



AFTER ACTION REPORT

Browns Ferry Nuclear Power Plant

REP Program Exercise

[FINAL]

December 7 and 8, 2011

Radiological Emergency Preparedness (REP) Program



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Administrative Handling Instructions

This After Action Report (AAR) for the 2011 Browns Ferry Nuclear Power Plant (BFNPP) Radiological Emergency Preparedness (REP), Plume and Ingestion Exposure Pathway Exercise is considered a public document.

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Executive Summary

On December 7 and 8, 2011, the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) Region IV, REP Program staff evaluated a plume and ingestion exposure pathway exercise in the 10-mile plume exposure pathway emergency planning zone (EPZ) and the 50-mile ingestion exposure pathway EPZ for the BFNPP. BFNPP is located in Limestone County, approximately 10 miles northwest of Decatur, Alabama and is operated by the Tennessee Valley Authority (TVA). The BFNPP 10-mile EPZ is divided into 19 emergency response sectors and encompasses parts of Lauderdale, Lawrence, Limestone and Morgan Counties; with a 10-mile EPZ population of approximately 46,623.

FEMA's overall objective of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency at BFNPP. This exercise was conducted in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans (RERP) and procedures. The previous federally evaluated exercise at this site was conducted on November 4, 2009. The qualifying emergency preparedness exercises were conducted on September 10, 1981 and November 4, 1987.

On April 27, 2011, storms producing catastrophic tornadoes passed through the State of Alabama. The tornadoes resulted in extensive damage in several areas of the State, including the area around BFNPP. The Alabama Emergency Management Agency (AEMA) and all of the BFNPP risk and host counties were affected by the tornadoes and activated their emergency operations centers and emergency response organizations. As part of the evaluation of capabilities during this exercise, FEMA considered the State and local response to the storms.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement and support development of corrective actions.

The objectives for the 2011 BFNPP REP Exercise were as follows:

Objective 1: Demonstrate the ability to provide Emergency Operations Center (EOC) management including Direction and Control through the Counties' and State Emergency Operations Centers (SEOC) Multi-agency Coordination Center System (MACCS).

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

Objective 3: Demonstrate the ability to implement protective actions for State and Counties' 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.

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- 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.
- Objective 7:** Demonstrate the ability to provide Dose Projection and Protective Action Decision Making.
- Objective 8:** Demonstrate the ability to calculate the projected dose for the ingestion exposure pathway.
- Objective 9:** Demonstrate the ability to make protective actions decisions for the ingestion exposure pathway.
- Objective 10:** Demonstrate the ability to identify areas requiring relocation.
- Objective 11:** Demonstrate the ability to follow decision criteria to allow re-entry into controlled areas.
- Objective 12:** Demonstrate the ability to develop return recommendations.
- Objective 13:** Demonstrate the ability to make decisions regarding assistance to individuals who are affected by the emergency.
- Objective 14:** Demonstrate the ability to coordinate decisions with other agencies.
- Objective 15:** Demonstrate the ability to ensure that information is available regarding water, food supplies, food, milk and agricultural production to implement protective actions.
- Objective 16:** Demonstrate that pre-printed materials are available.
- Objective 17:** Discuss development of appropriate strategies to implement protective actions for contaminated water, food products, milk and agricultural production.
- Objective 18:** Demonstrate the ability to implement decisions regarding relocation.
- Objective 19:** Demonstrate the ability to implement the decision regarding controlled re-entry of emergency workers and the public.
- Objective 20:** Discuss return decisions.

These objectives encompass the REP Program evaluation area criteria. All objectives were successfully demonstrated during this exercise. FEMA identified one Area Requiring Corrective Action (ARCA): inaccurate information regarding protective actions was broadcast in an EAS message by Morgan County. The county subsequently issued a corrected EAS message, resolving this ARCA during the exercise.

FEMA will provide input separately from this AAR for the State of Alabama's Improvement Plan (IP) describing strengths and areas for improvement observed during the exercise.

Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name

2011 BFNPP REP Program Evaluated Exercise

Type of Exercise

Plume and Ingestion Exposure Pathway Exercise

Exercise Out-of-Sequence Activities Dates

September 15 and 16; November 30; and December 2, 5, 6 and 10; 2011

Exercise Dates

December 7 and 8, 2011

Program

FEMA REP Program

Mission

Response

Capabilities

- Emergency Operations Center Management
- Emergency Public Information and Warning
- Citizen Evacuation and Shelter in Place
- Emergency Public Safety and Security Response
- Hazardous Materials Response and Decontamination
- Mass Care
- Public Health Laboratory Testing

Scenario Type

Radiological Emergency Preparedness, Plume and Ingestion Pathway Exposure Exercise

1.2 Participating Organizations

The following agencies, organizations and units of government participated in the 2011 BFNPP REP Exercise.

State of Alabama
Alabama Emergency Management Agency
Alabama Department of Public Health
Alabama Department of Environmental Management
Alabama Department of Human Resources
Alabama Department of Agriculture and Industries
Alabama Cooperative Extension System
Alabama Department of Public Safety

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Alabama Department of Transportation
Alabama National Guard
State of Tennessee
Tennessee Emergency Management Agency
Tennessee Department of Environment & Conservation
Risk Jurisdictions
Lauderdale County, Alabama
<ul style="list-style-type: none"> • Florence-Lauderdale Emergency Management Agency • Lauderdale County Sheriff's Office
Lawrence County, Alabama
<ul style="list-style-type: none"> • Lawrence County Emergency Management Agency • Lawrence County Sheriff's Office • Lawrence County Soil & Water Conservation District
Limestone County, Alabama
<ul style="list-style-type: none"> • Limestone County Emergency Management Agency • Limestone County Commission • Limestone County Board of Education • Athens Board of Education • Limestone County Sheriff's Office • Athens Police Department • Athens Fire and Rescue • Limestone County Emergency Medical Services • Limestone County Utilities • Limestone County Council on Aging
Morgan County, Alabama
<ul style="list-style-type: none"> • Morgan County Emergency Management Agency • Morgan County Commission • Morgan County Sheriff's Office • Decatur Police Department • Decatur Fire Department • Morgan County Schools • Decatur City Schools • Hartselle Fire Department • Hartselle Police Department • Trinity Police Department • Decatur EMS • Falkville Fire & Rescue • Brindlee Mountain Fire Department • Priceville Fire Department • Dothan-Houston County Emergency Management Agency
Host Jurisdictions
Madison County, Alabama
<ul style="list-style-type: none"> • Huntsville-Madison County Emergency Management Agency

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<ul style="list-style-type: none">• Madison Police Department• Huntsville Police Department
Ingestion Exposure Pathway Jurisdictions
Blount County Emergency Management Agency
Colbert County Emergency Management Agency
Cullman County Emergency Management Agency
Franklin County Emergency Management Agency
Marion County Emergency Management Agency
Marshall County Emergency Management Agency
Winston County Emergency Management Agency
Non-Governmental Organizations
American Red Cross
Salvation Army
Hospice of the Valley
North Alabama Regional Hospital
Decatur Ambulatory Surgery
Amateur Radio Emergency Services/Radio Amateur Civil Emergency Service
AlphaPet
Daikin America
Federal Organizations
Nuclear Regulatory Commission
Federal Emergency Management Agency
Food and Drug Administration
Department of Energy
Department of Agriculture
Centers for Disease Control and Prevention
National Weather Service
Tennessee Valley Authority

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Section 2: Exercise Design Summary

2.1 Exercise Purpose and Design

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

The results of this exercise together with review of the RERPs and procedures and verification of the periodic requirements set forth in NUREG-0654/FEMA-REP-1 through the Annual Letter of Certification and staff assistance visits enables FEMA to provide a statement with the transmission of this final AAR 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 BFNPP 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.

A REP exercise was evaluated on December 7 and 8, 2011, and included evaluations of the out-of-sequence (OOS) activities held September 15 and 16; November 30; and December 2, 5, 6, and 10; 2011.

On April 27, 2011, storms producing catastrophic tornadoes passed through the State of Alabama. The tornadoes resulted in extensive damage in several areas of the State, including the area around BFNPP. The AEMA and all of the BFNPP risk and host counties were affected by the tornadoes and activated their EOCs and emergency response organizations. As part of the evaluation of capabilities during this exercise, FEMA considered the State and local response to the storms.

2.2 Exercise Objectives and Capabilities

The following objectives for the 2011 BFNPP REP Exercise encompass the REP criteria and were agreed upon for this exercise:

Objective 1: Demonstrate the ability to provide EOC management including Direction and Control through the Counties' and SEOCs MACCS.

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

Objective 3: Demonstrate the ability to implement protective actions for State and Counties' 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 PNS/EAS System through exercise play.

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

Objective 7: Demonstrate the ability to provide Dose Projection and Protective Action Decision Making.

Objective 8: Demonstrate the ability to calculate the projected dose for the ingestion exposure pathway.

Objective 9: Demonstrate the ability to make protective actions decisions for the ingestion exposure pathway.

Objective 10: Demonstrate the ability to identify areas requiring relocation.

Objective 11: Demonstrate the ability to follow decision criteria to allow re-entry into controlled areas.

Objective 12: Demonstrate the ability to develop return recommendations.

Objective 13: Demonstrate the ability to make decisions regarding assistance to individuals who are affected by the emergency.

Objective 14: Demonstrate the ability to coordinate decisions with other agencies.

Objective 15: Demonstrate the ability to ensure that information is available regarding water, food supplies, food, milk and agricultural production to implement protective actions.

Objective 16: Demonstrate that pre-printed materials are available.

Objective 17: Discuss development of appropriate strategies to implement protective actions for contaminated water, food products, milk and agricultural production.

Objective 18: Demonstrate the ability to implement decisions regarding relocation.

Objective 19: Demonstrate the ability to implement the decision regarding controlled re-entry of emergency workers and the public.

Objective 20: Discuss return decisions.

Capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items that were derived from the Target Capabilities List (TCL). The capabilities listed below form the foundation for the organization of all FEMA Region IV REP Program objectives and observations in this exercise.

- **Emergency Operations Center Management:** Is the capability to provide multi-agency coordination for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, state, and federal EOCs; coordination public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities.
- **Emergency Public Information and Warning:** Is the capability that includes public information, alert/warning and notification. It involves developing, coordinating, and disseminating information to the public, coordinating officials, and incident management and responders across all jurisdictions and disciplines effectively under all hazard conditions.
- **Citizen Evacuation and Shelter in Place:** Is the capability to prepare for, ensure communication of, and immediately execute the safe and effective sheltering-in-place of an at-risk population (and companion animals), and/or the organized and managed evacuation of the at-risk population (and companion animals) to areas of safe refuge in response to a potentially or actually dangerous environment. In addition, this capability involves the safe reentry of the population where feasible.
- **Emergency Public Safety and Security Response:** Is the capability to reduce the impact and consequences of an incident or major event by securing the affected area, including crime/incident scene preservation issues as appropriate, safely diverting the public from hazards, providing security support to other response operations and properties, and sustaining operations from response through recovery. Public Safety and Security Response requires coordination among officials from law enforcement (LE), fire and emergency medical services (EMS).
- **Hazardous Materials Response and Decontamination:** Is the capability to assess and manage the consequences of a hazardous materials (HazMat) release,

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

- **Mass Care:** Is the capability to provide immediate shelter, feeding centers, basic first aid, bulk distribution of needed items, and related services to persons affected by a large-scale incident, including special needs populations. Special needs populations include individuals with physical or mental disabilities who require medical attention or personal care beyond basic first aid. Other special-needs populations include non-English speaking populations that may need to have information presented in other languages. The mass care capability also provides for pet care/handling through local government and appropriate animal-related organizations. Mass care is usually performed by nongovernmental organizations (NGO), such as the American Red Cross (ARC), or by local government-sponsored volunteer efforts, such as Citizen Corps. Special-needs populations are generally the responsibility of local government, with medical needs addressed by the medical community and/or its alternate care facilities. State and Federal entities also play a role in public and environmental health by ensuring safe conditions, safe food, potable water, sanitation, clean air, etc.
- **Public Health Laboratory Testing:** Is the capability to provide ongoing surveillance, rapid detection, confirmatory testing, data reporting, investigative support, and laboratory networking to address potential exposure, or known exposure, to all-hazards which include chemical, radiochemical, and biological agents in all matrices including clinical specimens, food and environmental samples, (e.g., water, air, soil). All-hazard threats include those deliberately released with criminal intent, as well as those that may be present as a result of unintentional or natural occurrences.

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 December 7 and 8, 2011 plume and ingestion exposure pathway exercise and OOS activities. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following terms:

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

3.2 Evaluation Capability Summaries

3.2.1 State of Alabama

Emergency Operations Center Management:

The AEMA successfully demonstrated EOC management capabilities at the SEOC. The SEOC staff was not prepositioned as allowed in the extent-of-play agreement (EOPA). The State Warning Point (SWP) demonstrated exceptional ability in handling their responsibilities. The SWP efficiently notified SEOC staff and the SEOC was fully activated in a timely manner and in accordance with plans and procedures. The SWP then continued to monitor communications and keep the SEOC staff updated. The Chief of Operations (CO) and staff under his guidance exercised efficient direction and control. Participation in protective action decisions (PAD) was performed as a coordinating participant, as PADs are the responsibility of the State Health Officer's representative in the State Radiological Monitoring and Assessment Center (SRMAC). Use of the State and TVA Hazard Analysts was especially effective in providing situational awareness for the staff, complimented by routine updates from the Public Information Officer (PIO).

The State conducted a concurrent all-hazards exercise that addressed additional staff objectives designed to enhance staff abilities during periods of low activity in the REP exercise. This was strategically effective and beneficial in reinforcing their ability to conduct multiple operations simultaneously; a consequence and benefit of a recent response to disastrous tornadoes that affected the area earlier in the year. The CO was very effective and capitalized on every opportunity, as conditions evolved, to explain procedures and actions taken. These teaching moments kept all staff members abreast of changing conditions and ensured they understood the scope of events, activities, and their roles in the response. Staff actions were defined and deliberate, which aided coordination with internal and external agencies.

The SEOC is technologically current, updated, and has sufficient space and equipment to support emergency response efforts. Communications were redundant and functioned throughout the exercise. Each state agency had a work area which was easily identifiable and functional for conducting its duties. Maps and status boards were visible and made vital information readily available to the staff for reference and aided in situational awareness. The SEOC staff demonstrated high competence in performing their duties and in the ability to protect the health and safety of the public in the event of an incident at BFNPP. All actions were performed in accordance with established plans and procedures.

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

Emergency Public Information and Warning:

State personnel successfully demonstrated the capability to promptly alert, notify and warn the public of an emergency at BFNPP through coordination between AEMA, the Alabama Department of Public Health (ADPH), and affected jurisdictions around BFNPP. Two Coordinated Press Releases were generated using pre-scripted messages, properly approved and disseminated in advance of the activation of the JIC. Prompt Notification System (PNS) and EAS coordination was monitored by the SEOC and SRMAC following the issuance of State Health Orders. Following activation of the JIC, the State coordinated the release of information through its representatives at that facility. Public inquiry was not observed.

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

Hazardous Materials Response and Decontamination:

This capability at the State level was demonstrated at the SRMAC and by two field monitoring teams (FMT).

In accordance with established procedures, following the declaration of Alert, the SRMAC, located in Morgan County, Alabama was fully activated. Adequate supplies and equipment necessary to support all response operations were readily available. Direction and Control of emergency management operations were the responsibility of ADPH, Office of Radiation Control (ORC), and were fulfilled in a professional, outstanding fashion.

All PADs with respect to both the 10-mile EPZ and the 50-mile EPZ were based on sound technical analyses, which included environmental field measurements, computerized dose assessment models, a thorough understanding of the simulated emergency at hand, and interactions with the utility operator's senior staff, as well as with Federal assisting organizations (U.S. Department of Energy, Food and Drug Administration, Centers for Disease Control and Prevention, and TVA).

Emergency information with respect to the implementation of the PADs was accomplished through the promulgation of appropriate State Health Orders, addressing public notifications, access restrictions, evacuations and concerns for food, water and milk in the affected areas.

During this exercise, the plume phase activities of two FMTs were conducted by interview while the post plume phase activities were demonstrated. ADPH/ORC has the primary responsibility for this capability. FMTs during the plume phase are composed of only ORC personnel. For the post-plume phase, an individual from the Milk Branch of ADPH and an individual from the Alabama Department of Agriculture and Industries (ADAI) were added to each team.

In accordance with the EOPA, FMT personnel were prepositioned. In an actual event, the teams would be mobilized by a call down tree from the ADPH duty officer. Each team had two independent communication systems; however, due to the limited scope of this demonstration, no communications with response organizations were demonstrated. The teams had appropriate equipment and supplies which had been brought from the ORC headquarters in Montgomery. The equipment and supplies were adequate for a plume phase response and for a post plume response. The ORC team members had both self-reading (SRD) and permanent-record dosimetry (PRD). Each team also had supplies of potassium iodide (KI). Team members checked the radiation detectors in accordance with their procedures and the vehicles were prepared so that potential contamination could be minimized. The team would be directed by SRMAC staff and would report plume phase results to the SRMAC staff. Team members provided detailed descriptions of the monitoring and sampling activities that they would perform to locate and then obtain particulate and iodine samples at the plume centerline. In a post plume phase response, SRMAC would again assign the teams where to sample. In this exercise, the sampling locations were determined by where local dairy operators allowed the sampling activities. Each team obtained four samples at each selected dairy. The samples consisted of a milk sample, a soils sample, an open water sample, and a vegetation sample. The Milk Branch team member actually took the milk sample and the ORC members prepared the samples for transfer to a courier for transport to a laboratory for analysis. The ADAI team member was available to issue a Stop Sale Order, if needed.

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.1, 2.b.2, 2.d.1, 2.e.1, 3.a.1, 3.b.1, 4.a.1, 4.a.2, 4.a.3, 4.b.1 and 5.b.1.

Public Health Laboratory Testing:

Alabama Department of Environmental Management (ADEM) personnel at the ADEM Laboratory in Montgomery, Alabama successfully demonstrated the ability to perform radiological analyses of milk, water, soil and vegetation samples in support of the response to an incident at BFNPP. There were sufficient qualified personnel on staff to allow 24-hour operations of the laboratory, if necessary. All personnel donned appropriate protective clothing and dosimetry and were knowledgeable of their administrative dose limits. The laboratory was equipped with two high-purity

germanium detectors capable of processing a total of between 12 and 48 samples per day. Analysis results underwent a peer review and a review by quality assurance staff before being released to ADPH for use in formulating PADs.

For this capability the following REP criteria were MET: 1.a.1, 1.d.1, 1.e.1, 3.a.1 and 4.c.1.

3.2.2 Joint Operations

3.2.2.1 Joint Information Center

Emergency Public Information and Warning:

The ability to provide emergency information and instructions to the media was successfully demonstrated at the JIC. The JIC was activated in accordance with published plans and procedures in support of BFNPP. Activation of the JIC is a joint decision between the AEMA, ADPH and TVA. The JIC is located within the Fine Arts Building on the campus of Calhoun Community College, Tanner Alabama. The JIC serves as the central coordinating location for the distribution and release of information to the media and public during an emergency at BFNPP. This facility offers ample space for the PIOs and supplemental technical staff from TVA; the State; Lauderdale, Lawrence, Limestone, and Morgan Counties; and Federal agencies to perform required duties.

Press briefings would normally be conducted in the College's auditorium. For this exercise, TVA used their mobile command trailer. This expandable semi-trailer offered suitable space to conduct the media briefings and was fully equipped with state of the art communication systems. A pooled video camera was used to provide a direct video feed back to the work rooms in the JIC. Television media could also link into this feed to telecast the media briefings back to their respective studios for broadcast to the public. The role of the mock media was played and supported by both TVA employees and a local college public relations class. The questions were well formulated and challenged the Information Manager as well as the spokespersons. Although the persistent and sometimes interrupting questioning was not expected, it was handled well by the spokespersons and added to overall success of the exercise.

There were a total of four briefings during the exercise: two formal press briefings, one technical update briefing and one special health briefing. A total of seven news releases, five Health Orders and three EAS bulletins were received and distributed in the JIC during the exercise. Some county news releases were never received in the JIC. This may have been result of problems with the fax machines or the lack of accessibility to the Emergency Management Information Tracking System (EMNETS) by the county representatives.

Media monitoring was performed by TVA staff. Local radio and television stations were monitored as well as internet social media and Really Simple Syndication (RSS) news

feeds. The public inquiry function was well managed and organized. State rumor control was divided among two separate entities at the JIC, public inquiry and media inquiry. Public inquiry accomplishes traditional rumor control functions and media inquiry only deals with inquiries from news and media outlets. The telephone numbers for these positions were published in the States new releases and mentioned in all media briefings.

For this capability the following REP criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1 and 5.b.1

3.2.3 Risk Jurisdictions

3.2.3.1 Lauderdale County

Emergency Operations Center Management:

The Florence-Lauderdale Emergency Management Agency (EMA) Director and his assigned staff successfully demonstrated effective and timely direction, control and coordination of response operations. This was demonstrated in part through validation of actions taken in response to the severe storms on April 27, 2011. Notification and mobilization of personnel to staff the EOC was simulated and the process was explained through interview and notifications made to staff members by cell phones.

Communications between Lauderdale County, the other counties in the EPZ, and SRMAC was through the use of the TVA Hotline for initial and significant status updates regarding BFNPP emergency conditions and protective actions. Additional redundant communication assets provided robust communication capabilities.

The EMA Director provided effective leadership and direction throughout the exercise. The newly assigned assistant and REP planner demonstrated clear understandings of their roles and responsibilities. There was constant communication within the EOC, outside agencies, and the county JIC liaison. Throughout the exercise, the EMA staff demonstrated their commitment to the protection of health and safety for the general public.

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, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.d.1 and 3.d.2.

Emergency Public Information and Warning:

The primary means to alert citizens is the siren system activated at the Lauderdale EOC; this system was also used in conjunction with other county sirens during response to the severe storms and tornadoes on April 27, 2011. EAS messages were developed and released in coordination with the other risk counties. The county has the capability of monitoring the EAS message encoding by the use of equipment in the 911 center adjacent to the EOC.

During the exercise, the EMA staff described utilizing backup route alerting to notify the public in event of a siren failure. Maps of routes are located in the county REP plan. Any of the routes could be easily covered within 45 minutes of notification. The county also has the capability of notifying boats operating on the waterways by the use of public address systems.

A county liaison represented Lauderdale County in the JIC and was in frequent communication with the EMA Director. If necessary, messages could be developed and released through the county or the JIC. The rumor control position was not filled during the exercise. In a real event, it would be utilized to receive public inquiries. Inquiries would be answered and logged there. If there was an inquiry of wider interest or which involved other jurisdictions, it would be referred to the JIC.

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

Hazardous Materials Response and Decontamination:

Lauderdale County EMA volunteers and staff successfully demonstrated the ability to perform radiological monitoring and decontamination of evacuees and emergency workers (EW). 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 instructions to evacuees. Workers described radiation safety briefings, appropriate protective clothing and dosimetry, reading and recording dosimeter readings on a periodic basis, and administrative dose limits. By interview, EMA volunteers and staff explained the flow of vehicles and evacuees through the Brooks High School (BHS) reception center and the Lauderdale High School (LHS) EW decontamination facility. Both facilities were well laid out, minimizing the chance for cross contamination. Public health nurses from the Lauderdale County Health Department would distribute KI, along with detailed written and verbal instructions, to EWs at LHS. EWs would be instructed not to ingest the KI until a Health Advisory was issued authorizing them to do so. Nurses would distribute KI to the public at BHS only after a Health Order was issued authorizing KI for the public.

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

Mass Care:

By interview, the ARC of Northwest Alabama successfully demonstrated the ability to provide services and accommodations for evacuees at the Florence High School shelter. ARC staff members at the Lauderdale reception center would direct evacuees to the shelter and contact Lauderdale EMA staff to assist with transportation, if necessary. Only individuals presenting a Department of Human Resources (DHR) form from 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 register on the

ARC Safe and Well web site.

For this capability the following REP criterion was MET: 6.c.1

3.2.3.2 Lawrence County

Emergency Operations Center Management:

This capability was successfully demonstrated by Lawrence County, in part through validation of actions taken in response to the severe storms and tornadoes on April 27, 2011. The EOC maintained 24-hour operations for eight days in response to the storms. Lawrence County actions included activation, notification, staffing, management, direction, control and coordination of storm response and recovery activities. The EOC also coordinated public information and warning. Lawrence County documented over 80,000 hours by volunteers assisting in the storm response and recovery.

During the exercise, alert and notification of essential personnel was made in a timely manner. Notification consisted of landline and cellular phone calls to pre-identified staff by the 911 center dispatchers. The EOC had sufficient equipment and communications for conducting operations and communicating with other State and local governments and agencies. Communications were redundant and reliable throughout this exercise as they had been during the storm response.

The Director maintained situational awareness as it pertained to the county's special populations. There are a total of ten functional needs persons within the Lawrence County portion of the 10-mile EPZ. For this exercise, staff described relocating those functional needs persons to the Lawrence Medical Center as they actually had done during the storm response. During the storm response, 60 functional needs persons within the county were transported by the county transportation department and EMS.

There are three schools located on one campus within the 10-mile EPZ. For this exercise, staff described the relocation of the campus to the Lawrence County Coliseum. During the storm response, all county schools were released early in the morning prior to tornado warnings being issued and schools were closed during the extended county power outage.

For this exercise, EOC staff described the establishment of traffic control points (TCP) following the Site Area Emergency (SAE) emergency classification level (ECL). During the storm response, TCPs were established in a manner similar to a REP response and maintained access control similar to REP reentry and return operations. The TCPs were staffed by the Lawrence County Sheriff's Office and local police departments with additional support from the Alabama National Guard. Impediments were also cleared as they would be in a REP response. During the storm response, it was realized that more heavy equipment was needed to clear storm related impediments unlike that expected during a REP response.

Staff described the opening of county shelters during the exercise. Per plan, the county

notifies the ARC at the Alert ECL and at the SAE ECL the shelters are placed on standby, opening at the General Emergency (GE) ECL or with an evacuation order. During the storm response, the ARC opened one shelter, the Moulton Community Shelter, which registered and provided accommodations for approximately 500 individuals on April 27. After the first day less than 40 individuals stayed at the shelter. For the storm response, reception center and shelter operations were conducted in accordance with REP response plans minus the radiological monitoring function.

The EMA Director and the EOC staff clearly demonstrated the ability to provide effective emergency response. The EOC staff, composed of representatives from various municipal and county agencies, clearly understood their responsibilities, followed their plans and performed their assigned duties in an exemplary manner. The Director provided outstanding direction and control throughout the exercise and demonstrated the ability to protect the health and safety of the citizens of Lawrence County.

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, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2 and 6.c.1.

Emergency Public Information and Warning:

This capability was successfully demonstrated by Lawrence County, in part through validation of actions taken in response to the severe storms and tornadoes on April 27, 2011. The EOC PIO demonstrated the capability to develop, coordinate and disseminate accurate alerts and emergency information to the media and the public by generating eight releases during this exercise. Numerous releases were generated in the same manner during the storm response by the county PIOs.

Lawrence County activated their PNS for the county after coordination with the other risk counties. Madison County, a host county, serves as the coordinator for this on the TVA Hotline. EAS messages are pre-scripted and released by the county PIO from the EOC to the county's local primary (LP-1) station. This was completed in a timely manner and without undue delay.

During the storm response, all TVA sirens within the 10-mile EPZ as well as six other county sirens were sounded seven times on April 27th with no failures. After the tornadoes cleared the area, the sirens were inoperable due to the county-wide loss of power with one TVA siren being damaged during the tornado. With the loss of sirens, the Sheriff's Office and county fire departments were placed on standby to complete public warning according to REP response plans for backup route alerting. Sheriff's Office personnel described actions for performing backup route alerting. Procedures detailing routes to be followed for specific siren failures, as well as a pre-scripted message to be broadcast are maintained in each patrol car. Officers would report to the EOC to obtain dosimetry and KI if necessary prior to performing backup route alerting.

The PIO continuously maintained contact with the PIO liaison at the JIC. They insured that any press releases were reviewed and approved prior to release. Public inquiry was

not demonstrated during this exercise. During the storm response, public inquiries were received and answered from the EOC. Call takers were volunteers and all answers to inquiries were approved by the Director or Deputy Director. Lessons learned from the storm response were the need to have one published rollover line that is released to the public. Numerous calls were received by the 911 Center, EOC and Sheriff's Office on the published phone numbers. REP plans call for one number being published for public inquiry; this REP response action would have improved storm response public inquiry.

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

3.2.3.3 Limestone County

Emergency Operations Center Management:

Limestone County EOC personnel successfully demonstrated this capability during the exercise. The ability of the county to orchestrate and sustain an emergency response to safeguard the life and property of its citizens was further amplified through the actions taken in the days and weeks following the tornado strikes throughout the county on April 27, 2011. The county's response to this event was validated through a review of news releases and duty logs, memos from responding agencies, copies of memorandum of agreement, and discussion with EMA and other agency representatives.

Although not required by the EOPA, the Emergency Management Director (EMD) recognized the opportunity the exercise provided. By fully activating the EOC during the exercise, she was able to introduce the EMA staff and support agencies to differences and similarities in managing a radiological release event at the BFNPP versus a natural disaster. Upon receiving notification of an Alert ECL at BFNPP, the EMD initiated timely actions to activate the EOC. Arriving personnel were provided position checklists to guide their actions through the escalation of the incident and provided frequent updates to maintain situational awareness.

The EMD explained that the county's ability to respond to the events of April 27th was enhanced by its participation as a risk county in the BFNPP 10-mile EPZ and the training and experience inherent in that role.

A proactive leader, the EMD coordinated with the support agencies to ensure they were initiating actions following the declaration of Alert that would enhance their responsiveness if the situation worsened and an SAE was declared. Following the SAE declaration; the agency representatives' experience and training was evident as they worked through their checklists, coordinated internally and simulated actions required to implement planned precautionary measures. Representatives described the process through which they would relocate schools and special facilities, relocate the special needs population, open reception and congregate care centers, conduct river clearance and establish traffic control.

In discussion with the EMD and representatives it was evident that this same level of

competence was present as the county initiated early release of schools, establishment of a shelter and logistical support sites in response to the aftereffects of the April 27th tornadoes. A benefit derived from the tornado response that is not achievable in REP exercises was the continued activation and coordination of recovery operations. The EMD recognized that staffing of the EOC can be tailored to ongoing activities and overall management of the situation can successfully occur through interagency meetings, conference calls and face-to-face coordination without requiring the EOC to be fully staffed.

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, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2 and 6.a.3.

Emergency Public Information and Warning:

This capability was fully demonstrated during the exercise and through a review of documentation from the events surrounding the April 27 severe storms and tornados.

Although PADs related to a deteriorating situation at BFNPP are within the realm of the State Health Officer's representative at the SRMAC, the risk counties are responsible for the activation of the PNS and the dissemination of emergency action messages and emergency information. The Limestone County PNS consists of sirens and tone-alert radios. The EAS consists of local radio and television stations. All systems can be activated from the EOC.

During the exercise, SRMAC contacted the counties over the TVA Hotline on three occasions to inform them of protective measures they were directing through the issuance of Health Orders. Following each call, Madison County coordinated the times for Limestone and the other risk counties to activate their PNS and issue EAS messages. The EMD participated in the decision calls and provided guidance to the PIO on the preparation of EAS messages. In each case PNS and EAS activation occurred within five minutes of the counties agreement of times.

This same timely notification of the public occurred on April 27th when Limestone County was faced with severe storms and tornados. PNS/EAS were activated 13 times during the period from 0440 to 1638 on April 27th. The PIO prepared short EAS messages informing the public of the situation to include road closures, storm damage and siren outages. In the aftermath, EAS messages continued to be distributed until early July to keep the public aware of recovery and restoration activities and requirements. PIO efforts to inform the public also include media briefings and the preparation and dissemination of informational flyers.

Although no siren failures were simulated during the exercise, there were power outages that rendered sirens ineffective during the storm. The Sheriff's Office maintained contact with the EOC to identify which areas were affected and dispatched patrols to those areas to alert citizens through the use of vehicle sirens and public address systems.

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

Hazardous Materials Response and Decontamination:

Limestone County EMA volunteers successfully demonstrated the ability to perform radiological monitoring and decontamination of evacuees and EWs. Each reception center worker received a thorough radiation safety briefing, wore appropriate protective clothing and dosimetry, read and recorded dosimeter readings on a periodic basis, and was familiar with administrative dose limits. Workers properly set up and used portal monitors and handheld instruments to detect radiological contamination, were knowledgeable of contamination action levels and decontamination procedures, and provided detailed information and instructions to evacuees. By interview, EMA staff described the flow of vehicles and evacuees through the West Limestone High School and Ardmore High School reception centers. Both facilities were well laid out, minimizing the chance for cross contamination.

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

3.2.3.4 Morgan County

Emergency Operations Center Management:

Morgan County EOC personnel successfully demonstrated the ability to coordinate a multiagency response to an incident at BFNPP. The EOC had sufficient equipment, displays and supplies to support the emergency response. Multiple communication systems ensured the EOC could communicate with all response agencies as well as with other affected jurisdictions. Although the EOPA would have allowed limited participation, the EOC was fully staffed by all agencies, and all EOC staff members were actively engaged in the response. The EMD frequently encouraged staff to “lean forward,” anticipating actions necessary should plant conditions degrade. The EMD also ensured that the EOC staff was aware of current activities by leading several briefings. EOC staff coordinated response actions in accordance with their plans and procedures including river clearance, early release of schools, relocation of special needs individuals and the preparation of reception centers and shelters.

This capability was also demonstrated in part through validation of actions taken in response to the severe storms and tornadoes on April 27, 2011. The EOC was partially activated following the first tornado watch and fully activated later in the day as the storms became more severe. The EOC remained operational initially for over 24 hours, and then approximately 18 hours per day for several days thereafter. Over 100 homes and some industrial buildings were damaged by tornadoes and power outages occurred over most of the county for several days.

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, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1 and 3.d.2.

Emergency Public Information and Warning:

Morgan County demonstrated the ability to alert the public and provide timely emergency information. Following the issuance of emergency health orders by ADPH, Morgan County coordinated with the other risk counties to sound sirens and provide EAS messages to the media for broadcast. Although the county released one EAS message with incorrect information, a corrected message was released shortly thereafter. The PIO in the EOC and the Morgan County representative at the JIC communicated frequently which ensured the JIC was aware of information released by the EOC and that the EOC was aware of information released by other jurisdictions.

This capability was also demonstrated in part through validation of actions taken in response to the severe storms and tornadoes on April 27, 2011. The EOC sounded warning sirens in affected areas of the county twenty times during the storms. The EMD provided information to the public through media interviews both before and after the storms passed through.

Area Requiring Corrective Action:

007-11-5b1-A1-Resolved: Emergency Public Information and Warning; Morgan County provided incorrect information to the public regarding PADs.

Condition: The ADPH issued Emergency Health Order No. 3 at 1145 ordering the evacuation of all persons from sectors A-2, B-2, F-2, G-2, F-5, G-5, F-10, G-10 and H-10 of the Browns Ferry EPZ. The SRMAC accurately informed the Morgan County EOC of the order via the TVA Hotline at 1157. At 1201, The Morgan County EOC provided an EAS message to the media for immediate broadcast. This message incorrectly stated that persons in the listed sectors should “take shelter, as a protective measure.”

Possible Cause: Morgan County has developed several pre-scripted EAS message templates for use in the event of an incident at BFNPP. It appears the PIO in the EOC inadvertently used the “take shelter” template rather than the “evacuate” template to prepare the EAS message. The EMD approved release of the EAS message without carefully reviewing it.

References:

1. Morgan County EMA Browns Ferry Standard Operating Procedure (SOP), Annex C (2/14/11)
2. NUREG-0654, E. 5.,7.
3. Morgan County EOC EEG, Emergency Public Information and Warning capability, Activity 1, Task 1.4: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.

Effect: The information released by Morgan County was in direct conflict with the information released by the other counties in their EAS messages. This would have caused confusion among the public and could have prevented some people from evacuating who were in the affected areas, adversely impacting their health. The confusion caused could also reduce the credibility of State and local governments also creating the potential to negatively impact the health and safety of the public.

Recommendation: Provide additional training to PIO staff on the use of pre-scripted EAS message templates and the importance of accurately portraying the PADs.

Consider developing joint messages with which all counties would concur and would issue under a joint masthead.

Corrective Action Demonstrated: Shortly after the issuance of the erroneous message, Morgan County developed a message that accurately reflected the PAD, received concurrence from the EMD and broadcast the corrected message over the EAS at 1221. All other EAS messages issued by Morgan County accurately reflected PADs.

For this capability the following REP criteria were MET: 5.a.1 and 5.b.1.

Hazardous Materials Response and Decontamination:

Hartselle Fire Department and Falkville Fire & Rescue personnel successfully demonstrated the ability to perform radiological monitoring and decontamination of evacuees and EWs at the Hartselle Junior High School reception center. Each reception center worker wore appropriate protective clothing and dosimetry, read and recorded dosimeter readings on a periodic basis, and was familiar with administrative dose limits. Workers properly set up and used portal monitors and handheld instruments to detect radiological contamination, were knowledgeable of contamination action levels and decontamination procedures, and provided detailed information and instructions to evacuees. The facility was well laid out, minimizing the chance for cross contamination. By interview, Morgan County Health Department personnel demonstrated the ability to distribute KI and appropriate instructions to the public at the reception center following a valid Health Order.

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

Citizen Evacuation and Shelter in Place:

Morgan County successfully demonstrated its ability to meet this capability during interviews with the principals from Leon Sheffield and Julian Harris Elementary Schools

and representatives from the Decatur City Schools administrative staff who were interviewed at the EOC. In a later interview the principals of West Morgan Elementary, Middle, and High Schools and a representative from the Morgan County School District were also interviewed. Both school systems would send representatives to the Morgan County EOC following an Alert ECL and would begin coordination of protective actions for their respective schools with other agencies. The coordination is performed by following guidance developed in a cooperative effort with the county EMA staff. Depending on the situation, schools could utilize early dismissal, shelter in place (SIP), or relocation to designated host schools. Notifications to parents or guardians are redundant by the use of telephone calls, web based systems, and news media to facilitate reunification. Students would be supervised at the host school until reunited with a parent or guardian.

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

Emergency Public Safety and Security Response:

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. A DPD representative would report to the EOC once it was activated, and DPD officers would be dispatched to the nine pre-designated TCP 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.

The ability to clear the Tennessee River of boat traffic in the event of an incident at BFNPP was successfully demonstrated through interview with Morgan County Rescue Squad (MCRS) personnel. MCRS members would be paged out by the Morgan County E911 center. MCRS would coordinate river clearance with the State Marine Police and rescue squads from other counties which can communicate by radio on a common frequency. MCRS would approach boats and read a pre-scripted message instructing them to proceed to the Decatur Boat Harbor. Once clearance was complete, MCRS would assist in maintaining a blockade of the river. MCRS members 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.a.1, 1.d.1, 1.e.1, 3.a.1, 3.b.1, 3.d.1 and 3.d.2.

Mass Care:

The ARC of Northwest Alabama successfully demonstrated the ability to provide services and accommodations for evacuees at the Sparkman Civic Center shelter. Only individuals presenting a DHR registration form from 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 register on the ARC Safe and Well web site.

For this capability the following REP criterion was MET: 6.c.1

3.2.4 Host Jurisdictions

3.2.4.1 Madison County

Emergency Operations Center Management:

This capability was successfully demonstrated by Madison County, in part through validation of actions taken in response to the severe storms and tornadoes on April 27, 2011. Madison County EOC staff was professional and fully engaged throughout the exercise. Interviews with representative from multiple organizations conducted during the BFNPP exercise revealed the same dedication and professionalism throughout the initial two week period following the tornadoes. Plans and procedures included redundancies to ensure safety and protection of the public. EOC staff kept message boards and logs updated as new information became available. Multiple communications systems were available and utilized throughout the exercise. The primary communication system utilized was the TVA Hotline, backed up by commercial telephones.

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

Emergency Public Information and Warning:

This capability was successfully demonstrated by EOC staff during the exercise by coordinating the activation of sirens and the broadcast of EAS messages by the four risk counties following notification of each ECL change at BFNPP and each health order issued by ADPH.

This capability was also successfully demonstrated by Madison County through validation of actions taken in response to the severe storms and tornadoes on April 27, 2011. While backup route alerting is not a requirement for host counties, it was a necessity during the storms. Widespread power outages in the county disabled the PNS. Police departments patrolled neighborhood to neighborhood with sirens and PA systems to warn the public of additional tornado threats in the area. Twenty-seven warnings were issued in Madison County following the devastating tornadoes. EOC staff members were equally as diligent coordinating the PNS and EAS messages with risk counties during the BFNPP exercise. All actions both real and simulated were conducted with a sense of urgency and according to plans and procedures.

For this capability the following REP criterion was MET: 5.a.1.

3.3 Evaluation Summary – Ingestion Exposure Pathway Tabletop Exercise

Emergency Operations Center Management:

The ingestion exposure pathway portion of the exercise was a modified tabletop with State and local impacted counties situated in the same room. The tabletop began with jurisdiction introductions followed by a summarized briefing of events from day one through day three. ADPH discussed the radiological plume path and the affected counties, which were Franklin, Marion, Winston, Colbert and Lawrence Counties. Lawrence County was significantly impacted within and outside the 10-mile EPZ. ADPH identified the following discussion topics in order of priority: Relocation, return, re-entry, placement of TCPs for both control of contaminated areas and crop embargoes, identification of contaminated livestock and crops, and disposal of contaminated food. Major action items were determined to be: development of a sampling plan; deployment of sampling teams; and reestablishment of local utilities, infrastructure and schools prior to evacuee return.

Limestone County and Madison County personnel efficiently coordinated their efforts with an AEMA Area Coordinator (AC) to address important questions and concerns. Limestone County is located on the north side of the Tennessee River away from the contaminated areas and received no significant amounts of radiological deposition. The county decided to plan re-entry in sectors A-2 and B-2 as their initial priority. A discussion ensued about TCPs, care and feeding of livestock, damage control and a gap analysis to determine if state resources would be required. The final decisions were to: conduct a damage assessment; conduct the gap analysis; request mutual aid through the North Alabama Mutual Aid Association (NAMAA); establish TCPs; and request the 44th Civil Support Team (National Guard) through AEMA for additional assistance. Madison County prepared to activate their backup reception center and congregate care facilities and provide mutual aid in accordance with NAMAA as requested.

AEMA provided great coordination through the AEMA ACs who were embedded within each county. The ACs reported the county decisions and requests to AEMA in a timely manner. The ACs worked closely with the county EMDs, providing State knowledge and expertise on emergency management functions. The ACs also functioned as facilitators to aid each county in focusing and aligning ingestion priorities. The AEMA SEOC played a very supportive role to the counties; planned for long term recovery; coordinated with FEMA; established situation reports; coordinated with the JIC; and determined resource allocations based of level of severity.

Tennessee Emergency Management Agency (TEMA) provided liaisons for coordination with AEMA and ADPH. The TEMA liaisons melded with AEMA and developed a plan for mutual aid (field teams) and long term recovery assistance.

Lawrence County bore the brunt of the ground deposition from the simulated radiological release from BFNPP. The Lawrence County EMD superbly coordinated with the AEMA, ADPH, Lawrence County Extension Service, Morgan County EMD and the

Federal Advisory Team for Environment, Food and Health on re-entry, return and relocation for the affected county populace. Lawrence County began by establishing county priorities: 1) developing a TCP map in conjunction with ADPH and AEMA for re-entry and embargo; 2) requesting ADPH perform detailed analysis of county areas to determine if any county areas outside the 10-mile EPZ would require relocation [sectors G10 and H10 (within the 10-mile EPZ) were previously evacuated]; 3) the county Extension Service was tasked to locate and brief if any poultry, livestock, or agricultural businesses were located within the affected sectors; and 4) preparing and disseminating appropriate public information.

The Lawrence County EMD delegated the development of the TCPs in the embargo area to the Assistant EMD and ADAI and the development of re-entry TCPs to the Lawrence County PIO and local LE. The EMD and AEMA AC concentrated on the required relocation of the population in certain areas outside the 10-mile EPZ.

ADPH provided a refined map of the 10 to 15-mile area immediately outside of sectors G10 and H10. The map was detailed enough to view numbered county roads. The Lawrence County EMD, AEMA AC and ADPH discussed viable options to notify the populace within the relocation zone. The EMDs decision was to acquire an address listing of the relocation zone from the 911 center and provide the listing to county EWs trained on backup route alerting. The EWs would be dispatched to the relocation area to physically notify each resident of the situation and ensure a clear understanding of relocation instructions.

Counties impacted by embargo orders discussed methods for implementing those orders, including the placement of control points for agricultural products. Other counties which were not impacted by the radiological deposition identified resources which they could make available to the affected counties.

Hazardous Materials Response and Decontamination:

At the close of the plume exposure pathway phase of the exercise, an Advance Party Meeting was held to discuss arrival and placement of Federal assets from the Federal Radiological Monitoring and Assessment Center (FRMAC) and Radiological Assistance Program (RAP) teams from the Savannah River Site. This meeting was attended by AEMA, ADPH, ADAI, Tennessee Department of Environment and Conservation's (TDEC) Division of Radiological Health, and Department of Energy personnel representing FRMAC and RAP. Two members of the Federal Advisory Team for Environment, Food and Health (one from the Centers for Disease Control and Prevention and one from the Food and Drug Administration) also attended. TVA presented a brief summary of events that occurred during the plume phase of the exercise that day. This included the sequence of events leading up to a GE declaration with a radiological release from the plant and also a summary of all the Health Orders issued.

After reviewing the information for day 1, AEMA and ADPH were given a dose projection map developed by TVA showing deposition data based upon the released

source term and the prevailing winds. Areas were identified to begin sampling based upon the priority of identifying areas where the public would have to be relocated from due to long term ground deposition exceeding any of the Environmental Protection Agency (EPA) Protective Action Guides (PAG) for relocation. The discussions centered on initially having nineteen possible fields teams made up of personnel from Alabama, Tennessee, FRMAC, the EPA and RAP on day 2. These teams would be utilized to sample areas downwind and outside the 10-mile EPZ to determine if additional civilian personnel would have to be moved due to excessive ground deposition. Further information was given for day 2 conditions including the first flyover map from the FRMAC Aerial Measuring System using a fixed wing airplane flying at 1,000 ft elevation to identify deposition and ground level exposure rates. This was followed by a Day 3 summary including a low level helicopter flyover to measure ground level exposure rates. At the end of the day 3 discussion, ADPH personnel were supplied ten isotopic sample results from different locations on the ground deposition map. ORC personnel utilized the sample data by inputting each isotope from the sample into a spreadsheet that calculated a conversion from picocuries per square meter into a gamma exposure rate and effective dose equivalent. The spreadsheet, one used in the accident assessment course at the FEMA Emergency Management Institute (EMI), calculated year one, year two, and 50-year doses to individuals living at that location. This allowed the sampling data to be quickly transformed into annual doses to be compared against the EPA PAGs. A division of effort between teams made for effective and timely relocation, return and re-entry decisions. Based upon the sample data that was analyzed and tabulated, an outline of an additional area for relocation outside the 10-mile EPZ was established. The team identified their priorities for the sample plan concentrating on relocation first, then return to previously evacuated zones, and then conducting agriculture sampling for decisions on embargoed milk and crops in the affected area. This demonstrated their philosophy of a “people first” attempt to control doses to the general public.

Conditions on day 4 were discussed and it was determined that the relocation of the identified area outside the 10-mile EPZ would begin after final relocation boundaries were determined. During these discussions on day 4 between ADPH, AEMA and the counties it was determined to sample areas outside the low level flyover map to verify that any contamination was below EPA PAGs. Once the samples had been analyzed in the laboratory and dose levels calculated, they would then identify areas for return of evacuees into previously evacuated sectors. Based upon sampling results it was determined that zones F-10 and H-10 could have the public return to their homes and business after verifying with the county that utilities and social services were available in those areas. They also developed a plan to start sampling in portions of evacuated zones F-5 and G-5 to establish areas where the public could return with no restrictions. A plan was developed for individuals who wanted to re-enter evacuated areas to feed livestock, recover medicines or valuables. Re-entry would be based upon individuals not exceeding an annual dose limit of 5 rem, which would be achieved by limiting individuals to 100 mrem/week. ADPH identified dosimetry requirements for re-entry and where the dosimetry would be picked up and returned. They also identified monitoring areas and decontamination facilities for personnel travelling into and out of any restricted areas.

ADPH also had good discussions and interaction with the FRMAC representative and the Advisory Team members concerning embargo of crops and sampling requirements to release previously embargoed agricultural products in nearby counties including Colbert, Marion, Franklin and Winston.

Emergency Public Information and Warning:

Public information was prepared and discussed by the TVA Public Communications Manager, ADPH Public Information Manager and AEMA Public Information Manager. During the tabletop, the above functioned as the JIC in continuance of operations from the plume phase of the exercise. The PIOs quickly acclimated themselves to the current situation and discussed priorities on public releases.

The PIOs agreed that the first priority was a news release regarding the additional relocation of Lawrence County citizens. The PIOs coordinated with Lawrence County, ADPH and AEMA regarding the specifics of this relocation. The subsequent news release was drafted by the PIOs, reviewed and approved by authorized agency representatives. All additional releases were completed in the same manner with only the approving authorities changing with each release.

News releases prepared during the tabletop were on the following subjects: Additional relocation of Lawrence County residents, embargo of agricultural products in the five county areas, and a reminder to place livestock on stored feed.

Subjects of additional types of news releases and public/media issues discussed included: return and re-entry with specific instructions; establishment of an American Nuclear Insurers claims office; summary of questions and answers from media briefs, a timeline of events; technical explanation of response; decontamination and recovery vs. condemnation and seizure for health and safety; disposal of contaminated food and agricultural products; response agency involvement; half life of I-131 explanation; schools, hospitals, and nursing home in evacuated and relocated areas; pet information.

ADPH and AEMA also supplied the following pre-printed documents: Radiological Emergency Information for Farmers, Food Processors, and Distributors; Agriculture and Nuclear Power in the Tennessee Valley; Controlled Reentry Guidelines; Hunting and Fishing Restrictions; Guidance to Minimize Exposure; Guidelines for Small Scale Farms; Precautionary Actions for Food Processors; and Bee Keeper Restrictions

The PIOs placed an emphasis on thorough and accurate press releases and on keeping those releases clear and concise. They also placed an added emphasis on conducting regular new conferences, recommending two daily media briefs by the State and TVA leadership.

During the tabletop exercise, the following REP criteria were MET: 2.d.1, 2.e.1, 3.e.1, 3.e.2, 3.f.1 and 5.b.1.

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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; the ingestion exposure pathway counties of Blount, Colbert, Cullman, Franklin, Marion, Marshall and Winston; 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.

During this exercise, FEMA identified one ARCA:

1. 007-11-5b1-A1; Emergency Public Information and Warning: Morgan County. Morgan County successfully re-demonstrated providing protective action information to the public via an EAS message during the exercise, thus, resolving this ARCA.

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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- Decatur	JIC	LAUDERDALE COUNTY	LAWRENCE COUNTY	LIMESTONE COUNTY	MORGAN COUNTY	MADISON COUNTY			
Alert	0826	0848	0841	NA	0851	0851	0851	0851	0851	0851	0851	0851
Site Area Emergency	0942	1007	0947	0958	0956	0956	0956	0956	0956	0956	0956	0956
General Emergency	1133	1148	1138	1135	1145	1145	1145	1145	1145	1145	1145	1145
Simulated Rad. Release Started	1125		1130	1158	1206	1246					1206	
Simulated Rad. Release Terminated	Ongoing		Ongoing	Ongoing	Ongoing	Ongoing					Ongoing	
Facility Declared Operational		0908	0840	1010	1003	0903	0908	0908	0908	0908	0856	0900
Declaration of State of Emergency		1007	1015	1212	1246	1010	1302					
State												
Local					1031	1020	1042				1150	
Exercise Terminated		1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Early Precautionary Actions												
1 st Protective Action Decision		1007	0950	1010	1007	1007	1007	1007	1007	1007	1007	1007
HO1 – Stay tuned												
HO2 – Restricted Access – 2 miles from NPP												
1 st PNS Activation		1013			1018	1013	1013	1013	1013	1013	1013	1013
1 st EAS Message		1013			1018	1013	1013	1013	1013	1013	1015	1013
2 nd Protective Action Decision		1157	1145	1150	1157	1157	1157	1157	1157	1157	1157	1157
HO3 – Evacuate A2, B2, F2, G2, F5, G5, F10, G10, H10												
2 nd PNS Activation		1201			1201	1201	1201	1201	1201	1201	1201/1228	1201
2 nd EAS Message		1201			1201	1201	1201/1228	1201/1221	1201/1221	1201/1221	1201/1221	1201
3 rd Protective Action Decision		1245	1220	1300	1238	1238	1238	1238	1238	1238	1238	1238
HO4 – Food testing in evacuated areas												
HO5 – Milk testing in evacuated areas												
HO6 – Water testing in evacuated areas												
3 rd PNS Activation												
3 rd EAS Message		1305					1249				1304	
KI Decision: Emergency Workers		1242	1220	1300	1238	1238	1238	1238	1238	1238	1238	1238

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Appendix B: Exercise Evaluators and Assignments

Location	Evaluation Team	Capabilities
Joint Operations		
JIC	R. Spence G. McLemore	Emergency Public Information & Warning
State of Alabama		
SEOC	O. Spencer	EOC Management Emergency Public Information & Warning
SRMAC	R. Trojanowski	HazMat Response & Decontamination
Field Teams <i>(OOS 11/30)</i>	J. Keller M. Campbell	HazMat Response & Decontamination
Radiation Laboratory <i>(OOS 12/2)</i>	J. Fill	Public Health Laboratory Testing
Lauderdale County		
EOC	J. Sandberg	EOC Management Emergency Public Information & Warning
Reception Center/EWD <i>(OOS 12/5)</i>	J. Fill J. Sandberg	HazMat Response & Decontamination
Lawrence County		
EOC	J. Ackermann	EOC Management Emergency Public Information & Warning
EWEC <i>(OOS 9/16)</i>	J. Fill	EOC Management

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Location	Evaluation Team	Capabilities
Limestone County		
EOC	W. Larrabee	EOC Management Emergency Public Information & Warning
Reception Center/EWD <i>(OOS 9/15)</i>	J. Fill J. Sandberg	HazMat Response & Decontamination
Morgan County		
EOC	J. Fill L. Lewis	EOC Management Emergency Public Information & Warning
TCP/ Waterway Warning/ Schools <i>(OOS 12/6)</i>	J. Fill J. Sandberg	Public Safety and Security Response Citizen Evacuation and Shelter in Place
Reception Center/EWD Congregate Care <i>(OOS 12/10)</i>	J. Fill J. Sandberg	HazMat Response & Decontamination Mass Care
Madison County		
EOC	L. Rink	EOC Management Emergency Public Information & Warning
Ingestion Pathway Tabletop Exercise		
IPX	K. Keyes R. Trojanowski J. Fill L. Rink J. Ackermann G. McLemore	HazMat Response & Decontamination EOC Management Emergency Public Information & Warning

Appendix C: Extent of Play Agreements

ALABAMA DEPARTMENT OF PUBLIC HEALTH, OFFICE OF RADIATION CONTROL

EVALUATION AREA: 1: EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a – Mobilization

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

EXTENT OF PLAY:

Alabama Office of Radiation Control (ORC): The ORC will simulate alerting, notifying and mobilizing emergency personnel. Personnel will be pre-positioned at the Decatur SRMAC room in Morgan County EMA Office, basement of the Morgan County Courthouse, 302 Lee Street, Decatur, AL. Personnel will also be pre-positioned at the JIC at the Calhoun Community College, U.S. Highway 31 North, Tanner, AL and the field teams will be pre-positioned at the Morgan County Health Department parking lot (for practice/training purposes only). Radiation Control will demonstrate the ability to receive notification from the licensee and verify the notification. The facilities will demonstrate activation in a timely manner, scenario dependent.

Sub-element 1.c - Direction and Control

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

EXTENT OF PLAY

ORC: Radiation Control will demonstrate direction and control from the SRMAC Room of the Morgan County Courthouse, Decatur, AL.

Sub-Element 1.d - Communications Equipment

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

EXTENT OF PLAY

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

Sub-element 1.e - Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, dosimetry, KI and other supplies are sufficient to support emergency operations. (NUREG-0654, H., J., 10a.b.c.e.f.j.k., 11, K.3.a.)

EXTENT OF PLAY

ORC: Radiation Control will have available equipment, maps and displays that would be necessary to support emergency operations at the Decatur SRMAC and JIC, scenario dependent. Dosimetry and KI will be available for field teams, as needed.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION MAKING

Sub-element 2.a - EW Exposure Control

Criterion 2.a.1: OROs use a decision making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs. (NUREG-0654, K.4.)

EXTENT OF PLAY

ORC: Radiation Control will demonstrate EW exposure control decision-making, for the State Radiological Monitoring Field Teams only.

Sub-element 2.b - Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency

Criterion 2.b.1: 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.8., 10., 11. and Supplement 3.)

EXTENT OF PLAY

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

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9., 10.m)

EXTENT OF PLAY

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

Sub-element 2.d – Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria. (NUREG-0654, I.8, J.11)

EXTENT OF PLAY

ORC: Radiation Control will demonstrate radiological assessment and the decision-making process to make PADs for the ingestion pathway. Coordination of PADs, once made, with the federal and state agencies and Browns Ferry Counties will be demonstrated through a tabletop discussion.

Sub- element 2.e – Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

Criterion 2.e.1: Timely relocation, re-entry and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the OROs.

EXTENT OF PLAY

ORC: Radiation Control will demonstrate radiological assessment and the decision-making process concerning relocation, re-entry and return. Coordination of decisions, once made, with the federal and state agencies and Browns Ferry Counties will be demonstrated through a tabletop discussion.

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

Sub-element 3.a - Implementation of EW Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to EWs in accordance with the plans and procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.)

EXTENT OF PLAY

ORC: Radiation Control will demonstrate the implementation of EW exposure control, for State Radiological Monitoring Field Teams only during out of sequence activities scheduled for Wednesday, November 30, 2011.

Sub-element 3.b - Implementation of KI Decision

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made appropriate record keeping of the administration of KI to EWs and institutionalized individuals is maintained. (NUREG-0654, E.7., J.10.e.,f.)

EXTENT OF PLAY

ORC: Radiation Control will demonstrate the implementation of KI to the State Radiological Monitoring Field Teams only during out of sequence activities scheduled for Wednesday, November 30, 2011.

EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS

Sub-element 4.a - Plume Phase Field Measurements and Analyses

Criterion 4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates. (NUREG-0654, H.10, I.8., 9., 11)

EXTENT OF PLAY

ORC: Four teams will be dispatched into the field on the day of the evaluated exercise, Wednesday, December 7, 2011. During the December 7th evaluated exercise, the field teams will be participating for practice/training purposes only, no evaluation. Field team evaluation criteria for plume phase will be conducted by interview and during out of sequence activities scheduled for Wednesday, November 30, 2011. Field teams will be pre-positioned at the Morgan County Health Department parking lot, 510 Cherry Street NE, Decatur, AL.

Criterion 4.a.2: Field measurement teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654, I.8., 11., J.10.a)

EXTENT OF PLAY

ORC: Four teams will be dispatched into the field on the day of the evaluated exercise, Wednesday, December 7, 2011. During the December 7th evaluated exercise, the field teams will be participating for practice/training purposes only, no evaluation. Field team evaluation criteria for plume phase will be conducted by interview and during out of sequence activities scheduled for Wednesday, November 30, 2011. Field teams will be pre-positioned at the Morgan County Health Department parking lot, 510 Cherry Street NE, Decatur, AL.

Criterion 4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulates samples are collected. Teams will move to an appropriate low background location to determine whether significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. (NUREG-0654, I.8., 9., 11.)

EXTENT OF PLAY

ORC: Four teams will be dispatched into the field on the day of the evaluated exercise, Wednesday, December 7, 2011. During the December 7th evaluated exercise, the field teams will be participating for practice/training purposes only, no evaluation. Field team evaluation criteria for plume phase will be conducted by interview and during out of sequence activities scheduled for Wednesday, November 30, 2011. Field teams will be pre-positioned at the Morgan County Health Department parking lot, 510 Cherry Street NE, Decatur, AL.

Sub-element 4.b – Post Plume Phase Field Measurement and Sampling

Criterion 4.b.1: The field teams 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, I.8, J.11)

EXTENT OF PLAY

ORC: Field team evaluation criteria for post plume (ingestion pathway) will be conducted during out of sequence activities scheduled for Wednesday, November 30, 2011. Two field teams will be evaluated. Field teams will be pre-positioned at the Morgan County Health Department parking lot, 510 Cherry Street NE, Decatur, AL. Since field teams had discussed contamination control during the plume phase interview, field teams will simulate booties and gloves during ingestion pathway sampling.

Sub-element 4.c – Laboratory Operations

Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support PADs. (NUREG-0654, C.3, I.8, 9..., J-11)

EXTENT OF PLAY

ORC: Laboratory operations will be demonstrated out of sequence scheduled for Friday, December 2, 2011. A courier will simulate the transport and delivery of the field samples to the laboratory for radiological analysis. One (1) box of samples will be delivered to the laboratory. ADEM Laboratory is located at 1350 Coliseum Blvd., Montgomery, AL 36110. Laboratory will demonstrate the acceptance of the samples and discuss the labs capability of performing required radiological analyses to support PADs.

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Sub-element 5.b - Emergency Information and Instructions for the Public and the Media

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

EXTENT OF PLAY

ORC: The coordination process will be demonstrated. Actual message distribution to the public and media will simulate.

EVALUATION AREA 6: SUPPORT OPERATIONS/ FACILITIES

Sub-element 6.d - Transportation and Treatment of Contaminated Injured Individuals

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

EXTENT OF PLAY

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ORC: Medical Services (MS-1) Drill will be demonstrated out of sequence scheduled for Thursday, September 8, 2011. Parties involved are Parkway Medical Center and Decatur EMS. Patient/victim will be pre-positioned at the Morgan County Health Department Parking Lot. The MS-1 Drill is scheduled to begin at 8:30 am.

ALABAMA EMA

EVALUATION AREA: 1: EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a - Mobilization

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

EXTENT OF PLAY:

AEMA staff will be pre-positioned at the SEOC, located at 5898 County Rd. 41, Clanton, AL, at the Decatur SRMAC room in Morgan County EMA Office, basement of the Morgan County Courthouse, 302 Lee Street, Decatur, AL., JIC at the Calhoun Community College, U.S. Highway 31 North, Tanner, AL and at each of the REP County EOCs.

Sub-element 1.c - Direction and Control

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

EXTENT OF PLAY

In accordance with the Alabama 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 EMCs will be coordinated through the SEOC Branch Directors.

Sub-Element 1.d - Communications Equipment

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

EXTENT OF PLAY

Communications systems will be demonstrated scenario dependent on December 7, 2011. The TVA Hotline is the primary means of communication. Telephones, E-mails EMNETS and faxes will serve as secondary communications. Southern Linc radios may also be used.

Sub-element 1.e - Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, dosimetry, KI and other supplies are sufficient to support emergency operations. (NUREG-0654, H., J., 10a.b.c.e.f.j.k.,11,K.3.a.)

EXTENT OF PLAY

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.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION MAKING

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9., 10.m)

EXTENT OF PLAY

Coordination only. The 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.

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria. (NUREG-0654, I.8, J.11)

EXTENT OF PLAY

AEMA will be demonstrating this during the table top exercise December 8th (scenario dependent).

Sub-element 2.e- Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

Criterion 2.e.1: Timely relocation, re-entry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the OROs

EXTENT OF PLAY

AEMA will demonstrate this during the table top exercise December 8th (scenario dependent).

Sub-element 3.e. - Implementation of Ingestion Pathway Decisions

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway EPZ for implementation of protective actions.

EXTENT OF PLAY

AEMA will demonstrate this during the table top exercise December 8th (scenario dependent).

Criterion 3.e.2: Appropriate measures, strategies and pre-printed instructional material are developed for implementing PADs for contaminated water, food products, milk and agricultural production.

EXTENT OF PLAY

AEMA will demonstrate this during the table top exercise December 8th (scenario dependent).

Criterion 3.f.1: Decisions regarding controlled re-entry of EWs and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG-0654, M.1, 3.)

EXTENT OF PLAY

AEMA will demonstrate the during the table top exercise December 8th (scenario dependent).

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Sub-element 5.a.1 - Activation of the Prompt Alert and Notification System

Criterion 5.a.1: 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 must include the elements required by current FEMA REP guidance. (10 CFR part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

EXTENT OF PLAY

SEOC will monitor TVA counties' coordination and PNS/EAS activation. Reference BFNPP SOG, Attachment 5 Activation of Browns Ferry PNS.

Sub-element 5.b - Emergency Information and Instructions for the Public and the Media

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

EXTENT OF PLAY

Actual message distribution to the public and media will simulated, scenario dependent. This will also be demonstrated during the table top exercise December 8th (scenario dependent).

Lauderdale County EMA

EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

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

EXTENT OF PLAY

On December 7th, 2011, EMA Staff, consisting of the EMA Director, EMA Deputy Director, EMA Planner, EMA Assistant & EMA Secretary, will be pre-positioned at 8:00 a.m. at the Lauderdale County EOC, located at 110 W. College Street, Florence, AL. Some of the EOC Support Staff will also be pre-positioned at 8:00 a.m. at the Lauderdale County EOC. Staff will provide documentation of additional EOC staff were alerted, notified and mobilized during the April 27th tornadoes. Several staff was in EOC during tornado watches and warning.

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

EXTENT OF PLAY

Lauderdale EMA will demonstrate direction and control in the EOC, scenario dependent.

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

EXTENT OF PLAY

Communications systems will be demonstrated, scenario dependent. Lauderdale County EMA uses the TVA Hotline is the primary means of communications & coordination. Land line telephones, UHF/VHF radios, Cellular phones, EMNETS, email and fax machines will serve as secondary communications. Southern Linc radios/talk groups will be used for unofficial communications only for coordination/polling.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION MAKING

Criterion 2.a.1: 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,K.4.)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependent.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9., 10.m)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependent.

Criterion 2.c.1: PADs are made, as appropriate, for special population groups. (NUREG-0654, J.9., 10.c.d.e.g)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependent.

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

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

EXTENT OF PLAY

EWs will demonstrate exposure control, out of sequence, during the week of October 24, 2011. The actual dates of demonstration will be determined.

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record-keeping of the administration of KI for EWs and institutionalized individuals is maintained. (NUREG-0654, J. 10. e)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependant.

Criterion 3.c.1: PADs are implemented for special populations other than schools within areas subject to protective actions. (NUREG-0654, J. 10. c, d, g)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependant.

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

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependant.

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

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependant.

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway EPZ for implementation of protective actions. (NUREG-0654, J.9,11)

EXTENT OF PLAY

Lauderdale County EMA or designee, will discuss implementation of protective actions, within the Ingestion Exposure Pathway, during the exercise, scenario dependant.

Criterion 3.e.2: Appropriate measures, strategies and pre-printed instructional material are developed for implementing PADs for contaminated water, food products, milk and agricultural production. NUREG-0654, J.9, 11)

EXTENT OF PLAY

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Lauderdale County EMA or designee, will discuss implementation of protective actions, within the Ingestion Exposure Pathway, during the exercise, scenario dependant.

Criterion 3.f.1: Decisions regarding controlled reentry of EWs and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG-0654, M.1.3)

EXTENT OF PLAY

Lauderdale County EMA or designee, will demonstrate the capability to implement relocation, re-entry, and return decisions.

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Criterion 5.a.1: 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 must include the elements required by current FEMA REP guidance. (10 CFR part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

EXTENT OF PLAY

Sirens will be simulated during the exercise for all PNS activations, scenario dependent. EAS message distribution will be simulated to the local EAS station, scenario dependent.

Criterion 5.b.1: OROs provide accurate 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., b., c.)

EXTENT OF PLAY

Actual messages will be developed, however, distribution to the public and media will be simulated, scenario dependent.

Following successful demonstration of the first EAS message, subsequent EAS messages will be handled using a proposed plan for testing/training purposes only. Morgan County will coordinate drafting a common EAS message for all 4 Counties. Each individual County will then simulate the transmittal of that common message.

EVALUATION AREA 6: SUPPORT OPERATIONS/ FACILITIES

Criterion 6.a.1: The reception center/EW facility appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or EWs. (NUREG-0654. J.10.h.; K.5.b)

EXTENT OF PLAY

Lauderdale County EMA will demonstrate monitoring, decontamination, and registration of evacuees and EWs during the Out of Sequence. This will take place at the Registration Center, which is BHS, located at 4300 Hwy 72, Killen, AL during the week of October 24, 2011. A specific date and time will be determined. Activation of facility is simulated for the exercise, scenario dependent but will be demonstrated out of sequence.

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of EW equipment, including vehicles. (NUREG-0654, K.5.b)

EXTENT OF PLAY

Vehicle monitoring and decontamination, will be demonstrated, out of sequence, at the EW Station which is Lauderdale County High School. The school is located at 201 Cedar Street, Rogersville, AL. Appropriate personnel will monitor, decontaminate and use appropriate signage for vehicles. This action and procedure will take place out of sequence the week of October 24, 2011. A specific date and time are to be identified and announced. Activation of facility is simulated for the exercise, scenario dependent but will be demonstrated out of sequence.

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

EXTENT OF PLAY

Lauderdale County EMA and appropriate personnel will demonstrate mass care facilities and resources for evacuees at the designated Mass Care Center which is Florence High School, located at 1201 Bradshaw Drive, Florence, AL. These procedures will take place out of sequence the week of October 24, 2011. A specific date and time are to be identified and announced. Activation of facility is simulated for the exercise, scenario dependent but will be demonstrated out of sequence.

Lawrence County EMA

EXTENT OF PLAY

BROWNS FERRY NUCLEAR POWER PLANT

December 7 & 8, 2011

EVALUATION AREA: 1: EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a- Mobilization

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

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

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On December 7, 2011 Lawrence County EMA Staff consisting of the EMA Director, Deputy 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.

Sub-element 1.b –Facilities

Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG-0654, H)

No new facilities

Sub-element 1.c-Direction and Control

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

Lawrence County EMA will demonstrate direction and control in the EOC scenario dependent on December 7, 2011.

Sub-Element 1.d- Communications Equipment

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

Communications systems will be demonstrated, scenario dependent on December 7, 2011. The TVA Hotline 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.

Sub-element 1.e- Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, dosimetry, KI and other supplies are sufficient to support emergency operations. (NUREG-0654, H., J., 10a.b.c.e.f.j.k.11,K.3.a.)

An adequate supply of thermo luminescent dosimeters (TLD) and dosimetry will be available for the EWs will be discussed at the Lawrence County EOC out of sequence on September 16, 2011.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION MAKING

Sub-element 2.a-EW Exposure Control

Criterion 2.a.1: OROs use a decision making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in

place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs. (NUREG-0654,K.4.)

This will be discussed during the exercise, scenario dependent on December 7, 2011.

Sub- element 2.b Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency

Criterion 2.b.1: 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.8., 10., 11. and Supplement 3.)

N/A

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9., 10.m)

Coordination only, scenario dependent

Sub-element 2.c-PADs Consideration for the Protection of Special Populations

Criterion 2.c.1: PADs are made, as appropriate, for special population groups. (NUREG-0654, J.9., 10.c.d.e.g)

This will be demonstrated by discussion at the Lawrence County EOC, scenario dependant on December 7, 2011.

Sub-element 2.d-Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria. (NUREG-0654, I.8, J.11)

This will be demonstrated by discussion scenario dependant on December 8, 2011.

Sub-element 2.e- Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

Criterion 2.e.1: Timely relocation, re-entry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the OROs

This will be demonstrated by discussion scenario dependant on December 8, 2011.

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

Sub-element 3.a- Implementation of EW Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to EWs in accordance with the plans and procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.)

EWs will demonstrate exposure control out of sequence on September 16, 2011 at the Lawrence County EOC located at 555 Walnut Street Moulton, AL 35650.

Sub-element 3.b- Implementation of KI Decision

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made appropriate record keeping of the administration of KI to EWs and institutionalized individuals is maintained. (NUREG-0654, E.7., J.10.e.,f.)

This criterion will not be demonstrated. Will be discussed during the December 7, 2011 exercise, (scenario dependent).

Sub-element 3.c.1- Implementation of Protective Actions for Special Populations

Criterion 3.c.1: PADs are implemented for special populations other than schools within areas subject to protective actions. (NUREG-0654, E.7. J.9. 10.c.d.e.g.)

This criterion will not be demonstrated. Will be discussed during the December 7, 2011 exercise, (scenario dependent).

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

This criterion will not be demonstrated. Will be discussed during the December 7, 2011 exercise, (scenario dependent).

Sub-element 3.d- Implementation of Traffic and Access Control

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

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

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

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

Sub-element 3.e. - Implementation of Ingestion Pathway Decisions

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway EPZ for implementation of protective actions.

This will be demonstrated by discussion scenario dependant on December 7, 2011.

Criterion 3.e.2: Appropriate measures, strategies and per-printed instructional material are developed for implementing PADs for contaminated water, food products, milk and agricultural production.

This will be demonstrated by discussion, scenario dependant on December 8, 2011.

Sub-element 3.f. - Implementation of Relocation, Re-entry and Return Decisions

Criterion 3.f.1: Decisions regarding controlled re-entry of EWs and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG-0654, M.1, 3.)

This will be demonstrated by discussion, scenario dependant on December 8, 2011.

EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS

Sub-element 4.a- Plume Phase Field Measurements and Analyses

Criterion 4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates. (NUREG-0654, H.10, I.8., 9., 11)

N/A

Criterion 4.a.2: Field measurement teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654, I.8. 11. J.10.a)

N/A

Criterion 4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulates samples are collected. Teams will move to an appropriate low background location to determine whether significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. (NUREG-0654, I.8., 9., 11.)

N/A

Sub-element 4.b-Post Plume Phase Field Measurement and Sampling

Criterion 4.b.1: The field teams 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, I.8. J.11.)

N/A

Sub-element 4.c-Laboratory Operations

Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support PADs. (NUREG-0654, C.3., I.8., 9.,J.11)

N/A

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Sub-element 5.a- Activation of the Prompt Alert and Notification System

Criterion 5.a.1: 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 must include the elements required by current FEMA REP guidance. (10 CFR part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

Siren activation will be simulated during the exercise for all PNS activations on December 7, 2011 scenario dependent.

EAS message distribution will be simulated to the local EAS stations scenario dependent.

Sub- element 5.a.2-RESERVED

Sub-element 5.a.3 Activation of the Prompt Alert and Notification System Backup Alert and Notification

Criterion 5.a.3: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system. (NUREG-0654, E.6., Appendix 3.b.2.c)

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

Sub-element 5.b.1- Emergency Information and Instructions for the Public and the Media

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

Actual message will be developed, however distribution to the public and media will be simulated scenario dependent on December 7, 2011.

Following successful demonstration of the first EAS message, subsequent EAS messages will be handled using a proposed plan for testing/training purposes only. Morgan County will coordinate drafting a common EAS message for all 4 Counties. Each individual County will then simulate the transmittal of that common message.

EVALUATION AREA 6: SUPPORT OPERATIONS/ FACILITIES

Sub-element 6.a- Monitoring and Decontamination of Evacuees and EWs, and Registration of Evacuees

Criterion 6.a.1: The reception center/EW facility appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or EWs. (NUREG-0654. J.10.h.; K.5.b)

This criterion will not be demonstrated. Will be discussed during the December 7, 2011 exercise, (scenario dependent).

Sub-element 6.b- Monitoring and Decontamination of EW Equipment

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of EW equipment including vehicles. (NUREG-0654, K.5.b)

This criterion will not be demonstrated. Will be discussed during the December 7, 2011 exercise, (scenario dependent).

Sub-element 6.c- Temporary Care of Evacuees

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

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

Sub-element 6.d-Transportation and Treatment of Contaminated injured Individuals

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

N/A

Limestone County EMA

EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

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

EXTENT OF PLAY

On December 7th, 2011, 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. Staff will show documentation that additional EOC staff were alerted, notified and mobilized during the April 27th tornadoes.

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

EXTENT OF PLAY

EMA will demonstrate direction and control in the EOC, scenario dependent.

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

EXTENT OF PLAY

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

Criterion 1.e.1: Equipment, maps, displays, dosimetry, KI and other supplies are sufficient to support emergency operations. (NUREG-0654, H., J., 10a.b.c.e.f.j.k.,11,K.3.a.)

EXTENT OF PLAY

An adequate supply of thermoluminescent dosimeters (TLDs) and dosimetry will be available for the EWs. This will be discussed at the Limestone County EOC out of sequence on September 15th, 2011.

The supply of K.I. will be discussed out of sequence, at the Limestone County Health Department, located at 20371 Clyde Mabry Dr., Athens, AL on July 13th, 2011.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION MAKING

Criterion 2.a.1: 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,K.4.)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependent.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9., 10.m)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependent.

Criterion 2.c.1: PADs are made, as appropriate, for special population groups. (NUREG-0654, J.9., 10.c.d.e.g)

EXTENT OF PLAY

Staff will show documentation that this was accomplished during the April 27th tornadoes.

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

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

EXTENT OF PLAY

EWs will demonstrate exposure control, out of sequence, on September 15th, 2011 at the EOC.

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record-keeping of the administration of KI for EWs and institutionalized individuals is maintained. (NUREG-0654, J. 10. e)

EXTENT OF PLAY

This will be discussed during the exercise, scenario dependant.

Criterion 3.c.1: PADs are implemented for special populations other than schools within areas subject to protective actions. (NUREG-0654, J. 10. c, d, g)

EXTENT OF PLAY

Staff will show documentation that this was accomplished during the April 27th tornadoes.

Criterion 3.c.2: OROs/School officials decide to implement protective actions for schools. (NUREG-0654, J.10.C, D, G)

EXTENT OF PLAY

Staff will show documentation that this was accomplished during the April 27th tornadoes.

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

EXTENT OF PLAY

Staff will show documentation that this was accomplished during the April 27th tornadoes.

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

EXTENT OF PLAY

Staff will show documentation that this was accomplished during the April 27th tornadoes.

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway EPZ for implementation of protective actions. (NUREG-0654, J.9,11)

EXTENT OF PLAY

A Limestone County Representative, will discuss implementation of protective actions, within the Ingestion Exposure Pathway, during the exercise, scenario dependant.

Criterion 3.e.2: Appropriate measures, strategies and pre-printed instructional material are developed for implementing PADs for contaminated water, food products, milk and agricultural production. NUREG-0654, J.9, 11)

EXTENT OF PLAY

A Limestone County Representative, will discuss implementation of protective actions, within the Ingestion Exposure Pathway, during the exercise, scenario dependant.

Criterion 3.f.1: Decisions regarding controlled reentry of EWs and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG-0654, M.1.3)

EXTENT OF PLAY

Limestone County Representatives, will demonstrate the capability to implement relocation, re-entry, and return decisions.

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Criterion 5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency

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officials to notify the public of an emergency situation. The initial instructional message must include the elements required by current FEMA REP guidance. (10 CFR part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

EXTENT OF PLAY

Sirens will be simulated during the exercise for all PNS activations, scenario dependent. EAS message distribution will be simulated to the local EAS station, scenario dependent.

Criterion 5.b.1: OROs provide accurate 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., b., c.)

EXTENT OF PLAY

Actual messages will be developed, however, distribution to the public and media will be simulated, scenario dependent.

EVALUATION AREA 6: SUPPORT OPERATIONS/ FACILITIES

Criterion 6.a.1: The reception center/EW facility appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or EWs. (NUREG-0654. J.10.h.; K.5.b)

EXTENT OF PLAY

Monitoring, will be demonstrated, out of sequence, at the EOC, located at 1011 W. Market St. Athens, AL 35611 on September 15th, 2011. Activation of Reception Centers during the exercise will be simulated, scenario dependent.

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of EW equipment, including vehicles. (NUREG-0654, K.5.b)

EXTENT OF PLAY

Vehicle monitoring, will be demonstrated, out of sequence, at the EOC located at 1011 W. Market St. Athens, AL 35611 on September 15th, 2011.

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

EXTENT OF PLAY

Staff will show documentation that this was accomplished during the April 27th tornadoes.

MORGAN COUNTY EMA

EVALUATION AREA 1 – EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a- Mobilization

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

EXTENT OF PLAY

The Morgan County EMA (MCEMA) staff will be pre-positioned at 8:00 am, at the Morgan County EOC. The EOC is located in the basement of the Morgan County Courthouse (302 Lee Street Decatur, Alabama. The EMA staff consists of Director, Admin Assistant, TVA Planner and EMA Planner. Some administrative volunteer support personnel will also be pre-positioned along with the EMA staff. The call-out process will be explained showing how personnel would be notified. Some call outs may be made as required. This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

Sub-element 1.b –Facilities

Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG-0654, H)

EXTENT OF PLAY

Since no major changes have occurred, this criterion will not be demonstrated.

Sub-element 1.c-Direction and Control

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

EXTENT OF PLAY

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

Sub-Element 1.d- Communications Equipment

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

EXTENT OF PLAY

Communications will be demonstrated scenario dependent. The TVA dedicated phone will serve as the primary means of communications. Telephones, Automation Systems and FAX machines will serve as secondary communications. SouthernLinc radios will be used for unofficial communications only.

Sub-element 1.e- Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, dosimetry, KI and other supplies are sufficient to support emergency operations. (NUREG-0654, H., J., 10a.b.c.e.f.j.k.,11,K.3.a.)

EXTENT OF PLAY

An adequate supply of thermoluminescent dosimeters (TLDs) and dosimetry are available for the EWs.

This evaluation area will be discussed out of sequence at the Morgan County EOC (Out of Sequence) on December 6th , 2011

No other events will be demonstrated during the December 7th exercise that will require the use of personnel monitoring devices.

EVALUATION AREA 2: PROTECTIVE ACTION DECISION MAKING

Sub-element 2.a-EW Exposure Control

Criterion 2.a.1: OROs use a decision making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for EWs including provisions to authorize radiation exposure in excess of administrative limits or PAGs. (NUREG-0654,K.4.)

EXTENT OF PLAY

Morgan County EMA has an exposure control system in place to include KI. This will be discussed (Out of Sequence) on Sept 9th, 2011.

The issuance of KI will be simulated during the Dec 7th, 2011 exercise (scenario dependent).

Sub- element 2.b Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9., 10.m)

EXTENT OF PLAY

Coordination only, scenario dependant.

Sub-element 2.c-PADs Consideration for the Protection of Special Populations

Criterion 2.c.1: PADs are made, as appropriate, for special population groups. (NUREG-0654, J.9., 10.c.d.e.g)

EXTENT OF PLAY

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This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011.

Sub-element 2.d-Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate PADs are made based on the ORO planning criteria. (NUREG-0654, I.8, J.11)

EXTENT OF PLAY

This will be demonstrated during the table top exercise Dec 8th,2011 (scenario dependent).

Sub-element 2.e- Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

Criterion 2.e.1: Timely relocation, re-entry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the OROs

EXTENT OF PLAY

This will be demonstrated during the table top exercise Dec 8th, 2011 (scenario dependent).

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

Sub-element 3.a- Implementation of EW Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to EWs in accordance with the plans and procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.)

EXTENT OF PLAY

EW exposure control will be discussed, (Out of Sequence), the morning of December 6th, 2011 at the Morgan County EOC at the Hartselle reception center at Hartselle Jr. High School. (Traffic control and river Access control at EOC on Dec 6th 2011; personnel monitoring and decontamination, vehicle decontamination at Hartselle reception center on Dec 10th 2011)

Sub-element 3.b- Implementation of KI Decision

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made appropriate record keeping of the administration of KI to EWs and institutionalized individuals is maintained. (NUREG-0654, E.7., J.10.e.,f.)

EXTENT OF PLAY

A representative from the Morgan County Health Department will discuss (Out of Sequence) issuance of K Sept 9th 2011. The distribution of KI will be simulated during the Dec 7th exercise, (scenario dependent).

Sub-element 3.c.1- Implementation of Protective Actions for Special Populations

Criterion 3.c.1: PADs are implemented for special populations other than schools within areas subject to protective actions. (NUREG-0654, E.7. J.9. 10.c.d.e.g.)

EXTENT OF PLAY

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011

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

EXTENT OF PLAY

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011
Implementation of protective actions for schools will be simulated during the December 7th , 2011 exercise, (scenario dependent).

Sub-element 3.d- Implementation of Traffic and Access Control

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

EXTENT OF PLAY

Representatives from the Decatur City Police Department will discuss (Out of Sequence) applicable procedures at the County EOC at 8:00 am on Dec 6th 2011, . Actual demonstrations will not be performed.
This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011

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

EXTENT OF PLAY

Representatives from the Decatur City Police Department will discuss (Out of Sequence) applicable procedures at the County EOC at 8:00 am on Dec 6th 2011. Actual demonstrations will not be performed.

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011

Sub-element 3.e. - Implementation of Ingestion Pathway Decisions

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Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway EPZ for implementation of protective actions.

EXTENT OF PLAY

This will be demonstrated during the table top exercise Dec 8th (scenario dependent).

Criterion 3.e.2: Appropriate measures, strategies and pre-printed instructional material are developed for implementing PADs for contaminated water, food products, milk and agricultural production.

EXTENT OF PLAY

This will be demonstrated during the table top exercise Dec 8th 2011 (scenario dependent).

Sub-element 3.f. - Implementation of Relocation, Re-entry and Return Decisions

Criterion 3.f.1: Decisions regarding controlled re-entry of EWs and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG-0654, M.1, 3.)

EXTENT OF PLAY

This will be demonstrating during the table top exercise Dec 8th (scenario dependent).

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Sub-element 5.a- Activation of the Prompt Alert and Notification System

Criterion 5.a.1: 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 must include the elements required by current FEMA REP guidance. (10 CFR part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

EXTENT OF PLAY

Sirens will be simulated for all PNS activations (scenario dependent). An initial message will be faxed to a local EAS station (WZYP) for simulated broadcast. The transfer of any subsequent messages offsite will be simulated.

Sub-element 5.a.3 Activation of the Prompt Alert and Notification System Backup Alert and Notification

Criterion 5.a.3: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system. (NUREG-0654, E.6., Appendix 3.b.2.c)

EXTENT OF PLAY

This criterion will be discussed (Out of Sequence) as part of the 1.d.1 with members of the Morgan Co. EMA on Dec 6th, 2011. Backup route alerting will not be demonstrated during the exercise or OOS this year.

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

EXTENT OF PLAY

Message development will be demonstrated at the EOC. Morgan County will compose and simulate transmittal of their initial EAS message in accordance with their plan. Actual message distribution to the public and media will be simulated during the December 7th, 2011 exercise (scenario dependent).

EVALUATION AREA 6: SUPPORT OPERATIONS/ FACILITIES

Sub-element 6.a- Monitoring and Decontamination of Evacuees and EWs, and Registration of Evacuees

Criterion 6.a.1: The reception center/EW facility appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or EWs. (NUREG-0654. J.10.h.; K.5.b)

EXTENT OF PLAY

The Hartselle Reception Center will be set up (Out of Sequence) at 5:30 pm Dec 10th, 2011 at the Hartselle Jr. High School.

Use of reception centers will be simulated during the Dec 7th 2011 exercise, (scenario dependent).

Sub-element 6.b- Monitoring and Decontamination of EW Equipment

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles. (NUREG-0654, K.5.b)

EXTENT OF PLAY

This criterion will be demonstrated (Out of Sequence) at Hartselle Jr. High School at 5:30 pm on Dec 10th, 2011.

Sub-element 6.c- Temporary Care of Evacuees

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with ARC planning guidelines (found in MASS CARE-Preparation Operations, ARC 3031). Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been

decontaminated as appropriate prior to entering congregate care facilities. (NUREG-0654, J.10.h., 12.)

EXTENT OF PLAY

This criterion will be discussed (Out of Sequence) with Morgan County Red Cross representative(s) on Dec 10, 2011. A walk through of their facility in the Hartselle area will be provided. Use of congregate care facilities will be simulated during the Dec 7th 2011 exercise, (scenario dependent).

This criterion may be demonstrated in part through discussion and validation of the response to the severe weather and tornadoes on April 27, 2011

MADISON COUNTY EMA

EVALUATION AREA: 1: EMERGENCY OPERATIONS MANAGEMENT

Sub-element 1.a – Mobilization

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

EXTENT OF PLAY:

Madison County EMA: On December 7, 2011 EMA Staff will be pre-positioned at the EOC, located 320 Fountain Circle, Huntsville, AL. A call-down list will be utilized. Staff will show documentation that additional EOC staff were alerted, notified and mobilized during the April 27, 2011 tornadoes.

Sub-element 1.c - Direction and Control

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

EXTENT OF PLAY

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

Sub-Element 1.d - Communications Equipment

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

EXTENT OF PLAY

Madison County EMA: Communications systems will be demonstrated, scenario dependent on December 7, 2011. The TVA Hotline is the primary means of communications. Telephones and

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fax machines will serve as secondary communications. Southern Linc radios may also be used for unofficial communications only.

Sub-element 1.e - Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, dosimetry, KI and other supplies are sufficient to support emergency operations. (NUREG-0654, H., J., 10a.b.c.e.f.j.k.,11,K.3.a.)

EXTENT OF PLAY

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 out of sequence on December 7, 2011. Dosimetry will be viewed out of sequence on December 7, 2011 at the EOC.

EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION

Sub-element 3.d - Implementation of Traffic and Access Control

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

EXTENT OF PLAY

Madison County EMA: Staff will discuss or show documentation that this was accomplished during the April 27, 2011 tornadoes. Implementation of traffic and access control will be simulated.

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

EXTENT OF PLAY

Madison County EMA: Staff will discuss or show documentation that this was accomplished during the April 27, 2011 tornadoes. Actual demonstrations will not be performed.

EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

Sub-element 5.a.1 - Activation of the Prompt Alert and Notification System

Criterion 5.a.1: 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 must include the elements required by current FEMA REP guidance. (10 CFR part 50, Appendix E & NUREG-0654, E.1., 4., 5., 6., 7.)

EXTENT OF PLAY

Madison County EMA: Madison County EMA will coordinate on December 7, 2011 as necessary, scenario dependant.

EVALUATION AREA 6: SUPPORT OPERATIONS/ FACILITIES

Sub-element 6.a - Monitoring and Decontamination of Evacuees and EWs, and Registration of Evacuees

Criterion 6.a.1: The reception center/EW facility appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or EWs. (NUREG-0654. J.10.h.; K.5.b)

EXTENT OF PLAY

Madison County EMA; Staff will show documentation that the registration component of this criterion will be demonstrated by AL DHR and ARC was accomplished during the April 27, 2011 tornadoes. Out of sequence, on December 7, 2011, the Dr. Richard Showers, Sr., Recreation Center at 4600 Blue Spring Road in Huntsville will be available for FEMA review. The use of Reception Centers will be simulated, scenario dependent, during the December 7, 2011 exercise. Monitoring and Decontamination for Evacuees and EWs is not applicable.

Sub-element 6.c - Temporary Care of Evacuees

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

EXTENT OF PLAY

Madison County EMA; Staff will show documentation that this was accomplished during the April 27, 2011 tornadoes. Use of Mass Care facilities will be simulated during the December 7, 2011 exercise.

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Appendix D: Scenario

Scenario Summary

The following is an approximate scenario timeline for this exercise which was for evaluator reference only.

Plant Time	Drill Time	Event
08:00	00:00	Start
08:05	00:05	An acetylene bottle leak reported in the __ area by plant workers.
08:20	00:20	Fire Ops report concentrations at or above 25% of the Lower Explosive Limit (LEL) for any three readings obtained in a 10ft. triangular area. Conditions exist for a ALERT based on EAL 6.6A.
09:15	01 :15	The selected control Rod (30-31) center rod in the U-2 reactor drifts out while it is being withdrawn (collet fingers not engaging). The rod is individually scrammed in and reset. Operators will scram the reactor when unable to prevent it from drifting out. Enough fuel clad fails to result in RCS DEI 131 > 300 uCi/gm. The accident monitors in the U-2 Drywell alarm.
~09:25	~01:25	The reactor is scrammed two other control rods 26-31 and 30-27 are stuck at 48, and one control rod 26-27 is stuck at 24. The rod that had drifted out inserts on the scram but then drifts out again.
~09:27	~01:27	The RWCU inboard isolation valve, 2-FCV-69-1 does not close when required due to an electrical fault outside of containment. If operations attempts to manually close 2-FCV-69-2, it will not close due to a mechanical problem. Conditions exist for a SAE based on EAL 2.3-S2 (Drywell radiation levels at or above the values listed in Table 2.3-A/2.3-S2, with the RCS barrier intact inside primary containment and indications of loss of Primary Containment due to the inability to isolate the RWCU line)
10:57	02:57	The RWCU line develops a leak outside containment just downstream of 2-FCV-69-2 in the RWCU HX room
11:35	03:35	Conditions exist for a GE based on EAL 3.2-G (An unisolable Primary System is discharging into Secondary Containment AND Any area radiation level at or above the Maximum Safe Operating Area radiation limit listed in Table 3.2. [2-RE-90-14 = 1000mR/hr] AND Any indication of potential or significant fuel cladding failure exists. Refer to Table 3.1-G/3.2-G with RCS Barrier intact inside Primary Containment. [2-RE-90-272A = 642 R/hr; 2-RE-90-273A = 297 R/hr]).
14:00	06:00	Exercise Terminated

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Appendix E: Schedule of Corrective Actions

Capability	Area for Improvement	Recommendation	Corrective Action Description	Primary Responsible Agency	Agency POC	Start / Completion Date
Emergency Public Information & Warning	Provide correct PAD information in EAS messages	<p>Provide additional training to PIO staff on the use of pre-scripted EAS message templates and the importance of accurately portraying PADs.</p> <p>Consider developing joint messages that all counties concur with and issued under a joint masthead by all counties</p>	<p>Shortly after the issuance of the erroneous message Morgan County EOC staff developed a message that accurately reflected the PAD, received concurrence from the EMD and broadcast the corrected message.</p>	Morgan County EMA	EMD	Successfully re-demonstrated during exercise on December 7, 2011.

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Appendix F: Acronyms

Acronym	Meaning
AAC	After Action Conference
AAR	After Action Report
AC	Area Coordinator
ADAI	Alabama Department of Agriculture and Industries
ADEM	Alabama Department of Environmental Management
ADPH	Alabama Department of Public Health
AEMA	Alabama Emergency Management Agency
ARC	American Red Cross
ARCA	Area Requiring Corrective Action
ARES	Amateur Radio Emergency Services
BFNPP	Browns Ferry Nuclear Power Plant
BHS	Brooks High School
CFR	Code of Federal Regulations
CO	Chief of Operations
DHS	Department of Homeland Security
DOT	Department of Transportation
DPD	Decatur Police Department
DRD	Direct Reading Dosimeter
DRH	Department of Human Resources
EAL	Emergency Action Level
EAS	Emergency Alert System
ECL	Emergency Classification Level
EEG	Exercise Evaluation Guide
EMA	Emergency Management Agency
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EOPA	Extent of Play Agreement
EMD	Emergency Management Director
EMI	Emergency Management Institute
EMNETS	Emergency Management Information Tracking System
EPA	Environmental Protection Agency
EPZ	Emergency Planning Zone
ESF	Emergency Support Function
EW	Emergency Worker
EWD	Emergency Worker Decontamination
EWEC	Emergency Worker Exposure Control
FEMA	Federal Emergency Management Agency
FMT	Field Monitoring Team

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Acronym	Meaning
FOUO	For Official Use Only
FRMAC	Federal Radiological Monitoring and Assessment Center
GE	General Emergency
HAZMAT	Hazardous Materials
HSEEP	Homeland Security Exercise and Evaluation Program
HQ	Headquarters
IC	Incident Commander
IP	Improvement Plan
IPZ	Ingestion Pathway Zone
JIC	Joint Information Center
KI	Potassium Iodide
LHS	Lauderdale High School
LP-1	Local Primary-1
MACCS	Multi-agency Coordination Center System
MCRS	Morgan County Rescue Squad
MOU	Memorandum of Understanding
mR	milliroentgen
mR/h	milliroentgen per hour
NAMAA	North Alabama Mutual Aid Association
NGO	Non-Governmental Organization
NOUE	Notification of Unusual Event
NRC	Nuclear Regulatory Commission
NWS	National Weather Service
OOS	Out-of-Sequence
ORC	Office of Radiation Control
ORO	Offsite Response Organization
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
PIO	Public Information Officer
PNS	Prompt Notification System
PPE	Personal Protective Equipment
PRD	Permanent Record Dosimetry
R	Roentgen
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Service
RAP	Radiological Assistance Program
REM	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
R/h	Roentgen(s) per hour

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Acronym	Meaning
RO	Radiological Officer
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
SIP	Shelter-in-Place
SOG	Standard Operating Guide
SOP	Standard Operating Procedure
SRD	Self-Reading Dosimeter
SRMAC	State Radiological Monitoring and Assessment Center
SWP	State Warning Point
TCL	Target Capabilities List
TCP	Traffic Control Point
TDEC	Tennessee Department of Environment and Conservation
TEMA	Tennessee Emergency Management Agency
TLD	Thermoluminescent dosimeter
TVA	Tennessee Valley Authority
UTL	Universal Task List
VFD	Volunteer Fire Department

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