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

FEMA

JAN 11 2016

Leonard Wert
Acting Regional Administrator - RII
US Nuclear Regulatory Commission
One Marquis Tower
245 Peachtree Center Avenue, Suite 1200
Atlanta, Georgia 30303

Dear Mr. Wert:

Enclosed is a copy of the final exercise report for the November 4, 2015 Browns Ferry Nuclear Power Plant hostile-action-based exercise. The report addresses the evaluation of the plans and preparedness for the State of Alabama; Lauderdale, Lawrence, Limestone, and Morgan Counties within the 10-mile emergency planning zone; and Madison County, a host county.

This successful exercise demonstrated the State of Alabama and affected counties' commitment to public health and safety. Federal evaluators did not identify any level 1 findings (formerly called deficiencies) or level 2 findings (formerly called areas requiring corrective action) during the exercise. FEMA Region IV Radiological Emergency Preparedness Program staff prepared the report.

Based on the results of this exercise and FEMA's review of the State's annual letter of certification for 2014, the offsite radiological emergency response plans for the State of Alabama and the affected local jurisdictions site-specific to the Browns Ferry Nuclear Power Plant can be implemented. They are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site. Therefore, the Title 44 CFR, Part 350 approval of the State of Alabama's offsite radiological emergency response plans and preparedness site-specific to the Browns Ferry Nuclear Power Plant granted on July 6, 1990 will remain in effect.

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

Sincerely,

Gracia B. Szczech
Regional Administrator

Enclosure

cc: Ms. Vanessa E. Quinn, Branch Chief
Radiological Emergency Preparedness Branch

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

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Browns Ferry Nuclear Power Plant After Action Report

Exercise Date November 4, 2015

Radiological Emergency Preparedness Program

FEMA

Published January 11, 2016

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Executive Summary

On November 4, 2015, the Department of Homeland Security, Federal Emergency Management Agency (FEMA) Region IV, Radiological Emergency Preparedness Program staff evaluated a hostile-action-based plume-exposure-pathway exercise in the 10-mile emergency planning zone for the Browns Ferry Nuclear Power Plant. The evaluations of out-of-sequence activities conducted September 9, October 5-9, and November 5, 2015 are also included in this report.

Browns Ferry is located in Limestone County, Alabama, approximately 10 miles northwest of Decatur, Alabama. The plant is operated by the Tennessee Valley Authority. The emergency planning zone is divided into 19 emergency response sectors and encompasses parts of Lauderdale, Lawrence, Limestone, and Morgan Counties.

FEMA's overall objective for the exercise was to assess the level of State and local preparedness in responding to a hostile-action-based incident at Browns Ferry. 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 June 5, 2013. The qualifying emergency preparedness exercises were conducted on September 10, 1981 and November 4, 1987.

Officials and representatives from participating agencies and organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them during the exercise. All jurisdictions met their exercise objectives and successfully demonstrated the corresponding core capabilities identified in Section 2.2 of this report. FEMA did not identify any level 1 or level 2 findings (formerly known as deficiencies or areas requiring corrective action) during this exercise. It was apparent that a great deal of training and practice had been conducted to seamlessly incorporate the incident command post into the response and to provide all offsite support and resources requested by the licensee. The use of the new Joint Information Center and a new procedure for coordinating Emergency Alert System messages and disseminating them through the National Weather Service were also highlights of the exercise.

FEMA wishes to acknowledge the efforts of the many individuals who participated and made the exercise a success. The professionalism and teamwork of the participants was evident throughout all phases of the exercise.

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Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name
2015 Browns Ferry Nuclear Power Plant, Hostile Action Based (HAB) Radiological Emergency Preparedness (REP) Program Evaluated Exercise

Type of Exercise
Full-Scale Exercise

Exercise Date
November 4, 2015

Exercise Off-Scenario/Out-of-Sequence Dates
September 9, October 5-9, and November 5, 2015

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

Sponsors
Alabama Emergency Management Agency
PO Drawer 2106
Clanton, Alabama 35046

Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402

Program
Department of Homeland Security (DHS) FEMA REP Program

Mission
Response

Scenario Type
HAB Plume-Phase Full-Participation REP Exercise

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the 2015 Browns Ferry Nuclear Power Plant exercise.

State Jurisdictions:

- Alabama Emergency Management Agency
- Alabama Department of Public Health
- Alabama Law Enforcement Agency
- Alabama Department of Human Resources

Risk Jurisdictions:

- Limestone County
  - Limestone County Emergency Management Agency
  - Limestone County Sheriff's Office
  - Limestone County Commission
  - Limestone County Schools
  - Limestone County 911 Office

Limestone County Community Relations
Limestone Council on Aging
Athens Police Department
Athens Fire Department
Athens City School District
Athens-Limestone Emergency Medical Service
Segers Volunteer Fire and Rescue
East Limestone Volunteer Fire and Rescue

Morgan County

Morgan County Emergency Management Agency
Morgan County Emergency Management Communication District 911
Morgan County Commission
Decatur City Mayor
Decatur Police Department
Hartselle Police Department
Morgan County Sheriff's Office
Morgan County Rescue Squad
Morgan County Area Transportation Services
Morgan County Schools
Decatur City Schools
Hartselle City Schools
Decatur Fire and Rescue
Hartselle Fire and Rescue
Dothan Houston County Emergency Management Agency

Lawrence County

Lawrence County Emergency Management Agency
Lawrence County Sheriff's Office
Moulton Fire Department
Lawrence County Rescue Squad
Lawrence County Board of Education
Lawrence County Department of Transportation

Lauderdale County

Florence-Lauderdale County Emergency Management Agency
Florence-Lauderdale 911
Rogersville Police Department
Lauderdale County Sheriff's Office
Colbert County Emergency Management

Host Jurisdictions:

Madison County

Huntsville-Madison County Emergency Management Agency
Madison County Sheriff's Office
Huntsville Police Department

Private Organizations:

AlphaPet
American Red Cross
Amateur Radio Emergency Service
Bankhead Amateur Radio Club
Decatur Utilities
First Response Ambulance
General Electric
Hospice
Lifeguard Ambulance Service
Salvation Army
Shoals Ambulance
Voluntary Organizations Active in Disaster

Federal Agencies:

National Weather Service
Tennessee Valley Authority
U.S. Nuclear Regulatory Commission

Section 2: Exercise Design Summary

2.1 Exercise Purpose and Design

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 sixteen planning standards that form the basis for radiological emergency response planning for the licensee, and State, tribal, and local governments impacted by the emergency planning zones (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 radiological emergency response plans (RERPs) and procedures by 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 visits enables FEMA to provide a statement with the transmission of this final after action report to the U.S. Nuclear Regulatory Commission (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 RERP for the Browns Ferry Nuclear Power Plant to FEMA by the State of Alabama occurred on August 30, 1982. A revised plan was submitted to FEMA on February 10, 1989. Formal approval of the RERP was granted by FEMA on July 6, 1990, under 44 CFR 350.

2.2 FEMA Exercise Objectives and Core Capabilities

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

objectives for this exercise were as follows:

Objective 1: Demonstrate the ability to provide direction and control of the emergency response through the State's and counties' emergency operations centers (EOCs) and incident command system, including providing protective action decision making for State and county emergency workers and the public through exercise play and discussions of plans and procedures.

Objective 2: Demonstrate the ability to coordinate the use of off-site resources with on-site resources in the case of a hostile action taken against the nuclear power plant.

Objective 3: Demonstrate the ability to implement protective actions for State and county emergency workers and public through exercise play and discussion of plans and procedures.

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

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

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

2.3 Scenario Summary

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

The exercise was depicted as occurring on a Federal holiday. (Utility emergency response organization staff members were not on site.)

0800 Start of exercise.

0805 Security reports the approach of a barge directly towards the intake pumping station.

0815 The barge collides with the intake barriers and pushes through to then collide with the pumping station and sets off an explosion on the bow of the barge. Several adversaries on the tug begin firing automatic rifles at the security posts near the river. Two adversaries run to the bow and make their way into the protected area through the breach only to be neutralized.

0816 Two smaller ski boats make landfall just downstream of the intake pumping station and cross gate structure #2 to the protected area fencing.

0819 Five adversaries make it into the plant buildings by entering the radioactive waste building.

0837 Two adversaries enter the turbine building.

0850 Two adversaries enter the unit 2 reactor building.

0855 An explosion is heard in the unit 2 condensate pump pit and the pit begins to fill with water.

0930 Another explosion is heard in the unit 2 reactor building. Steam begins to fill the building and radiation levels increase. Reactor water level begins to decrease.

0935 Security restricts access to the unit 2 reactor building.

Exercise continues until onsite and offsite objectives have been demonstrated.

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Section 3: Analysis of Capabilities

3.1 Exercise Evaluation and Results

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the November 4, 2015 HAB plume-phase exercise and out-of-sequence (OOS) interviews and demonstrations of September 9, October 5-9, and November 5, 2015.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities and the underlying REP criteria as delineated in the FEMA REP Program Manual dated July 2015. Exercise criteria are listed by number, and the demonstration status of those criteria are indicated by the use of the following terms:

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

3.2 Summary Results of Exercise Evaluation

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

Operational Coordination: Key leadership personnel from different agencies established and maintained a unified and coordinated operational structure which provided effective and responsive direction and control. The integration of the incident command post (ICP) directing the response to the hostile action into the well-established operational structure for a response to a radiological incident at the Browns Ferry Nuclear Power Plant (BFNPP) was successful. The facilities which were activated contained ample working space, equipment, and communications capabilities to allow responders to perform their respective roles. The overall decision making process enabled potential protective actions to be evaluated and subsequent decisions to be made in a sensible and timely manner.

Public Information and Warning: Alert and notification of the public was made using siren soundings and EAS messages, followed by supplemental news broadcast (SNB) messages, media releases, and formal media briefings in the JIC. A new procedure for the counties to coordinate EAS and SNB messages and to disseminate the messages via the National Weather Service enhanced the capability to provide clear and actionable information to the public.

Environmental Response/Health and Safety: State personnel demonstrated the capability to assess radiological and plant conditions and to make well-reasoned recommendations and decisions in response to an HAB incident at BFNPP. Workers at a reception center in Limestone County demonstrated the ability to perform radiological monitoring and decontamination of evacuees during an out-of-sequence activity.

Critical Transportation: District and school administrators from Limestone County Schools successfully demonstrated the ability to safeguard students, staff, and faculty in the event of an incident involving BFNPP during an out-of-sequence discussion. Although other counties were not scheduled to demonstrate this capability, school representatives in the risk county EOCs were clearly knowledgeable of their plans and procedures.

On-Scene Security and Protection: Counties demonstrated the ability to establish appropriate traffic and access control to ensure a safe and secure environment and protection of the affected population and communities. This was accomplished by local law enforcement agencies simulating the successful establishment of traffic control points (TCPs) in support of protective action decisions.

Mass Care: Limestone County and Madison County successfully demonstrated the ability to provide services and accommodations for evacuees. Other counties were not scheduled to demonstrate this capability during this exercise.

Table 3.2 - Summary of Exercise Evaluation

DATE: November 4, 2015 SITE: Browns Ferry Nuclear Power Plant M: Met, 1: Level 1 Finding, 2: Level 2 Finding, P: Plan Issue, N: Not Demonstrated		State of Alabama	BFNPP JIC	Lauderdale County	Lawrence County	Limestone County	Morgan County	Madison County
Emergency Operations Management								
Alert and Mobilization	1a1	M	M	M	M	M	M	M
Facilities	1b1	M	M	M	M	M	M	M
Direction and Control	1c1	M		M	M	M	M	M
Communications Equipment	1d1	M	M	M	M	M	M	M
Equipment and Supplies to Support Operations	1e1	M	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	M	
PADs for the Protection of persons with disabilities and access/functional needs	2c1			M	M	M	M	
Radiological Assessment and Decision-making for the Ingestion Exposure Pathway	2d1							
Radiological Assessment & Decision-making Concerning Post-Plume Phase	2e1							
Protective Action Implementation								
Implementation of Emergency Worker Exposure Control	3a1	M		M	M	M	M	
Implementation of KI Decision for Institutionalized Individuals and the Public	3b1					M		
Implementation of Protective Actions for persons with disabilities & access/functional needs	3c1							
Implementation of Protective Actions for persons with disabilities & access/functional needs	3c2					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						
Plume Phase Field Measurement and Analyses	4a3	M						
Post Plume Phase Field Measurements and Sampling	4b1							
Laboratory Operations	4c1							
Emergency Notification and Public Info								
Activation of the Prompt Alert and Notification System	5a1	M		M	M	M	M	M
RESERVED	5a2							
Activation of the Prompt Alert and Notification System	5a3			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
Support Operations/Facilities								
Monitoring, Decontamination, and Registration of Evacuees	6a1					M		M
Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles	6b1							
Temporary Care of Evacuees	6c1					M		M
Transportation and Treatment of Contaminated Injured Individuals	6d1							

3.3 Jurisdictional Summary Results of Exercise Evaluation

3.3.1 State Jurisdictions

3.3.1.1 State of Alabama

Operational Coordination Capability Summary:

Alabama Emergency Management Agency (AEMA) personnel successfully demonstrated the ability to support the emergency response to an HAB event at BFNPP by maintaining a unified and coordinated operational structure that integrated stakeholders which could offer assistance and resources. State Emergency Operation Center (SEOC) staff utilized the Emergency Management Information Tracking System (EMITS) effectively to track and fulfill resource requests to support the incident. The operations section chief provided regular briefings to keep staff informed of incident status and conducted round table discussions with branch directors to stay informed of response actions.

The AEMA Communications Branch successfully demonstrated the ability to alert and notify AEMA staff and risk counties in a timely manner and without undue delay. The Communications Branch staff notified key SEOC staff and verified message receipt effectively using EMITS. They ensured the Governor, AEMA director, and county emergency management directors were notified of all subsequent notifications. Communications Branch personnel adequately explained alert and notification procedures after normal hours and during regular work hours, in addition to how they utilize 10-hour shifts. Emergency notifications from the utility were received via the Emergency Communications Notification System (ECNS) and fax. They were immediately disseminated to each section chief. Staff members were experienced and knowledgeable; they effectively received and processed information in a timely and professional manner.

The Alabama SEOC facility was well equipped to provide statewide emergency response and support. The SEOC consisted of an open two-story layout with adequate digital and paper displays containing relevant emergency response information and logs throughout the space. Emergency support functions were arranged in like group cells with numerous computer stations, landline phones, and response plans available. Communication capabilities were redundant and functional, and sufficient backup power and heating and air were available.

The Alabama Law Enforcement Agency (ALEA) successfully discussed management and support of TCPs. Representatives from ALEA sufficiently addressed how they supported and resourced the risk counties with both personnel and equipment to establish TCPs, as well as how resources from the Alabama Department of Transportation were available to provide additional barricades, cones, and wrecker support. ALEA personnel

were also knowledgeable on required equipment, dosimetry, and radiological and safety briefings. ALEA staff briefed the process of requesting and managing requests for law enforcement resources through EMITS and the use of rotating towing company support.

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

Public Information and Warning Capability Summary:

Prompt notification of the public within the 10-mile EPZ of BFNPP was provided by sounding fixed sirens. The emergency management directors of Lauderdale, Lawrence, Limestone, and Morgan Counties activated the portion of the siren system that was physically located within their respective counties. SEOC communications officers monitored all coordination calls regarding the activations of the siren system and EAS messages.

Alabama Department of Public Health (ADPH) Office of Radiation Control (ORC) public information officers (PIOs) prepared four media releases. The releases described actions being taken by the State of Alabama and provided further details on actions for the public to take in response to emergency health orders. All media releases were coordinated with and approved by AEMA prior to dissemination to the media. Each release was faxed to the SEOC by ADPH and reviewed by the lead PIO, who then had it approved and signed by the operations chief. The PIO and his staff successfully maintained focus on providing the most accurate information to the public and news media, with undue delay.

For this capability the following REP criteria were met: 5.a.1, 5.b.1

Environmental Response/Health and Safety Capability Summary:

The capability to assess radiological and plant conditions and to make well-reasoned recommendations and decisions in response to an HAB incident at BFNPP was successfully demonstrated by personnel staffing the State Radiological Monitoring and Assessment Center (SRMAC) in Montgomery, the SRMAC in Decatur, and two radiological field monitoring teams (RFMTs).

ADPH ORC staff initially coordinated the State's technical response to the emergency at BFNPP by activating SRMAC-Montgomery and by contacting and deploying personnel to staff SRMAC-Decatur and to act as liaisons in each of the risk counties. In accordance with the extent-of-play agreement (EOPA), ORC personnel were prepositioned near their facilities. One RFMT participated on exercise day for training only.

The SRMAC-Montgomery director provided direction and control to SRMAC-Montgomery staff and kept ORC leadership and the State Health Officer informed. Staff

members gathered information on plant conditions and began to mobilize and brief RFMTs. Following the declaration of general emergency by BFNPP and the decision by the incident commander (IC) and risk counties to order restricted access and "go inside – stay inside" orders for the two-mile sectors, the SRMAC-Montgomery director coordinated with the State Health Officer to develop and issue two emergency health orders to mirror those decisions. Plant conditions did not warrant issuing any emergency health orders above and beyond the actions already taken by the IC and counties.

Following arrival at the SRMAC-Decatur, staff members quickly set up their work areas and began obtaining information on plant conditions from numerous sources including the utility liaisons and U.S. Nuclear Regulatory Agency liaisons in the SRMAC, utility personnel at the utility's Central Emergency Coordination Center, and the ORC liaison at the ICP. The SRMAC-Decatur director kept staff focused on assessing plant conditions and the potential for any radiological release and ensured the State Health Officer's designee in the SRMAC was kept updated. SRMAC-Decatur took control of the ORC response from SRMAC-Montgomery following the issuance of the emergency health orders.

Although no radiological release above federally approved limits occurred during the emergency, dose assessors in each of the SRMACs were prepared to perform dose assessments using RASCAL 3.0.5 software and performed various hypothetical calculations. SRMAC staff effectively directed the activities of an RFMT. RFMT movements were coordinated with the ICP. RFMT members were given safety briefings and were kept informed of changes in meteorological data and plant conditions.

SRMAC-Montgomery had recently been relocated to a new room. It was a well-equipped facility capable of supporting emergency operations. New furniture, computers, projectors, printers, television monitors and other equipment had been installed. The renovated facility allowed staff to accomplish their tasks efficiently. The SRMAC-Decatur, located in a room adjacent to the Morgan County EOC, was also a well-equipped facility.

Two RFMTs participated in an off-scenario, out-of-sequence demonstration on November 5, 2015. The teams properly prepared and checked all equipment and survey instruments. Team members wore appropriate dosimeters and described the proper use of dosimetry, administrative dose limits, use of potassium iodide (KI), and record-keeping requirements. The teams simulated being deployed with a directive to traverse a given area to locate a radiological plume. Each team demonstrated proper monitoring, air sampling, and contamination control techniques.

For this capability the following REP criteria were met: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.1, 2.b.2, 3.a.1, 4.a.2, 4.a.3.

3.3.2 Joint Operations

3.3.2.1 Joint Information Center

Public Information and Warning Capability Summary:

The ability to provide emergency information and instructions to the public and media was successfully demonstrated at the JIC in support of BFNPP. The JIC, located in Decatur, was owned and maintained by the utility. This new facility was approximately 12 miles from the plant and outside the 10-mile EPZ. The building had adequate furnishings, lighting, restrooms, and ventilation and was protected by security fencing with controlled access entry.

The JIC was activated in accordance with published plans and procedures. Activation of the JIC was initiated following the declaration of the site area emergency (SAE) emergency classification level (ECL) at BFNPP. Activation was a joint decision made among TVA, AEMA, and ADPH. Representatives and supplemental technical staff from the utility; State of Alabama; the counties of Limestone, Morgan, Madison, and Lawrence; and the NRC participated in this exercise.

The JIC was well equipped with a redundancy in communications, which included commercial telephones, SouthernLINC radios, cell phones, internet, and email. All communications systems were tested and functional from the start of the exercise; there were no communications system failures during the exercise. Equipment and supplies were sufficient to support operations.

The process for preparing and distributing news releases varied among the different agencies. All releases would be formulated outside of the JIC and then sent to the JIC for distribution among the staff and pooled media. For this exercise the State issued four news releases and the counties did not issue any. The State releases covered the protective action decision (PAD) of "Go Inside, Stay Inside" and "Restricted Access." Additionally, TVA issued three releases and the NRC two. There were two media briefings during the exercise. Prior to each briefing, the TVA PIO and agency spokespersons discussed and coordinated their message in a pre-briefing meeting. During the media briefings, the spokespersons answered the questions asked of them and were able to discuss the actions of their agencies effectively.

The responsibility for public inquiry was shared by TVA and the State. They received calls on both onsite and offsite questions and concerns. If a call regarded an offsite concern or question, TVA public inquiry staff provided the caller with the number of the appropriate State or county EOC. All calls were logged and briefly summarized. One trend was identified. Media monitoring was performed by TVA; local network television and local primary radio were monitored, as well as social media (Facebook and Twitter).

For this capability the following REP criterion was met: 5.b.1

3.3.3 Risk Jurisdictions

3.3.3.1 Limestone County

Operational Coordination Capability Summary:

Offsite law enforcement response to BFNPP during an HAB event was the responsibility of the Limestone County Sheriff's Office. Sheriff's Office personnel in conjunction with members of the Limestone County Emergency Management Agency (EMA) and other State, county and municipal agencies successfully demonstrated the ability to take appropriate actions to protect the public and provide offsite support and resources requested by the licensee.

Initial notification of the hostile action came to the Limestone County 911 Office directly from BFNPP Security. The 911 center relayed the information to the Limestone County Dispatch Office who initiated their HAB recall rosters. The IC then established an ICP in the facility designated for response to an event at BFNPP.

The ICP was organized and operated in accordance with the basic concepts of the National Incident Management System and the Incident Command System. This organizational structure maintained unity of command with clear and consistent duties and responsibilities for the supporting staff. These individuals, as well as those from various support agencies, represented their specific response disciplines as they would in an actual incident.

Communications capabilities for the ICP were robust and redundant. These included county-issued cell phones, personal cell phones, land-line phones, and mobile and portable county radios. Communication checks were made with response and support agencies, and there were no communication failures during the exercise.

The ICP was well equipped and had sufficient equipment and supplies to accomplish the mission. There were several instances when offsite resources were requested to meet BFNPP needs. In each instance, the fulfillment of the request was clearly made, understood, and coordinated among the response agencies.

ICP staff were proactive in anticipating, understanding, and meeting BFNPP resource needs. All response actions were thorough, well coordinated, and deliberate. The IC made appropriate decisions as required after consultation with all resources available to him within the ICP. One of the first decisions the IC made was to lock down Limestone County schools within the 10-mile EPZ. The decisions and strategies demonstrated that life and safety were of the highest priority and that his overall goal was the safe, expedient mitigation and recovery from the hostile action.

Through discussion, the IC described how he would provide dosimetry to his personnel, both through the county EOC and the utility. He explained he would follow the established administrative exposure limits and also consult with the ADPH liaison to ensure exposures to his personnel were kept as low as reasonably achievable.

Law enforcement personnel would not have access to dosimetry during their initial response, but would go on site with BFNPP security officers and those officers would have dosimetry. Until arrangement could be made to safely rotate back to a staging area for "just-in-time" training and issuance of dosimetry and KI, officers would rely on the security officers for area/group dosimetry. During an out-of-sequence activity, the county radiological officer demonstrated briefing emergency workers, issuing dosimetry, and maintaining associated records.

Traffic and access control points were established when the IC made the protective action decision to restrict access to the two-mile portion of the EPZ. Due to its nature, the HAB event was an impediment to evacuation. That impediment to evacuation was in place for the duration of the exercise.

The ICP staff collectively demonstrated command and control under the Incident Command System, coordinating actions and discussing options and responsibilities before decisions were made. Radiological protection was utmost in all leaders' minds. All requests for support from BFNPP were quickly coordinated and staged awaiting a safe opportunity to respond. All members of the ICP were professional, motivated, and anxious to support.

Limestone County EMA staff demonstrated the ability to establish and maintain a unified and coordinated operational structure and process that appropriately integrated all critical stakeholders and supported the execution of the response to the HAB incident at BFNPP.

EMA staff used effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. Using an automated notification system that used voicemails, text, and emails, EOC personnel were alerted within minutes. ECNS and SouthernLINC telephone systems were effectively used throughout the exercise to maintain communications with other counties and the State. In addition, the EOC leadership team used VHF radios to effectively and efficiently communicate and coordinate activities.

Video displays and computerized white boards were used to keep EOC staff and personnel in the ICP informed of events occurring in the county. Maps of the county and EPZ were displayed in the EOC. All support personnel had access to plans and checklists, computers, and telephones.

The EMA director started the exercise in the EOC, coordinating the initial activation of the EOC after receiving the first notification. There was some initial confusion

concerning the information disseminated on the ECNS system concerning protective actions recommendations. The director quickly investigated the information and provided the correct responses and alerts.

Once the ICP was established, the director went to the ICP where she effectively coordinated activities between the ICP and the EOC. The use of handheld radios greatly enhanced the ability for the director to communicate and coordinate activities with her EOC staff. The REP planner and PIO effectively provided direction and control of EOC personnel. They coordinated protective actions with other counties and the State while also communicating with the JIC, activating sirens and tone alert radios, and ensuring proper messages were sent to the National Weather Service (NWS). EMA staff coordinated with the director in the ICP to make protective actions decisions to protect the general public. These decisions included actions for schools and functional needs individuals. Schools were placed on lockdown and had busses on standby if needed.

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

Public Information and Warning Capability Summary:

The Limestone County EOC staff demonstrated the ability to deliver coordinated, prompt, reliable, and actionable information to the general public. The primary method for notifying the public in the 10-mile EPZ for BFNPP was through sounding fixed sirens followed by instructional EAS messages and SNB messages. This process was coordinated with the IC by the EMA director. The actual decision to notify the public was made in the EOC in coordination with the surrounding risk counties.

Public information was not released from the ICP. The IC would advise the Sheriff's Office dispatch center supervisor who was present in the ICP of the current situation and what information was appropriate for public release. This supervisor would then coordinate with the PIO in the EOC regarding public messaging. The supervisor and PIO were in frequent contact throughout the exercise.

A PIO and assistant PIO reported to the EOC and a PIO liaison deployed to the JIC. The liaison immediately established communications with the Limestone County lead PIO in the EOC and served as a critical source of information for the JIC and EOC, where he provided situational awareness with status updates, coordinated activities between the JIC and the Limestone County EOC, and ensured the EOC had the most current information.

The public information staff was proficient, organized, and knowledgeable of the county plans and procedures and carried out their responsibilities with urgency and no undue delay. They coordinated with the other counties to select EAS and SNB messages. Although EAS and SNB messages were pre-scripted, a situation arose that required a different message for the general public. The PIO and assistant quickly developed a

modified message, concurred with by the other counties, and emailed it directly to the NWS for dissemination. All messages included required initial, follow-up and supplemental information to be used in media briefings, and were accurate and timely. EOC staff also activated sirens and tone-alert radios at the times coordinated with the other counties. Messages and activities were tracked and chronicled electronically with the ability to retrieve them for reference if needed at a later time. Messages and activities were also emailed and fax blasted to the JIC liaison.

There were no news releases produced from the EOC during this exercise. However the PIO explained their ability to do so and their protocols, which were consistent with plans.

For this capability the following REP criteria were met: 5.a.1, 5.b.1

Environmental Response/Health and Safety Capability Summary:

Members of Segers Volunteer Fire and Rescue and East Limestone Volunteer Fire and Rescue successfully demonstrated the ability to perform radiological monitoring and decontamination of evacuees at the East Limestone High School reception center during an out-of-sequence demonstration. The facility was well laid out, minimizing the chance for cross contamination. Reception center workers wore (simulated) appropriate protective clothing and dosimetry, were familiar with dosimeter reading and recording requirements, and were knowledgeable of administrative dose limits. Workers properly set up and used a portal monitor and handheld instruments to detect radiological contamination, were knowledgeable of contamination action levels and decontamination procedures, and provided information and instructions to evacuees. Alabama Department of Human Resources (DHR) workers registered evacuees in accordance with procedures and Limestone County Health Department personnel demonstrated the ability to distribute KI and appropriate instructions to the public at the reception center following a valid emergency health order.

For this capability the following REP criteria were met: 1.e.1, 3.a.1, 3.b.1, 6.a.1

Mass Care Capability Summary:

American Red Cross (ARC) personnel successfully demonstrated the ability to provide services and accommodations for evacuees at the East Limestone High School shelter during an out-of-sequence demonstration. Only individuals who had registered with DHR at the reception center would be allowed in the shelter. Meals, clothing, and health services would be provided at the shelter, as well as the opportunity for evacuees to provide information for the ARC Safe and Well web site.

For this capability the following REP criteria were met: 6.a.3

Critical Transportation Capability Summary:

District and school administrators from Limestone County Schools successfully demonstrated the ability to safeguard students, staff, and faculty in the event of an incident involving BFNPP during an out-of-sequence discussion and participation in a tabletop exercise. All were knowledgeable of their plans. Following notification of an incident, district staff would coordinate with the EOC to develop an appropriate course of action. Each school would recall sufficient drivers and buses to relocate their students in a timely manner if necessary. The relocation facilities would be prepared to accept the students and assist in their supervision and eventual release to parents or guardians. Parents and guardians would be notified via the district's mass notification system.

For this capability the following REP criterion was met: 3.c.2

3.3.3.2 Morgan County

Operational Coordination Capability Summary:

Morgan County elected officials, emergency management personnel, and EOC staff successfully demonstrated the ability to effectively respond to an HAB event at BFNPP. Personnel were well trained and familiar with their responsibilities.

The director simulated the alert, notification and mobilization of emergency personnel and activated the Morgan County EOC in a timely manner. The EOC would be able to maintain operational status on a 24-hour basis; operational periods were stated to be 12-hour shifts. A copy of the 24-hour staffing roster had been prepared. The Morgan County EOC itself was sufficient to support emergency response. At least two communications systems were available, at least one operated properly, and communications links were established and maintained with appropriate locations; no communication failures occurred during the exercise. Equipment and supplies were sufficient to support emergency operations.

The director was actively involved in the decision making process throughout the exercise, and continually had his county prepared for potential upcoming events. He led his staff with a proactive approach to problem solving. He integrated BFNPP updated information into his status briefings to the EOC staff, and received their action status reports. Morgan County demonstrated a high level of leadership support during the exercise, with participation by the chairman of the county commissioners and the mayor of the city of Decatur. Their presence and periodic addresses to the EOC staff emphasized the importance of the staff's actions in protecting the public. All actions taken by the county leaders and EOC staff during the exercise demonstrated that they were well trained and familiar with their responsibilities.

The Morgan County EOC representatives simulated demonstration of and discussed through interview protective action decision implementation. The Morgan County REP

planner discussed the issuance of appropriate dosimetry, KI and the management of radiological exposure to emergency workers.

As precautionary actions, West Morgan Elementary School and West Morgan High School were relocated to Danville High School (relocation simulated) and Decatur City Schools implemented early release (early release simulated). Following these actions, the Morgan County Schools representative discussed the implementation of protective actions for all Morgan County Schools.

A Morgan County Sheriff's Office deputy discussed through interview appropriate traffic and access control establishment, as well as how impediments to evacuation would be identified and resolved.

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

Public Information and Warning Capability Summary:

The director and PIO successfully demonstrated activities associated with alerting and notifying the public in a timely manner and providing accurate emergency information and instruction to the public and news media.

The Morgan County PNS, which consisted of sirens, tone alert radios, and industrial net radio, and their EAS messages, disseminated to local radio and television stations by NWS, were successfully activated when the conditions at the BFNPP indicated the public should be alerted for possible protective actions. All PNS systems were activated from the Morgan County EOC; the decision to activate was based on information provided to the Morgan County EMA. The Morgan County EMA staff coordinated with the other counties, via ECNS, all activations of the PNS and EAS.

For this capability the following REP criteria were met: 5.a.1, 5.b.1

On-Scene Security and Protection Capability Summary:

The ability to clear the Tennessee River of boat traffic inside the 10-mile EPZ in the event of an incident at BFNPP was successfully demonstrated through interview and an on-the-water demonstration with members of the Morgan County Rescue Squad during an out-of-sequence demonstration. Team members would be notified by the EOC, which would coordinate river clearance with other counties. The team would launch one or two boats and follow a predesigned route to ensure all areas of the river were covered. The team would approach boats and read a pre-scripted message instructing them to leave the river. The team members were knowledgeable in the use of dosimetry, administrative dose limits, and procedures for obtaining and taking KI.

The ability to control the flow of evacuee traffic in the event of an incident at BFNPP was successfully demonstrated through interview with Decatur Police Department (DPD) personnel during an out-of-sequence demonstration. A DPD representative would report to the EOC once it was activated, and DPD officers would be dispatched to the pre-designated TCPs as directed by the EOC. Traffic would be controlled through the positioning of patrol cars and barricades. Traffic impediments would be cleared using wreckers or other heavy equipment. DPD personnel were knowledgeable in the use of dosimetry, administrative dose limits, and procedures for obtaining and taking KI.

For this capability the following REP criteria were met: 1.e.1, 3.a.1, 3.d.1, 3.d.2

3.3.3.3 Lawrence County

Operational Coordination Capability Summary:

Lawrence County EMA personnel and EOC staff successfully demonstrated the ability to effectively respond to an HAB event at BFNPP. Following notification of the SAE ECL via the ECNS, the EMA director promptly alerted the staff to report the EOC staff using the RapidCast system. In accordance with the EOPA, EOC staff were pre-positioned near the EOC, and the EOC was activated in a timely manner. A 24-hour EOC roster was maintained by the deputy director.

The facility had adequate space, supplies, and other resources to support emergency operations including dorm rooms, a kitchen, environmental control, and two backup electrical generators. There were redundant communications systems which operated without failure during the exercise. Bankhead Amateur Radio Club personnel enhanced the communications ability of the county.

The Lawrence County emergency management director and deputy director provided direction and control to the EOC staff. As planners, they theorized how to mitigate various outcomes throughout the exercise. The director maintained a critical level of situational awareness with the EOC staff by frequently briefing the staff with the most recent incident information. The EOC staff then quickly took appropriate response actions to respond to the situation. The director made direct contact with directors of adjoining risk counties EMAs to validate consistency of information shared between all counties. The Lawrence County finance officer responded to the EOC and provided insight during the protective action decision process.

Although not scheduled for demonstration during the exercise, EOC staff members were very knowledgeable of procedures to contact and transport persons with disabilities and access/functional needs, to relocate school children, to supply radiological training and dosimetry to emergency workers, and to provide KI to emergency workers and the public if ordered.

Lawrence County Sheriff's Office representatives provided details on traffic control points, clearing impediments, and access control for restricted areas. As part of the response to the hostile action, the law enforcement representatives discussed the county's role in restricting access to portions of the Tennessee River as coordinated with the IC, other risk counties, and State marine resources.

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

Public Information and Warning Capability Summary:

The director, deputy director and PIO successfully demonstrated activities associated with alerting and notifying the public in a timely manner and providing accurate emergency information and instruction to the public and news media. They coordinated with the other counties via ECNS to ensure all EAS and SNB messages were properly selected and distributed through prescribed processes. PNS activation (simulated) was conducted at times coordinated with the other risk counties in accordance with procedures with no failures experienced.

For this capability the following REP criteria were met: 5.a.1, 5.b.1

On-Scene Security and Protection Capability Summary:

The ability to control the flow of evacuee traffic in the event of an incident at BFNPP was successfully demonstrated through an out-of-sequence interview with two officers from the Lawrence County Sheriff's Office and the county radiological officer (RO). Following notification by the EOC, the Lawrence County Sheriff or his designee would respond to the EOC to coordinate law enforcement activities. Officers assigned to staff TCPs would report first to the EOC to receive a briefing and obtain dosimetry from the RO. The RO gave the officers a thorough radiological briefing including the use of dosimetry, administrative dose limits, and procedures for obtaining and taking KI.

Traffic would be controlled through the positioning of patrol cars and barricades. Officers staffing TCPs could communicate with the EOC via 800 MHz radios and cell phones. The county road department would supply any needed barricades. Impediments would be cleared using routine methods (wreckers) or heavy equipment from the road department.

For this capability the following REP criteria were met: 1.e.1, 3.a.1, 3.d.1, 3.d.2

3.3.3.4 Lauderdale County

Operational Coordination Capability Summary:

Florence-Lauderdale County EMA personnel and EOC staff successfully demonstrated the ability to effectively respond to an HAB event at BFNPP. In accordance with the EOPA, EOC staff were pre-positioned near the EOC. EMA staff sent out a text notification to EOC staff using the Everbridge mass notification system following notification of the SAE ECL via the ECNS. The EOC was activated in a timely manner.

The EOC and the 911 communications center were located in the same building and had adequate facilities, equipment, and supplies to support emergency operations. Redundant communications methods were available and operated properly throughout the exercise. Three backup generators were available to supply electrical power if necessary.

The EMA director provided overall direction to the EOC staff. The director, deputy director, and REP planner reviewed and discussed protective action recommendations from the utility and participated in decision making discussions with the other counties via ECNS. The director or deputy director briefed EOC staff frequently, and EOC staff took appropriate response actions.

EOC staff members were very knowledgeable of procedures to set-up traffic and access control points, to supply radiological training and dosimetry to emergency workers, and to provide KI to emergency workers and the public if ordered.

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

Public Information and Warning Capability Summary:

EOC personnel successfully demonstrated activities associated with alerting and notifying the public in a timely manner and providing accurate emergency information and instruction to the public and news media. They coordinated with the other counties via ECNS to ensure all EAS and SNB messages were properly selected and distributed using prescribed methods. PNS activation (simulated) was conducted at times coordinated with the other risk counties in accordance with procedures with no failures experienced.

The ability to perform backup route alerting of the public in the event of a siren failure was demonstrated out of sequence by the chief of the Rogersville Police Department (RPD). Following notification from the EOC that one of the Lauderdale sirens had failed to sound when activated, an RPD officer or Rogersville Volunteer Fire Department unit would be dispatched to perform the backup route alerting. For this demonstration, the RPD chief completed three routes surrounding the designated failed sirens in a timely manner, slowing in populated areas to read a pre-scripted message over his car's public address system. The chief was knowledgeable in the use of dosimetry, administrative dose limits, and procedures for obtaining and taking KI.

For this capability the following REP criteria were met: 5.a.1, 5.a.3, 5.b.1

On-Scene Security and Protection Capability Summary:

The ability to control the flow of evacuee traffic in the event of an incident at BFNPP was successfully demonstrated out of sequence through interview with the chief of the RPD. Following notification by the EOC, RPD officers would be recalled and dispatched to the emergency worker station to obtain a radiological briefing and dosimetry. From there, they would proceed to the pre-designated TCPs as directed by the EOC. Traffic impediments would be pushed from the roadway or appropriate equipment would be requested from the EOC. The chief was knowledgeable in the use of dosimetry, administrative dose limits, and procedures for obtaining and taking KI.

For this capability the following REP criteria were met: 1.e.1, 3.a.1, 3.d.1, 3.d.2

3.3.4 Host Jurisdictions

3.3.4.1 Madison County

Operational Coordination Capability Summary:

The Huntsville-Madison County EMA staff successfully demonstrated the capability to establish and maintain a unified and operational structure and process that appropriately integrates all critical stakeholders in response to an HAB incident at BFNPP. As a host county, Huntsville-Madison County EMA's role was to coordinate the risk counties' decision making and activation of PNS and EAS and, in the event of an evacuation, open one or more reception centers. The staff successfully demonstrated the required actions to coordinate the dissemination of the appropriate information/instructions to the public with a sense of urgency and without undue delay. The EMA director and staff coordinated the activation of siren soundings and the broadcast of EAS and SNB messages in a timely manner. No evacuation was ordered during the exercise. Therefore their reception centers were not activated. However, thinking forward, the director did place those resources and traffic management law enforcement personnel on standby.

Even though the county's participation in this event was limited, its role was nonetheless important. Only limited staff (full time day to day) were activated for this exercise. However, all key staff notifications were accomplished, including those to political officials.

The EOC had more than sufficient equipment, space, supplies, maps, displays, monitoring instruments, and dosimetry to support emergency response operations. The facility was equipped with a backup generator, restrooms, and a kitchen area. There were redundant communications systems available and no communication failures occurred during the exercise.

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

Public Information and Warning Capability Summary:

Huntsville-Madison County EMA staff successfully demonstrated the ability to provide accurate and timely information and instructions to the public. Madison County facilitated the coordination of three PNS activations and associated EAS and SNB selections by the risk counties. Staff then forwarded the approved EAS and SNB messages to the NWS Huntsville office.

When notified, NWS Huntsville personnel quickly generated and disseminated the EAS and SNB messages according to procedures agreed upon with Huntsville-Madison County EMA. Communication and coordination between NWS Huntsville and Madison County was nearly flawless. An experienced meteorologist expertly accessed template messages within the Advanced Weather Interactive Processing System, modified the templates according to the instructions from Madison County, and (simulated) transmitted the EAS and SNB messages, generally within one minute of the decision to disseminate. The meteorologist proactively sought clarification when necessary to ensure each message was completely accurate. At one point, NWS Huntsville was asked to modify the content of the protective actions beyond the scope of the agreed procedures. In that instance, Limestone County provided additional language for one EAS message and one SNB message. Recognizing the urgency of the action, the NWS meteorologist expressed a willingness to quickly adapt to the unexpected request, and ultimately the EAS message and SNB message were published with little delay.

For this capability the following REP criteria were met: 5.a.1, 5.b.1

On-Scene Security and Protection Capability Summary:

The ability to control the flow of evacuee traffic was demonstrated by interview with representatives of the Madison County Sheriff's Office and the Huntsville Police Department. The two departments, along with the Madison Police Department and the Alabama Highway Patrol share communications capabilities over an 800 MHz radio system. The officers interviewed were each equipped with hand held radios and vehicle mounted radios. Cellular telephones would serve as a backup. Their vehicles were equipped with sufficient supplies to establish TCPs. They were aware of the locations that could be used as reception centers in Madison County and understood that they would be directed by their supervisors, under the control of the EOC, to patrol and monitor traffic in their respective jurisdictions. The officers were aware that any impediments identified by law enforcement would be handled through the EOC by either coordinating removal or by rerouting traffic and shifting signage. Local wrecker services or heavy equipment from various road departments would be used for impediment

removal.

For this capability the following REP criteria were met: 1.e.1, 3.d.1, 3.d.2

Mass Care Capability Summary:

DHR and ARC personnel demonstrated the ability to register evacuees and provide those with needs with the proper services. The reception center at Spragins Hall would process evacuees from Limestone County or Morgan County should shelter capacities be exceeded in either of those counties. DHR and ARC personnel had procedures in place to assure that evacuees had been monitored for contamination and had been decontaminated as appropriate before entering the facility. ARC personnel maintained a list of shelters which could be opened as necessary, and would direct evacuees needing shelter to the appropriate facility. ARC personnel would also arrange transportation to the shelter facility if needed.

For this capability the following REP criteria were met: 6.a.1, 6.a.3

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Section 4: Conclusion

Overall, the exercise was a success. Officials and representatives from the State of Alabama; the risk counties of Lauderdale, Lawrence, Limestone, and Morgan; the host county of Madison; TVA; 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 this exercise a success. Protecting the public health and safety is the full-time job of some of the exercise participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. State and local emergency response organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them.

The integration of the incident command post into the response, the use of the new Joint Information Center, and a new procedure for coordinating Emergency Alert System messages and disseminating them through the National Weather Service were highlights of the exercise. These enhanced response capabilities, developed since the last exercise, help demonstrate the commitment of all of the jurisdictions involved to improve their preparedness for an incident at Browns Ferry.

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Appendix A: Exercise Timeline

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken									
		SEOC	SRMAC-Mont.	SRMAC-Decatur	JIC	Lauderdale County	Lawrence County	Limestone County	Limestone ICP	Morgan County	Madison County
Site Area Emergency	0816	0823	0825	N/A	0850	0825	0825	0825	0841	0825	0825
General Emergency	0828	0844	0848	0855	0855	0845	0845	0845	0859	0845	0845
Simulated Rad. Release Started	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Simulated Rad. Release Terminated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Facility Declared Operational		0825	0830	0940	1010	0833	0927	0831	0841	0832	0836
Declaration of State of Emergency State		0848	N/A	N/A	0858	N/A	0859	N/A	N/A	N/A	N/A
Local		N/A	N/A	N/A	1050	0853	0915	0915	0915	N/A	N/A
Exercise Terminated		1234	0950	1231	1246	1231	1243	1234	1235	1238	1242
Early Precautionary Actions Schools Early Dismissal/ Relocation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0830/0845	N/A	
Schools on Lockdown			1052	0900				0852	N/A		
1st Protective Action: Stay Tuned – SAE	N/A	0835	N/A	N/A	0841	0841	0841	N/A	0841	0841	
1st Siren Activation	N/A	N/A	N/A	N/A	0846	0846	0846	N/A	0846	0846	
1st EAS Message: Message 2	N/A	N/A	N/A	N/A	0846	0846	0846	N/A	0846	0846	
2nd Protective Action: Restricted Access to A2, A5, B2, B5, F2, F5, G2,G5	0915	0919	0905	N/A	0905	0905	0905	0905	0905	0905	
2nd Siren Activation	0915	N/A	0910	N/A	0910	0910	0910	0910	0910	0910	
2nd EAS Message: Messages 3, 205, 206	N/A	N/A	0910	N/A	0910	0910	0910	0910	0910	0910	
3rd Protective Action: Go Inside, Stay Inside for A2, B2, F2, G2; Restricted Access to A2, B2, F2, G2 and 5-Miles on River	0933	N/A	0935	N/A	0933	0933	0919	0910	0933	0933	
3rd Siren Activation	N/A	N/A	N/A	N/A	0937/0949	0937/0949	0936/0948	N/A	0936/0948	0937/0948	
3rd EAS Message: Messages 203, 204, 205, 206	N/A	N/A	N/A	N/A	0937/0949	0937/0949	0936/0948	N/A	0936/0948	0937/0948	

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Appendix B: Exercise Evaluators and Team Leaders

Regional Assistance Committee Chair: Conrad Burnside
Section Chief: Randall Hecht **Site Specialist:** John Fill

Location	Evaluation Team	Core Capabilities
Joint Operations		
JIC	R. Spence D. Schneck	Public Information & Warning
NWS	J. Simpson	Public Information & Warning
State of Alabama		
SEOC	M. Bradley Q. Ivy	Operational Coordination Public Information & Warning
SRMAC-Montgomery	K. Tosch	Environmental Response/Health and Safety Public Information & Warning
SRMAC-Decatur	J. Fill	Environmental Response/Health and Safety Public Information & Warning
Field Teams (OOS 11/5)	J. Keller R. Bonner	Environmental Response/Health and Safety
Lauderdale County		
EOC	A. Sera T. Blackmon	Operational Coordination Public Information & Warning
OOS Activities 10/8	J. Fill W. Cushman C. Jones J. Ackermann	On-Scene Security and Protection Public Information & Warning
Lawrence County		
EOC	G. McLemore L. Lewis G. Dawkins	Operational Coordination Public Information & Warning
OOS Activities 10/9	J. Fill W. Cushman C. Jones	On-Scene Security and Protection

Location	Evaluation Team	Core Capabilities
Limestone County		
EOC	J. Harworth O. Spencer M. Dalton	Operational Coordination Public Information & Warning
ICP	W. Cushman J. Ackermann	Operational Coordination Public Information & Warning
OOS Activities 9/9, 10/6	J. Fill W. Cushman C. Jones J. Ackermann	Critical Transportation Environmental Response/Health and Safety Mass Care
Morgan County		
EOC	M. Dolder C. Jones E. Houghton	Operational Coordination Public Information & Warning
OOS Activities 10/8	J. Fill W. Cushman C. Jones	On-Scene Security and Protection
Madison County		
EOC	R. Shaw Rosemary Samsel	Operational Coordination Public Information & Warning
OOS Activities 10/5	J. Fill W. Cushman C. Jones	On-Scene Security and Protection Mass Care

Appendix C: Acronyms and Abbreviations

Acronym	Meaning
AAR	After Action Report
ADPH	Alabama Department of Public Health
AEMA	Alabama Emergency Management Agency
ALEA	Alabama Law Enforcement Agency
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
BFNPP	Browns Ferry Nuclear Power Plant
CFR	Code of Federal Regulations
DHR	Alabama Department of Human Resources
DHS	Department of Homeland Security
DPD	Decatur Police Department
EAS	Emergency Alert System
ECL	Emergency Classification Level
ECNS	Emergency Communications Notification System
EMA	Emergency Management Agency
EMITS	Emergency Management Information Tracking System
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOPA	Extent-of-Play Agreement
EPZ	Emergency Planning Zone
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GE	General Emergency
HAB	Hostile Action Based
HSEEP	Homeland Security Exercise and Evaluation Program
IC	Incident Commander
ICP	Incident Command Post
JIC	Joint Information Center
KI	Potassium Iodide
MHz	Megahertz
NRC	U.S. Nuclear Regulatory Commission
NUREG-0654/ FEMA REP-1	NUREG-0654/FEMA-REP-1, Rev. 1, *"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980*
NWS	National Weather Service
OOS	Out of Sequence
ORC	Office of Radiation Control
ORO	Offsite Response Organization

Acronym	Meaning
PAD	Protective Action Decision
PAR	Protective Action Recommendation
PIO	Public Information Officer
PNS	Prompt Notification System
RAC	Regional Assistance Committee
RASCAL	Radiological Assessment Systems for Consequence AnaLysis
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RFMT	Radiological Field Monitoring Team
RO	Radiological Officer
RPD	Rogersville Police Department
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
SNB	Special News Broadcast
SOP	Standard Operating Procedure
SRMAC	State Radiological Monitoring and Assessment Center
SWP	State Warning Point
TCP	Traffic Control Point

Appendix D: Extent-of-Play Agreements

Alabama Emergency Management Agency
2015 Browns Ferry Nuclear Power Plant (BFNPP) Exercise
Extent-of-Play Agreement

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

Organizational Capability Target: Emergency Operations Management

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

Alabama Emergency management Agency (AEMA) will simulate alerting, notifying and mobilizing personnel. Personnel will be pre-positioned at the State Emergency Operating Center (SEOC), SRMAC (if operational), and the Joint Information Center (JIC). AEMA will demonstrate the ability to receive notification from the licensee (IAW the REP Plan) and verify the notification. A message will be entered into the Emergency Management Information Tracking System (EMITS) deploying personnel and task action updates will be made when the JIC and SRMAC are operational. Pre-positioning is necessary due to the compression of the scenario and the distances involved in traveling to the various locations.

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

Communication systems will be demonstrated scenario dependent on November 4, 2015. The TVA Hotline is the primary means of communication. Telephones, E-mails, EMITS, and faxes will serve as secondary communications. SouthernLINC radios may also be used.

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

AEMA will have available equipment, maps, and displays that would be necessary to support emergency operations at the SEOC, and JIC, scenario dependent. Dosimetry and KI are not applicable.

Organizational Capability Target: Protective Action Decision Making

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

In accordance with the Alabama Radiological Emergency Preparedness (REP) Plan and the BFNPP Standard Operating Guide (SOG), direction and control will be demonstrated by AEMA, scenario dependent. The (SEOC) will be activated. All requirements and activities to support the plans will be performed; actions required by the Emergency Management Coordinators (EMCs) will be coordinated through the SEOC Branch Directors via messages and update in EMITS.

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

Coordination only. The Office of Radiation Control (ORC) is responsible for issuing the PADs. However after a PAD is issued, AEMA reserves the right to review and/or recommend the PAD be changed due to any mitigating circumstances (road conditions, weather conditions, etc.); scenario dependent.

Organizational Capability Target: Protective Action Implementation

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

AEMA will simulate contacting applicable rail and air traffic authorities, scenario dependent at the SEOC. This will be demonstrated during exercise November 4, 2015.

Critical Task: Impediments to evacuation are identified and resolved. (NUREG-0654 J.10.k Criterion 3.d.2)

AEMA will demonstrate coordination of state resources assistance as needed by the County at the SEOC, scenario dependent. This will be demonstrated during exercise November 4, 2015.

Core Capability: **Public Information and Warning**

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

Organizational Capability Target: Emergency Notification and Public Information

Critical Task: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current REP Guidance. (NUREG-

0654 E.5, 6, 7 Criterion 5.a.1)

SEOC will monitor TVA counties' coordination and PNS/EAS activation. Reference Browns Ferry Nuclear Power Plant (BFNPP) Standard Operating Guide (SOG).

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

Actual message distribution to the public and media will be simulated. This will be demonstrated during the exercise November 4, 2015 (scenario dependent).

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Alabama Department of Public Health
Browns Ferry Nuclear Power Plant Exercise
November 4, 2015
Extent-of-Play Agreement

Core Capability: **Public Information and Warning** Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available.
Organizational Capability Target: Emergency Notification and Public Information *Critical Task:* Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (NUREG-0654 E.5, 7; G.3.a; G.4.a, c; Criterion 5b1). Office of Radiation Control (ORC): The coordination process will be demonstrated. Actual message distribution to the public and media will be simulated.
Core Capability: **Environmental Response/Health and Safety** Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.
Organizational Capability Target: Emergency Operations Management *Critical Task:* OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1). ORC will simulate alerting, notifying and mobilizing emergency personnel. Personnel will be pre-positioned at the RSA Tower, Suite 1250, SRMAC Room 1266 at 201 Monroe Street, Montgomery, AL, and at the Decatur SRMAC room in Morgan County EMA Office, basement of the Morgan County Courthouse, 302 Lee Street, Decatur, AL and at Joint Information Center (JIC), 2055 Market Street, N.E., Decatur, AL. ORC will demonstrate the ability to receive notification from the licensee and/or state and county agencies. The facilities will demonstrate activation in a timely manner, scenario dependent. *Critical Task:* Facilities are sufficient to support the emergency response (NUREG-0654 H.3; G.3.a; J.10.h, J.12; K.5.b; Criterion 1b1). ORC will demonstrate this critical task at the Montgomery SRMAC and the Decatur SRMAC. (Note: The Decatur SRMAC is part of the Morgan County Emergency Management Agency facility in the basement of the Morgan County Courthouse.) *Critical Task:* At least 2 communications systems are available, at least 1 operates properly,

and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1).

ORC will demonstrate communication capabilities at the appropriate locations (Montgomery SRMAC, the Decatur SRMAC and the JIC), and between governmental agencies.

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

ORC will have available equipment, maps, and displays that would be necessary to support emergency operations at the Montgomery SRMAC, Decatur SRMAC, and the JIC, scenario dependent. Dosimetry, KI and monitoring/sampling equipment will be available for the field teams during the out of sequence evaluation on November 5, 2015.

Organizational Capability Target: Protective Action Decision Making

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

ORC will demonstrate direction and control from the Montgomery SRMAC and from the Decatur SRMAC of the Morgan County Courthouse, Decatur, AL.

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

If applicable, ORC will discuss emergency worker exposure control decision-making, for the Radiological Monitoring Field Teams only in SRMAC.

Critical Task: Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions. (NUREG-0654 I.10 and Supplement 3; Criterion 2.b.1)

ORC will demonstrate radiological assessment for the plume phase of the emergency.

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

ORC will demonstrate the decision-making process to make protective action decisions for the general public. Coordination of protective action decisions, once made, with the State of Alabama EMA and Browns Ferry Counties will be demonstrated.

Critical Task: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria (NUREG-0654 A.3; C.1, 4; D.4; J.9, 11; Criterion 2d1).

Not required to be demonstrated.

Critical Task: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures (NUREG-0654 I.10; J.9; K.3.a; M.1; Criterion 2e1).

Not required to be demonstrated by any jurisdiction.

Organizational Capability Target: Protective Action Implementation

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

ORC will demonstrate the implementation of emergency worker radiation exposure control during out of sequence on November 5, 2015, for the Radiological Field Monitoring Teams only, scenario dependent.

Critical Task: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions (NUREG-0654 A.3; C.1, 4; J.11; Criterion 3e1).

Not required to be demonstrated.

Critical Task: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11; Criterion 3e2).

Not required to be demonstrated.

Critical Task: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented (NUREG-0654 E.7; J.10.j; J.12; K.5.b; M.1, 3; Criterion 3f1).

Not required to be demonstrated.

Organizational Capability Target: Field Measurement and Analysis

Critical Task: Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654 C.1; H.12; I.7, 8, 11; J.10.a; Criterion 4a2).

Two (2) field teams will be evaluated out of sequence on Thursday, November 5, 2015 at 9:00

a.m. Field teams will be pre-positioned at the Morgan County Health Department Parking lot, 510 Cherry Street NE, Decatur, AL. Due to the scenario is compressed and hostile action based, field teams will discuss field team procedures as well as demonstrate taking an air sample in the parking lot of the Morgan County Health Department Parking lot. Field teams will simulate using booties and gloves (only) for contamination control for air sampling demonstration only and simulate using them thereafter, scenario dependent. All activities will take place in the Morgan County Health Department Parking lot.

ORC will simulate dispatching and managing field teams, scenario dependent, from the SRMAC during the exercise on November 4, 2015.

Critical Task: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. (NUREG-0654/FEMA-REP-1, C.1; H.12: I.8, 9; J.10.a; Criterion 4a3).

Two (2) field teams will be evaluated out of sequence on Thursday, November 5, 2015 at 9:00 a.m. Field teams will be pre-positioned at the Morgan County Health Department Parking lot, 510 Cherry Street NE, Decatur, AL. Due to the scenario is compressed and hostile action based, field teams will discuss field team procedures and radioiodine sample procedures as well as demonstrate taking an air sample in the parking lot of the Houston County Health Department parking lot. Field teams will use booties and gloves (only) for contamination control for the air sampling demonstration only and simulate using them thereafter, scenario dependent. All activities will take place in the Morgan County Health Department Parking lot.

Critical Task: The field teams (2 or more) demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision making. (NUREG-0654/FEMA-REP-1, C.1; I.8; J.11; Criterion 4b1).

Not required to be demonstrated.

Critical Task: The laboratory is capable of performing required radiological analyses to support protective action decisions. (NUREG-0654/FEMA-REP-1, C.1, 3; J.11; Criterion 4c1).

Not required to be demonstrated.

Core Capability: **Public Health and Medical Services**
Provide lifesaving medical treatment via emergency medical services and related operations and avoid additional disease and injury by providing targeted public health and medical support and products to all people in need within the affected area.

Organizational Capability Target: Support Operations and Facilities
Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a,

b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1).

Not required to be demonstrated (see below).

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

Not required to be demonstrated (see below).

Critical Task: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals (NUREG-0654 F.2; H.10; K.5.a, b; L.1, 4; Criterion 6d1).

Not required to be demonstrated due to the real event at Browns Ferry Nuclear Power Plant involving a contaminated patient on March 25, 2015. ORC received letter on May 5, 2015 from Mr. Conrad Burnside, FEMA, that credit was granted which eliminated the requirement for Decatur Morgan Hospital – Decatur General Campus and Lawrence County EMS for 2015.

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Lauderdale County

2015 Browns Ferry Nuclear Power Plant Exercise Extent-of-Play Agreement

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

Organizational Capability Target: Emergency Operations Management

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

Lauderdale County EMA: The Florence/Lauderdale EMA Staff will be pre-positioned a.t 8:00 a.m. at which normal duty hours begin. The Florence-Lauderdale EMA Emergency Operations Center (EOC) is located at 110 W. College Street Florence, Alabama in the basement of City Hall. The Florence-Lauderdale EMA Staff is comprised of a Director, Deputy Director, Planner, Two Assistants, a Secretary and Records Clerk. A few administrative volunteers will also be pre-positioned with the Florence-Lauderdale County EMA staff. A call list will be utilized to ensure all required personnel are alerted and notified the day of the exercise.

Critical Task: Facilities are sufficient to support the emergency response (NUREG-0654 H.3; G.3.a; J.10.h, J.12; K.5.b; Criterion 1b1).

The Florence/Lauderdale EMA and 911 center are co-located in the basement of City Hall. All 911 calls in Lauderdale County go to the 911 center. The facility is manned 24 hours a day 7 days a week. Backup power generation is available. Numerous communication assets are available to the EOC and 911 center. The EMA also has a Field Operations Building that houses additional equipment to support an all-hazards incident, including an incident at Browns Ferry. These may be viewed the day of the exercise.

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

Lauderdale County EMA: Communications systems will be demonstrated, scenario dependant on November 4, 2015. The TVA ECNS (Emergency Communication and Notification System) is the primary means of communication. Land line phone is secondary along with EMITS, cell phones, RF UHF and VHF radio systems. Southern Lincs may be

used as an unofficial means of communication.

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

Lauderdale County EMA: Equipment, maps, displays, and dosimetry will be in place and in use on November 4th, 2015 during the exercise scenario dependant. The EMA Field Operations Building located at 702 Oak Street in Florence, Alabama houses field equipment including TLDs, dosimetry, and monitoring instruments and these units can be discussed during the Out of Sequence on October 8th, 2015 at either the Rogersville Police Department, 50 Wheeler Street, Rogersville, AL or the Field Operations Building.

Organizational Capability Target: Protective Action Decision Making

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

Lauderdale County EMA – The Florence-Lauderdale EMA will demonstrate direction and control from the Lauderdale County EOC during the exercise on November 4, 2015.

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

Lauderdale County EMA: This will be discussed during the exercise scenario dependent. Discussion of KI can be discussed during the out of sequence on October. 8, 2015.

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

Lauderdale County EMA: Coordinates only. The Alabama Department of Public Health-Office of Radiation Control is responsible for issuing the PAD's. However after a PAD is issued, the county EMA reserves the right to review and/or recommend the PAD be changed due to any mitigating circumstances (road conditions, weather conditions, etc.) Scenario dependent.

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

Lauderdale County EMA – This will be discussed during the exercise, scenario dependent

Critical Task: Radiological consequences for the ingestion pathway are assessed and

appropriate PADs are made based on the ORO planning criteria (NUREG-0654 A.3; C.1, 4; D.4; J.9, 11; Criterion 2d1).

Not required to be demonstrated.

Critical Task: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures (NUREG-0654 I.10; J.9; K.3.a; M.1; Criterion 2e1).

Not required to be demonstrated.

Organizational Capability Target: Protective Action Implementation

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

Lauderdale County EMA: Emergency worker exposure control will be discussed Out of Sequence on October. 8th, 2015 at the Rogersville PD with a member of local law enforcement (if available). Exposure control equipment will be pre-distributed for out of sequence having simulated the issuance procedures (ie: Alternate route alerters and Traffic control units) when units are instructed to discuss their areas.

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

Not Required to be demonstrated

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

Not required to be demonstrated.

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

Lauderdale County EMA: Florence-Lauderdale EMA will discuss this criterion Out of Sequence on October 8, 2015 with applicable personnel at Rogersville PD. Traffic Control and Access will be simulated the day of the exercise; scenario dependent. Local Law Enforcement from various depts. such as the Lauderdale County Sheriff's department, Lauderdale County Road Department, Alabama DPS, and Rogersville PD (if available) will

participate.

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

Lauderdale County EMA: Florence-Lauderdale EMA will discuss this criterion on November 4th, 2015 with applicable personnel in our EOC or communications room. Lauderdale County EOC Staff will participate. Actual demonstrations will not be performed.

Critical Task: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions (NUREG-0654 A.3; C.1, 4; J.11; Criterion 3e1).

Not required to be demonstrated.

Critical Task: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11; Criterion 3e2).

Not required to be demonstrated.

Critical Task: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented (NUREG-0654 E.7; J.10.j; J.12; K.5.b; M.1, 3; Criterion 3f1).

Not required to be demonstrated.

Core Capability: **Public Information and Warning**

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

Organizational Capability Target: Emergency Notification and Public Information

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

PNS coordination will be done via the ECNS and led by Madison County. Siren activation will be simulated for PNS activation by each county (scenario dependent). The BFNPP

counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of the (NWS), and simulated for this exercise.

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

Lauderdale County EMA, Rogersville PD (If available), Rogersville Volunteer Fire (If Available) will demonstrate this Out of Sequence on October 8, 2015.

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

The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of (NWS) and simulated for this exercise. (scenario dependent)

Core Capability: **Environmental Response/Health and Safety**
Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

Organizational Capability Target: Support Operations and Facilities

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

Critical Task: KI and appropriate instructions are made available in case a decision to

recommend use of KI is made. Appropriate record keeping of the administration of KI for institutionalized individuals and the general public is maintained (NUREG-0654 J.10.e, f; Criterion 3b1).

See this critical task under Operational Coordination Core Capability.

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

Not required to be demonstrated.

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

Not required to be demonstrated.

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

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

Criterion 3d2). ***See this critical task under Operational Coordination Core Capability.***
Core Capability: **Critical Transportation** Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.
Organizational Capability Target: Protective Action Implementation *Critical Task:* OROs/School officials implement protective actions for schools (NUREG-0654 CJ.10.c, d, e, g; Criterion 3c2). ***Not required to be demonstrated.***
Core Capability: **Mass Care** Provide life-sustaining services to the affected population with a focus on hydration, feeding and sheltering to those who have the most need as well as support for reunifying families.
Organizational Capability Target: Support Operations and Facilities *Critical Task:* Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities (NUREG-0654; J.10.h; J.12; Criterion 6c1). ***Not required to be demonstrated.***

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Lawrence County
2015 Browns Ferry Nuclear Power Plant Exercise
Extent-of-Play Agreement

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

Organizational Capability Target: Emergency Operations Management

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

On November 4, 2015 Lawrence County EMA Staff consisting of the EMA Director and TVA Planner will be pre-positioned at 8:00 a.m. at the Lawrence County EOC located at 555 Walnut Street Moulton, Al 35650. EOC Support Staff will also be pre-positioned at 8:30 a.m. at the Lawrence County EOC. The call out process for additional support staff will be discussed with no actual demonstration performed.

Critical Task: Facilities are sufficient to support the emergency response (NUREG-0654 H.3; G.3.a; J.10.h, J.12; K.5.b; Criterion 1b1).

On October 9, 2015 a walk thru Emergency Operations Center during the out of sequence activities.

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

Communications systems will be demonstrated, scenario dependent on November 4, 2015. The TVA ECNS is the primary means of communications. Telephones and fax machines will serve as secondary communications. Southern Linc radios will be used for unofficial communications only.

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

An adequate supply of thermo luminescent dosimeters (TLD's) and dosimetry will be available for the emergency workers. This will be discussed at the Lawrence County EOC out of sequence on October 9, 2015.

Organizational Capability Target: Protective Action Decision Making

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

Lawrence County EMA will demonstrate direction and control in the EOC scenario dependent on November 4, 2015.

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

This will be discussed during the exercise, scenario dependent on November 4, 2015.

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

Coordination only, scenario dependent.

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

This will be demonstrated by discussion at the Lawrence County EOC, scenario dependent on November 4, 2015.

Critical Task: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria (NUREG-0654 A.3; C.1, 4; D.4; J.9, 11; Criterion 2d1).

Not required to be demonstrated.

Critical Task: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures (NUREG-0654 I.10; J.9; K.3.a; M.1; Criterion 2e1).

Not required to be demonstrated.

Organizational Capability Target: Protective Action Implementation

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs

(NUREG-0654 J.10.e, K.3.a, b, K.4; Criterion 3a1).

Emergency worker exposure control will be discussed out of sequence on October 9, 2015 at the Lawrence County EOC located at 555 Walnut Street Moulton, Al 35650.

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

This criterion will not be demonstrated.

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

This criterion will not be demonstrated.

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

This criterion will not be demonstrated.

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

The Lawrence County Sheriff's Office will discuss traffic and access control during out of sequence on October 9, 2015 at the Lawrence County EOC; actual demonstrations will not be performed. Traffic Control and access control will be simulated during the November 4, 2015 exercise, (scenario dependent).

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

The Lawrence County Sheriff's Office will discuss impediments to evacuation during the out of sequence on October 9, 2015, at the Lawrence County EOC. Actual demonstrations will not be performed.

Critical Task: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions (NUREG-0654 A.3; C.1, 4; J.11; Criterion 3e1).

Not required to be demonstrated.

Critical Task: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11; Criterion 3e2).

Not required to be demonstrated.

Critical Task: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented (NUREG-0654 E.7; J.10.j; J.12; K.5.b; M.1, 3; Criterion 3f1).

Not required to be demonstrated.

Core Capability: **Public Information and Warning**

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

Organizational Capability Target: Emergency Notification and Public Information

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

PNS coordination will be done via the ECNS and led by Madison County. Siren activation will be simulated for PNS activation by each county (scenario dependent). The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of the (NWS), and simulated for this exercise.

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

Not required to be demonstrated.

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

The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of (NWS) and simulated for this exercise. (scenario dependent)

Core Capability: **Environmental Response/Health and Safety**
Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

Organizational Capability Target: Support Operations and Facilities

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

Not required to be demonstrated.

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

Not required to be demonstrated.

Core Capability: **On-Scene Security and Protection** Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.
Organizational Capability Target: Protective Action Implementation *Critical Task:* Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1). ***See this critical task under Operational Coordination Core Capability.*** *Critical Task:* OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654 J.10.e, K.3.a, b, K.4; Criterion 3a1). ***See this critical task under Operational Coordination Core Capability.*** *Critical Task:* Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1). ***See this critical task under Operational Coordination Core Capability.*** *Critical Task:* Impediments to evacuation are identified and resolved (NUREG-0654 J.10.k; Criterion 3d2). ***See this critical task under Operational Coordination Core Capability.***
Core Capability: **Critical Transportation** Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.
Organizational Capability Target: Protective Action Implementation *Critical Task:* OROs/School officials implement protective actions for schools (NUREG-0654 CJ.10.c, d, e, g; Criterion 3c2). ***Not required to be demonstrated.***
Core Capability: **Mass Care** Provide life-sustaining services to the affected population with a focus on hydration, feeding and sheltering to those who have the most need as well as support for reunifying families.
Organizational Capability Target: Support Operations and Facilities *Critical Task:* Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines.

Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities (NUREG-0654; J.10.h; J.12; Criterion 6c1).

Not required to be demonstrated.

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Limestone County
2015 Browns Ferry Nuclear Power Plant Exercise
Extent-of-Play Agreement

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

Organizational Capability Target: Emergency Operations Management

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

On November 4, 2015, EMA Staff, consisting of the EMA Director, and EM Officers, will be pre-positioned at 8:00 a.m. at the Limestone County EOC, located at 1011 W. Market St., Athens, AL. Some of the EOC Support Staff will also be pre-positioned at 8:00 a.m. at the Limestone County EOC. Additional EOC staff will be alerted, notified and mobilized according to the Browns Ferry Nuclear Plant Notification List.

Critical Task: Facilities are sufficient to support the emergency response (NUREG-0654 H.3; G.3.a; J.10.h, J.12; K.5.b; Criterion 1b1).

This will be demonstrated out of sequence on October 6, 2015 at the EOC.

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

Communications systems will be demonstrated, scenario dependent. The TVA ECNS is the primary means of communications. Telephones and fax machines will serve as secondary communications. SouthernLinc radios will be used for unofficial communications only.

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

An adequate supply of thermoluminescent dosimeters (TLDs) and dosimetry will be available for the emergency workers. This will be discussed at the Limestone County EOC out of sequence on October 6, 2015.
The supply of KI will be viewed out of sequence, at the Limestone County Health

Department, located at 20371 Clyde Mabry Dr., Athens, AL on October 6, 2015.

Organizational Capability Target: Protective Action Decision Making

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

EMA will demonstrate direction and control in the EOC, scenario dependent. The Limestone County Sheriff's Office will demonstrate direction and control at the Incident Command Post located at 1011 W. Market St. Athens, AL 35611 and at the Staging Area located at 11281 Ripley Rd Athens, AL 35611, scenario dependent.

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

This will be discussed during the exercise, scenario dependent.

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

This will be discussed during the exercise, scenario dependent.

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

This will be discussed during the exercise, scenario dependent.

Critical Task: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria (NUREG-0654 A.3; C.1, 4; D.4; J.9, 11; Criterion 2d1).

Not required to be demonstrated.

Critical Task: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures (NUREG-0654 I.10; J.9; K.3.a; M.1; Criterion 2e1).

Not required to be demonstrated.

Organizational Capability Target: Protective Action Implementation

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

Emergency workers will discuss exposure control, out of sequence, on October 6, 2015 at the EOC.

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

This will be discussed with a Health Department representative, out of sequence, at East Limestone High School on October 6, 2015.

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

Not required to be demonstrated.

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

This will be discussed with Limestone County Schools representatives, out of sequence, during the tabletop exercise on September 9, 2015.

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

The Limestone County Sheriff's Office, will discuss traffic and access control and a Rescue Squad representative will discuss river access control, during the exercise at the EOC, scenario dependant. Actual demonstration will not be performed.

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

The Limestone County Sheriff's Office, will discuss impediments to evacuation, during the exercise at the EOC, scenario dependant. Actual demonstration will not be performed.

Critical Task: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the

ingestion exposure pathway emergency planning zone for implementation of protective actions (NUREG-0654 A.3; C.1, 4; J.11; Criterion 3e1).

Not required to be demonstrated.

Critical Task: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11; Criterion 3e2).

Not required to be demonstrated.

Critical Task: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented (NUREG-0654 E.7; J.10.j; J.12; K.5.b; M.1, 3; Criterion 3f1).

Not required to be demonstrated.

Core Capability: **Public Information and Warning**

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

Organizational Capability Target: Emergency Notification and Public Information

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

PNS coordination will be done via the ECNS and led by Madison County. Siren activation will be simulated for PNS activation by each county (scenario dependent). The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of the (NWS), and simulated for this exercise.

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

Not required to be demonstrated.

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

The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of (NWS) and simulated for this exercise. (scenario dependent)

Core Capability: **Environmental Response/Health and Safety**
Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

Organizational Capability Target: Support Operations and Facilities

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

This will be discussed with a Health Department representative, out of sequence, at East Limestone High School on October 6, 2015.

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

Monitoring, decontamination and registration of evacuees will be demonstrated, out of sequence, at the Reception Center at East Limestone High School, located at 15641East

Limestone Rd. Athens, AL on October 6, 2015. Vehicle monitoring and decontamination will not be demonstrated. Protective clothing for emergency workers/evacuees will not be issued and actual decon will be simulated. Since male and female decon is mirrored only male decon will be demonstrated. Activation of Reception Centers during the exercise will be simulated, scenario dependent.

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

Not required to be demonstrated.

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

Organizational Capability Target: Protective Action Implementation

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

Organizational Capability Target: Protective Action Implementation *Critical Task:* OROs/School officials implement protective actions for schools (NUREG-0654 CJ.10.c, d, e, g; Criterion 3c2). ***Not required to be demonstrated.***
Core Capability: **Mass Care** Provide life-sustaining services to the affected population with a focus on hydration, feeding and sheltering to those who have the most need as well as support for reunifying families.
Organizational Capability Target: Support Operations and Facilities *Critical Task:* Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities (NUREG-0654; J.10.h; J.12; Criterion 6c1). ***This element will be demonstrated, out of sequence, at the Reception Center at East Limestone High School on October 6, 2015. Activation of Mass Care Shelters during the exercise will be simulated, scenario dependent.***

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Morgan County
2015 Browns Ferry Nuclear Power Plant Exercise
Extent-of-Play Agreement

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

Organizational Capability Target: Emergency Operations Management

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

The Morgan County EMA staff will be pre-positioned on November 4th, 2015 at 8:00 am, at which time normal duty hours begin. Staff consists of Director, TVA REP Planner, Operations Planner and Administrations. Some volunteers and support personnel will also be pre-positioned along with the Morgan County staff. The call-out process will be explained showing how personnel would be notified.

Critical Task: Facilities are sufficient to support the emergency response (NUREG-0654 H.3; G.3.a; J.10.h, J.12; K.5.b; Criterion 1b1).

Morgan County EMA (located in the basement of the Morgan County Courthouse, 302 Lee Street, N.E, Decatur, Alabama 35601) will demonstrate facility capabilities during the exercise, scenario dependent.

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

MCEMA will discuss the communication capabilities from the Morgan County EOC scenario dependent. Communication equipment will be utilized during the exercise, (scenario dependent). The TVA dedicated (ECNS) phone will serve as the primary means of Communications. Telephones and Fax Machines will also be utilized. Telephones will be primary means backed up by ham radio along with Southern Linc radio will be used for unofficial communication only.

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

An adequate supply of TLDs and dosimetry is available for the emergency workers. Discussed scenario dependent.
This Evaluation area will be discussed at the Morgan County EOC (Out of Sequence) on October 8th, 2015.

Organizational Capability Target: Protective Action Decision Making

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

MCEMA will demonstrate direction and control from the Morgan County EOC during the exercise, (scenario dependent).

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

Morgan County EMA has an exposure control system in place that includes KI. This will be discussed in the EOC during the exercise November 4, 2015. (scenario dependent).

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

In Accordance with the Alabama REP Plan, Pages A-2, A-3, B-1, B-10, B-16. The ORC is responsible for issuing the PADs. However, after a PAD is issued, The County EMA reserves the right to review, and/or recommend the PAD be changed due to any mitigating circumstances (road conditions, weather condition, etc.)
Coordination only (scenario dependent).

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

This will be discussed in the EOC during the exercise November 4, 2015. (scenario dependent).

Critical Task: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria (NUREG-0654 A.3; C.1, 4; D.4; J.9, 11; Criterion 2d1).

Not required to be demonstrated.

Critical Task: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures (NUREG-0654 I.10; J.9; K.3.a; M.1; Criterion 2e1).

Not required to be demonstrated.

Organizational Capability Target: Protective Action Implementation

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

This criterion will be discussed with various emergency workers in our EOC on November 4, 2015. (scenario dependent)

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

Not required to be demonstrated.

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

Not required to be demonstrated.

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

Implementation of protection actions for schools will be simulated during the exercise, (scenario dependent).
This is not scheduled for demonstration during November 4, 2015, exercise.

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

This criterion will be discussed with applicable personnel from the Decatur City Police Department in our EOC on November 4, 2015. (scenario dependent)
The need for traffic control will be simulated during the November 4, 2015 exercise (scenario dependent); no demonstration.
This criterion will be demonstrated with applicable personnel from the Morgan County

Rescue Squad (Out of Sequence) on October 8, 2015.
The river access control will be demonstrated during Out of Sequence on October 8, 2015; only a portion of the Morgan County river clearance will be demonstrated; the entire Morgan County river portion will not be cleared or demonstrated.

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

Representatives from the Decatur City Police Department will discuss applicable procedures (Out of Sequence) at the County EOC on November 4, 2105. Actual demonstrations will not be performed.

Critical Task: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions (NUREG-0654 A.3; C.1, 4; J.11; Criterion 3e1).

Not required to be demonstrated.

Critical Task: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11; Criterion 3e2).

Not required to be demonstrated.

Critical Task: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented (NUREG-0654 E.7; J.10.j; J.12; K.5.b; M.1, 3; Criterion 3f1).

Not required to be demonstrated.

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

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

PNS coordination will be done via the ECNS and led by Madison County. Siren activation will be simulated for PNS activation by each county (scenario dependent). The BFNPP counties have developed unified EAS and Special News Broadcast message and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of the (NWS), and simulated for this exercise.

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

Not required to be demonstrated.

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

The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and will designate to the (NWS) via land line phone which message to distribute. EAS message distribution will be the responsibility of (NWS) and simulated for this exercise. (scenario dependent)

Core Capability: **Environmental Response/Health and Safety**
Ensure the availability of guidance and resources to address all hazards including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

Organizational Capability Target: Support Operations and Facilities

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

Not required to be demonstrated.

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

Not required to be demonstrated.

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

Organizational Capability Target: Protective Action Implementation

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

See this critical task under Operational Coordination Core Capability.

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

Criterion 3d2). ***See this critical task under Operational Coordination Core Capability.***
Core Capability: **Critical Transportation** Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.
Organizational Capability Target: Protective Action Implementation *Critical Task:* OROs/School officials implement protective actions for schools (NUREG-0654 CJ.10.c, d, e, g; Criterion 3c2). ***Not required to be demonstrated.***
Core Capability: **Mass Care** Provide life-sustaining services to the affected population with a focus on hydration, feeding and sheltering to those who have the most need as well as support for reunifying families.
Organizational Capability Target: Support Operations and Facilities *Critical Task:* Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities (NUREG-0654; J.10.h; J.12; Criterion 6c1). ***Not required to be demonstrated.***

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Madison County
2015 Browns Ferry Nuclear Power Plant Exercise
Extent-of-Play Agreement

Core Capability: **Operational Coordination** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
Organizational Capability Target: Emergency Operations Management *Critical Task:* OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (NUREG-0654 A.1.a, e; A.3, 4; C.1, 4, 6; D.4; E.1, 2; F.1, 2 H.3, 4; Criterion 1a1). ***Madison County EMA: EMA Staff will be pre-positioned at the EOC, located 320 Fountain Circle, Huntsville, AL. A call-down list will be utilized.*** *Critical Task:* Facilities are sufficient to support the emergency response (NUREG-0654 H.3; G.3.a; J.10.h, J.12; K.5.b; Criterion 1b1). ***Madison County EMA: located 320 Fountain Circle, Huntsville, AL. will demonstrate facility capabilities during the exercise on November 4, 2015, scenario dependent.*** *Critical Task:* At least 2 communications systems are available, at least 1 operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations (NUREG-0654 F.1, 2; Criterion 1d1). ***Madison County EMA: Communications systems will be demonstrated, scenario dependent on November 4, 2015. The TVA ECNS phone is the primary means of communications. Telephones and fax machines will serve as secondary communications. Southern Linc radios may also be used for unofficial communications only.*** *Critical Task:* Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1). ***The Madison County EMA will have available equipment, maps and displays that would be necessary to support emergency operations. These will be viewed at the county EMA on November 4, 2015. Dosimetry will be viewed out of sequence on October 5, 2015 at the EOC.***
Organizational Capability Target: Protective Action Decision Making *Critical Task:* Key personnel with leadership roles for the ORO provide direction and control

to that part of the overall response effort for which they are responsible (NUREG-0654 A.1.d; A.2.a, b; A.3; C.4, 6; Criterion 1c1).

Madison County EMA: EMA will demonstrate direction and control from the EOC scenario dependent.

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

Not applicable.

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

Not applicable.

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

Not applicable.

Critical Task: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria (NUREG-0654 A.3; C.1, 4; D.4; J.9, 11; Criterion 2d1).

Not required to be demonstrated.

Critical Task: Timely post-plume phase relocation, reentry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures (NUREG-0654 I.10; J.9; K.3.a; M.1; Criterion 2e1).

Not required to be demonstrated.

Organizational Capability Target: Protective Action Implementation

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Not applicable.

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

Madison County EMA: County EMA will discuss this criterion out of sequence on October 5, 2015 with law enforcement personnel in the EOC. Actual demonstrations will not be performed.

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

Madison County EMA: County EMA will discuss this criterion out of sequence on October 5, 2015 with law enforcement personnel in the EOC. Actual demonstrations will not be performed.

Critical Task: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions (NUREG-0654 A.3; C.1, 4; J.11; Criterion 3e1).

Not required to be demonstrated.

Critical Task: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654/FEMA-REP-1, G.1, J.9, 11; Criterion 3e2).

Not required to be demonstrated.

Critical Task: Decisions regarding controlled reentry of emergency workers and relocation and return of the public during the post-emergency phase are coordinated with appropriate organizations and implemented (NUREG-0654 E.7; J.10.j; J.12; K.5.b; M.1, 3; Criterion 3f1).

Not required to be demonstrated.

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

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

PNS coordination will be done via the ECNS and led by Madison County. Siren activation will be simulated for PNS activation by each county (scenario dependent). The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designated to the NWS via landline phone which message to distribute. EAS message distribution will be the responsibility of the NWS, and simulated for this exercise.

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

Not applicable.

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

The BFNPP counties have developed unified EAS and Special News Broadcast messages and distributed to the National Weather Service Office in Huntsville (NWS). Madison County will coordinate the EAS/SNB messages with the BFNPP counties via the ECNS and designate to the NWS via landline phone which message to distribute. EAS message

distribution will be the responsibility of the NWS and simulated for this exercise. (scenario dependent)
Core Capability: **On-Scene Security and Protection** Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.
Organizational Capability Target: Protective Action Implementation *Critical Task:* Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (NUREG-0654 H.7, 10; I.7, 8, 9; J.10.a, b, e; J.11, 12; K.3.a; K.5.b; Criterion 1e1). ***See this critical task under Operational Coordination Core Capability.*** *Critical Task:* OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (NUREG-0654 J.10.e, K.3.a, b, K.4; Criterion 3a1). ***See this critical task under Operational Coordination Core Capability.*** *Critical Task:* Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (NUREG-0654 A.3; C.1, 4; J.10.g, j; Criterion 3d1). ***See this critical task under Operational Coordination Core Capability.*** *Critical Task:* Impediments to evacuation are identified and resolved (NUREG-0654 J.10.k; Criterion 3d2). ***See this critical task under Operational Coordination Core Capability.***
Core Capability: **Mass Care** Provide life-sustaining services to the affected population with a focus on hydration, feeding and sheltering to those who have the most need as well as support for reunifying families.
Organizational Capability Target: Support Operations and Facilities *Critical Task:* The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees (NUREG-0654 A.3; C.4; J.10.h; J.12; Criterion 6a1). ***Madison County EMA; The registration component of this criterion will be demonstrated by AL DHR and American Red Cross, out of sequence on October 5, 2015 at The University of Alabama in Huntsville Spragins Hall, 205 Spragins Hall in Huntsville. The use of Reception Centers will be simulated, scenario dependent, during the November 4, 2015 exercise. Monitoring and Decontamination for Evacuees and Emergency Workers is not applicable.***

Actual demonstration of decontamination will not be performed.

Critical Task: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities (NUREG-0654; J.10.h; J.12; Criterion 6c1).

Madison County EMA; This criterion will be discussed by the American Red Cross, out of sequence on October 5, 2015 at The University of Alabama in Huntsville Spragins Hall, 205 Spragins Hall in Huntsville. Appropriate shelter information will be provided to the evaluators during the interview. Use of Mass Care facilities will be simulated during the November 4, 2015 exercise.