture and provided critical inputs which enhanced the response process. The WBO staff was competent and showed they could support the actions of Charlotte-Mecklenburg and Gaston Counties to protect the public. The WBO staff also exhibited exceptional skills in participating in the exercise as well as managing tasks and missions to support Hurricane Sandy which impacted the coastal area and northern areas of North Carolina.

Emergency Public Information and Warning:

The NCEM staff demonstrated the ability to successfully meet the requirements of Emergency Public Information and Warning during the Catawba Nuclear Station Exercise at the SEOC. The SERT PIO used pre-scripted news releases as the basis for providing instructions and information to the affected population in North Carolina. The PIO staff at the SEOC worked in conjunction with the JIC staff in Charlotte as well as the public information staff from each of the counties involved in the operation. In this exercise a total of seven press releases were made. The SERT PIO prepared and released two messages prior to the activation of the JIC in Charlotte.

After the JIC was operational the remaining five releases were sent to the JIC. Procedures were followed in coordinating siren soundings and EAS messages with the appropriate staff from State, Federal and local agencies and representatives over the Decision Line before release. The SERT Team Leader kept all staff informed of messages that were provided to the public. Timely and accurate information was provided to the public throughout the exercise.

Hazardous Materials Response:

The RPS Dose Assessment operation at the SEOC was staffed by 5 individuals. The RPS SERT Coordinator (SERT-C) continued throughout the exercise to interact with SERT Leadership, other SERT members and his staff to ensure that pertinent information was flowing in both directions. These actions demonstrated that the direction and control provided by the SERT-C was effective, that his team was kept informed and involved in the process, and that the SERT Leader was being advised appropriately.

During activation of the dose assessment area the staff set up and verified operation of their communications equipment. Computers with Internet access were also used to obtain WebEOC information and plant data. During the exercise no communications concerns were observed.

The dose assessment staff successfully monitored and evaluated plant, radiological, and meteorological data. The Field Team Coordinator (FTC) managed the Field Monitoring Teams(FMTs) to locate, track and quantify the simulated radiological plume. The RPS performed dose projections based on plant conditions and licensee radiological data, and compared FMT data with projected doses to insure reasonable agreement. The SERT-C provided effective direction and control of the dose assessment staff. He also worked effectively with the State Health Officer (SHO) and the Licensee's Technical Advisor to make appropriate recommendations, including those related to the authorization of Potassium Iodide (KI). The dose assessment staff accurately evaluated and assessed plant and off-site radiological conditions and provided good input for PADs by the SERT Leader.

The FTC conducted a briefing by radio with the FMTs, the Mobile Laboratory and Sample Courier using a checklist. The FTC kept the teams informed of changing plant conditions and the other changes in meteorological conditions including wind direction and speed. The SERT-C was kept informed and he was consulted by the FTC on all placement locations and routes traversed by the field teams, with the results reported back quickly.

The FTC used an 800 MHz Motorola Voice Inoperability Plan for Emergency Responders (VIPER) base station as a primary means of communication with the FMTs, Mobile Lab and Courier.

Throughout the exercise the FTC efficiently located the FMTs to obtain appropriate ambient and

air sampling data and coordinated the data with the dose assessment leader and the SERT coordinator in a timely manner.

PRIOR ARCAs - RESOLVED: 012-08-5.a.1-A-02

Condition: South Carolina decided to have only those individuals from the evacuation zones ingest KI. North Carolina decided to have all individuals within the 10-mile EPZ ingest KI. The EAS message issued by the State of North Carolina at 1205 included a statement to the effect that the health officers from both North and South Carolina decided to have individuals within the 10-mile EPZ take KI. The EAS message issued by North Carolina was factually incorrect.

Corrective Action Demonstrated: Throughout the exercise the North Carolina SERT and PIOs worked closely together to insure all EAS messages were consistent with the PADs and with South Carolina's actions. Three EAS messages were issued during the exercise. During the discussions concerning the issue and ingestion of KI the NC SERT deferred to SC and the Risk Counties on the final PADs and insured the NC EAS was in agreement with these PADs.

The use of a conference call bridge line greatly assisted all parties in reviewing PARs and PADs and formulating the correct EAS message. Also during this exercise a new JIS system was put in place that required additional coordination and reviews by PIOs and command staff which may have also assisted in issuing the correct EAS messages.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 3.a.1, 3.d.1, 3.d.2, 4.a.2, 4.a.3, 4.c.1, 5.a.1, 5.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.2 North Carolina Joint Information Center

Emergency Public Information and Warning:

The Public Information function at the Duke JIC operated within a Joint Information System (JIS) structure. This structure was supported by the South Carolina JIC in Columbia and the State Emergency Response Team (SERT) PIO at North Carolina's State Emergency Operations Center in Raleigh. It was through close coordination and collaboration that effective and unified emergency information for the public was achieved within the JIS structure.

Representatives from the States of North Carolina and South Carolina, York County, Charlotte-Mecklenburg County and Gaston County successfully demonstrated the Emergency Public Information and Warning capability by providing emergency information and instructions to the media and public.

The JIC was activated in accordance with published plans and procedures in support of the CNS. Duke Energy's Public Information Manager (PIM) had the overall responsibility for the management of the Duke JIC. Equipment, displays, maps and other supplies were sufficient to support emergency operations in the JIC. Multiple communications systems were available and used without failure during the exercise.

Upon activation, the North Carolina Lead PIO in the Duke JIC assumed the primary responsibility for coordinating emergency public information responsibilities from the North Carolina State Emergency Operations Center. The NC State and Counties' spokespersons were involved in three media briefings during the exercise. Prior to each briefing, the agency spokespersons discussed and coordinated their message with SCEMD PIO in the South Carolina JIC. They discussed who would say what, and in which order the briefing would be conducted. A total of 35 press releases and three EAS messages were received and distributed in the Duke JIC during the exercise. Copies of the Nuclear Power Plant Emergency Notification Forms (ENFs) were received and shared with the JIC staff.

Public inquiry/rumor control was coordinated at six different locations; the Duke JIC was the main location for inquiries to the utility and the State of North Carolina. Each County fielded calls at their EOC, and South Carolina received calls at their JIC. The applicable phone numbers were provided to the public during each media briefing and rumors dispelled. Over 50

calls were received and answers provided about a broad spectrum of related subjects.

NCEM's ability to provide timely emergency information and instructions for the public and the media was successfully demonstrated at the Duke JIC. The spokespersons and their staff performed their roles with a sense of urgency and competence.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.d.1, 1.e.1, 5.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.3 Charlotte-Mecklenberg County

EOC Management:

CNS contacted the MEDIC Emergency Medical Services by the Selective Signaling System (SSS) and simultaneously sent a facsimile to advise an Alert ECL had been declared. The dispatcher who received the SSS call knew who and how to notify at the Charlotte-Mecklenburg County Emergency Management Staff. The dispatcher was familiar with the equipment and procedures associated with the Warning Point.

The EOC successfully activated and prepared to begin operations. The Director Emergency Management (DEM) and Emergency Management Planner (EMP) successfully accomplished direction and control and made timely decisions. An initial EOC staff briefing was conducted prior to EOC activation and upon receipt of each ENF form thereafter. The most up-to-date information was relayed to the EOC staff within minutes of the leadership accepting and reviewing new messages. Response activities were coordinated between agencies and authorized by the leadership in a timely fashion with a public safety focus. Throughout the exercise, the DEM confidently discussed and provided concurrence for all PADs and EAS messages. The General Manager of Charlotte-Mecklenburg County was constantly engaged with the DEM as the situation degraded and provided executive level insight as needed. The ENF notification process was consistent with each follow-up notification and each escalation in ECL.

Communication systems were fully functional and no discrepancies were noted during demonstration. Equipment, maps, displays, dosimetry, KI and other supplies were sufficient to support emergency operations.

Emergency Public Information and Warning:

The Charlotte-Mecklenburg EOC staff demonstrated the capability to warn the public and provide emergency public information during the CNS emergency. Initial news releases were developed by the EOC PIO staff and approved by the DEM. Subsequent news releases were coordinated with the JIC. Three siren activations occurred followed by EAS messages with the protective actions to be taken by the public. The siren activations were conducted by operators at the Charlotte-Mecklenburg Warning Point facility. An interview was conducted with the County Fire Marshall who adequately described the actions of backup route alerting if there were siren failures. Lake clearing operations were conducted for Lake Wylie which was impacted by the event. Impacted schools and special needs populations were notified and the Pineville Elementary School and the nearby nursing home were evacuated to UNCC. The Charlotte-Mecklenburg EOC staff effectively and consistently implemented and coordinated Protective Action Decisions of evacuation and shelter-in-place for the affected areas of their county.

Public Safety and Security Response:

The EOC TCP Team successfully explained by interview the ability to establish TCPs and provide instructions to personnel. TCPs were pre-identified by the Charlotte-Mecklenburg Emergency Management. The Charlotte-Mecklenburg EOC TCP team consisted of three police officers from different police departments. They freely discussed events and actions as a group. They communicated with organizations by radio and telephone and verbally coordinated with other EOC personnel. The EOC TCP team had desk binders with procedures, contact names and numbers, dosimetry information, maps showing the location of TCPs and evacuation routes. They were aware of exposure control limits. The TCP team discussed impediments to the traffic flow and described the means by which they would alleviate them.

Citizen Evacuation/Shelter in Place:

The Charlotte-Mecklenburg Schools (CMS) successfully demonstrated the ability to safeguard students and staff in the event of an incident involving the CNS by interviews. Participants in

the interviews were the Assistant Principals of Pineville Elementary and Olympic High Schools, the CMS Director of Safety, the CMS Transportation Department Safety and Training Specialist, and Charlotte-Mecklenburg and NCEM representatives. The Charlotte-Mecklenburg E-Plan provides detailed guidance for CMS and individual schools to follow in preparing to respond to a radiological incident at fixed nuclear facilities. The assistant principals were well conversant with the respective plans. It was pointed out that when the schools receive notice of a radiological incident a reconfirming phone call is initiated to validate the authenticity of the notice. Schools have prepared their staffs on actions to take to shelter or relocate their populations. These include maintaining student accountability; providing faculty supervision on each bus; ensuring student medicines and a supplemental school crisis box accompanies the relocation; designated individuals take actions to prepare the school for sheltering and ensuring it has been vacated for relocation. CMS has identified sufficient buses to move all students at each school. CMS also uses pre-scripted messages over the Connect-Ed system to inform parents of the actions being taken and where they can report to pick up their children. Staff and faculty have specific functions to perform and these are addressed during in-service training and in the school's emergency checklist for staff and faculty.

All interviewed were knowledgeable and demonstrated a very professional demeanor.

Hazardous Materials Response:

Charlotte Fire Department (CFD) emergency workers, in a team effort by firefighters from Engine Companies 20, 24, and 30, demonstrated an outstanding ability to monitor and decontaminate emergency workers and equipment at Fire Station # 20. The firefighters performed their duties in a professional manner, demonstrating excellent knowledge of monitoring and decontamination techniques while avoiding cross-contamination at the site. This would allow them to assist emergency workers reporting to their station get put back in service in a timely manner. The use of Team Leaders at each assigned activity (personnel monitoring, vehicle monitoring and decontamination, and personnel decontamination) was highly effective in ensuring that all actions were smoothly coordinated. The CFD Incident Commander implemented effective radiological exposure control procedures.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1, 5.a.3, 5.b.1, 6.a.1, 6.b.1.

b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.4 Gaston County

EOC Management:

The staff of the Gaston County EOC successfully demonstrated the capability to activate and operate their EOC to respond to a radiological incident at the CNS. Participation by the Chairman of the County Commission and another Commissioner and the County Manager, in addition to personnel from a variety of county and municipal agencies during the exercise demonstrated a firm dedication to the safety and welfare of the county residents.

The EOC Manager and the EOC staff were highly proficient in the performance of their duties and were proactive in their planning and implementation of Gaston County emergency response actions. The EOC was successfully activated in accordance with the County plan by a simulated activation of the emergency notification system for the EOC staff. Upon activation of the EOC, the EOC Manager maintained direction and control, properly coordinated PADs, and ensured situational awareness through frequent staff briefings. The EOC had sufficient equipment and communications for conducting operations and communicating with other State and local governments and agencies, including three dedicated telephone systems.

The EOC staff successfully demonstrated the ability to coordinate with local, regional and State agencies to establish TCPs and perform backup route alerting. There was seamless coordination to ensure school students and staff, and special needs residents were safely notified and relocated. All personnel were professional, well trained, and knowledgeable of their responsibilities.

Emergency Public Information and Warning:

EOC personnel demonstrated the capability to develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public. The EOC Manager ensured the

successful activation of the siren system at the Site Area Emergency (SAE), and twice more during subsequent development of the emergency at CNS. Although there were no siren failures the Sheriff's Office Captain in the EOC was knowledgeable of the process to perform backup route alerting and was fully prepared to initiate it.

Gaston County had two designated PIOs, one located at the JIC, and one on the EOC staff. The two PIOs successfully developed and issued press releases to give the public situational awareness of the emergency, and to clarify what actions the general public should take. In addition, the EOC PIO staffed the Public Inquiry function, and consistently provided accurate information to callers. There were no trends or rumors identified during the exercise.

Citizen Evacuation/Shelter in Place:

The ability of the Gaston County Schools (GCS) System to safeguard students, staff, and faculty in response to an incident at CNS was demonstrated by interview. Participants included the principal, an assistant principal, and the business manager of Forestview High School; the principal and an assistant principal from the host high school, Hunter Huss High School; the Executive Director of Auxiliary Services (EDAS) of the GCS, a representative of Gaston County Environmental Health, and the Emergency Administrator (EA) of the Gaston County Office of Emergency Management (OEM), and a representative of North Carolina Emergency Management.

OEM has developed detailed guidance on the actions required by the school system and individual schools to initiate protective actions to safeguard students, staff and faculty in the event of an incident at CNS. The school system and the individual schools have developed procedures to ensure timely and effective implementation of protective actions.

Forestview High School's supplemental plan provides detailed listings enumerating duties of key staff and faculty during a radiological event. In-service training has been conducted to maintain staff and faculty situational awareness. The school has provided information to parents that augments information Duke Energy provides in annual brochures provided residents of the emergency planning zone. The staffs of the risk and host schools have coordinated to facilitate the assimilation of the Forestview population into the Hunter Huss facility.

The school district, the individual schools, and supporting county agencies were well prepared to

safeguard students, staff and faculty in the event of a radiological emergency.

Hazardous Materials Response:

Gaston County very effectively demonstrated the ability to perform emergency worker and vehicle monitoring and decontamination operations during a demonstration at the Ashbrook High School location. Supporting agencies were the Gastonia Fire Department (Special Operations Division, Hazardous Materials (HAZMAT) Branch), the Gaston Emergency Medical Services (GEMS) Specialized Tactics and Rescue Team (STAR), Gaston County Schools, and Gaston County Emergency Management. Upon notification from the Gaston County emergency operations center (EOC) the agencies would mobilize to the school and begin set up of operations. The agencies complemented each other with their operations and supplies, smoothly performing as one integrated team. Incident command was quickly established, equipment and supplies were issued, and the site was quickly set up for operations. All emergency workers present were briefed on safe operations, to include exposure to radiological contamination. Team members performed a thorough survey and decontamination of the contaminated emergency workers and vehicles while maintaining proper documentation. The vehicle monitoring and decontamination teams exhibited good team work, communications, and good monitoring and decontamination practices.

Personnel monitoring and decontamination of evacuees was demonstrated at North Gaston High School in Dallas, North Carolina. Members of the Gastonia Fire Department provided personnel to staff the registration, monitoring, and decontamination stations. Ample supplies and equipment were available in the State Medical Assistance Team (SMAT) trailer. A SMAT decontamination tent was erected with dressing and shower facilities for males, females, and handicapped evacuees. Radiation monitoring equipment consisted of two Ludlum 52 portal monitors and five calibrated SE International Inspector EXP survey meters. Direct Reading Dosimeters were posted in the portal monitoring area and the decontamination area as group dosimeters. Personnel understood the use of dosimetry and associated exposure limits.

Evacuees were first registered at a registration table where their personal and vehicle information was obtained. Vehicle decontamination was explained by interview with the Incident Commander from the Gastonia Fire Department. Evacuees were led through a portal monitor for a 5-10 second count. With a population of 22,723 evacuees, a 20% monitoring capability estimate in 12 hours would be approximately six evacuees per minute. Using two portal

monitors, a monitoring rate of three evacuees per minute was achieved. Of the six evacuees monitored, two (one male and one female) were contaminated via controller inject. The "clean" evacuees were given a wrist band for entry into the Reception Center. The contaminated evacuees were directed to the mobile decontamination area where they were slowly frisked to locate the contamination. After initial decontamination efforts using wipes and tape were unsuccessful, the evacuees were led to the appropriate area of the SMAT tent and instructed to disrobe and place clothing and personal items in designated bags, shower, and then towel dry. After showering, a staff member performed a whole body survey using an EXP Inspector hand held meter to ensure the evacuee was below the contamination level of 300 counts per minute. Contamination control methods were sufficient to manage contaminated evacuees while maintaining designated clean areas.

Mass Care:

Gaston County demonstrated its ability to establish and manage a general population shelter in support of a radiological incident at the CNS at the North Gaston High School in Dallas, NC. The Gaston County Department of Social Services (DSS) and the Gaston County Chapter, American Red Cross (ARC), as the lead agencies, provided a layout of the allocated space in the high school as they would during an actual emergency. Staff members of both lead agencies, supported by the Gaston County Department of Health, Pathway Mental Health Services, and the Gaston County Amateur Radio Emergency Services (ARES) supported a facility walkthrough and discussed organizational roles in support of evacuees. Additional agencies that would participate in an actual event include the Sheriff's Department, Gaston County Schools, Gaston Emergency Medical Services (GEMS), Police, Fire, and Animal Control Services.

The combined fulltime and volunteer staff supporting shelter operations presented a cohesive approach to meeting evacuee needs. The shelter registration process was designed to ease the evacuee waiting period. Personnel staffing the medical, mental health, and client services support rooms were professional and well versed in their responsibilities. All were prepared to use available resources and rapidly reach back to parent organizations for supplemental assistance. DSS, with a staff of 375, is fully prepared to rotate personnel to meet current and expanded staffing requirements. The Department of Health has assigned a physician's assistant to assist in meeting medical needs, and the Sheriff, in addition to providing security, supports the shelter by assisting in the registration process and accepting responsibility for oversight of evacuees who are sex offenders. The shelter staff is prepared to support the needs of a bi-lingual

population and has contacts to meet other linguistic challenges. ARC staff members discussed their ability to aid evacuees in registering on the ARC national "Safe and Well" data base. The shelter was well organized and set up in conformity with extant plans.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1, 5.a.3, 5.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.5 Cleveland County

Public Safety and Security Response:

The ability of the Kings Mountain Police Department to establish TCPs was determined by interview with a department Captain who was knowledgeable in the establishment and location of TCPs which would be established in Cleveland County. He described in detail how all law enforcement officers would report to the Command Post established at the reception and congregate care center (Kings Mountain High School) to receive their assignments and dosimetry kits. Since the CP is located at the high school, the officers would have a clear understanding of how evacuees should be directed and the resources available to them at the shelter. The officer was proficient in the demonstration and use of personal dosimetry and recording any measured readings. Patrol vehicles were equipped with sufficient safety equipment to aid in traffic direction and have multiple means of radio and computer aided dispatch technology to receive and transmit essential information. There are procedures in place to complete removal of impediments to traffic.

Hazardous Materials Response:

Cleveland County successfully demonstrated the ability to monitor, decontaminate (if necessary), and shelter evacuees from the emergency planning zone (EPZ) areas. Cleveland County is a host county for evacuees from York County, SC in the event of a radiological event at the CNS. The

personnel staffing the Kings Mountain High School reception activity successfully assessed radiological hazards through radiological monitoring and established contamination action levels. The county managed radiological exposure by providing radiological safety briefings, implementing radiation exposure limits and issuing personal dosimetry to all emergency workers. There was sufficient space and facilities to handle the anticipated number of evacuees and vehicles. Appropriate quantities of personal dosimetry, and special equipment for survey and decontamination operations were available. Personnel demonstrated the ability to manage contamination control, displayed good communication, and teamwork, and demonstrated the ability to monitor and decontaminate evacuees and their vehicles. All personnel were well trained and demonstrated a high degree of knowledge on monitoring and decontamination of evacuees.

Mass Care:

Cleveland County successfully demonstrated its ability to execute Mass Care responsibilities at the Kings Mountain High School, Kings Mountain, NC. The shelter manager had the gymnasium set up as he would in actual operation, less the full complement of beds. All stations (reception, human services, medical services, recreation, refreshments, and amateur radio) except mental health were staffed. The activities were supported by Cleveland County Emergency Management Agency (EMA), Department of Social Services (DSS), Public Health (PH), Cleveland County Chapter of the America Red Cross (ARC), Cleveland County ARES and the Kings Mountain Board of Education.

The DSS and ARC share primary responsibility for evacuee registration and shelter operations. The combined fulltime and volunteer staff supporting shelter operations presented a cohesive approach to meeting evacuee needs. DSS was prepared to conduct registration activities and expand its staff as required. ARC and PH personnel staffing client services, medical and mental health thoroughly described their responsibilities and the manner in which they would support evacuee needs. Lead ARC, DSS and PH staff are prepared to reach back to their parent organizations or EMA for additional assistance. The shelter was organized in accordance with current ARC plans to meet the anticipated shelter capacity provided in the plans.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.d.1, 3.d.2, 6.a.1, 6.c.1.

b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.1.6 Union County (NC)

EOC Management:

The Union County Emergency Management Director (EMD) and his staff successfully demonstrated the capability to provide multi-agency coordination and incident management for the Catawba Nuclear Station Plume exercise. Upon notification of an Alert ECL key staff and agency leads were alerted of the emergency situation in accordance with procedures. The team activated and mobilized the Emergency Operations Center (EOC) in a timely manner. Representatives from various county agencies, volunteers, and elected local officials supported the response from the EOC.

The supplies and equipment in the EOC was sufficient to support the emergency operations assigned to this facility. A sufficient number of computers were available and were used to track and record the event and actions taken by the staff. The team had overhead projectors that were used to display pertinent information for staff use such as the WEBEOC log. Emergency Planning Zone maps and County procedures were available and used by the staff.

The communications available to the EMD was the state telephone conferencing line, which is the primary means of communication between Union County, the State, and the Risk Counties. The State 800 MHz Voice Interoperability Plan for Emergency Responders (VIPER) radio network was the backup system. A Union County 800 MHZ radio system was also available as an additional backup for the EMD. Each EOC staff's position was equipped with a minimum of one commercial land line telephone. Each staff member also had cellular telephones available to use as a back-up if needed. The County police staff member also had an 800 MHZ UHF/VHF radio available that would allow communications with the police and fire department organizations. Additional communications resources included two members of the ARES and their equipment. This included the Voice Over Internet and VHF packet. No communications concerns were observed with the ARES system during the exercise.

The (EMD) provided the direction and control for the Union County EOC. The EMD directed the staff to activate the Emergency Operations Center (EOC) including establishing communications. At 0840 he declared the EOC activated and then gave the team the initial briefing. Fifteen additional briefings were given by the EMD and his Operations lead. The EMD also notified the County Manager of the current situation. During the exercise the EMD continued to keep the County Manager informed of any changes in the event. The EMD also drafted and presented to the County Manager a Declaration of a County State Emergency with his recommendations.

As situations changed EMD advised his staff on what the staff should focus on for that particular ECL. At the Site Area Emergency declaration the EMD directed his staff to take actions necessary to staff traffic control points, send students home from Marvin Ridge High School and set up the facility to handle evacuees, open and staff the evacuee center, and to staff the radiological monitoring and decontamination sites. The EOC staff took the actions necessary to complete these tasks (actual deployment of the resources was simulated). It was noted that the EMD solicited feedback from the staff concerning the actions they were assigned to perform. Throughout the exercise the staff performed their duties in a professional manner and displayed excellent teamwork.

Hazardous Materials Response:

The Out of Sequence demonstration for the Marvin Ridge Middle School (MRMS) reception and congregate care center (RCCC) was conducted on April 3, 2012. The monitoring and decontamination team was staffed with personnel from the Wesley Chapel Fire Department (WCFD).

WCFD emergency workers had equipment and supplies for monitoring and decontaminating evacuees. However, none of the Radiation Alert EXP hand held meters had a range of readings sticker on them, which rendered them unsuitable for use in monitoring evacuees. . A portal monitor was also available for conducting evacuee monitoring but none of the emergency workers knew how to properly source check the instrument. In addition, no radioactive source was available that could be used to properly source check the portal monitor. Therefore, no evacuees could be monitored for radiological contamination.

Emergency workers were knowledgeable of contamination limits but were not knowledgeable of contamination monitoring instrument operations. In addition, they were not knowledgeable of exposure controls; call back values, turn back values and exposure limit values. The emergency workers attempted to read from their plan but were unable to interpret the requirements listed in the plan. The plan also required them to be able to read exposure levels that could not be read on the dosimetry equipment they were issued. Decontamination team members knew how to instruct evacuees to perform decontamination activities and what actions to take if they could not be decontaminated.

Mass Care:

Union County demonstrated its ability to establish and manage a general population shelter in support of a radiological incident at the CNS at the Marvin Ridge High School in Waxhaw, NC. Overall management of the shelter complex is the responsibility of the Union County Chapter of the American Red Cross (ARC). Significant assistance was provided during the demonstration by the County's Department of Health (DOH) and Sheriff's Office, and the Department of Social Services was prepared to supplement personnel requirements. A unique aspect of this Reception and Congregate Care Center was that evacuees who have been successfully monitored, and decontaminated if necessary, are registered by DOH and then have the opportunity to receive KI tablets and receive a medical or mental health assessment from DOH staff without processing into the shelter.

The registration procedures for the ARC shelter include the presence of the Sheriff's Office personnel to assist with any evacuee required to report to law enforcement. Recognizing that there may be some delays in the registration process based on the anticipated population the ARC staff has positioned a laptop with internet access to facilitate evacuees in registering on the ARC national "Safe and Well" website in the registration area. In addition to bi-lingual signage, the shelter staff and DSS have Spanish speakers and contacts to assist in meeting other linguistic challenges. Animal Services which is equipped with a companion animal mobile evacuation trailer has not developed procedures or determined how it fits into the overall shelter scheme. Similarly, DOH representatives indicated the intent to accommodate the special needs population in the complex but were not sure of where they fit in to the scheme.

The ARC staff and supporting county agencies were well-versed in their responsibilities. They were receptive to recommendations and understood that use of the school complex to house the

anticipated evacuee population requires an extensive re-look at space allocation and utilization.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 3.a.1, 3.b.1, 6.c.1.
b. AREAS REQUIRING CORRECTIVE ACTION: 1.e.1, 6.a.1.

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CRITERION: Equipment, maps, displays, dosimetry, KI, and other supplies are sufficient to support emergency operations.

CONDITION: Radiological monitoring equipment used at the Union County Reception and Congregate Care Center (RCCC) was not sufficient to allow for the proper monitoring and decontamination of evacuees or to provide appropriate radiological exposure control for the emergency workers.

POSSIBLE CAUSE: The Union County Plan calls for emergency workers who may be exposed to ionizing radiation outside of the 10-mile EPZ to be issued 2 DRDs, one with a range of 0 – 200 mR and the other with a range of 0 – 20 R. Union County only issued the 0 – 20 R DRDs to their emergency workers. The administrative limit for these workers is 1R and they are required to increase the frequency of reading their dosimeters once a value of 10 mR is reached. It is not possible to read 10 mR on a 0-20R DRD and therefore the procedural requirements could not be met.

When the Radiation Alert EXP instruments were last calibrated the acceptance range of reading sticker was not affixed to the instrument. The lack of the range of readings sticker did not allow emergency workers to source check their instruments to verify that they were responding to radiation appropriately, therefore the validity of any reading made by the radiological monitoring instruments could not be assured.

For the portal monitor, the radiological check source was not available to ensure that the instrument was in proper working order and that the contamination alarm set points were appropriately activated.

REFERENCE: 1. EEG, Capability: Hazardous Materials (HAZMAT) Response and Decontamination, Activity 2

2. Union County Emergency Management General Operating Guidelines, Catawba Nuclear Site, Radiation Monitoring, Decontamination, and Exposure Control.

3. NUREG – 0654, J12

EFFECT: Problems with the radiologic equipment issued in Union County did not allow emergency workers to appropriately monitor their exposure levels, nor demonstrate an ability to accurately assess the radiological contamination of evacuees.

RECOMMENDATION: 1. Obtain a 1μCi source to conduct source checks of the portal monitor.

2. Recalibrate all Radiation EXP Alert instruments and ensure that a range of readings sticker is affixed to each instrument.

3. Ensure that a sufficient supply exists in Union County to issue emergency workers both a 0 – 200 mR DRD and a 0 – 20 R DRD.

ISSUE NO.: 12-12-6a1-A-2

CRITERION: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees.

CONDITION: The setup of equipment and operation of the reception center was inadequate due to a lack of training of the emergency workers assigned to the center.

POSSIBLE CAUSE: Training of emergency workers on the procedures for equipment operations and reception center setup was inadequate.

REFERENCE: 1. EEG, Capability: Hazardous Materials (HAZMAT) Response and Decontamination,
Activity 2

2. Union County Emergency Management General Operating Guidelines, Catawba Nuclear Site, Radiation Monitoring, Decontamination, and Exposure Control.

3. NUREG – 0654, O5

EFFECT: Emergency workers were not sure of the layout and flow of the reception center. They were not able to perform source checks on portal monitors and only one person knew anything about the portal monitor. Individuals conducting contamination monitoring were not knowledgeable of the equipment operations or exposure limits. Emergency workers were not knowledgeable of their call back or turn back limits or any administrative exposure limits, and could not locate the proper information in the plans they were carrying. Even after players located the information in the plans they were not able to explain what the exposure limits meant or how they were tracked.

RECOMMENDATION: 1. Implement an annual training program in accordance with FEMA REP Manual requirements and NUREG 0654 requirements.

2. Develop job aides to assist emergency workers in the set-up and operation of the reception center, including radiological monitoring and decontamination tasks.

3. The State of North Carolina should provide assistance to Union county to ensure that an appropriate annual training program is established and provide assistance in reception center activities as required/requested by Union County.

4. If needed, request a FEMA representative to attend training, to assist in a walk-through of the reception center and to provide guidance.

c. DEFICIENCY: None

d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.2 South Carolina Jurisdictions

3.3.2.1 State of South Carolina

EOC Management:

South Carolina Emergency Management Division (SCEMD) successfully demonstrated the capability to provide multi-agency coordination for incident management by activating and operating the State Emergency Operations Center (SEOC) in response to a simulated incident involving Catawba Nuclear Station (CNS). This included SEOC activation, notification, staffing, management, direction, control and coordination of response activities.

The SCEMD Director, Chief of Operations, Chief of Plans and the Technical Support Officer clearly demonstrated the ability to provide effective emergency response. The SEOC staff, composed of representatives from various state agencies, clearly understood their responsibilities, followed their plans and effectively performed their assigned duties with proficiency. Outstanding direction, control and coordination were demonstrated throughout the exercise. The decision making process was defined and deliberate, which aided in making timely and decisive protective action decisions as conditions evolved. Numerous staff briefings and updates were conducted, which allowed input from key staff, kept all staff abreast of changing conditions and allowed forecasting that contributed to the efficiency of operations and ongoing coordination with other agencies and affected jurisdictions involved with the response effort. Use of the conference bridge line enhanced coordination and decision making with the State of North Carolina and York, Gaston and Charlotte-Mecklenburg Counties.

The SEOC has sufficient space and equipment to support emergency response efforts. Each state agency had an operational area, easily identifiable and functional for conducting their duties. Maps and status boards were visible and made vital information readily available to the staff for reference and aided in situational awareness. The SEOC staff was well trained, professional and effectively demonstrated their dedication to protect the health and safety of the public in the event of an incident at CNS and performed their duties in accordance with established plans and

procedures.

Emergency Operations Facility:

The State and local government officials dispatched to the Emergency Operations Facility (EOF) served in an all-important liaison capacity between the utility operator and their respective State and County EOCs. From the State of South Carolina representatives from SCEMD, Department of Health and Environmental Control (DHEC) and York County were present, while from North Carolina representatives from NCEM and RPS were present. The open communications by the EOF staff and State and local liaisons resulted in the smooth flow of utility recommendations concerning protective actions recommendations (PARs) and potassium iodide (KI) decisions. The State Liaisons in conjunction with the utility Emergency Director, effectively communicated, coordinated, and functioned as a cohesive response and recovery unit. Both States supplied dose projection liaisons who assisted with supplying dose assessment runs to their respective dose assessment personnel. When questions arose as to the current dose projections the liaisons requested further information from the utility dose assessment staff. This enabled the states to perform independent assessments of the utility operator's dose assessment process and resulting PAR.

Emergency Public Information and Warning:

The management and staff of the SEOC successfully demonstrated the effective and timely coordination of public information and warning and maintenance of the information and communication necessary for coordinating response activities. Additionally, the SEOC personnel showed the capability to provide new information and instructions to the public as necessary. The Public Information Director (PID) of SCEMD along with the operations staff at the SEOC proficiently worked together to alert the public in the Emergency Planning Zone (EPZ) with the sounding of sirens and the broadcast of Emergency Alert System (EAS) messages.

During the exercise the SEOC activated the Alert and Notification System (A&N) three times. The first was to alert the public to Evacuate and Shelter-in-Place in particular EPZ zones and the declaration of a Site Area Emergency. The second A&N was to inform the public of the expansion of the zones for Evacuation and Shelter-in-Place and the declaration of a General Emergency. The third A&N message was to inform the public to take Potassium Iodide. The first

message only was sent to the National Weather Service and actions were performed to broadcast the message (simulated per Extent-of-Play). EAS messages were followed up with eight News Releases to the public which provided additional information. Pre-Scripted messages were used in the development of both EAS and follow on News Releases. The PID was in frequent communications with the Joint Information Center personnel at the SEOC to keep them abreast of changing conditions to be released to the media.

Public Safety and Security Response:

An interview was conducted on October 30, 2012, at the South Carolina Highway Patrol (SCHP) office located at Rock Hill. The SCHP demonstrated their ability to provide public safety and security for establishing the four traffic control points (TCPs) they were responsible for within York County.

The trooper was knowledgeable about responsibilities, equipment needs, and locations of TCPs, shelters, decontamination centers, plans and procedures. He was well aware of dosimetry, administrative limits, procedures for the ingestion and recording of KI. He was also very knowledgeable on how to handle any impediment and his responsibility to redirect traffic.

Hazardous Materials Response:

DHEC successfully demonstrated the capability to assess and manage the consequences of a radiological materials release. They were capable of testing and identifying all likely radiological substances found offsite; ensuring that responders had protective clothing and equipment; conducting surveys of suspected sources or contamination spreads and establishing isolation perimeters; and notifying environmental, health, and law enforcement agencies. DHEC personnel were prepositioned per the extent-of-play agreement at the SEOC . Rosters were provided to demonstrate 24-hour coverage of essential functions. Plans and procedures were available for each function. The Emergency Response Coordinator (ERC) was in charge of the DHEC group with the Dose Assessment Coordinator (DAC) providing support for dose assessment. Both Coordinators demonstrated effective leadership and delegated tasks appropriately, although they were located in different rooms. Communications capabilities, equipment, and supplies were sufficient for the exercise for both groups. Primary equipment used in this exercise included landline telephones, 800 Mega Hertz (MHz) radios, computers, and the CNS 10-mile EPZ maps.

The ERC and dose assessment staff performed dose projections and recommended protective actions based on data from the CNS Emergency Notification Forms (ENF). The DAC completed timely dose assessment functions and compared results with licensee dose projections and licensee field team results.

The DHEC functions included making PARs, KI recommendations, dose assessments, and operation of field teams. The DHEC team effectively characterized and quantified the radiological plume. Protective actions and KI recommendations were appropriate for the corresponding dose projections and meteorological data.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 3.a.1, 3.d.1, 3.d.2, 4.a.2, 5.a.1, 5.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.2 South Carolina Joint Information System

Emergency Public Information and Warning:

The Public Information staff of the South Carolina Joint Information Center (JIC) successfully demonstrated the capability to activate, alert and mobilize, manage public information and warnings, and provide public inquiry control during a simulated incident at CNS.

The staff was prepositioned in the JIC as allowed in the EOPA and was mobilized following notification of an Emergency Classification Level (ECL) declaration of Alert, in response to a simulated earthquake, and transitioned to a simulated response to a radiological event at CNS. Alert and mobilization of personnel and equipment was simulated. The JIC was well equipped, with redundant communications.

The State Lead Public Information Officer (PIO), DHEC PIO, and York County PIO were primary staff and included a State Rumor Control Specialist and two PIO assistants to the DHEC

and York County PIOs. The Public Information staff leadership exhibited skilled, expert knowledge of plans and procedures, had clearly defined roles and processes, and conducted all coordinating activities with the States of South Carolina and North Carolina, York County and counterpart agencies in other host and risk counties, and Duke Energy in accordance with established plans and procedures. The staff was proactive in coordinating, appraising and disseminating information, and especially capable in message accuracy and timeliness. Each member adeptly understood their role and was complimentary to other staff.

Pre-scripted messages were used effectively for news release (NR) and Emergency Alert System (EAS) messages. All information was reviewed, approved and coordinated by proper officials, prior to dissemination, which ensured procedural compliance and aided in development of Joint NRs and EAS messages for dissemination to the media, the public and local radio and television stations without undue delay. All Media briefs supported the coordinated dissemination of joint messages. The media briefs were prepared by the Public Information staff, away from the JIC at a strategic location in the SEOC. Briefs included references to available brochures, hot line numbers, public inquiry, internet sites and social media sources.

Public inquiry was managed by a rumor control specialist in the JIC. The Commission of Minority Affairs, which aids in the development and translation of Spanish and other language products as well as for hearing and sight impaired and translators at the call center, augmented the Public Inquiry staff.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.d.1, 1.e.1, 5.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.3 York County

EOC Management:

York County Emergency Management staff and York County support agencies personnel demonstrated the capability for incident management by activating and operating their EOC. This demonstration included activating the EOC, direction and control of response activities, coordination with affected State and County governments , and coordination of public information and warning.

Although personnel were pre-positioned, per the extent of play, the Emergency Management Director (EMD) and his Operations Chief described the activation process and actual pages and telephone calls were made to activate EOC staff. The EOC was well equipped with computers, monitors and video displays and all emergency support functions (ESFs) had access to County Plans and Standard Operating Guides (SOGs). Primary and backup communication systems were available and all systems worked throughout the exercise.

The EMD demonstrated excellent direction and control throughout the exercise and coordinated all protective actions with both States and the other County Governments involved in the decision process. York County Operations Chief successfully demonstrated coordinating the activation of their siren system with the other counties involved. The EMD also used 137 exercise injects to drive the EOC staff to participate fully and to identify any processes that did not work as anticipated. These injects kept the EOC busy and occupied. They were also an excellent training mechanism.

The EMD and staff were knowledgeable of personnel exposure control and the use of KI. All members of the EOC were issued PRDs and KI when appropriate. The EMD and Assistant County Administrator coordinated protective actions for the schools with the School District Risk Manager. There were 54 schools within the 10-mile EPZ in York County. Winthrop University was located within the 10-mile EPZ in York County and a representative from the Winthrop University Police Department was part of the Public Safety and Security Section (ESF 13) staff in the EOC. The university conducted a table top exercise in conjunction with the CNS exercise.

The Transportation staff (ESF 1) was active in preparing for transportation needs throughout the

exercise. They determined that 272 individuals within the evacuated zones needed special transport. Contact with the individuals was simulated and the staff recognized contacting them would take some time and indicated the county reverse calling system may be utilized to assist.

The York County Sheriff's Office representatives and the South Carolina Highway Patrol representatives were knowledgeable of their duties for establishing traffic control points, maintaining exposure control and how to handle impediments.

Emergency Public Information and Warning:

The York County Office of Emergency Management demonstrated the capability to provide warnings to the public through the activation of sirens and the issuance of news releases. After each Protective Action Decision (PAD) made by the York County Office of Emergency Management in concurrence with the other affected counties from North Carolina, the sounding of sirens and the release of an Emergency Alert System (EAS) message was coordinated. York County performed silent tests of its siren system. No actual siren failures were observed during the exercise. York County demonstrated the ability to provide warnings by backup route alerting in response to a controller injected failure of one siren. In addition to sounding the sirens, the Public Information Officer (PIO) at the York County Emergency Operations Center (EOC)released seven news releases, and the EOC responded to inquiries from the public, provided as controller-injected messages.

Citizen Evacuation/Shelter in Place:

School District personnel from each of the four school districts located within the 10 mile EPZ of York County successfully demonstrated their ability to safeguard students, staff and faculty in the event of an incident involving CNS. This was completed by out of sequence interview with the Principals and selected district staff of each of the following: York School District 1 (Hunter Street ES, Cotton Belt, Harold C. Johnson MS, York One Academy, Jefferson ES and York MS); Clover School District 2 (Crowder's Creek ES, Kinard ES and Griggs Road ES); Rock Hill School District 3 (Finley Road ES, Rawlinson Road MS, Belleview ES, Children's School at Sylvia Circle and Ebenezer Avenue ES); and Fort Mill School District 4 (Banks Trail MS, Fort Mill ES and Gold Hill MS). All were well conversant with their plans and it was apparent that all plans were thoroughly coordinated. Each school district has sufficient buses to relocate their students in a timely manner and the pickup points are prepared to accept the students and assist

in their supervision and eventual release to parents/guardians. District and school staffs of each school have specific functions and these are addressed during annually scheduled school 'lock down' drills and evacuation/relocation training exercises.

Hazardous Materials Response:

Members of the Bethany, Lesslie and Clover Volunteer Fire Departments (VFD) demonstrated the capability to; assess and manage the consequences of a radiological release; ensured that responders had protective clothing and equipment; decontaminated responders, and equipment; and coordinated off-site decontamination with relevant agencies.

Since personnel were pre-positioned at both the Lesslie and Bethany locations, in accordance with the extent of play, the Station Commanders described the notification and callout procedures. A thorough radiological and safety briefing was conducted by the Deputy Chief, Operations Chief, Safety Chief and the Administrative Chief. All personnel were briefed on contamination control and limits, exposure limits and how often workers were to read their direct reading dosimeters (DRDs), where to wear their permanent record dosimeter (PRD) and insured each worker was issued the appropriate personal protective equipment (PPE). A calibration sticker affixed to the side of each survey meter indicated the probe associated with the survey meter, the calibration date and calibration due date, and the acceptable range of instrument response to the check source attached to the survey meter. All instruments and dosimetry were within their calibration dates. Workers operationally checked each survey meter, verifying that the instrument response to the check source was within the range specified on the calibration sticker, and wrapped each probe with plastic. Decontamination equipment included a shower tent for decontaminating personnel, and a water hose and brushes for decontaminating emergency vehicles and equipment. All workers were knowledgeable of their equipment and dosimetry, knew the exposure and contamination limits, and how often to read their DRDs.

There was sufficient room at the facility to monitor and decontaminate emergency vehicles. A specific area was designated for quarantining vehicles that could not be decontaminated. The monitoring and decontamination teams were knowledgeable of their exposure and contamination limits. The vehicle monitoring team exhibited good monitoring techniques and knew what locations to monitor. The decontamination team exhibited good techniques to minimize water spray and preventing contamination spread. They used good methods to decontaminate small areas in the interior of the vehicles so that the vehicles could remain in service.

The personnel monitoring and decontamination team was also very knowledgeable of their exposure and contamination limits. The monitoring team displayed good monitoring techniques and even rotated monitors to allow all team members to participate. The decontamination area and tent were sufficient to handle any potential situation. The decontamination team knew proper decontamination techniques and what actions to take if an individual could not be decontaminated. At the conclusion of the drill, the safety officer oversaw the removal of PPE by the personnel who conducted monitoring and decontamination activities.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. 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, 3.d.2, 5.a.1, 5.a.3, 5.b.1, 6.a.1, 6.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.4 Cherokee County

Hazardous Materials Response:

Cherokee County Emergency Management Agency (CCEMA) personnel along with firefighters from Gaffney Fire Department, Buffalo Volunteer Fire Department (VFD), Blacksburg VFD, and Cherokee Falls/Kings Creek/Cashion's Crossroads VFD, and DHEC successfully demonstrated the ability to monitor, decontaminate (if necessary), and shelter evacuees from the emergency planning zone (EPZ) areas.. This demonstration included; ensuring that responders had protective clothing and equipment; mitigating the effects of radiological contamination, decontaminating evacuees, and vehicles; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies that would be needed to support the process.

Emergency workers had sufficient supplies for monitoring and decontaminating evacuees. The Gaffney Fire Chief gave an excellent briefing prior to dispersing workers to their positions. He briefed on using common language, station locations and team members, evacuee and vehicle

flow path, contamination and exposure limits, personal protective equipment and dosimetry, and time frame for when to read dosimetry, and general safety reminders. Emergency workers were knowledgeable of the contamination and exposure limits. Emergency workers successfully demonstrated how to perform operational and source checks on the portal monitors and the Ludlum Model 3s survey instruments. The emergency workers also demonstrated they were knowledgeable in how to operate the survey instruments.

The vehicle monitoring team demonstrated good monitoring techniques and knowledge of contamination limits and good practices to prevent cross-contamination. They successfully monitored two vehicles and directed them to the quarantine parking area. They successfully demonstrated the ability to monitor the number of evacuees to process 20% in a 12-hour period. The portal monitoring team knew where to direct evacuees that alarmed the portal monitor and where evacuees should go to register. Both the emergency workers and DHEC personnel knew the contamination limit was 330 cpm. Both emergency worker teams demonstrated good knowledge of how to survey evacuees and how to instruct evacuees to decontaminate themselves. If the evacuees were successfully decontaminated both teams knew to give the evacuee a green sticker and have them escorted to the reception area. DHEC personnel knew what to do with evacuees that could not be decontaminated after two attempts.

Mass Care:

The CCEMA personnel successfully demonstrated its ability to receive and support York County evacuees in the event of a CNS radiological incident. The Piedmont Chapter of the American Red Cross (ARC) and the Department of Social Services (DSS) were the two primary agencies responsible for the activation of a shelter and provided fulltime staff and volunteers who were well-versed in the responsibilities as a host county.

The Gaffney High School is a newly designated shelter and all actions to bring it fully on line have not been accomplished, but in discussions with DSS, the facility manager, and ARC volunteers it was obvious that the shelter could be activated rapidly if needed. All personnel understood restrictions to entry to the registration and shelter area due to potential radiological contamination and were vigilant in identifying evacuees to be returned to the monitoring and decontamination station. Simulated evacuees processed into the shelter received handouts on shelter life and received a general orientation by ARC volunteers. Those requiring further medical and mental health screening were referred to experienced and well-qualified ARC

medical and mental health staff for assessment. Contact information was available to obtain additional support by county agencies and the ARC if needed. The shelter area was well-signed with bi-lingual posters in English and Spanish. Several staff could speak Spanish and information on accessing additional ARC interpreter/translator support was available. The ARC had coordinated for feeding support through the school district and evacuees who had been decontaminated would receive clothing from the Salvation Army. Both DSS and the ARC had staff rosters indicating personnel who would staff rotating shifts in support of shelter operations. Although other primary support agencies were not present, the facility manager stated based on previous coordination their support of an actual activation was unquestioned.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.e.1, 3.a.1, 6.a.1, 6.c.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.2.5 Lancaster County

Hazardous Materials Response:

Lancaster County Emergency Management Agency, Hazardous Material Team, Emergency Medical Services and Lancaster City Fire and Police Department personnel successfully demonstrated the ability to monitor, decontaminate (if necessary), and shelter evacuees from the emergency planning zone (EPZ) areas. This demonstration included; ensuring that responders had protective clothing and equipment; mitigating the effects of hazardous materials, decontaminating evacuees, and vehicles; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies that would be needed to support the process.

Lancaster County emergency workers had sufficient supplies for monitoring and decontaminating evacuees. Emergency workers were knowledgeable of contamination and exposure limits. The emergency workers successfully demonstrated how to perform operational and source checks on all their monitoring instruments. The emergency workers also

demonstrated they were knowledgeable in how to operate the survey instruments.

Emergency workers also demonstrated knowledge in monitoring vehicles and evacuees. The vehicle monitoring team was knowledgeable in; monitoring techniques, contamination limits, directing evacuees, and disposition of contaminated vehicles. Personnel monitoring workers were knowledgeable of; contamination limits, contamination control, and where to direct contaminated and non-contaminated evacuees. Decontamination team members knew how to instruct evacuees to perform decontamination activities, monitor evacuees, and what actions to take if they could not be decontaminated.

Mass Care:

The Upper Palmetto Chapter of the ARC assisted primarily by the Lancaster County DSS demonstrated the ability of county staff and ARC volunteers to meet the congregate care needs of evacuees during a nuclear incident at the CNS. The county employees and ARC volunteers worked together as a team and described their shared responsibilities in the establishment and management of the shelter. The shelter has a current (3/8/10) ARC facility survey that supported meeting the requirements of a maximum of 949 evacuees. It was evident that the ARC as lead and all supporting county agencies (Lancaster County School District, Lancaster County Sheriff's Office, Emergency Management Agency (EMA), DHEC, Emergency Medical Services, and Lancaster City Police) had coordinated on establishing and managing a safe shelter.

Personnel participating in the demonstration were well-versed in their roles and open to suggestions on how their plans could be modified to the benefit of both the staff and the public which they serve. The ARC Facility Manager described the availability of representatives conversant with services that could assist evacuees. Volunteers were prepared to provide limited medical and mental health support on site and provide assistance in evacuee registration in the ARC "Safe and Well" website. Coordination had been effected by ARC with the School District for meeting the feeding needs of the anticipated population. The DHEC representative described the resources available to issue potassium iodide (KI) tablets to evacuees. Lastly, in response to evacuee concerns over care for pets, the EMA has obtained a Companion Animal Response Team trailer and equipment and is in the initial stages of developing procedures to provide for care of evacuee pets.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.e.1, 3.a.1, 6.a.1, 6.c.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

3.3.3 Support Jurisdictions

3.3.3.1 Catawba Nuclear Station Joint Information System

Emergency Public Information and Warning:

A Joint Information System has been established for response to an incident at CNS. The State of South Carolina has decided to conduct media operations out of the SEOC with representation from York County. North Carolina and Charlotte-Mecklenburg and Gaston Counties still operate out of the Duke Energy Media Center in Charlotte , North Carolina. All parties effectively demonstrated the ability to manage public information and warnings, and provide for public inquiry control during a simulated incident at CNS)during this exercise.

The JIS was structured to deliver the most accurate and timely emergency instructions and information available to the public, with consistency and completeness and aided in development and delivery of coordinated interagency messages. Each agency retained its autonomy and spoke for itself, performing their duties under organic plans, protocols and structures as well as coordinated protocols that provided and encompassed all public information efforts related to incident operations information.

From the onset of the exercise at ECL Alert at 0830, through termination of the exercise, State and local governmental agencies and the licensee coordinated the dissemination of over thirty-five News Releases, that addressed ECL escalations, coordinated siren activations, protective actions, and general situation awareness. These News releases and Media briefings aided in the ability to control inaccurate information that could may have undermined public confidence in the incident response effort and the ability to protect the health and safety of the public.

In summary, the status of DHS/FEMA criteria for this location is as follows:

a. MET: 1.a.1, 1.d.1, 1.e.1, 5.b.1.
b. AREAS REQUIRING CORRECTIVE ACTION: None
c. DEFICIENCY: None
d. PLAN ISSUES: None
e. NOT DEMONSTRATED: None
f. PRIOR ISSUES - RESOLVED: None
g. PRIOR ISSUES - UNRESOLVED: None

SECTION 4: CONCLUSION

Officials and representatives from the States of South Carolina and North Carolina; the risk counties of York, South Carolina and Charlotte-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 was evident throughout all phases of the exercise. FEMA wishes to acknowledge the efforts of the many individuals who participated and made the exercise a success. Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities.

State and local emergency response organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them.

During this exercise, FEMA identified two areas requiring corrective action (ARCA) concerning activities in Union County, North Carolina. The first ARCA concerned the inadequate training of emergency workers in Union County. The second ARCA concerned the range of dosimeters issued to emergency workers and the inability of Union County to provide operable radiological monitoring equipment.

FEMA will work with the State of North Carolina to resolve these ARCAs ensuring that emergency workers are properly trained and that the equipment issued to emergency workers is appropriate and operable.

An ARCA (012-08-5.a.1-A-02) identified during the 2008 Catawba exercise that concerned the inaccurate content of an Emergency Alert System Message issued by the State of North Carolina was successfully corrected during this exercise.

APPENDIX A: IMPROVEMENT PLAN

Issue Number: 12-12-1e1-A-1	Criterion: 1e1
ISSUE: Radiological monitoring equipment used at the Union County Reception and Congregate Care Center (RCCC) was not sufficient to allow for the proper monitoring and decontamination of evacuees or to provide appropriate radiological exposure control for the emergency workers.	
RECOMMENDATION: 1. Obtain a 1μCi source to conduct source checks of the portal monitor. 2. Recalibrate all Radiation EXP Alert instruments and ensure that a range of readings sticker is affixed to each instrument. 3. Ensure that a sufficient supply exists in Union County to issue emergency workers both a 0 – 200 mR DRD and a 0 – 20 R DRD.	
CORRECTIVE ACTION DESCRIPTION:	
CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:
CAPABILITY ELEMENT:	START DATE:
AGENCY POC:	ESTIMATED COMPLETION DATE:

Issue Number: 12-12-6a1-A-2	Criterion: 6a1
ISSUE: The setup of equipment and operation of the reception center was inadequate due to a lack of training of the emergency workers assigned to the center.	
RECOMMENDATION: 1. Implement an annual training program in accordance with FEMA REP Manual requirements and NUREG 0654 requirements. 2. Develop job aides to assist emergency workers in the set-up and operation of the reception center, including radiological monitoring and decontamination tasks. 3. The State of North Carolina should provide assistance to Union county to ensure that an appropriate annual training program is established and provide assistance in reception center activities as required/requested by Union County. 4. If needed, request a FEMA representative to attend training, to assist in a walk-through of the reception center and to provide guidance.	
CORRECTIVE ACTION DESCRIPTION:	
CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:
CAPABILITY ELEMENT:	START DATE:
AGENCY POC:	ESTIMATED COMPLETION DATE:

APPENDIX B: EXERCISE TIMELINE

N/A - Non Applicable

N/R - Not Received

Table 1 - Exercise Timeline
DATE: 2012-10-30, SITE: Catawba Nuclear Station, SC

Emergency Classification Level or Event	Time Utility Declared	NC	NC JIC	Charlotte-Mecklenberg County	Gaston County	SC	SC JIS
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alert	0808	0829	0847	0829	0829	0828	0830
Site Area Emergency	1031	1047	1045	1042	1045	1043	1045
General Emergency	1234	1254	1250	1250	1250	1250	1249
Simulated Rad. Release Started	1024	1047	1045	1055	1045	1043	N/A
Simulated Rad. Release Terminated	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	N/A
Facility Declared Operational		0800	1005	0825	0905	1041	1020
Declaration of State of Emergency - South Carolina		N/R	1155	1155	N/R	1120	1158
Declaration of State of Emergency - North Carolina		1017	1028	N/R	1052	N/R	1027
Declaration of State of Emergency - Local		N/R	1218	1156	1100	N/R	N/R
Exercise Terminated		1418	1421	1420	1424	1413	1413
1st Protective Action Decision: Evacuate - A0 / Shelter - E1, E2, F1, F2, F3		1115	1134	1115	1115	1115	1115
1st Siren Activation		1130	1134	1130	1135	1130	1130
1st EAS Message		1130	1134	1130	1135	1130	1130
1st NWS Activation		1130	N/A	1130	1135	1130	1130
2nd Protective Action Decision: Evacuate - A0, E1, E2, F1, F2, F3 / Shelter - All remaining 10 mile EPZ		1310	1310	1310	1310	1310	1310
2nd Siren Activation		1325	1325	1325	1325	1325	1325
2nd EAS Message		1325	1325	1325	1325	1325	1325
2nd NWS Activation		1325	N/A	1325	1325	1325	1325
3rd Protective Action Decision:		1355	N/A	1355	1355	N/A	N/A
3rd Siren Activation		1410	N/A	1410	1410	N/A	N/A
3rd EAS Message		1410	N/A	1410	1410	N/A	N/A
3rd NWS Activation		1410	N/A	1410	1410	N/A	N/A
KI Administration Decision: South Carolina - EW, Institutionalized & General Public		N/A	N/A	N/A	N/A	1355	N/A
KI Administration Decision: North Carolina - EW & General Public		1355	N/A	1355	1355	N/A	N/A

Table 1 - Exercise Timeline

DATE: 2012-10-30, SITE: Catawba Nuclear Station, SC

Emergency Classification Level or Event	Time Utility Declared	York County
Unusual Event	N/A	N/A
Alert	0808	0825
Site Area Emergency	1031	1045
General Emergency	1234	1246
Simulated Rad. Release Started	1024	1045
Simulated Rad. Release Terminated	Ongoing	Ongoing
Facility Declared Operational		0915
Declaration of State of Emergency - South Carolina		N/R
Declaration of State of Emergency - North Carolina		N/R
Declaration of State of Emergency - Local		N/R
Exercise Terminated		1425
1st Protective Action Decision: Evacuate - A0 / Shelter - E1, E2, F1, F2, F3		1115
1st Siren Activation		1130
1st EAS Message		1130
1st NWS Activation		1130
2nd Protective Action Decision: Evacuate - A0, E1, E2, F1, F2, F3 / Shelter - All remaining 10 mile EPZ		1310
2nd Siren Activation		1325
2nd EAS Message		1325
2nd NWS Activation		1325
3rd Protective Action Decision:		1355
3rd Siren Activation		1410
3rd EAS Message		1410
3rd NWS Activation		1410
KI Administration Decision: South Carolina - EW, Institutionalized & General Public		1355
KI Administration Decision: North Carolina - EW & General Public		N/A

APPENDIX C: EXERCISE EVALUATORS AND TEAM LEADERS

DATE: 2012-10-30, SITE: Catawba Nuclear Station, SC

LOCATION	EVALUATOR	AGENCY
State of North Carolina	*Matthew Bradley Keith Earnshaw Robert Gantt Bernis Hannah James Hickey Cheryl Weaver	FEMA RIV ICFI ICFI ICFI ICFI ICFI
North Carolina Joint Information Center	Henry Christiansen *Robert Spence	ICFI FEMA-NP-TH-REP
Charlotte-Mecklenberg County	Matthew Bradley Michael Dolder Joe Inman Willis Larrabee Jill Leatherman Robert Lemeshka *Gerald Mclemore Bruce Swiren	FEMA RIV FEMA-NP-TH-REP ICF ICFI ICFI ICFI FEMA RIV ICFI
Gaston County	*Michael Dolder Willis Larrabee Lynn Steffensen	FEMA-NP-TH-REP ICFI ICFI
Cleveland County	Alan Bevan *Joe Harworth Willis Larrabee Jill Leatherman	ICFI FEMA ICFI ICFI
Union County (NC)	*Alan Bevan Joe Harworth Willis Larrabee	ICFI FEMA ICFI
State of South Carolina	Terry Blackmon Joe Harworth Quirino Iannazzo Jill Leatherman *Ronald Shaw Carl Wentzell	ICFI FEMA ICFI ICFI FEMA-NP-TH_REP ICFI
South Carolina Joint Information System	Willis Larrabee *Odis Spencer	ICFI FEMA
York County	John Ackermann *Joe Harworth David Kayen Bart Ray David Stuenkel	FEMA FEMA ICFI ICFI ICFI
Cherokee County	John Ackermann Ronald Shaw *Odis Spencer	FEMA FEMA-NP-TH_REP FEMA
Lancaster County	*Joe Harworth Willis Larrabee	FEMA ICFI
Catawba Nuclear Station Joint Information System	Henry Christiansen Willis Larrabee Robert Spence *Odis Spencer	ICFI ICFI FEMA-NP-TH-REP FEMA
* Team Leader		

APPENDIX D: EXTENT OF PLAY AGREEMENTS

SOUTH CAROLINA
EXTENT OF PLAY AGREEMENT
Catawba Nuclear Station
PARTIAL PARTICIPATION RADIOLOGICAL EMERGENCY PREPAREDNESS EXERCISE
April 17, 2012

All selected activities will be demonstrated fully in accordance with respective plans. The Extent of Play agreement is written by exception. If it is not listed as an exception it will be demonstrated as described in the plans and standard operating guides or procedures. It is requested that any issue or discrepancy arising during exercise play be allowed correction immediately, at all player locations, if it isn't disruptive to exercise play and if it is mutually agreeable to both the SCEMD controller and FEMA evaluator.

CAPABILITY: Emergency Operations Management (State and County EOC's)

Definition: Emergency Operations Center (EOC) management is the capability to provide multi-agency coordination (MAC) for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes: EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, State, and Federal EOCs; coordination of public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities. Similar entities may include the National (or Regional) Response Coordination Center (NRCC or RRCC), Joint Field Offices (JFO), National Operating Center (NOC), Joint Operations Center (JOC), Multi-Agency Coordination Center (MACC), Initial Operating Facility (IOF), etc.

Activity 1: Activate EOC (Definition: In response to activation, perform incident notifications, recall essential personnel, and stand-up EOC systems to provide a fully staffed and operational EOC.)

1.1 **ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner.** (Sub-element 1.a, Mobilization, **Criterion 1.a.1**: NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

All participating state and local government personnel will be pre-positioned in the area and will respond as the scenario dictates. Alert rosters will be provided to FEMA evaluators.

1.2 **Facilities are sufficient to support emergency response.** (Sub-element 1.b, Facilities, **Criterion 1.b.1**: NUREG-0654, H.3)

The York County Joint Information Center (JIC) will be evaluated on April 17, 2012 to establish a baseline for this exercise evaluation criterion. The York County JIC is a new facility and is located at 1070 Heckle Blvd. Building A, Rock Hill, SC 29732.

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

The Selective Signaling System (SSS) is the primary means of communication to notify off-site response organizations (OROs). Backup to the SSS are commercial telephone lines, 800 MHz and the Local Government Radio (LGR).

State and county decision makers will use a conference bridge line to conduct protective action discussions/decision making.

1.4 **Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations**. (Sub-element 1.e., Equipment and Supplies to Support Operations, **Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).

Distribution of potassium iodide (KI) for emergency workers will be demonstrated during OOS exercises at the counties. KI for Emergency Workers is stored at the local EOC and/or Region 3 Health Department and at DHEC Central Pharmacy in Columbia, SC. Quantities of KI will be verified during Staff Assistance Visits (SAVs).

All state/county radiation detection equipment will be inspected and operationally checked during the OOS activities. Quantities of equipment, their calibration/testing will be verified during SAVs.

Staff Assistance Visits (SAV) will be conducted in:

York County on March 26, 2012 at 1:30 p.m.
Lancaster County on March 27, 2012 at 2:00 p.m.

Union County on March 28, 2012 at 3:30 p.m.

Chester County on March 28, 2012 at 1:30 p.m.

Cherokee County on March 29, 2012 at 3:30 p.m.

Activity 2: Direct EOC Operations (Definition: Following activation of the EOC system, staff and organize the EOC in accordance with the comprehensive emergency management plan (CEMP) and the requisite policies, procedures, and directives.)

2.1 **Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible.** (Sub-element 1.c.1, Direction and Control,
Criterion 1.c.1: NUREG-0654, A.1.d, 2.a.b.)

State Direction and Control will be at the State Emergency Operations Center (SEOC). County Direction and Control will take place at the York County EOC. All telephone calls to non-participating agencies will be made by calling the simulation cell (simcell). FEMA evaluator will be given access to the simcell as needed.

2.2 **OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides.** (Sub-element 2.a., Emergency Worker Exposure Control, **Criterion 2.a.1**: NUREG-0654, K.4.)

The staff at county EOCs and the SEOC will discuss the processes with evaluators during in-sequence and/or out-of-sequence (OOS) activities.

2.3 **A decision-making process involved 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).** (Sub-element 2.b., Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency, **Criterion 2.b.2**: NUREG, J.9, 10.M.)

A conference bridge line will be utilized for protective action discussions/decision making.

2.4 **Protective action decisions are made, as appropriate, for special population groups.** (Sub-element 2.c., Protective Action Decisions Consideration for the Protection of Special Populations, **Criterion 2.c.1**: NUREG-0654, J.9, 10.c.d.e.g).

York County will discuss their plans and procedures to satisfy this criterion on April 17, 2012. A list of potential special population citizens will be provided for the FEMA evaluator to review.

Activity 3: Support and Coordinate Response (Definition: Once requested, provide resource, technical, and policy support to the Incident Command by coordinating the actions of off-site agencies, organizations, and jurisdictions, implementing MAAs, and requesting higher-level assistance.)

3.1 **The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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.** (Sub-element 3.a., Implementation of Emergency Worker Exposure Control, **Criterion 3.a.1**: NUREG-0654, K.3).

This criterion will be demonstrated by the counties during OOS activities.

3.2 **KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not general public) is maintained.** (Sub-element 3.b., Implementation of KI Decision, **Criterion 3.b.1**: NUREG-0654, E.7., J., 10.e.f.).

KI is distributed to Emergency Workers prior to their being dispatched. Record keeping will be discussed at the York County EOC. The York County Health Department representative will discuss record keeping for KI during SAV.

3.3 **Protective action decisions are implemented for special populations other than schools within areas subject to protective actions** (Sub-element 3.c., Implementation of Protective Actions for Special Populations, **Criterion 3.c.1**: NUREG-0654, E.7., J.9., 10.c. d.e.g,)

York County will discuss the ability and resources to implement appropriate protective actions for special population groups. A list of people with special transportation needs will be provided to evaluators. Evacuation assistance will not be demonstrated.

3.4 OROs/School officials decide upon and implement protective actions for schools. (Schools include: all public schools, licensed day care centers, and participating private schools) (Sub-element 3.c., Implementation of Protective Actions for Special Populations, Criterion 3.c.2: NUREG-0654, J.10.d. g.)

A school representative or appropriate county official will be prepared to discuss their plans and procedures to satisfy this criterion in the York County EOC on April 17, 2012 and also during school interviews on March 27, 2012.

3.5 **Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.** (Sub-element 3.d., Implementation of Traffic and Access Control, **Criterion 3.d.1**: NUREG-0654, J.10.g, j., k.)

Command and Control of TCP operations will be discussed by ESF-16 at the SEOC and by SCHP/York County Sheriff's personnel at the York County EOC on April 17, 2012. SCHP Officers will discuss during TCP demonstration.

3.6 Impediments to evacuation are identified and resolved. (Sub-element 3.d., Criterion 3.d.2: Implementation of Traffic and Access Control, NUREG-0654, J.10.k)

Actions to identify and remove impediments to evacuation will be by discussion with the highway patrol supervisor at the York County EOC.

CAPABILITY: Citizen Evacuation and Shelter in Place (Schools)

Definition: Citizen Evacuation and shelter-in-place is the capability to prepare for, ensure communication of, and immediately execute the safe and effective sheltering-in-place of an at-risk population (and companion animals), and/or the organized and managed evacuation of the at-risk population (and companion animals) to areas of safe refuge in response to a potentially or actually dangerous environment. In addition, this capability involves the safe reentry of the population where feasible.

Activity 1: Direct Evacuation and/or In Place Protection (Definition: In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident.)

1.1 **Out-of-Sequence Interview/Demonstration** (Sub-element 3.c., Implementation of Protective Actions for Special Populations, **Criterion 3.c.2:** NUREG-0654, J.10. d., g.)

York County will simulate school evacuations by out-of-sequence interviews with key school staff members and one bus driver from each evaluated school district on March 27, 2012.

York County schools to be evaluated are:

Banks Trail MS, Belleview Elem., Children's School Sylvia Circle Elem., Cotton Belt Elem., Crowder's Creek Elem., Ebenezer Ave. Elem., Finley Road Elem., Ft. Mill Elem., Gold Hill MS, Griggs Road Elem., Harold C. Johnson Elem., Hunter St. Elem., Jefferson Elem., Kinard Elem., Rawlinson Road MS, York One Academy, York MS

CAPABILITY: Emergency Public Information and Warning (State and County EOCs and JICs)

Definition: Develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public prior to an impending emergency and activate warning systems to notify those most at-risk in the event of an emergency. By refining its ability to disseminate accurate, consistent, timely, and easy-to understand information about emergency response and recovery processes, a jurisdiction can contribute to the well-being of the community during and after an emergency.

Activity 1: (JICs Only) Public Information, Alert/Warning, and Notification Plans (Definition: Activate key personnel, facilities, and procedures.)

1.1 ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (Sub-element 1.a, Mobilization, Criterion 1.a.1: NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

Courtesy evaluation requested: The York County JIC is a new facility and will be exercising for the first time to assist in developing future plans and procedures.

All participating JIC personnel will be pre-positioned in the area and will respond as the scenario dictates. Alert and notification procedures for JIC staff will be discussed with FEMA evaluators at the SEOC and York County EOC on April 17, 2012.

1.1 At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. (Sub element 1.d, Communications, Criterion 1.d.1: NUREG-0654, F. 2.)

Courtesy evaluation requested: York County JIC

Duke Energy JIC: this criterion will be demonstrated in accordance with plans and procedures.

2.1 Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations. (Sub-element 1.e., Equipment and Supplies to Support Operations, Criterion 1.e.1: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).

Courtesy evaluation requested: York County JIC

Duke Energy JIC: this criterion will be demonstrated in accordance with plans and procedures.

Activity 2: (JIC only) Establish Joint Information System (JIS) (Definition: Upon assigning PIO, activate and implement the JIS/JIC and disseminate information to public.)

2.1 **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)** (Sub-element 5.b., Emergency Information and Instructions for the Public and the Media,

Criterion 5.b.1: NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Courtesy evaluation requested: York County JIC

Duke Energy JIC: this criterion will be demonstrated in accordance with plans and procedures.

Activity 3: (JIC Only) Manage Emergency Public Information and Warnings (Definition: In response to need for public notification, provide overall management and coordination of Emergency Public Information and Warning capability.)

3.1 **Provide periodic updates and conduct regularly scheduled media conferences.** (Sub-element 5.b. Emergency Information and Instructions for the Public and the Media, **Criterion 5.b.1**: NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Courtesy evaluation requested: York County JIC

Duke Energy JIC: this criterion will be demonstrated in accordance with plans and procedures.

Activity 4: Issue Emergency Warnings (Definition: Upon receiving Protective Action Decisions, issue emergency public warnings through established warning systems.)

4.1 Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized off-site 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 FEMA REP guidance. (Sub-element 5.a., Activation of the Prompt Alert and Notification System, Criterion 5.a.1: 10 CFR Part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

At the appropriate decision point, sirens will be simulated (by conducting silent tests) and the EAS message will be transmitted to the National Weather Service offices in Greer, SC. A simulated EAS message and follow-on news release will be prepared but will not be transmitted to the National Weather Service. Copies of the simulated EAS messages and news releases will be provided to the FEMA evaluator at the SEOC. The National Weather Service will have staff available for interview during the EAS demonstration.

4.2 **Activities associated with FEMA-approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized off-site emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection of a failure of the primary alert and notification system.** (Sub-element 5.a., Activation of the Prompt Alert and Notification System, **Criterion 5.a.3:** NUREG-0654, E.6, Appendix 3.B.2.c)

York County will demonstrate back-up route alerting procedures with FEMA evaluators on April 17, 2012.

Lake Clearing activities will be demonstrated at Ebeneezer Park Landing by local law enforcement on April 5, 2012. York County Sheriff's Dept. will provide command and control of lake clearing activities.

4.3 **OROs provide accurate emergency information and instructions to the public and the news media. (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay)** (Sub-element 5.b., Emergency Information and Instructions for the Public and the Media, **Criterion 5.b.1**: NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Courtesy evaluation requested: York County JIC

The State and York County will demonstrate the ability to coordinate with the Duke Energy JIC to formulate and disseminate accurate information and instructions to the public and news media.

Activity 5: Provide Public Inquiry Control (Definition: Upon activation of the JIS, track inquiries for rumors.)

5.1 **OROs provide accurate emergency information and instructions to the public and the news media.** (Sub-element 5.b., Emergency Information and Instructions for the Public and the Media, **Criterion 5.b.1**: NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Rumor control for the State will be demonstrated at the York County JIC. Rumor control for York County will be demonstrated at the county EOC. Rumor control personnel will provide the FEMA evaluator with a call log.

CAPABILITY: Public Safety and Security Response (TCPs)

Definition: Public Safety and Security Response is the capability to reduce the impact and consequences of an incident or major event by securing the affected area, including crime/incident scene preservation issues as appropriate, safely diverting the public from hazards, providing security support to other response operations and properties, and sustaining operations from response through recovery. Public Safety and Security Response requires coordination among officials from law enforcement (LE), fire, and emergency medical services (EMS).

Activity 1: Activate Public Safety/Security Response (Definition: Upon notification, mobilize and deploy to begin operations.)

1.1 ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. **(Sub-element 1.a, Mobilization,** Criterion 1.a.1**: NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)**

TCP Officers will discuss this criterion with FEMA evaluators on April 17, 2012.

1.2 **At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations.** (Sub element 1.d, Communications, **Criterion 1.d.1**: NUREG-0654, F. 2.)

TCP Officers will discuss this criterion with FEMA evaluators on April 17, 2012.

1.3 **Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations**. (Sub-element 1.e, Equipment and Supplies to Support Operations, **Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).

At locations where traffic control personnel are deployed, the availability of appropriate equipment (e.g. vehicles, barriers, traffic cones and signs, etc.) will be discussed by law enforcement personnel.

Activity 2: Command/Control Public Safety/Security Response (Definition: In response to a notification for security assets, establish the management and coordination of the Public Safety and Security Response, from activation through to demobilization.)

2.1 **The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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.** (Sub-element 3.a., Implementation of Emergency Worker Exposure Control, **Criterion 3.a.1**: NUREG-0654, K.3).

TCP Officers will be interviewed to determine their knowledge of radiation incident response procedures (i.e. exposure limits, protective clothing, dose record keeping, etc.) on April 17, 2012.

2.2 **KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not general public) is maintained.** (Sub-element 3.b., Implementation of KI Decision, **Criterion 3.b.1**: NUREG-0654, E.7., J., 10.e.f.).

TCP Officers will discuss this criterion with FEMA evaluators on April 17, 2012.

Activity 3: Control Traffic, Crowd, and Scene (Definition: Direct/redirect traffic and pedestrians out of the affected area(s). Assess, coordinate, and establish force protection and perimeter zones, maintain a visible and effective security presence to deter criminal conduct and maintain law and order.)

3.1 **Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel**. (Sub-element 3.d., Implementation of Traffic and Access Control, **Criterion 3.d.1**: NUREG-0654, J.10.g, j., k.).

Traffic Control Points (TCPs) are pre-determined. The South Carolina Highway Patrol will demonstrate traffic control on-scene on April 17, 2012. Highway patrol will provide an escort from SC Highway Patrol Newport Office 305 Hands Mill Hwy, Rock Hill, SC to the TCPs to be evaluated. TCPs to be evaluated are:

TCP #3 SC-274 and S-80
TCP #4 SC-274 and S-1081

TCP #5 Daimler Blvd. and Charlotte Hwy.

3.2 **Impediments to evacuation are identified and resolved.** (Sub-element 3.d., Implementation of Traffic and Access Control, **Criterion 3.d.2**: NUREG-0654, J.10.k)

County/Local Law Enforcement personnel will discuss actions to identify and remove impediments to evacuation at the York County EOC.

CAPABILITY: HAZMAT Decontamination and Response (Reception Centers, Emergency Worker Decontamination and Dose Assessment)

Definition: HAZMAT Response and Decontamination is the capability to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; ensuring that responders have protective clothing and equipment; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical survey searches of suspected sources or contamination spreads and establishing isolation perimeters; mitigating the effects of hazardous materials, decontaminating on-site victims, responders, and equipment; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures.

Activity 1: Site Management and Control (Definition: In response to activation, mobilize and arrive at the incident scene and initiate response operations to manage and secure the physical layout of the incident.)

1.1 **ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner.** (Sub-element 1.a, Mobilization, **Criterion 1.a.1**: NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

All participating personnel will be pre-positioned at their respective Reception Center or EW Decon site for demonstration during OOS activities (Chester County in-sequence). Alert and notification procedures will be discussed with FEMA evaluators at this time. DHEC Dose Assessment personnel will describe their alert and notification procedures with the evaluator at the SEOC on April 17, 2012.

1.2 **Equipment, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations.** (Sub-element 1.e, Equipment and Supplies to Support Operations, **Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).

All radiation detection equipment will be inspected and operationally checked before each use. York County equipment will be calibrated or leak tested in accordance with existing plans by the York County Radiological Lab. All other radiation detection equipment will be inspected, calibrated or leak tested by the SCEMD Radiological Calibration and Maintenance Laboratory.

KI will be simulated by candy or other means (empty envelope marked KI).

1.3 **(Dose Assessment only) OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides**. (Sub-element 2.a., Emergency Worker Exposure Control, **Criterion 2.a.1**: NUREG-0654, K.4.)

DHEC (ESF-10) will discuss with the FEMA evaluator how exposure control decisions would be made for field monitoring teams on April 17, 2012.

1.4 **(Dose Assessment only) Appropriate protective action recommendations are based on available information including: plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions.** (Sub-element 2.b., Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency, **Criterion 2.b.1**: NUREG-0654, I.8., 10, and Supplement 3.)

DHEC (ESF-10) will provide protective action recommendations based on the scenario and artificial monitoring data produced by the plant and/or inject.

1.5 **A decision-making process involved 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).** (Sub-element 2.b., Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency, **Criterion 2.b.2:** NUREG, J.9, 10.M.)

This criterion will be demonstrated in accordance with plans and procedures.

1.6 **The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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.** (Sub-element 3.a., Implementation of Emergency Worker Exposure Control, **Criterion 3.a.1**: NUREG-0654, K.3).

Emergency workers or emergency worker teams will use Self Reading Dosimeters (SRDs) or electronic dosimeters and simulated Permanent Record Dosimeters (PRDs) to monitor and control their radiation exposure. Emergency workers in low exposure rate areas will use PRDs and may use SRDs or place them in centralized areas.

Emergency workers will be interviewed to determine their knowledge of radiation incident response procedures (i.e. exposure limits, protective clothing, dose record keeping, etc.). Personal exposure forms will be completed by emergency workers during OOS activities and provided to FEMA evaluators upon conclusion.

1.7 **(Dose Assessment only) KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not general public) is maintained.** (Sub-element 3.b., Implementation of KI Decision, **Criterion 3.b.1:** NUREG-0654, E.7., J., 10.e.f.).

DHEC (ESF-10) will discuss with the FEMA evaluator how KI would be distributed to Field Monitoring teams, if necessary.

Activity 2: Hazard Assessment Risk Evaluation

2.1 **(Dose Assessment only) Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure.** (Sub-Element 4.a., Plume Phase Field Measurements and Analyses, **Criterion 4.a.2**: NUREG-0654, H.12; I.8, 11; J.10.a)

DHEC (ESF-10) will discuss this criterion with the FEMA evaluator on April 17, 2012.

Activity 3: Decontamination and Cleanup/Recovery Operations

3.1 The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination and registration of evacuees and/or emergency workers. (Sub-element 6.a., Monitoring and Decontamination of Evacuees and Emergency Workers and Registration of Evacuees, **Criterion 6.a.1**: NUREG-0654, J.10.h: K.5.b.)

Courtesy evaluations requested: Chester and Union Counties

All Reception Centers will be demonstrated out-of-sequence. At least six people will be monitored and registered. Personnel decontamination will be demonstrated via walk-through and discussion. All necessary supplies will be on hand. Walkways will not be entirely covered with barrier material; however, some markings will be used to aid in directing evacuees.

Demonstration will include the necessary radiological monitoring equipment and monitoring teams required to monitor 20% of the population allocated to the facility within 12 hours. At least two vehicles will be monitored and one vehicle will be processed as contaminated. Vehicle decontamination will be discussed in accordance with local SOPs.

Reception Centers to be evaluated are:

Lancaster County:	Lancaster HS	March 27, 2012 @ 4:30 p.m.
Union County:	Lockhart HS	March 28, 2012 @ 6:30 p.m.
Cherokee County:	Gaffney HS	March 29, 2012 @ 6:30 p.m.
Chester County:	Chester HS	April 17, 2012 @ 3:30 p.m.

3.2 The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles. (Sub-element 6.b, Monitoring and Decontamination of Emergency Worker Equipment, **Criterion 6.b.1:** NUREG-0654, K.5.b)

Emergency Worker Monitoring and Decontamination will be demonstrated OOS. All necessary supplies will be displayed in accordance with local SOPs. Water will not be used in demonstrating personnel decontamination. Two emergency workers will be monitored. Personnel decontamination will be demonstrated via walk- through and discussion. One emergency vehicle will be monitored and decontaminated in accordance with local SOPs. Water will be used when demonstrating decontamination of the emergency vehicle.

Emergency Worker Decontamination Points to be evaluated are:

York County: Lesslie FD March 27, 2012 @ 6:30 p.m.
Bethany FD March 28, 2012 @ 6:30 p.m.

CAPABILITY: Mass Care

Definition: Mass Care is the capability to provide immediate shelter, feeding centers, basic first aid, bulk distribution of needed items, and related services to persons affected by a large-scale incident, including special needs populations. Special needs populations include individuals with physical or mental disabilities who require medical attention or personal care beyond basic first aid. Other special-needs populations include non-English speaking populations that may need to have information presented in other languages. The mass care capability also provides for pet care/handling through local government and appropriate animal-related organizations. Mass care is usually performed by nongovernmental organizations (NGOs), such as the American Red Cross, or by local government-sponsored volunteer efforts, such as Citizen Corps. Special-needs populations are generally the responsibility of local government, with medical needs addressed by the medical community and/or its alternate care facilities. State and Federal entities also play a role in public and environmental health by ensuring safe conditions, safe food, potable water, sanitation, clean air, etc.

Activity 1: Establish Shelter Operations (Congregate Care)

Definition: Mass Care is the capability to provide immediate shelter, feeding centers, basic first aid, bulk distribution of needed items, and related services to persons affected by a large-scale incident, including special needs populations. Special needs populations include individuals with physical or mental disabilities who require medical attention or personal care beyond basic first aid. Other special-needs populations include non-English speaking populations that may need to have information presented in other languages. The mass care capability also provides for pet care/handling through local government and appropriate animal-related organizations. Mass care is usually performed by nongovernmental organizations (NGOs), such as the American Red Cross, or by local government-sponsored volunteer efforts, such as Citizen Corps. Special-needs populations are generally the responsibility of local government, with medical needs addressed by the medical community and/or its alternate care facilities. State and Federal entities also play a role in public and environmental health by ensuring safe conditions, safe food, potable water, sanitation, clean air, etc.

1.1 Managers of congregate care facilities demonstrate that the centers have the resources to provide services and accommodations consistent with American Red Cross planning guidelines (found in MASS CARE Preparedness Operations, ARC 3031). Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities. (Sub-element 6.c, Temporary Care of Evacuees, **Criterion 6.c.1**: NUREG-0654, J.10.h, 12.).

Courtesy evaluations requested: Chester and Union Counties

County shelters will be demonstrated by walk through concurrent with Evaluation Area 6.a above. Procedures that assure that only non-contaminated persons enter shelters will be demonstrated.

NORTH CAROLINA

CATAWBA NUCLEAR POWER STATION
EXTENT OF PLAY AGREEMENT
EMERGENCY PREPAREDNESS EXERCISE
APRIL 17, 2012

Most activities will be demonstrated fully in accordance with respective plans. Some activities are requested to be performed as a training-only opportunity, and are identified in the participant description. It is requested that any issue or discrepancy arising during exercise play be allowed correction immediately, at all player locations, if it isn't disruptive to exercise play and if it is mutually agreeable to both the controller and evaluator. Exercise participants are allowed to pre-position for this exercise. Staff working in the Joint Information Center (JIC) will pre-position in the Charlotte area and will be called to report to the JIC at the appropriate time.

CAPABILITY: Emergency Operations Management (State and County EOCs)

Definition: Emergency Operations Center (EOC) management is the capability to provide multi-agency coordination (MAC) for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes: EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, State, and Federal EOCs; coordination of public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities. Similar entities may include the National (or Regional) Response Coordination Center (NRCC or RRCC), Joint Field Offices (JFO), National Operating Center (NOC), Joint Operations Center (JOC), Multi-Agency Coordination Center (MACC), Initial Operating Facility (IOF), etc.

Activity 1: Activate EOC (Definition: In response to activation, perform incident notifications, recall essential personnel, and stand-up SEOC systems to provide a fully staffed and operational SEOC.)

1.1 **ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner**. (Sub-element 1.a, Mobilization, **Criterion 1.a.1:** NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

Participants: NC SERT, Gaston, Mecklenburg, Union Counties

1.2 **Facilities are sufficient to support emergency response.** (Sub-element 1.b, Facilities, **Criterion 1.b.1**: NUREG-0654, H.3)

Participants: **NC SERT**

***NC State EOC will have a preliminary review but not for evaluation.**

1.3 **At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations**. (Sub element 1.d, Communications, **Criterion 1.d.1:** NUREG-0654, F. 2.)

Participants: NC SERT, Gaston, Mecklenburg, Union Counties

1.4 **Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations**. (Sub-element 1.e., Equipment and Supplies to Support Operations, **Criterion 1.e.1:** NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).

Participants: NC SERT, Cleveland, Gaston, Mecklenburg, Union Counties

Staff Assistance Visits:

Cleveland County:

Emergency Management Office
100 Justice Place, Room 104-B
Shelby, NC 28151

Date: Wednesday, April 4, 2012
Time: 3:00 p.m.

Gaston County:

Emergency Management Office at EOC
615 N. Highland Street
Gastonia, NC 28053

Date: Wednesday, April 4, 2012
Time: 1:00 p.m.

Mecklenburg County:

Charlotte-Mecklenburg Emergency Management Office
228 East 9th Street
Charlotte, NC 28202

Date: Monday, April 2, 2012
Time: 2:00 p.m.

Union County:

Emergency Management Office
805 Skyway Drive
Monroe, NC 28110

Date: Tuesday, April 3, 2012
Time: 1:00 p.m.

Activity 2: Direct EOC Operations (Definition: Following activation of the SEOC system, staff and organize the SEOC in accordance with the comprehensive emergency management plan (CEMP) and the requisite policies, procedures, and directives.)

2.1 **Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible.** (Sub-element 1.c.1, Direction and Control, **Criterion 1.c.1:** NUREG-0654, A.1.d, 2.a.b.)

Participants: NC SERT, Mecklenburg, Gaston, Cleveland and Union Counties.

- Mecklenburg County will be the lead-coordinating county in North Carolina until the State is requested to assume direction and control. Following the simulated sounding of sirens and issuance of the first PAD recommendations to the public at Site Area Emergency, Mecklenburg will request the State assume direction and control.

- The State's of North and South Carolina as well as the counties of York, SC, Gaston, Mecklenburg, Union, and the Western Branch Office will coordinate decisions and keep each other advised on actions taken throughout the exercise.

2.2 **OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides.** (Sub-element 2.a., Emergency Worker Exposure Control, **Criterion 2.a.1:** NUREG-0654, K.4.)

Participants: NC SERT, Radiation Protection Section, Gaston, Mecklenburg, Counties

- KI will be discussed with the Federal Evaluator
- Dosimetry will be distributed and PRD will be simulated

2.3 **A decision-making process involved 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).** (Sub-element 2.b., Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency, **Criterion 2.b.2:** NUREG, J.9, 10.M.)

Participants: NC SERT, Radiation Protection, Gaston, Mecklenburg Counties.

- Protective Action Decisions will be discussed between Gaston and Mecklenburg counties and the State's of North and South Carolina

2.4 **Protective action decisions are made, as appropriate, for special population groups.** (Sub-element 2.c., Protective Action Decisions Consideration for the Protection of Special Populations, **Criterion 2.c.1:** NUREG-0654, J.9, 10.c.d.e.g).

Participants: Gaston, Mecklenburg Counties

- Counties will demonstrate their procedures through discussion and review of a special populations list and resource list.

Activity 3: Support and Coordinate Response (Definition: Once requested, provide resource, technical, and policy support to the Incident Command by coordinating the actions of off-site agencies, organizations, and jurisdictions, implementing MAAs, and requesting higher-level assistance.)

3.1 **The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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.** (Sub-element 3.a., Implementation of Emergency Worker Exposure Control, **Criterion 3.a.1**: NUREG-0654, K.3).

Participants: NC SERT, Radiation Protection Section, Cleveland, Gaston, Union Counties.

- Turn back values will be in accordance with state plans. Personnel will describe procedures used when turn back values are reached.
- Duke Energy and Division of Radiation Protection will provide technical advice and assistance to the state and counties.

3.2 **KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not general public) is maintained.** (Sub-element 3.b., Implementation of KI Decision, **Criterion 3.b.1:** NUREG-0654, E.7., J., 10.e.f.).

Participants: NC SERT, Radiation Protection, Gaston, and Mecklenburg Counties.

- Demonstration of KI will be through "Discussion Only" at State and County EOC's.
- Decision to take KI is made by the State Health Director in consultation with the State Pharmacist and County Health Directors
- Demonstration of KI distribution for the General Public will be accomplished during Off-Scenario activity by local Public Health officials through discussion with and presentation of distribution documentation to the Federal Evaluator.

3.3 **Protective action decisions are implemented for special populations other than schools within areas subject to protective actions** (Sub-element 3.c., Implementation of Protective Actions for Special Populations, **Criterion 3.c.1:** NUREG-0654, E.7., J.9., 10.c. d.e.g,)

Participants: NC SERT, Radiation Protection, Mecklenburg & Gaston Counties.

- Demonstration of KI will be through "Discussion Only" at State and County EOC's.

3.4 **OROs/School officials decide upon and implement protective actions for schools. (Schools include: All public schools, licensed day care centers, and participating private schools)** (Sub-element 3.c., Implementation of Protective Actions for Special Populations, **Criterion 3.c.2:** NUREG-0654, J.10.d. g.)

Participants: Gaston and Mecklenburg Counties
Refer to Citizen Evacuation and Shelter in Place, Activity 1.1

3.5 **Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.** (Sub-element 3.d., Implementation of Traffic and Access Control, **Criterion 3.d.1:** NUREG-0654, J.10.g, j., k.)

Participants: Gaston, Mecklenburg Counties

- Traffic control points will be discussed with the Federal Evaluator at the County EOC. Law Enforcement personnel will discuss REP traffic control procedures and equipment.

- At least one representative will be available from each agency assigned traffic control responsibilities in the county.

- If a Federal Evaluator would like to see a TCP/SRB demonstrated, one will be selected from the agencies represented and that agency representative will take him to the field location.

Gaston County:

Gaston County Sheriff's Department

Date and Time: On-scenario, at 10:00 a.m.
Location: EOC

Mecklenburg County:

Charlotte-Mecklenburg Police Department
Pineville Police Department

Date and Time: On-scenario
Location: EOC

- State Highway Patrol will determine appropriate access control measures to restrict access to contaminated areas when State is in direction & control.

3.6 **Impediments to evacuation are identified and resolved.** (Sub-element 3.d., **Criterion 3.d.2:** Implementation of Traffic and Access Control, NUREG-0654, J.10.k)

Participants: Gaston, Mecklenburg Counties

- Officers during the interview process will identify how impediments to evacuation are identified and removed/resolved based on a set of simulated circumstances and questions posed by the federal evaluator.

CAPABILITY: Emergency Public Information and Warning (State and County EOCs and JICs)

Definition: Develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public prior to an impending emergency and activate warning systems to notify those most at-risk in the event of an emergency. By refining its ability to disseminate accurate, consistent, timely, and easy-to understand information about emergency response and recovery processes, a jurisdiction can contribute to the well-being of the community during and after an emergency.

Activity 1: Public Information, Alert/Warning, and Notification Plans (Definition: Activate key personnel, facilities, and procedures.)

Participants: Joint Information Center (NC, Gaston, Mecklenburg Counties)

1.1 ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. **(Sub-element 1.a, Mobilization,** Criterion 1.a.1**: NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)**

1.2 At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. **(Sub element 1.d, Communications,** Criterion 1.d.1**: NUREG-0654, F. 2.)**

1.3 Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations. **(Sub-element 1.e., Equipment and Supplies to Support Operations,** Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).**

- **The JIC does not issue or manage dosimeters or KI.**

Activity 2: Manage Emergency Public Information and Warnings (Definition: In response to need for public notification, provide overall management and coordination of Emergency Public Information and Warning capability.**)**

Participants: Joint Information Center

2.1 **Provide periodic updates and conduct regularly scheduled media conferences.** (Sub-element 5.b. Emergency Information and Instructions for the Public and the Media, **Criterion 5.b.1**: NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Activity 3: Establish Joint Information System (JIS) (Definition: Upon assigning PIO, activate and implement the JIS/JIC and disseminate information to public.**)**

Participants: Joint Information Center

3.1 **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)** (Sub-element 5.b., Emergency Information and Instructions for the Public and the Media, **Criterion 5.b.1**: NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Activity 4: Issue Emergency Warnings (Definition: Upon receiving Protective Action Decisions, issue emergency public warnings through established warning systems.)

Participants: NC SERT, Mecklenburg and Gaston Counties

4.1 Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized off-site 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 FEMA REP guidance. **(Sub-element 5.a., Activation of the Prompt Alert and Notification System,** Criterion 5.a.1**: 10 CFR Part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)**

- South Carolina will be the "Lead Agency" for EAS message selection and siren activation. As Lead Agency, South Carolina will coordinate and conduct the countdown for activating sirens. Copies of individual state EAS messages will be provided to FEMA evaluators by both South Carolina and North Carolina. An actual silent test will be conducted to simulate the sounding of sirens.

- Mecklenburg County as North Carolina "Lead County" will be in Direction and Control of North Carolina counties. Following the sounding of sirens and release of first PAD recommendations to the public at Site Area Emergency (SAE), Mecklenburg County as "Lead County" will request the State to take Direction and Control.

- News releases concerning PAD's will be coordinated by the states and counties.

4.2 Activities associated with FEMA-approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized off-site emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by HBR SEP of a failure of the primary alert and notification system. **(Sub-element 5.a., Activation of the Prompt Alert and Notification System,** Criterion 5.a.3**: NUREG-0654, E.6, Appendix 3.B.2.c)**

Participants: NC SERT, Mecklenburg and Gaston Counties.

- An actual silent test will be conducted to simulate the sounding of the sirens. A feedback sheet will show if a siren has failed and if backup route alerting around the failed siren would be necessary.

- Participants should have necessary maps and copies of broadcast messages available.

- If a siren has failed, back-up alerting will be discussed with the Federal Evaluator for a pre-determined zone (siren failure simulated).

County Participants: Gaston and Mecklenburg Counties
Gaston County:

Gaston County Sheriff's Office

Date and Time: On-scenario at 10:30
Location: EOC

Mecklenburg County

Date and Time: On-scenario
Location: EOC

Lake Wylie Warning and Clearing:

York County, South Carolina
Charlotte-Mecklenburg Police Dept. Steele Creek Division
NC Wildlife Resource Commission

Date and Time: Thursday, April 5, 2012 at 1:00 p.m. (or after lunch)
Location: Camp Thunderbird

4.3 **OROs provide accurate emergency information and instructions to the public and the news media. (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay)** (Sub-element 5.b., Emergency Information and Instructions for the Public and the Media, **Criterion 5.b.1**: NUREG-0654, E.5; 7, G.3.a, G.4, a., b., c.)

Participants: NC SERT, Mecklenburg and Gaston Counties.

Activity 5: Provide Public Inquiry Control (Definition: Upon activation of the JIS, track inquiries for rumors.**)**

5.1 **OROs provide accurate emergency information and instructions to the public and the news media**. (Sub-element 5.b., Emergency Information and Instructions for the Public and the Media**, Criterion 5.b.1:** NUREG-0654, E.5, 7, G.3.a, G.4, a., b., c.)

Participants: NC SERT, Mecklenburg and Gaston Counties.

- PIO's will receive rumor control calls at the JIC once it is activated. Approximately six calls per hour will be made to each state and county PIO represented at the JIC.
- Two rumor trends will be identified and appropriate actions taken to address them.

CAPABILITY: Citizen Evacuation and Shelter in Place (Schools)

Definition: Citizen Evacuation and shelter-in-place is the capability to prepare for, ensure communication of, and immediately execute the safe and effective sheltering-in-place of an at-risk population (and companion animals), and/or the organized and managed evacuation of the at-risk population (and companion animals) to areas of safe refuge in response to a potentially or actually dangerous environment. In addition, this capability involves the safe reentry of the population where feasible.

Activity 1: Direct Evacuation and/or In Place Protection (Definition: **In response to a hazardous condition for a locality, direct, manage, and coordinate evacuation and/or in-place sheltering procedures for both the general population and those requiring evacuation assistance throughout incident.**)

1.1 OROs/School officials decide upon and implement protective actions for schools. **(Sub-element 3.c., Implementation of Protective Actions for Special Populations,** Criterion 3.c.2**: NUREG-0654, J.10. d., g.)**

Participants: Mecklenburg and Gaston Counties.

- School evacuation procedures and interviews will be demonstrated via discussion with key school staff members at the following locations:

Mecklenburg County:

Olympic High School
4301 Sandy Porter Road
Charlotte, NC 28273

Pineville Elementary School
210 Lowery Street
Pineville, NC 28134

Date and Time: Tuesday, April 3 at 9:00 a.m. and 10:30 a.m.

Location: Meet at Charlotte-Mecklenburg EM Office and travel to school sites. Charlotte-Mecklenburg Emergency Management will provide transportation to and from schools if necessary.

Gaston County:

Forestview High School
Gaston County Public School Administration

Date and Time: Wednesday, April 4 at 10:00 a.m.
Location: Forestview High School
5545 Union Road
Gastonia, NC 28054

CAPABILITY: Public Safety and Security Response (TCPs)

Definition: Public Safety and Security Response is the capability to reduce the impact and consequences of an incident or major event by securing the affected area, including crime/incident scene preservation issues as appropriate, safely diverting the public from hazards, providing security support to other response operations and properties, and sustaining operations from response through recovery. Public Safety and Security Response requires coordination among officials from law enforcement (LE), fire, and emergency medical services (EMS).

Participants Gaston and Mecklenburg Counties, NC State Highway Patrol

Refer to Activity 3.5 of EOC Management Capability

Activity 1: Activate Public Safety/Security Response (Definition: Upon notification, mobilize and deploy to begin operations.)

1.1 **ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner**. (Sub-element 1.a, Mobilization, **Criterion 1.a.1:** NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

1.2 **At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations.** (Sub element 1.d, Communications, **Criterion 1.d.1**: NUREG-0654, F. 2.)

1.3 Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations. **(Sub-element 1.e, Equipment and Supplies to Support Operations,** Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).**

Activity 2: Command/Control Public Safety/Security Response (Definition: In response to a notification for security assets, establish the management and coordination of the Public Safety and Security Response, from activation through to demobilization.)

2.1 **The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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.** (Sub-element 3.a., Implementation of Emergency Worker Exposure Control, **Criterion 3.a.1:** NUREG-0654, K.3).

2.2 **KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not general public) is maintained**. (Sub-element 3.b., Implementation of KI Decision, **Criterion 3.b.1:** NUREG-0654, E.7., J., 10.e.f.).

Activity 3: Control Traffic, Crowd, and Scene (Definition: Direct/redirect traffic and pedestrians out of the affected area(s). Assess, coordinate, and establish force protection and perimeter zones, maintain a visible and effective security presence to deter criminal conduct and maintain law and order.)

3.1 **Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel.** (Sub-element 3.d., Implementation of Traffic and Access Control, **Criterion 3.d.1:** NUREG-0654, J.10.g, j., k.).

3.2 **Impediments to evacuation are identified and resolved**. (Sub-element 3.d., Implementation of Traffic and Access Control, **Criterion 3.d.2:** NUREG-0654, J.10.k)

CAPABILITY: HAZMAT Decontamination and Response (Dose Assessment, FMTs, FMT Control, Reception Centers, Emergency Worker Decontamination)

Definition: HAZMAT Response and Decontamination is the capability to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; ensuring that responders have protective clothing and equipment; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical survey searches of suspected sources or contamination spreads and establishing isolation perimeters; mitigating the effects of hazardous materials, decontaminating on-site victims, responders, and equipment; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures.

Activity 1: Site Management and Control (Definition: In response to activation, mobilize and arrive at the incident scene and initiate response operations to manage and secure the physical layout of the incident.)

1.1 **ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner**. (Sub-element 1.a, Mobilization, **Criterion 1.a.1:** NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

Participants: Gaston, and Union Counties.

- Federal Evaluator will ask about alert and notification procedures at the county EOCs on-scenario.

Gaston County Reception and Congregate Care Center:

North Gaston High School
1133 Ratchford Road,
Dallas, NC 28034

Agencies: Gastonia HazMat and GEMS STAR Team, American Red Cross, Dept. of Social Services, Health Department

Date and Time: Monday, April 2, 2012 at 4:00 p.m.

Union County Reception and Congregate Care Center:

Marvin Ridge High School
2825 Crane Road
Waxhaw, NC 28173

Agencies: Wesley Chapel VFD, American Red Cross, Dept. of Social Services, Health Department

Date and Time: Tuesday, April 3, 2012 at 6:00 p.m.
Cleveland County Reception and Congregate Care Center (Host County):

Kings Mountain Senior High School
500 Phifer Road,
Kings Mountain, NC

Agencies: Kings Mountain Fire Department, Kings Mountain Police Department Cleveland County Emergency Management, Cleveland County Social Services, American Red Cross

Date and Time: Wednesday, April 4, 2012 at 4:00 p.m.

1.2 Equipment, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations. **(Sub-element 1.e, Equipment and Supplies to Support Operations,** Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).**

- Availability and currency of KI was verified during the Staff Assistance Visit to the State and Mecklenburg and Gaston Counties during the August 2011 McGuire Exercise.

1.3 OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. **(Sub-element 2.a., Emergency Worker Exposure Control,** Criterion 2.a.1**: NUREG-0654, K.4.)**

Participants: Gaston and Mecklenburg Counties

Gaston County:

Ashbrook High School
2222 S. New Hope Road
Gastonia, NC 28054

Agencies: **Gastonia HazMat, GEMS STAR Team**

Date and Time: **Tuesday, April 3, 2012 at 4:00 p.m.**

Mecklenburg County

Charlotte Fire Department
Station #20
9400 Nations Ford Road
Charlotte, NC 28273

Agencies: **CFD E-20, E-24, and E-30**

Date and Time: **Wednesday, April 4, 2012 at 10:00 a.m.**

1.4 Appropriate protective action recommendations are based on available information including: plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions. **(Sub-element 2.b., Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency,** Criterion 2.b.1**: NUREG-0654, I.8., 10, and Supplement 3.)**

Participants: NC SERT, Radiation Protection Section.

- Radiation Protection Section will establish an independent dose assessment and projection team at the State EOC.

- Back-up dose assessment will be demonstrated via a battery powered portable computer.

- The team will communicate with the Utility EOF, Mobile Lab and deployed field survey teams to obtain data for developing dose projections. Radiation Protection Section will analyze technical data and make recommendations to SERT Leader and Gaston & Mecklenburg EM Coordinators.

1.5 A decision-making process involved 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). **(Sub-element 2.b., Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency,** Criterion 2.b.2**: NUREG, J.9, 10.M.)**

Participants: NC SERT, Radiation Protection, Mecklenburg & Gaston Counties.

- Protective Action Decisions will be discussed between Gaston and Mecklenburg counties and the State's of North and South Carolina.

- Decision to authorize Public KI is made by the State Health Director in consultation with County Health Directors.

1.6 The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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. **(Sub-element 3.a., Implementation of Emergency Worker Exposure Control,** Criterion 3.a.1**: NUREG-0654, K.3).**

Participants: NC SERT, Radiation Protection Section, Mecklenburg, Gaston, Cleveland & Union Counties.

- Turn back values will be in accordance with state plans. Personnel will describe procedures used when turn back values are reached.

- Duke Power and Division of Radiation Protection will provide technical advice and assistance to the state and counties.

- Dosimetry will be distributed and TRD will be simulated.

1.7 KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not general public) is maintained. **(Sub-element 3.b., Implementation of KI Decision,** Criterion 3.b.1**: NUREG-0654, E.7., J., 10.e.f.).**

Participants: NC SERT, Radiation Protection, Mecklenburg & Gaston Counties.

- Demonstration of KI will be through "Discussion Only" with State and County participants.
- Decision to take KI is made by the State Health Director in consultation with the State Pharmacist and County Health Directors.

Activity 2: Hazard Assessment Risk Evaluation

2.1 The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates. **(Sub-Element 4.a., Plume Phase Field Measurements and Analyses,** Criterion 4.a.1**: NUREG-0654, H.10; I.7, 8, 9)**

Participants: NC Radiation Protection

- Radiation Protection Section field activities will consist of two Radiation Protection field survey teams. The teams will be deployed from the North Carolina Army National Guard facility located at the Charlotte-Douglas International Airport.
- Radiation Protection Section's mobile laboratory and other field activities will be conducted from the NC National Guard Facility at Douglas International Airport in Charlotte, NC.
- **Training Only**

2.2 Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure. **(Sub-Element 4.a., Plume Phase Field Measurements and Analyses,** Criterion 4.a.2**: NUREG-0654, H.12; I.8, 11; J.10.a)**

Participants: Radiation Protection Section

- Radiation Protection Section field activities will consist of two Radiation Protection field survey teams. The teams will be deployed from the North Carolina Air National Guard facility located at the Charlotte-Douglas International Airport.
- Radiation Protection Section's mobile laboratory and other field activities will be conducted from the NC National Guard Facility at Douglas International Airport in Charlotte, NC.
- **Training Only**

2.3 Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. **(Sub-Element 4.a., Plume Phase Field Measurements and Analyses,** Criterion 4.a.3**: NUREG-0654, I.9)**

Participants: NC Radiation Protection Section

- Radiation Protection Section field activities will consist of two Radiation Protection field survey teams. The teams will be deployed from the North Carolina Army National Guard facility located at the Charlotte-Douglas International Airport.
- Radiation Protection Section's mobile laboratory and other field activities will be conducted from the NC National Guard Facility at Douglas International Airport in Charlotte, NC.
- **Training Only**

Activity 3: Decontamination and Cleanup/Recovery Operations

3.1 The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination and registration of evacuees and/or emergency workers. **(Sub-element 6.a., Monitoring and Decontamination of Evacuees and Emergency Workers and Registration of Evacuees,** Criterion 6.a.1: **NUREG-0654, J.10.h: K.5.b.)**

Participants: Mecklenburg, Gaston, Cleveland & Union Counties.

Mecklenburg County:

Will not demonstrate this criterion. The County has only one reception center/ emergency worker facility to demonstrate and it was done during the McGuire Exercise on August 9, 2011.

Gaston County Reception and Congregate Care Center:

North Gaston High School
1133 Ratchford Road,
Dallas, NC 28034

Agencies: Gastonia HazMat and GEMS STAR Team, American Red Cross, Dept. of Social Services, Health Department

Date and Time: Monday, April 2, 2012 at 4:00 p.m.
Union County Reception and Congregate Care Center:

Marvin Ridge High School
2825 Crane Road
Waxhaw, NC 28173

Agencies: Wesley Chapel VFD, American Red Cross, Dept. of Social Services, Health Department

Date and Time: Tuesday, April 3, 2012 at 6:00 p.m.

Cleveland County Reception and Congregate Care Center (Host County):

Kings Mountain Senior High School
500 Phifer Road,
Kings Mountain, NC

Agencies: Kings Mountain Fire Department, Kings Mountain Police Department Cleveland County Emergency Management, Cleveland County Social Services, American Red Cross

Date and Time: Wednesday, April 4, 2012 at 4:00 p.m.

3.2 The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles. **(Sub-element 6.b, Monitoring and Decontamination of Emergency Worker Equipment,** Criterion 6.b.1: **NUREG-0654, K.5.b)**

Participants: Mecklenburg, and Gaston Counties.

- ***Two*** vehicles will be monitored and ***one*** vehicle decontaminated using water. ***This activity is weather dependent.***
- Monitoring and decontamination of emergency workers will be demonstrated by the following agencies at the indicated locations.

Mecklenburg County:

Charlotte Fire Department
Station #20
9400 Nations Ford Road
Charlotte, NC 28273

Agencies: **CFD E-20, E-24, and E-30**

Date and Time: **Wednesday, April 4, 2012 at 10:00 a.m.**

Gaston County:

Ashbrook High School
2222 S. New Hope Road
Gastonia, NC 28054

Agencies: **Gastonia HazMat, GEMS STAR Team**

Date and Time: **Tuesday, April 3, 2012 at 4:00 p.m.**

Activity 4: Site Management and Control (MS-1 Drill)

Definition: In response to activation, mobilize and arrive at the incident scene and initiate response operations to manage and secure the physical layout of the incident.

1.1 Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations. **(Sub-element 1.e, Equipment and Supplies to Support Operations,** Criterion 1.e.1**: NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).**

1.2 The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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. **(Sub-element 3.a., Implementation of Emergency Worker Exposure Control.** Criterion 3.a.1**: NUREG-0654, K.3).**

Activity 5: Decontamination and Recovery Operations (MS-1
Definition: Upon arrival on-scene and with the requisite equipment, initiate response operations to reduce the level of contamination on-scene, minimize the potential for secondary contamination beyond the incident scene, and ensure an effective transition to clean-up and recovery operations.

2.1 **The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination and medical services to contaminated injured individuals. (Sub-element 6.d, Transportation and Treatment of Contaminated Injured Individuals, Criterion 6.d.1: NUREG-0654, F.2, H.10, K.5.b, L.1 and L.2)**

Mecklenburg County
Participating Agencies: MEDIC, Carolina's Medical Center – Main, Charlotte-Mecklenburg EM

Date and Time: December 5, 2011 at 4:00 a.m.

CAPABILITY: Mass Care

Activity 1: Establish Shelter Operations (Congregate Care)

Definition: Mass Care is the capability to provide immediate shelter, feeding centers, basic first aid, bulk distribution of needed items, and related services to persons affected by a large-scale incident, including special needs populations. Special needs populations include individuals with physical or mental disabilities who require medical attention or personal care beyond basic first aid. Other special-needs populations include non-English speaking populations that may need to have information presented in other languages. The mass care capability also provides for pet care/handling through local government and appropriate animal-related organizations. Mass care is usually performed by nongovernmental organizations (NGOs), such as the American Red Cross, or by local government-sponsored volunteer efforts, such as Citizen Corps. Special-needs populations are generally the responsibility of local government, with medical needs addressed by the medical community and/or its alternate care facilities. State and Federal entities also play a role in public and environmental health by ensuring safe conditions, safe food, potable water, sanitation, clean air, etc.

1.1 **Managers of congregate care facilities demonstrate that the centers have the resources to provide services and accommodations consistent with American Red Cross planning guidelines (found in MASS CARE Preparedness Operations, ARC 3031). Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.** (Sub-element 6.c, Temporary Care of Evacuees, **Criterion 6.c.1:** NUREG-0654, J.10.h, 12.).

Participants: Gaston, Cleveland and Union Counties.

Gaston County:

North Gaston High School
1133 Ratchford Road,
Dallas, NC 28034

Agencies: American Red Cross, Dept. of Social Services, Health Department

Date and Time: Monday, April 2, 2012 following Reception Center.

Cleveland County (Host County):

Kings Mountain Senior High School
500 Phifer Road,
Kings Mountain, NC

Agencies: Kings Mountain Fire Department, Kings Mountain Police Department Cleveland County Emergency Management, Cleveland County Social Services, American Red Cross

Date and Time: Wednesday, April 4, 2012 at 4:00 p.m.

Union County (Host County):

Marvin Ridge High School
2825 Crane Road
Waxhaw, NC 28173

Agencies: Wesley Chapel VFD, American Red Cross, Dept. of Social Services, Health Department

Date and Time: Tuesday, April 3, 2012 at 6:00 p.m.

CAPABILITY: Public Health Laboratory Testing (Mobile or Fixed laboratory)

Definition: The Public Health Laboratory Testing capability is the ongoing surveillance, rapid detection, confirmatory testing, data reporting, investigative support, and laboratory networking to address potential exposure, or known exposure, to all-hazards which include chemical, radiochemical, and biological agents in all matrices including clinical specimens, food and environmental samples, (e.g., water, air, soil). All-hazard threats include those deliberately released with criminal intent, as well as those that may be present as a result of unintentional or natural occurrences.

Activity 1: Direct Public Health Laboratory Testing

Participant: Radiation Protection Section

1.1 **ORO's use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner.** (Sub-element 1.a, Mobilization, **Criterion 1.a.1:** NUREG-0654, A.4. D.3, 4, E.1, 2, H.4)

1.2 At least two communications systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. **(Sub element 1.d, Communications,** Criterion 1.d.1: **NUREG-0654, F. 2.)**

1.3 Equipment, maps, displays, dosimeters, potassium iodide (KI), other supplies are sufficient to support emergency operations. **(Sub-element 1.e, Equipment and Supplies to Support Operations,** Criterion 1.e.1: **NUREG-0654, H., J.10.a.b.e.f.j.k, 11, K.3.a).**

1.4 The OROs issue appropriate dosimeters and procedures, and manage radiological exposure to emergency workers in accordance with the plans and 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. **(Sub-element 3.a., Implementation of Emergency Worker Exposure Control,** Criterion 3.a.1: **NUREG-0654, K.3).**

1.5 **The laboratory is capable of performing required radiological analyses to support protective action decisions.** (Sub-Element 4.c., Laboratory Operations, **Criterion 4.c.1**: NUREG-0654, C.3, I.8, 9, J.11)

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