

INTERIM FINDING REPORT for REASONABLE ASSURANCE

**On the Adequacy of the Offsite
Radiological Emergency Response Planning
for the
Bellefonte Nuclear Plant, Units 3 and 4
Hollywood, Alabama**

December 7, 2009

Prepared by the
U.S. Department of Homeland Security
Federal Emergency Management Agency
National Preparedness Division
Technological Hazards Division

Region IV

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Executive Summary

On November 19, 2007, FEMA received a Combined License (COL) application from Tennessee Valley Authority (TVA) to construct two new reactors, Units 3 and 4, at the proposed Bellefonte Nuclear Plant located in Jackson County, Alabama, approximately 7 miles northeast of Scottsboro. Part 5 of the COL application contained the proposed Bellefonte Nuclear Plant (BNP) Combined License Application Emergency Plan. The review of the materials provided with the BNP application resulted in findings for all the 16 Planning Standards. All Planning Standards were found to be Adequate; nine of those Planning Standards have items listed on the Post COL Reasonable Assurance Tracking Form and to be completed before the qualifying exercise. One Planning Standard was Not Applicable.

The following plans were reviewed:

- Alabama Emergency Operations Plan, dated April 20, 2006; and the table of proposed changes for the BNP, dated September 2007;
- Alabama Radiological Emergency Preparedness Plan, dated July 17, 2006; and Table of Proposed Changes for the BNP, dated September 2007
- Proposed Appendix 3 to the Alabama REPP, dated September 2007
- Proposed Jackson and DeKalb County Radiological Emergency Plans for Bellefonte Nuclear Plant, dated September 2007
- Tennessee Emergency Management Plan (TEMP)
- Georgia Radiological Emergency Plan, Annex F, Ingestion Pathway, dated March 2005
- State of Tennessee and State of Georgia REP plans and procedures that apply to ingestion pathway radiological response
- DeKalb County Emergency Operations Plan, February 15, 2004
- Jackson County Emergency Operations Plan, June 2004

The *Bellefonte Nuclear Plant ETE Report*, KLD Associates, Inc, dated September 2007 was also used in the review.

The materials listed above were the basis for the review. NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," amended March 2002, and its Supplements, the Interim REP Program Manual, dated August 2002, current FEMA guidance documents, and established industry practices were considered in making the determination as to the plans' adequacy.

The review of the offsite emergency plans resulted in evaluation findings for all of the planning standards and associated criteria contained in NUREG-0654/FEMA-REP-1, Rev. 1, as amended, that are ORO responsibilities. Each planning standard and criterion was rated as:

- Adequate: Plans are adequate and there is reasonable assurance that they can be implemented with only limited or no corrections needed.

- Adequate – corrections must be made: Plans are adequate but before a determination can be made as to whether they can be implemented, corrections must be made to the plans or supporting measures must be demonstrated (e.g. adequacy and maintenance of procedure, training, resource, staffing levels and qualifications, and equipment).
- Inadequate: Plans are inadequate and cannot be implemented until they are revised to corrected deficiencies noted in the Federal review.
- N/A: The planning standard is not applicable to offsite response organizations.

Select criteria are not able to be evaluated in the planning phase. They are placed on the Post COL Reasonable Assurance Tracking Section of the report to be reviewed and evaluated prior to the Interim Finding Report for Reasonable Assurance on the Adequacy of Offsite Radiological Emergency Response Preparedness.

The review resulted in the following interim evaluation findings (ratings for each individual criterion are summarized in Section IV, Criterion Rating Summary):

- Planning Standard A: Adequate
- Planning Standard B: N/A
- Planning Standard C: Adequate
- Planning Standard D: Adequate
- Planning Standard E: Adequate, See Post COL Tracking
- Planning Standard F: Adequate
- Planning Standard G: Adequate, See Post COL Tracking
- Planning Standard H: Adequate, See Post COL Tracking
- Planning Standard I: Adequate
- Planning Standard J: Adequate, See Post COL Tracking
- Planning Standard K: Adequate, See Post COL Tracking
- Planning Standard L: Adequate, See Post COL Tracking
- Planning Standard M: Adequate
- Planning Standard N: Adequate, See Post COL Tracking
- Planning Standard O: Adequate, See Post COL Tracking
- Planning Standard P: Adequate, See Post COL Tracking

Adequacy of the BNP Application Emergency Plan review for OROs is also dependent on:

- Satisfactory resolution of all items listed in the Post COL Reasonable Assurance Tracking form, Section IV.
- Satisfactory demonstration of plan implementation during a joint exercise with the licensee and state and local governments and utilizing BNP Units 3 and 4 facilities.

I. Introduction

General Characteristics of the Bellefonte Nuclear Plant

The proposed Bellefonte Nuclear Plant (BNP) site is approximately seven miles northeast of downtown Scottsboro. BNP is located about 38 miles east of downtown Huntsville, Alabama (AL); 44 miles southwest of downtown Chattanooga, Tennessee; and 48 miles north of downtown Gadsden, Alabama. The closest communities to BNP are the Town of Hollywood (three miles to the west) and the Town of Pisgah (five miles to the east).

The proposed Plume Exposure Pathway Emergency Planning Zone (EPZ) consists of an area about 10 miles in radius around the site, including portions of both Jackson and DeKalb Counties.

The proposed Ingestion Exposure Pathway EPZ consists of an area about 50 miles in radius around the site. The Ingestion Exposure Pathway includes all or part of Jackson, DeKalb, Cherokee, Etowah, Calhoun, Marshall, Blount, Morgan, Cullman, Talladega, Limestone, and Madison Counties in Alabama; Floyd, Chattooga, Walker, Catoosa, Dade, and Whitfield Counties in Georgia; and Hamilton, Marion, Grundy, Sequatchie, Franklin, Lincoln, Coffee, and Moore Counties in Tennessee.

Tennessee Valley Authority (TVA) is the applicant for the combined license application for the Bellefonte Nuclear Plant.

Emergency Response Organizations

The Governor of the State of Alabama has overall responsibility for emergency preparedness and response concerning an incident at a nuclear power plant. The Alabama Emergency Management Agency (AEMA) is the focal point within the State government for emergency planning, preparedness, mitigation, response, and recovery. The Governor has charged the AEMA Director with the responsibility of coordinating the activities of all departments, agencies, and organizations of state government and local emergency management agencies to carry out emergency functions relating to a Nuclear Power Plant (NPP) incident. AEMA directs the staff activities of the State Emergency Operation Center (SEOC) and Interim Operating Facility (IOF).

Alabama law designates the Alabama Department of Public Health/Radiological Control Agency (ADPH/RCA) as the agency responsible for issuing any order requiring actions to be taken necessary to meet the emergency. The ADPH/RCA will determine the protective actions needed to protect the public from excessive exposure to radiation and issue Public Health Orders requiring such actions be taken. They will conduct off-site radiation monitoring and control activities and coordinate radiation data with the licensee, federal agencies, and SEOC. The RCA will provide prompt, regular notification to the Governor and the legislature concerning the status of the radiation hazard and will provide technical information to the state staff on all aspects

of radiation (i.e., determine the level of radiation, health hazards, food contamination, evacuee decontamination procedures, and re-entry guidelines). The RCA will also provide medical and technical support to local governments.

The assigned responsibilities of ADPH/RCA and AEMA merge in the joint development and issuance of the State of Alabama Radiological Emergency Preparedness Plan (REPP) by the ADPH/RCA and AEMA.

Plans

The State of Alabama has both an Emergency Operations Plan (EOP) and a Radiological Emergency Preparedness Plan (REPP). Both the EOP and REPP utilize the National Incident Management System (NIMS) format and are organized by ESF. The Alabama EOP addresses an array of hazards; the Alabama REPP addresses, in detail, the State's response specific to an incident at a nuclear power plant. Additional proposed changes and draft county plans describe Jackson and DeKalb County responsibilities and their planned response to an incident at BNP.

The following plans were reviewed:

- Alabama Emergency Operations Plan, dated April 20, 2006; and the table of proposed changes for the BNP, dated September 2007;
- Alabama Radiological Emergency Preparedness Plan, dated July 17, 2006; and Table of Proposed Changes for the BNP, dated September 2007
- Proposed Appendix 3 to the Alabama REPP, dated September 2007
- Proposed Jackson and DeKalb County Radiological Emergency Plans for Bellefonte Nuclear Plant, dated September 2007
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- DeKalb County Emergency Operations Plan, February 15, 2004
- Jackson County Emergency Operations Plan, June 2004

The *Bellefonte Nuclear Plant ETE Report*, KLD Associates, Inc, dated September 2007 was also used in the review.

Basis for Findings

The status of emergency preparedness for offsite response to possible incidents resulting from an accident at the SHNP has been determined based on review of the plans cited above.

Adequacy of the reviewed plans is dependent upon:

- 44 CFR part 353

- Guidance Memoranda
- NUREG-0654 FEMA-REP-1, Rev.1

Evaluation Format

In accordance with the Memorandum of Understanding (MOU) (44 CFR 353 appendix A) with the Nuclear Regulatory Commission (NRC), FEMA agreed to furnish assessments, findings and determinations as to whether State, Tribal and local emergency plans and preparedness are adequate and continue to be capable of implementation (e.g., adequacy and maintenance of procedures, training, and resources, staffing levels and qualification and equipment adequacy). These findings and determinations are used by the NRC under its own rules in connection with its licensing and regulatory requirements and FEMA supports its findings in the NRC licensing process and related court proceedings- 44 CFR 350.3(f).

NUREG-0654 FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants issued November 1980 and amended March 2002 is the guidance used to review and develop this Interim Finding Report. Each planning standard will have an overall rating.

II. Review and Evaluation of Emergency Preparedness Plans for the Bellefonte Nuclear Plant against the Planning Standards of NUREG-0654 FEMA-REP-1, Rev. 1

A. Assignment of Responsibility (Organization Control): *Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the Emergency Planning Zone have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.*

A.1.a. *Each plan shall identify the State, local, Federal and private sector organizations (including utilities), that are intended to be part of the overall response organization for Emergency Planning Zones.*

Criterion Statement

State of Alabama: Plans are adequate. The organizations that comprise the State of Alabama response are listed in multiple locations throughout the Alabama EOP and REPP. There is a complete listing of the State organizations involved in the actions described by the Alabama REPP.

As noted above, the Alabama REPP lists the primary organizations responsible for those Emergency Support Functions (ESF) considered to be applicable to an incident at a nuclear power plant.

The Alabama REPP includes a listing of tasked organizations. It also contains additional parts listing the primary, secondary and support agencies for each of the fifteen ESFs identified by NIMS.

Jackson County: Plans are adequate. The Jackson organization responsible for supporting ESF functions are designated in each County Basic Plan. The County ESFs are expected to expand upon the ESFs contained in the County's Basic EOP to address the Bellefonte Nuclear Plant.

DeKalb County: Plans are adequate. The DeKalb organization responsible for supporting ESF functions are designated in each County Basic Plan. The County REP ESFs are expected to expand upon the ESFs contained in the County's Basic EOP to address the Bellefonte Nuclear Plant.

Plan Reference

State of Alabama Emergency Operations Plan

- Radiological Field Monitoring Team Manual, Radiation Control, dated July 2006
- Southern Mutual Radiation Assistance Plan, dated November 2005

Jackson County Plan

- Basic Plan and Section IV.A and Section V and Annex I
DeKalb County Plan
- Basic Plan and Section IV.A and Section V and Annex I

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- A.1.b. *Each organization and sub-organization having an operational role shall specify its concept of operations and its relationship to the total effort.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP describes the overall Concept of Operation. The role of the AEMA and the State EOC, the conditions under which mutual aid agreements would be activated, and the conditions under which the Governor may proclaim a "State of Emergency" and request disaster assistance are included. Additional subsections describe the overall State system of direction and control and subsections describe the State procedure for ensuring continuity of government and continuity of operations during an emergency.

Jackson County: Plans are adequate. Presently established organizational charts have been provided to update the Alabama Radiological Emergency Preparedness Plan.

DeKalb County: Plans are adequate. Presently established organizational charts have been provided to update the Alabama Radiological Emergency Preparedness Plan.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan Section VI

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IX.B

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 1, Section I

Proposed Jackson County Plan

- Basic Plan, Section III

Proposed DeKalb County Plan

- Basic Plan, Section III

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

A.1.c. *Each plan shall illustrate these interrelationships in a block diagram.*

Criterion Statement

State of Alabama: Plans are adequate. Tab B of the Alabama EOP provides a block diagram illustrating the interrelationships between the organizations involved in emergency response, which identifies the Incident Command System functional position and pertinent support functions for that position.

The Alabama REPP provides an organizational structure for the AEMA. Organizational structures for the affected County governments are also provided, but Jackson and DeKalb Counties are not yet included. The proposed revision to Alabama REPP, Base Plan, Section IX.E, "Organizational Structure for all Organizations," states that the organizational structures for DeKalb and Jackson Counties will be added.

Jackson County: Plans are adequate. Proposed Jackson County plans include notification diagrams in Appendix 1 to the respective radiological emergency plans. The notification plans provide the interrelationships between the various agencies involved in radiological emergency response.

DeKalb County: Plans are adequate. Proposed DeKalb County plans include notification diagrams in Appendix 1 to the respective radiological emergency plans. The notification plans provide the interrelationships between the various agencies involved in radiological emergency response.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Tab B

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IX.E

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IX.E

Proposed Jackson County Plan

- Appendix 1, Notification Diagram

Proposed DeKalb County Plan

- Appendix 1, Notification Diagram

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- A.1.d. *Each organization shall identify a specific individual by title who shall be in charge of the emergency response.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP describes the Governor as chief executive, with the Director of the AEMA being in charge of implementing disaster operational decisions for the State of Alabama. At the county level, overall control of local emergency operations is vested in the Chairman of the County Commission and the Mayor. Individuals are specified, by title, as the principal in charge of emergency response for all State organizations and all county organizations.

Jackson County: Plans are adequate. The proposed Jackson County REP, Basic Plan, lists the organizations at the County level. Proposed Jackson County REP, Basic Plan, Section V, lists the organizations at the County level with primary responsibility for emergency response.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Basic Plan, lists the organizations at the County level. Proposed DeKalb County REP, Basic Plan, Section V, lists the organizations at the County level with primary responsibility for emergency response.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section VI.B and Emergency Support Annexes.

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IV.E

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 1, Section II.A and C

Jackson County Plan

- Basic Plan, Section IV and V

DeKalb County Plan

- Basic Plan, Section IV and V

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- A.1.e. *Each organization shall provide for 24-hour per day emergency response, including 24-hour per day manning of communications links.*

Criterion Statement

State of Alabama: Plans are adequate. The State plan addresses 24-hour staffing for Level III, II, and I incidents. The Alabama EOP Basic Plan, categorizes

incidents based upon severity and risk. For the BNP, an Alert ECL equates to a Level III, a Site Area Emergency ECL equates to a Level II, and a General Emergency ECL equates to a Level I response.

Jackson County: Plans are adequate. The proposed Jackson County REP, Basic Plan, requires the JCEMA Director establish an EOC capable of continuous communication with AEMA and local supporting organizations. During emergency conditions, the EOC will be capable of providing direction and control on a 24 hour basis for the duration of the incident. The Jackson County E-911 serves as the 24 hour warning point and in the event of a fast breaking "General Emergency" will be responsible for coordination of actions to protect the population, until the EOC can be activated. A notification diagram that also shows the 24-hour notification path is included in the proposed Basic Plan.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Basic Plan, requires the DCEMA Director establish an EOC capable of continuous communication with AEMA and local supporting organizations. During emergency conditions, the EOC will be capable of providing direction and control on a 24 hour basis for the duration of the incident. The DeKalb County E-911 serves as the 24 hour warning point and in the event of a fast breaking "General Emergency" will be responsible for coordination of actions to protect the population, until the EOC can be activated. A notification diagram that also shows the 24-hour notification path is included in the proposed Basic Plan.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic, Plan Section III

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IX.C, and X.B

Proposed Jackson County Plan

- Basic Plan, Section IV and Appendix I

Proposed DeKalb County Plan

- Proposed DeKalb County REP, Basic Plan, Section IV and Appendix I

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- A.2.a. *Each organization shall specify the functions and responsibilities for major elements and key individuals by title, of emergency response, including the following: Command and Control, Alerting and Notification, Communications, Public Information, Accident Assessment, Public Health and Sanitation, Social Services, Fire and Rescue, Traffic Control, Emergency Medical Services, Law Enforcement, Transportation, Protective Response (including authority to request*

Federal assistance and to initiate other protective actions), and Radiological Exposure Control. The description of these functions shall include a clear and concise summary such as a table of primary and support responsibilities using the agency as one axis, and the function as the other.

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP, Basic Plan provides responsibilities for the State organizations involved in emergency response to an incident at BNP. The Alabama Emergency Management Agency is the lead State agency for coordinating disaster/emergency planning, response, and relief efforts. AEMA, in coordination with ALDHS, is responsible for advising the Governor, State and local officials, and others to the nature, magnitude, and possible effects of a natural, technological, or national security emergency.

Jackson County: Plans are adequate. The primary agency responsible for transportation in Jackson County is the Jackson County Board of Education, per Jackson County EOP.

DeKalb County: Plans are adequate. According to the DeKalb County EOP, the primary agency responsible for transportation is the Emergency Management Agency (DCEMA).

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section V.B, Tab A and Emergency Support Annexes 1-15, and Section V

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IV.E and XIV

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 5

Proposed Jackson County Plan

- Basic Plan, Section V

Proposed DeKalb County Plan

- Basic Plan, Section V

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

A.2.b. *Each plan shall contain (by reference to specific acts, codes or statutes) the legal basis for such authorities.*

Criterion Statement

State of Alabama: Plans are adequate. The introduction to the Alabama EOP, Basic Plan describes the authority for establishing the Alabama Emergency

Management Agency (AEMA). The authority for the roles and responsibilities assigned to the Governor and the various Agencies is provided in Alabama EOP, Basic Plan.

Jackson County: Plans are adequate. Legal authority to implement the Jackson County Emergency Operations Plan (EOP) is per Jackson County EOP Sections I.A and IV.G.3.

DeKalb County: Plans are adequate. Legal authority to implement the DeKalb County EOP is per DeKalb County EOP Sections I.A.1.b, IV.C.1, VII.B, IX.A.c and X.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Sections I, V, VI, VI.C, XI and Annex 2, Section VII

Alabama Radiological Emergency Preparedness Plan

- Alabama REPP

Proposed Jackson County Plan

- Sections I.A and IV.G.3.

Proposed DeKalb County Plan

- Sections I.A.1.b, IV.C.1, VII.B, IX.A.c and X.

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- A.3. *Each plan shall include written agreements referring to the concept of operations developed between Federal, State, and local agencies and other support organizations having an emergency response role within the Emergency Planning Zones. The agreements shall identify the emergency measures to be provided and the mutually acceptable criteria for their implementation, and specify the arrangements for exchange of information. These agreements may be provided in an appendix to the plan or the plan itself may contain descriptions of these matters and a signature page in the plan may serve to verify the agreements. The signature page format is appropriate for organizations where response functions are covered by laws, regulations or executive orders where separate written agreements are not necessary.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP contains a signed letter of agreement. This letter is signed by the agencies and organizations tasked in the plan.

Jackson County: Plans are adequate. The proposed Jackson County Radiological Emergency Plans (REPs) will use organizations that have signed

contracts with TVA, are governmental agencies in their own right, or respond in accordance with their roles as delineated in the purpose, scope, and policies of the controlling ESF. This process has been utilized for existing nuclear power plants in Alabama and will be employed for the Bellefonte Nuclear Plant when operational. Details for use of support organizations and facilities will be addressed by the County in sufficient time to support the full-participation exercise required prior to fuel load.

DeKalb County: Plans are adequate. The proposed DeKalb County Radiological Emergency Plans (REPs) will use organizations that have signed contracts with TVA, are governmental agencies in their own right, or respond in accordance with their roles as delineated in the purpose, scope, and policies of the controlling ESF. This process has been utilized for existing nuclear power plants in Alabama and will be employed for the Bellefonte Nuclear Plant when operational. Details for use of support organizations and facilities will be addressed by the County in sufficient time to support the full-participation exercise required prior to fuel load.

Plan Reference

State of Alabama Emergency Operations Plan

- Letter of Agreement and Basic Plan, Section VI.E

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- A.4. *Each principal organization shall be capable of continuous (24-hour) operations for a protracted period. The individual in the principal organization who will be responsible for assuring continuity of resources (technical, administrative, and material) shall be specified by title.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP requires 24-hour staffing of the response organizations. The plan requires that the SEOC, RCA and County Emergency Management Agencies maintain a 24-hour communication system with the NPPs. Alabama REPP, Base Plan, states that the SEOC and local EOCs in REP counties must be capable of operating 24-hours a day for extended periods. It further states that the AEMA Director will be responsible for maintaining and operating a SEOC capable of continuous (24-hour) operations for a protracted period. The Master checklist Guide of the Base Plan places the responsibility for developing a roster to support 24-hour operation upon the person identified by that organization as being in charge of emergency response. This section says that a roster of key personnel will be prepared and

maintained to ensure rapid notification and to demonstrate a twenty-four hour capability to react to a radiation emergency at a NPP.

Jackson County: Plans are adequate. Detailed rosters for county emergency response are contained in standard operating guidelines (SOGs).

DeKalb County: Plans are adequate. Detailed rosters for county emergency response are contained in standard operating guidelines (SOGs).

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Sections III and V and Incident Annex E, Section IV

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections III, IX, X and XIII

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section I

Proposed Jackson County Plan

- Basic Plan, Section IV

Proposed DeKalb County Plan

- Basic Plan, Section IV

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- B. Onsite Emergency Organization:** *On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.*

This Planning Standard is not applicable to offsite preparedness.

- C. Emergency Response Support and Resources:** *Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the Licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.*
- C.1** *The Federal government maintains in-depth capability to assist licensees, States and local governments through the Federal Radiological Emergency Response Plan (FRERP), May 8, 1996 (61 FR 20944)*. Each State and licensee shall make*

provisions for incorporating the Federal response capability into its operation plan, including the following:

**The FRERP was superseded by the National Response Framework, Nuclear/Radiological Incident Annex (73 FR 4887).*

- C.1.a. *Specific persons by title authorized to request Federal assistance; see A.1.d., and A.2.a.*

Criterion Statement

State of Alabama: Plans are adequate. Three Alabama officials (the Governor, the Director of the Office of Radiation Control (RCA) and the Director of the Alabama Emergency Management Agency (AEMA)) are authorized to request Federal assistance.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

State of Alabama Emergency Operations Plan (EOP)

- Basic Plan, Section VI.A. 9 and A.3.c

Alabama Radiological Emergency Preparedness Plan (REPP)

- Base Plan, Section XIII.B and C

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- C.1.b. *Specific Federal resources expected, including expected times of arrival at specific nuclear facility sites.*

Criterion Statement

State of Alabama: Plans are adequate. Arrival times for federal resources are expected to be consistent with those listed for the Browns Ferry Nuclear Plant as travel distances are similar for both Browns Ferry Nuclear Plant and the proposed Bellefonte Plant.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan (REPP)

- Emergency Support Function (ESF) #8, Tab 8

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**
DeKalb County: **Not Applicable**

- C.1.c. *Specific licensee, State and local resources available to support the Federal response, e.g., airfields, command posts, telephone lines, radio frequencies and telecommunications centers.*

Criterion Statement

State of Alabama: Plans are adequate. The State of Alabama Emergency Operations Plan adequately addresses resource availability.

Jackson County: Plans are adequate. Jackson County refers to The State of Alabama Emergency Operations Plan to address resource availability.

DeKalb County: Plans are adequate. DeKalb County refers to The State of Alabama Emergency Operations Plan to address resource availability.

Plan Reference

State of Alabama Emergency Operations Plan

- ESF 7, Sections IV.C, and V.A and Support Annex B, Sections I, II.C.1 and V.C.1

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IX

Proposed Alabama Radiological Emergency Preparedness Plan

- None

Proposed Jackson County Plan

- To be developed

Proposed DeKalb County Plan

- To be developed

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- C.2.a. *Each principal offsite organization may dispatch representatives to the licensee's near site Emergency Operations Facility. (State technical analysis representatives at the near site EOF are preferred.)*

Criterion Statement

State of Alabama: Plans are adequate. The State is not required to send a liaison to the EOF (CECC) and has not historically dispatched a liaison.

Jackson County: Plans are adequate. Jackson County is not required to send a liaison to the CECC.

DeKalb County: Plans are adequate. DeKalb County is not required to send a liaison to the CECC.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section III.C, XIII.C

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- C.3. *Each organization shall identify radiological laboratories and their general capabilities and expected availability to provide radiological monitoring and analyses services which can be used in an emergency.*

Criterion Statement

State of Alabama: Plans are adequate. The primary laboratory for analysis of field samples is identified in the Alabama REPP, Emergency Support Function #8. The Alabama Department of Environmental Management Environmental Laboratory is the primary laboratory for the State of Alabama and is located in Montgomery, Alabama. A listing of laboratory equipment is included in ESF#8, Section B.V. The Southern Mutual Radiation Assistance Plan (SMRAP) includes a listing of analysis equipment and identifies the Alabama laboratory's general analysis capabilities (e.g. types of analysis available for soil, water, fish, air, and vegetation). The plan says that if requested, the lab can dispatch available portable analysis equipment to the county health department nearest the IFO.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

State of Alabama Emergency Operations Plan

- Appendix 1

Alabama Radiological Emergency Preparedness Plan

- Emergency Support Function (ESF) #8

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- C.4. *Each organization shall identify nuclear and other facilities, organizations or individuals which can be relied upon in an emergency to provide assistance. Such assistance shall be identified and supported by appropriate letters of agreement.*

Criterion Statement

State of Alabama: Plans are adequate. Letters of agreement were included in the information provided for review in the Alabama EOP. NUREG criterion A.3 in this report provides details for letters of agreement and memorandums of understanding.

Jackson County: Plans are adequate. Letters of agreement were included in the information provided for review in the Proposed Jackson County plans. NUREG criterion A.3 in this report provides details for letters of agreement and memorandums of understanding.

DeKalb County: Plans are adequate. Letters of agreement were included in the information provided for review in the Proposed DeKalb County Plan. NUREG criterion A.3 in this report provides details for letters of agreement and memorandums of understanding.

Plan Reference

State of Alabama Emergency Operations Plan

- Letter of Agreement

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IV.E

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3

Jackson County Emergency Operations Plan

- Section VIII.A

DeKalb County Emergency Operations Plan

- Section VII.B

Proposed Jackson County Plan

- Annex A, Appendix 2

Proposed DeKalb County Plan

- Annex A, Appendix 2

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- D. Emergency Classification System: *A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for***

reliance on information provided by the facility licensees for determinations of minimum initial offsite response measures.

- D.3. *Each State and local organization shall establish an emergency classification and emergency action level scheme consistent with that established by the facility licensee.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP, Basic Plan, defines the response levels for the State organizations using the NIMS classification system, which has five response levels. The Alabama EOP, Incident Annex E, relates the NIMS classification levels to the Emergency Classification Levels used by BNP. The Actions executed under this plan are defined as Levels I, II, III, and IV. Level I include readiness in normal day-to-day operations and also encompass an "Unusual Event" at a NPP. Level II begins upon notification of an "Alert." Level III begins at "Site Area Emergency," which could include precautionary relocation and/or sheltering. Level IV starts at "General Emergency," which includes Protective Action Recommendations (PARs) to either evacuate and/or shelter.

Jackson County: Plans are adequate. The proposed Jackson County REP, Basic Plan, Section III.B defines the EOC activation levels in terms of the BNP ECLs. Emergency Classification Level definitions are provided and match the definitions in the Alabama REPP, Section XI, as described above.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Basic Plan, Section III.B, defines the EOC activation levels in terms of the BNP ECLs. Emergency Classification Level definitions are provided and match the definitions in the Alabama REPP, Section XI, as described above.

Plan References

State of Alabama Emergency Operations Plan

- Basic Plan, Section III and Incident Annex E

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections II, III.A, C and Section XI

Proposed Jackson County Plan

- Basic Plan, Section III.B

Proposed DeKalb County Plan

- Basic Plan, Section III.B

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- D.4. *Each State and local organization should have procedures in place that provide for emergency actions to be taken which are consistent with the emergency actions recommended by the nuclear facility licensee, taking into account local offsite conditions that exist at the time of the emergency.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama EOP describes actions to be taken by response organizations as a function of Emergency Classification Level. These actions are defined by ECL and are generally aligned with the actions described by the licensee, to include consideration of conditions that exist at the time of the emergency.

Jackson County: Plans are adequate. The actions to be taken by organizations working under the County plan are described in Jackson County REP Plan, Annex E.

DeKalb County: Plans are adequate. The actions to be taken by organizations working under the County plan are described in DeKalb County REP Plan, Annex E.

Plan Reference

State of Alabama Emergency Operations Plan

- Incident Annex E, Section III

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section III.C

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4

Proposed Jackson County Plan

- Annex E. III. C.

Proposed DeKalb County Plan

- Annex E. III. C

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- E. Notification Methods and Procedures:** *Procedures have been established for notification, by the licensee of State and local response organizations and for notification of emergency personnel by all response organizations; the content of initial and follow-up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.*

- E.1. *Each organization shall establish procedures which describe mutually agreeable bases for notification of response organizations consistent with the emergency classification and action level scheme set forth in Appendix 1. These procedures shall include means for verification of messages. The specific details of verification need not be included in the plan.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP, Alabama REPP and proposed Alabama REPP, all specify the procedure for initial and subsequent notification by the licensee to a designated offsite 24-hour warning point, and the process used to notify applicable offsite responding organizations.

Jackson County: Plans are adequate. Proposed Jackson County REPP specifies the procedure for initial and subsequent notification from the licensee to a designated offsite 24-hour warning point and the process used to notify applicable offsite responding organizations. The responsibility for notifying appropriate organizations after initial notification is received is clear in the plans.

DeKalb County: Plans are adequate. Proposed DeKalb County REPP specifies the procedure for initial and subsequent notification from the licensee to a designated offsite 24-hour warning point and the process used to notify applicable offsite responding organizations. The responsibility for notifying appropriate organizations after initial notification is received is clear in the plans.

Plan Reference:

State of Alabama Emergency Operations Plan

- Incident Annex E, Section III.D.3

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections III.C, X.B, XI and Appendix 2

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IX.C; X.G, and Appendix 3, Attachment 1, Section III and Attachment 4 and Emergency Support Function #2, Section V

Proposed Jackson County Plan

- Basic Plan, Section III; IV.A.5, and Appendix 1, and Annex A and E

Proposed DeKalb County Plan

- Basic Plan, Section III; IV.A.5, and Appendix 1, and Annex A; E Section III.A

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- E.2. *Each organization shall establish procedures for alerting, notifying, and mobilizing emergency response personnel.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP contains checklists for AEMA and RCA at different ECLs and indicates, in part, when staff is activated. Alabama REPP clearly outlines who the SEOC will notify at each ECL.

Jackson County: Further planning will be adopted by March 2015 in accordance with the TVA milestone schedule.

DeKalb County: Further planning will be adopted by March 2015 in accordance with the TVA milestone schedule.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections X, C, XI, XIII.B, XIII.C and Appendix 1, Attachment 4

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4, Section I.A

Jackson County Plan

- Annex A, Checklists

DeKalb County Plan

- Annex A, Checklists

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- E.5. *State and local government organizations shall establish a system for disseminating to the public appropriate information contained in the initial and follow-up messages received from the licensee including the appropriate notification to appropriate broadcast media, e.g., the Emergency Alert System (EAS) (59 FR 67090).*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP contains information on monitoring emergency messages for accuracy.

Proposed Alabama REPP says that intra-county alerting and warning of the populace will be by a combination of fixed sirens, tone alert radios, and NOAA weather alert radios, as well as house-to-house notification if necessary. When the risk counties activate the Prompt Notification System, the individual risk county Emergency Management Coordinator/Director will ensure that a local

radio station broadcasts the Emergency Alert System message.

Jackson County: Plans are adequate. The proposed Jackson County REP, Annex E, "Public Notification," Section II, "Concept of Operations," say that the county Prompt Notification Systems consist of sirens and tone alert radios. The EAS consists of local radio and television stations. These plans identify radio station WKEA as the activation point for the EAS.

DeKalb County: Plans are adequate. Proposed DeKalb County REP, Annex E, "Public Notification," Section II, "Concept of Operations," say that the county Prompt Notification Systems consist of sirens and tone alert radios. The EAS consists of local radio and television stations. These plans identify radio station WKEA as the activation point for the EAS.

Plan Reference

State of Alabama Emergency Operations Plan

- Support Annex D, Sections IV.I. and N.1

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections X.C

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.G

Proposed Jackson County Plan

- Annex E

Proposed DeKalb County Plan

- Annex E

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- E.6. *Each organization shall establish administrative and physical means, and the time required for notifying and providing prompt instructions to the public within the plume exposure pathway Emergency Planning Zone (see Appendix 3.) It shall be the licensee's responsibility to demonstrate that such means exist, regardless of who implements this requirement. It shall be the responsibility of the State and local governments to activate such a system.*

Criterion Statement

State of Alabama: Plans are adequate. The proposed section X.G of the Alabama REPP discusses the proposed administrative processes for activating the alert and notification system. When the risk counties activate the PNS, the individual risk county Emergency Management Coordinator/Director will ensure that a local radio station broadcasts an Emergency Alert System (EAS) message.

The initial notification will be sounded in a timely manner after the risk counties have coordinated and made the decision to activate the PNS. The Jackson County Emergency Management Director will coordinate the initial sounding as well as subsequent activations, via the TVA Hotline. The DeKalb County Emergency Management Director will have backup responsibility for sounding the initial and subsequent activations. The system will be available for inspection prior to or in sufficient time to support the required full participation exercise.

Jackson County: Provisions for alerting the hearing-impaired in response to an emergency at the proposed Bellefonte Nuclear Plant are subject to further development for inclusion in the proposed Section X.G and Appendix 3 of the Alabama REPP. Annexes E and G of the proposed Jackson and DeKalb counties REPs are also subject to further development. Detailed implementing procedures for the proposed Jackson and DeKalb Counties REPs have not yet been developed nor will they be developed until some time after construction of the proposed plant begins.

DeKalb County: Provisions for alerting the hearing-impaired in response to an emergency at the proposed Bellefonte Nuclear Plant are subject to further development for inclusion in the proposed Section X.G and Appendix 3 of the Alabama REPP. Annexes E and G of the proposed Jackson and DeKalb counties REPs are also subject to further development. Detailed implementing procedures for the proposed Jackson and DeKalb Counties REPs have not yet been developed nor will they be developed until some time after construction of the proposed plant begins.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X, Sections A, and E; ESF #2 Section VI.A

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.G; Appendix 3, Section I.B; Attachment 4, Section I.A and B and Sections VI and X

Proposed Jackson County Plan

- Annex E and Section III.B; Annex G, Appendix 4

Proposed DeKalb County Plan

- REP, Annex E, Section II and Section III.B; Annex G, Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- E.7. *Each organization shall provide written messages intended for the public, consistent with the licensee's classification scheme. In particular, draft messages*

to the public giving instructions with regard to specific protective actions to be taken by occupants of affected areas shall be prepared and included as part of the State and local plans. Such messages should include the appropriate aspects of sheltering, ad hoc respiratory protection, e.g., handkerchief over mouth, thyroid blocking or evacuation. The role of the licensee is to provide supporting information for the messages. For ad hoc respiratory protection see "Respiratory Protective Devices Manual" American Industrial Hygiene Association, 1963, pp. 123-126.

Criterion Statement

State of Alabama: EAS messages and their distribution are expected to be similar to those for existing nuclear power plants in Alabama, per the Alabama REPP. As noted in the Alabama REPP, information will be distributed through press conferences and briefings, and prepared press releases to be read over the air. Accordingly, detailed SOPs will be available for inspection at the full participation exercise prior to fuel loading at the Bellefonte Nuclear Plant. Rumor control points with publicized telephone numbers will be established per Alabama REPP.

Jackson County: Proposed Jackson County REP contain pre-scripted EAS Bulletins and Special News Broadcasts that require only minor modifications to meet all content guidelines. The plans also describe the process of issuing messages to the EAS station, and contain descriptions of planning zones in terms of local landmarks. Proposed Jackson County REP contains a specific procedure for issuing EAS messages or Special News Broadcasts. It also contains descriptions of each of the ERPA boundaries expressed in common landmarks. Each ERPA also has checkboxes for sheltering in place or evacuation, and identifies the appropriate reception center.

Proposed Jackson County REP contains a specific procedure for issuing EAS messages or Special News Broadcasts. Based on demographic information available through the US Census Bureau, Jackson County does not have sufficient population to provide public information in a foreign language.

The process for adapting EAS messages to account for and counter rumors or other inaccuracies that may have a negative impact on adherence by the public to instructions issued by authorities, are subject to further development for inclusion into the Jackson County plans. These details will be addressed by the County in sufficient time to support the full-participation exercise required prior to fuel load.

ERPAs for the Bellefonte Nuclear Plant are provided in the County's proposed REP Annex. Certain details in these descriptions are not yet determined. Descriptions will be addressed by the County in sufficient time to support the full-participation exercise required prior to fuel load.

DeKalb County: Proposed DeKalb County REP contain pre-scripted EAS Bulletins and Special News Broadcasts that require only minor modifications to

meet all content guidelines. The plans also describe the process of issuing messages to the EAS station, and contain descriptions of planning zones in terms of local landmarks. Proposed DeKalb County REP contains a specific procedure for issuing EAS messages or Special News Broadcasts. It also contains descriptions of each of the ERPA boundaries expressed in common landmarks. Each ERPA also has checkboxes for sheltering in place or evacuation, and identifies the appropriate reception center.

Proposed DeKalb County REP contains a specific procedure for issuing EAS messages or Special News Broadcasts. Based on demographic information available through the US Census Bureau, DeKalb County does not have sufficient population to provide public information in a foreign language.

The process for adapting EAS messages to account for and counter rumors or other inaccuracies that may have a negative impact on adherence by the public to instructions issued by authorities, are subject to further development for inclusion into the DeKalb County plans. These details will be addressed by the County in sufficient time to support the full-participation exercise required prior to fuel load.

ERPAs for the Bellefonte Nuclear Plant are provided in the County's proposed REP Annex. Certain details in these descriptions are not yet determined. Descriptions will be addressed by the County in sufficient time to support the full-participation exercise required prior to fuel load.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Emergency Support Function #15, Section VI.D

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.G; Emergency Support Function #15

Proposed Jackson County Plan

- Annex C, Appendix 1; 2; 3 and 6, and Annex Q

Proposed DeKalb County Plan

- Annex C, Appendix 1; 2; 3 and 6, and Annex Q

Criterion Evaluation

State of Alabama: See Post COL Reasonable Assurance Tracking Form

Jackson County: See Post COL Reasonable Assurance Tracking Form

DeKalb County: See Post COL Reasonable Assurance Tracking Form

F. Emergency Communications: *Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.*

- F.1 *The communication plans for emergencies shall include organizational titles and alternates for both ends of the communication links. Each organization shall establish reliable primary and backup means of communication for licensees,*

local, and State response organizations. Such systems should be selected to be compatible with one another. Each plan shall include:

- F.1.a. Evaluation Criterion: *provision for 24-hour per day notification to and activation of the State/local emergency response network; and at a minimum, a telephone link and alternate, including 24-hour per day manning of communications links that initiate emergency response actions.*

Criterion Statement:

State of Alabama: Plans are adequate. Responsibility for establishing, maintaining, and operating the communications networks necessary for emergency response functions is delegated to the Alabama Emergency Management Agency in numerous places in both the Alabama EOP and the Alabama REPP.

Jackson County: Plans are adequate. The proposed Jackson County REP, Basic Plan, Section IV.A, states that the Jackson County E-911 serves as the 24 hour warning point and in the event of a fast breaking "General Emergency" will be responsible for coordination of actions to protect the population, until the EOC can be activated.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Basic Plan, Section IV.A, states that the DeKalb County E-911 serves as the 24 hour warning point and in the event of a fast breaking "General Emergency" will be responsible for coordination of actions to protect the population, until the EOC can be activated.

Plan Reference

State of Alabama Emergency Operations Plan

- Emergency Support Function (ESF) #2, Section IV and Incident Annex E, Section III

Alabama Radiological Emergency Response Plan

- Base Plan, Section III, Section X.C

Proposed Alabama Radiological Emergency Response Plan

- Base Plan, Section IX, X.G, and Appendix 3, Section I

Proposed Jackson County Plan

- Basic Plan, Section IV.A, and Appendix 1

Proposed DeKalb County Plan

- Basic Plan, Section IV.A, and Appendix 1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- F.1.b. *Provision for communications with contiguous State/local governments within the Emergency Planning Zones;*

Criterion Statement

State of Alabama: Plans are adequate. Communications in the SEOC will be used to receive and evaluate information, disseminate instructions, coordinate operations, and advise local, state, and federal agencies.

Jackson County: Plans are adequate. The Jackson County Emergency Management Agency serves as the local governing authority's principal agency to coordinate and direct actions to protect the population. The Jackson County EMA is capable of continuous communication with AEMA and local supporting organizations.

DeKalb County: Plans are adequate. The DeKalb County Emergency Management Agency serves as the local governing authority's principal agency to coordinate and direct actions to protect the population. The DeKalb County EMA is capable of continuous communication with AEMA and local supporting organizations.

Plan Reference

State of Alabama Emergency Operations Plan

- ESF #2, Section IV

Alabama Radiological Emergency Response Plan

- Base Plan, Section IX, X.B, and X.C

Proposed Alabama Radiological Emergency Plan

- ESF #2, Section III and VIII

Proposed Jackson County Plan

- Section IV.A

Proposed DeKalb County Plan

- Section IV.A

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- F.1.c. *Provision for communications as needed with Federal emergency response organizations;*

Criterion Statement

State of Alabama: Plans are adequate. The communications in the SEOC will be used to receive and evaluate information, disseminate instructions, coordinate operations, and advise local, state, and federal agencies. Communications

systems which include National Alert and Warning System (NAWAS) and dedicated commercial telephone line (for FEMA).

Jackson County: Plans are adequate. Jackson County ESF #2 will maintain the capability to communicate with AEMA.

DeKalb County: Plans are adequate. DeKalb County Emergency Operations Center will maintain the capability to communicate with AEMA.

Plan Reference

State of Alabama Emergency Operations Plan

- Emergency Support Function #2, Section I, IX, X.B and X.C

Proposed Jackson County Plan

- Section X.G

Proposed DeKalb County Plan

- Section X.G

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- F.1.d. *Provision for communications between the nuclear facility and the licensee's near-site Emergency Operations Facility, State and local emergency operations centers, and radiological monitoring teams;*

Criterion Statement

State of Alabama: Plans are adequate. Initial communication between the Bellefonte Plant and the State of Alabama during an escalating event will be to the Radiation Control Agency, who then calls AEMA, who in turn notifies the affected counties. The primary means for this notification is the commercial telephone. Once the SEOC is activated a dedicated decision line is activated.

Jackson County: Plans are adequate. If a "fast breaker" General Emergency occurs, TVA will notify JCEMA or the Sheriff's Office after normal duty hours.

DeKalb County: Plans are adequate. If a "fast breaker" General Emergency occurs, TVA will notify DCEMA or the Sheriff's Office after normal duty hours

Plan Reference

State of Alabama Emergency Operations Plan

- ESF #1, Section IV and ESF #2, Section I

Proposed Jackson County Plans

- Section III.B.2.d

Proposed DeKalb County Plans

- Section III.B.2.d

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

F.1.e. *Provision for alerting or activating emergency personnel in each response organization; and*

Criterion Statement

State of Alabama: Plans are adequate. The responsibility for notifying agencies on Alabama Emergency Management Agency and says that they are the primary agency for ESF #2, and will notify each agency and/or volunteer agency (as required).

Jackson County: Plans are adequate. The JCEMA Director will establish an EOC that is capable of continuous communications with AEMA and local supporting organizations. During emergency conditions the EOC will be capable of providing direction and control on a 24-hour basis for the duration of the incident.

DeKalb County: Plans are adequate. The DCEMA Director will establish an EOC that is capable of continuous communications with AEMA and local supporting organizations. During emergency conditions the EOC will be capable of providing direction and control on a 24-hour basis for the duration of the incident.

Plan Reference

State of Alabama Emergency Operations Plan

- ESF#2, Section IV

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.C and X.G

Proposed Jackson County REP Plan

- Basic Plan, Section IV.A, Appendix 1

Proposed DeKalb County REP Plan

- Basic Plan, Section IV.A, Appendix 1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- F.2. *Each organization shall ensure that a coordinated communication link for fixed and mobile medical support facilities exists.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP describes the coordinated communication link for fixed and mobile medical support facilities sufficiently to address the criterion.

Jackson County: Plans are adequate. As described in the Jackson County EOP, Jackson County Communications 911 is the EMS Dispatch point for the County and is the central point for 911/Medical call taking and dispatch. Hospital Emergency Administrative Radio (HEAR) is a VHF radio system coordinated by Jackson County Health Care Authority/Jackson County Hospital during a Mass Casualty Incident used to ascertain and assemble information regarding hospital resources. Jackson County Communications has the ability to establish primary and backup communications links from the EOC to dispatch centers.

DeKalb County: Plans are adequate. DeKalb County EOP states the requirement to establish and maintain communications between Health and Medical Services and the EOC when requests for assistance exceed existing arrangements with medical facilities. DeKalb County has an E-911 dispatch center as described on the 911 center's website. The DeKalb County EOP lists primary and alternate communications systems available for emergency responders, including emergency medical services.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.C and Emergency Support Function #2, Section III.F and Emergency Support Function #8 Tab 5, Section III.D.

Jackson County Emergency Operations Plan

- ESF #2, Section VIII. A, and B and ESF #8, Section I.C.

DeKalb County Emergency Operations Plan

- ESF #2, Table 2 and ESF #8, Section IV.E.

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- F.3. *Each organization shall conduct periodic testing of the entire emergency communications system (see evaluation criteria N.2.a, N.2.d and Appendix 3¹).*

¹ Revised by FEMA GM PR-1.

Criterion Statement

¹ Revised by FEMA GM PR-1.
9-15-09

State of Alabama: Plans are adequate. The general requirement for testing emergency communications systems and a communication system capable of immediate and sustained support operational functions during an incident at a NPP must be operational at all times. Periodic tests of the system must be conducted to verify and ensure its serviceability. Communication systems will be tested in accordance with the following schedule:

- Inter-county dedicated telephone - daily
- State-wide radio network - weekly
- In-state NAWAS - daily
- Radio Amateur Civil Emergency Services (RACES) - semi annually during drills

Jackson County: Plans are adequate. In Jackson County, obtaining, installing, and testing communication equipment is the responsibility of the Jackson County Communications Unit, per Jackson County Emergency Operations Plan ESF #2, Section VIII.A. Systems undergo periodic testing in accordance with ESF #2 Section IX.D.3. According to Section IX.E of ESF #2 of the Jackson County EOP, maintenance of the communications equipment will be the responsibility of the organization owning the equipment. To the extent possible, the communications systems used for normal operations will be utilized, if available, during emergency operations, per ESF #2 Section II.A, avoiding the “infrequent use” issue. Pagers, fax machines and computers are commonly used devices. Auto-dialing equipment and/or computerized phone number storage systems are not currently used by Jackson County.

DeKalb County: Plans are adequate. In DeKalb County, primary notification is by ESF functional area, from the DeKalb County Emergency Management Agency (DCEMA) to the agency point of contact, using telephone and digital pagers, per DeKalb County EOP ESF #8, Section IV.C and ESF #10, Section V.C. Both telephones and digital pagers are commonly used systems. Pagers, fax machines and computers are commonly used devices. Auto-dialing equipment and/or computerized phone number storage systems are not currently used by DeKalb County.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.A, Appendix 3, Attachment 1 to (current) Appendix 3, Section I

Proposed State of Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.G.

Jackson County Emergency Operations Plan

- ESF #2 Sections VIII.A., IX.D.3 and IX.E

DeKalb County Emergency Operations Plan

- ESF #8 Section IV.C, and ESF #10 Section V.C

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

G. Public Education and Information: *Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.*

- G.1. *Each organization shall provide a coordinated periodic (at least annually) dissemination of information to the public regarding how they will be notified and what their actions should be in an emergency. This information shall include, but not necessarily be limited to:*
- a. educational information on radiation;*
 - b. contact for additional information;*
 - c. protective measures, e.g., evacuation routes and relocation centers, sheltering, respiratory protection, radioprotective drugs; and*
 - d. protective measures related to the ingestion pathway²; and*
 - e. special needs of the handicapped.*

Means for accomplishing the required dissemination prior to an emergency¹ may include, but are not necessarily limited to: information in the telephone book; periodic information in utility bills; posting in public areas; and publications distributed on an annual basis.

Criterion Statement

State of Alabama: Alabama REPP indicates that AEMA and the Office of Radiation Control will develop a public education program, and that a public information brochure will be distributed annually.

Jackson County: The proposed Jackson County plans contain copies of an existing ingestion pathway brochure. Educational items require further development when information becomes available.

DeKalb County: The proposed DeKalb County plans contain copies of an existing ingestion pathway brochure. Educational items require further development when information becomes available.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

² Revised by FEMA GM IN-1.
9-15-09

- ESF #15, Section II.B, Section III.C, Section III.D, Section V.A.
Proposed State of Alabama Radiological Emergency Preparedness Plan
- ESF #15, Section VI.A,
Proposed Jackson County Radiological Emergency Preparedness Plan
- Annex P, Ingestion Pathway Operations, Appendix 1
Proposed DeKalb County Radiological Emergency Preparedness Plan
- Annex P, Ingestion Pathway Operations, Appendix 1

Criterion Evaluation

State of Alabama: **See Post COL Reasonable Assurance Tracking Form**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- G.2. *The public information program shall provide the permanent and transient adult population within the plume exposure EPZ an adequate opportunity to become aware of the information annually. The programs should include provision for written material that is likely to be available in a residence during an emergency. Updated information shall be disseminated at least annually. Signs or other measures (e.g., decals, posted notices or other means, placed in hotels, motels, gasoline stations and phone booths) shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an emergency or accident occurs. Such notices should refer the transient to the telephone directory or other source of local emergency information and guide the visitor to appropriate radio and television frequencies.*

Criterion Statement

State of Alabama: TVA provides fixed information signs at public use areas, such as boat ramps, parks, and campgrounds, located within the plume exposure pathway Emergency Planning Zone (EPZ). These signs provide information regarding the proximity of the facility, emergency notification methods, emergency response activities, sources of emergency information, and evacuation route markings. Specific locations of transient material postings within Jackson and DeKalb Counties have not yet been determined. Alabama REPP says that special attention will be given to distribution to transient populations. Alabama REPP says that informational brochures will be produced and distributed annually. Further planning will be adopted by March 2015 in accordance with the TVA milestone schedule.

Jackson County: Further planning will be adopted by March 2015 in accordance with the TVA milestone schedule.

DeKalb County: Further planning will be adopted by March 2015 in accordance with the TVA milestone schedule.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #15, Section V.A

Proposed Alabama Radiological Emergency Preparedness Plan

- ESF #15, Section VI.A

Criterion Evaluation

State of Alabama: **See Post COL Reasonable Assurance Tracking Form**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- G.3.a. *Each principal organization shall designate the points of contact and physical locations for use by news media during an emergency.*

Criterion Statement:

State of Alabama: Plans are adequate. The Joint Information Center for Bellefonte incidents will be located at the TVA headquarters in Chattanooga, TN. County Public Information Officers (PIO) may designate a local media briefing location. All local news releases concerning an incident will be made through the PIO. The PIO will designate a location near the EOC for the use of the media and at which all local news releases will be made. The location will not necessarily be pre-designated because of the changing availability of potential space. AEMA will serve as the point of contact for news media until the JIC is established.

Jackson County: Plans are adequate. EOP ESF #13, Section III.B.2.f discusses the establishment of a briefing center at the County EOC or Information Center.

DeKalb County: Plans are adequate. EOP ESF #13, Section II states the DeKalb County Public Information Officer (PIO) of the DCEMA is responsible for providing a central point for the news media and the general public to access information concerning protective actions taken by the county.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #15, Section III.B, Section V.A

Proposed Alabama Radiological Emergency Preparedness Plan

- ESF #15, Section II.B

Jackson County Emergency Operations Plan

- ESF #13, Section III.B.2.f

DeKalb County Emergency Operations Plan

- ESF #13, Section .II

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**
DeKalb County: **Adequate**

- G.4.a. *Each principal organization shall designate a spokesperson who should have access to all necessary information.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP says that the Governor's Office PIO is the primary spokesperson in an emergency, and that AEMA may act as the lead agency. The Governor's PIO will notify PIOs at other State agencies. The PIO of the AEMA is responsible for disseminating information concerning specific disasters, associated threats, and protective actions to the news media and general public.

Jackson County: Plans are adequate. Proposed Jackson County REP, Annex C, "Public Information," Appendix 1, "Checklist for Public Information Officers," gives an SOP for generating press releases based on situation conditions defined in Appendix 2. The final step of the SOP is to coordinate release of information with the liaison at the JIC.

DeKalb County: Plans are adequate. Proposed DeKalb County REP, Annex C, "Public Information," Appendix 1, "Checklist for Public Information Officers," gives an SOP for generating press releases based on situation conditions defined in Appendix 2. The final step of the SOP is to coordinate release of information with the liaison at the JIC.

Plan Reference

State of Alabama Emergency Operations Plan

- ESF #15, Section IV.B, Section V.A, Section V.B
- Support Annex D Section V.E.2.b.1, Incident JIC Staffing Components

Alabama Radiological Emergency Preparedness Plan

- ESF #15 – External Affairs, Section I.C and II.B, I.C, V.A and V.B

Proposed Alabama Radiological Emergency Preparedness Plan

- , Emergency Support Function #15, Section, VI.A

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex C, Appendix 1 and 2

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex C, Appendix 1 and 2

Criterion Evaluation

State of Alabama: **Adequate**
Jackson County: **Adequate**
DeKalb County: **Adequate**

G.4.b. *Each organization shall establish arrangements for timely exchange of information among designated spokespersons.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP and Alabama REPP indicate that PIOs will coordinate with lead agencies and other organizations. "Other support agencies" will perform public information services for their respective agencies in coordination with AEMA and the Governor's office. The county PIO will coordinate news releases with the AEMA PIO and other county PIOs to ensure consistency of the information released, and all local government agencies will coordinate news releases through the PIO to ensure accuracy and uniformity.

Jackson County: Plans are adequate. The proposed Jackson County REP indicate that PIOs will coordinate with lead agencies and other organizations.

DeKalb County: Plans are adequate. The proposed DeKalb County REP indicate that PIOs will coordinate with lead agencies and other organizations.

Plan Reference

State of Alabama Emergency Operations Plan

- ESF #15, Section V.B and Support Annex D, Section V.B
- Alabama Radiological Emergency Preparedness Plan reference:
- ESF #15, Section V.B and V.C

Proposed Alabama Radiological Emergency Preparedness Plan

- ESF #15, Section VI.A

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex C, Appendix 1

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex C, Appendix 1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

G.4.c. *Each organization shall establish coordinated arrangements for dealing with rumors.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP indicates that public inquiry telephone lines will be activated in an emergency and that rumor control procedures will be implemented. The Alabama REPP indicates that a rumor control point will be activated and telephone numbers will be published. As quickly as possible, AEMA Public Affairs will contact key news media to inform

them about the incident and its status, provide initial information to counter speculation and rumors, and make available, where necessary or known, immediate health and safety guidance. Departments and agencies are to closely coordinate media queries during this critical phase to ensure that the approved interagency plan is being executed.

Jackson County: Plans are adequate. In Jackson County, the Public Information Officer is responsible for establishing a public information line to keep the public informed of events.

DeKalb County: Plans are adequate. In DeKalb County, the Public Information Officer is responsible for managing and staffing public information telephone lines.

Plan Reference

State of Alabama Emergency Operations Plan

- Alabama ESF #15, Section IV.B, and IV.E, and Support Annex D Section V.D, and IV.E

State of Alabama Radiological Emergency Preparedness Plan

- ESF#15, Section II.B

Jackson County Emergency Operations Plan

- ESF #13, Sections III.B.2 and VI.A

DeKalb County Emergency Operations Plan

- ESF #13, Sections II

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- G.5. *Each organization shall conduct coordinated programs at least annually to acquaint news media with the emergency plans, information concerning radiation, and points of contact for release of public information.*³

Criterion Statement

State of Alabama: Plans are adequate. AEMA and the Office of Radiation Control, will conduct a training program annually for the news media.

“Responsibilities, Utility,” indicates that the utility will prepare an annual media conference to educate media personnel on the plant conditions and actions to protect the populace should an accident occur. This conference and the agenda will be coordinated with AEMA and Office of Radiation Control. The news media training is accomplished through briefings for the news media conducted once each calendar year, which TVA coordinates with affected State authorities. The annual briefings acquaint members of the media organizations with the

³ Revised by FEMA GM PR-1.
9-15-09

emergency plans, information regarding radiation hazards, and points of contact for release of public information during an emergency.

Jackson County: Plans are adequate. AEMA and the Office of Radiation Control, will conduct a training program annually for the news media.

DeKalb County: Plans are adequate. AEMA and the Office of Radiation Control, will conduct a training program annually for the news media.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- Sections II.B, Section III.C

Jackson County

- State of Alabama REPP, Sections II.B, Section III.C

DeKalb County

- State of Alabama REPP, Sections II.B, Section III.C

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

H. Emergency Facilities and Equipment: *Adequate emergency facilities and equipment to support the emergency response are provided and maintained.*

- H.3. *Each organization shall establish an emergency operations center for use in directing and controlling response functions.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP and REPP describe the location, layout, and security for the State EOC. It is located at 5898 County Road 41, Clanton, AL.

Jackson County: Plans are adequate. The Jackson County EOC is at 102 East Laurel Street, Scottsboro, AL.

DeKalb County: Plans are adequate. The DeKalb County EOC is located at 111 Grand Av SW in Fort Payne, AL.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Basic Plan

Proposed Jackson County Radiological Emergency Preparedness Plan

- Section V.G.

Proposed Jackson County Radiological Emergency Preparedness Plan

- Section V.G.

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- H.4. *Each organization shall provide for timely activation and staffing of the facilities and centers described in the plan.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP and REPP describe the timely activation and staffing of the facilities identified in the State plans. Activation of the Alabama State EOC will be a function of the emergency level. The specific activation process by emergency level for a nuclear power plant incident is described in more detail in Alabama EOP.

Jackson County: Plans are adequate. The proposed Jackson County plans describe timely activation and staffing of the County EOC, monitoring and decontamination facilities, reception centers, and mass care centers. Proposed Jackson County REP, Basic Plan provides a description of the EOC activation level to be implemented as a function of ECL. Proposed Jackson County REP, describes the notification and activation process for monitoring, decontamination, reception, registration, and mass care facilities.

DeKalb County: Plans are adequate. The proposed DeKalb County plans describe timely activation and staffing of the County EOC, monitoring and decontamination facilities, reception centers, and mass care centers. Proposed DeKalb County REP, Basic Plan provides a description of the EOC activation level to be implemented as a function of ECL. Proposed DeKalb County REP, describes the notification and activation process for monitoring, decontamination, reception, registration, and mass care facilities.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section VII.A

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections III.C, IX.C, XIII

Proposed Alabama Radiological Emergency Preparedness Plan

- Attachment 1, Appendix 3, Section I

Proposed Jackson County Radiological Emergency Preparedness Plan

- Basic Plan, Section III.B and Annex M Section III

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Basic Plan, Section III.B and Annex M Section III,

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- H.7. *Each organization, where appropriate, shall provide for offsite radiological monitoring equipment in the vicinity of the nuclear facility.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Proposed Appendix 3, Section I.B, "Organizational Responsibilities," states that radiological equipment monitoring has been placed in two local Health Departments for use in emergency situations. During "Increased Readiness," the RCA staff will alert the local REMT members in Jackson and DeKalb Counties. KI is available to trained Public Health nurses at the Jackson and DeKalb County Health Departments.

Jackson County: In Proposed Jackson County REP, Annex N, Section II, "Concept of Operations," the actions for Site Area Emergency require the County Radiological Officer to pick up the emergency trailers at a Site Area Emergency declaration and take Monitoring Equipment (Portal Monitor and 3 Monitoring Kits-1 for each shower and 1 for vehicle monitoring) to the Reception Centers.

DeKalb County: In Proposed DeKalb County REP, Annex N, Section II, "Concept of Operations," the actions for Site Area Emergency require the County Radiological Officer to pick up the emergency trailers at a Site Area Emergency declaration and take Monitoring Equipment (Portal Monitor and 3 Monitoring Kits-1 for each shower and 1 for vehicle monitoring) to the Reception Centers.

Plan Reference

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section I.B and ESF #8 Sections IV.B, IV.C, Tab 5, Section I.A
- Radiological Field Monitoring Team Manual, Radiation Control, July 2006.

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex F, Section II, Annex N, Section II and Appendix 9

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex F, Section II, Annex N, Section II and Appendix 9

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- H.10. *Each organization shall make provisions to inspect, inventory and operationally check emergency equipment/instruments at least once each calendar quarter and*

after each use. There shall be sufficient reserves of instruments/equipment to replace those which are removed from emergency kits for calibration or repair. Calibration of equipment shall be at intervals recommended by the supplier of the equipment.

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP lists the radiological survey and monitoring equipment available from the Alabama Radiation Control Agency. Alabama REPP requires at normal readiness that the County Public Health Official shall inventory radiological monitoring equipment such as radiation survey meters and air monitors.

Jackson County: Plans are adequate. The type and usage of monitoring equipment, including portal monitors, is described in proposed Jackson County REP. The plan contains descriptive instructions for setup, testing, use, and teardown of the portals. The plan contains instructions for preparing the survey meters for use, including both battery and source operational checks. The plans also describe proper use of the survey meters.

DeKalb County: Plans are adequate. The type and usage of monitoring equipment, including portal monitors, is described in proposed DeKalb County REP. The plan contains descriptive instructions for setup, testing, use, and teardown of the portals. The plan contains instructions for preparing the survey meters for use, including both battery and source operational checks. The plans also describe proper use of the survey meters.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF#8, Section V

State of Alabama Emergency Operations Plan

- Radiological Field Monitoring Team Manual, Radiation Control, July 2006

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex F, Section II, Annex N, Appendix 9, Tab A, and Appendix 9, Tab B

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex F, Section II and Annex N, Appendix 9, Tab A and B

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- H.11. *Each plan shall, in an appendix, include identification of emergency kits by general category (protective equipment, communications equipment, radiological monitoring equipment and emergency supplies).*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP lists the radiation monitoring, protective equipment and laboratory equipment available at the Radiation Control Agency and at the ADEM Lab in Montgomery, Alabama.

Jackson County: The Proposed Jackson County REP provides a list of the dosimetry equipment that the Radiation Officer will provide to the emergency workers, but this equipment is not arranged by kits.

DeKalb County: The Proposed DeKalb County REP provides a list of the dosimetry equipment that the Radiation Officer will provide to the emergency workers, but this equipment is not arranged by kits.

Plan References

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Section V

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex F, Section II and Annex N, Section II

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex F, Section II and Annex N, Section II

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- H.12. *Each organization shall establish a central point (preferably associated with the licensee's near-site Emergency Operations Facility), for the receipt and analysis of all field monitoring data and coordination of sample media.*

Criterion Statement

State of Alabama: The Alabama EOP states that the Department of Public Health (Office of Radiation Control) shall conduct off-site radiation monitoring and control activities and coordinate radiation data with the licensee, federal agencies, and Alabama Emergency Management Agency. With environmental monitoring and meteorological information, ESF #8 will determine the protective actions needed and issue any orders necessary to meet the situation. The RCA shall provide a central reporting location for all organizations (local, state, and federal) collecting environmental data. The standing requests for Federal Assistance are to be coordinated with the RCA at the State IOF. The Alabama Office of Radiation Control (ORC) serves as the initial point of contact for warnings of condition changes at the plant. The ORC shall evaluate radiological information provided by TVA and make decisions on protective measures for

monitoring radiological contamination off-site. The ORC shall report and evaluate technical data to support decisions on population protection participating as a principal member of the state EOC and State Field Office (SFO). All sampling operations are coordinated through SRMAC. The Alabama Department of Agriculture and Industries will have primary responsibility for sampling farm products, excluding milk, which is performed by the Milk Inspectors from the Alabama Department of Public Health. A location for the coordination of radiological monitoring and sampling activities has not yet been identified for the BLFNT site, but is expected to follow the approach taken in Alabama at the two other operating sites.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan References

State of Alabama Emergency Operations Plan

- Incident Annex E, Section III

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section V.B

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Sections IV.A and Section IV.C

State of Alabama, Radiological Field Monitoring Team Manual, Radiation Control, July 2006

Proposed Jackson County Radiological Emergency Preparedness Plan

Basic Plan, Section IV

Proposed DeKalb County Radiological Emergency Preparedness Plan

Basic Plan, Section IV, p.BP-6

Criterion Evaluation

State of Alabama: See Post COL Reasonable Assurance Tracking Form

Jackson County: Not Applicable

DeKalb County: Not Applicable

- I. Accident Assessment:** *Adequate methods, systems and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.*
- I.7.** *Each organization shall describe the capability and resources for field monitoring within the plume exposure Emergency Planning Zone which are an intrinsic part of the concept of operations for the facility.*

Criterion Statement

State of Alabama: Plans are adequate. According to the Alabama Radiation Emergency Preparedness Plan, under ideal conditions, one or more local team(s)

will be available and fully operational within one hour of deployment and additional teams will be available within 8 hours of deployment.

Jackson County: Not applicable.

DeKalb County: Not applicable.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Sections I, III, IV, VI, VIII

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section I.B

State of Alabama, Radiological Field Monitoring Team Manual, Radiation Control, July 2006

- Southern Mutual Radiation Assistance Plan (2005), Section F.1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not applicable**

DeKalb County: **Not applicable**

- I.8. *Each organization, where appropriate, shall provide methods, equipment and expertise to make rapid assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways. This shall include activation, notification means, field team composition, transportation, communication, monitoring equipment and estimated deployment times.*

Criterion Statement

State of Alabama: Plans are adequate. Plans describe the methods for activation and notification of field teams, and the types of equipment to be used to make assessments. Composition of teams, deployment times, transportation and communications are all addressed in the plans. Duty performance, such as deployment, survey, and sample collection, processing and exposure control are all addressed.

Jackson County: Non Applicable

DeKalb County: Non Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8 Section IV and V, VII and VIII.

Additional Plan

- Alabama Radiological Field Monitoring Team (RFMT) Manual

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not applicable**
DeKalb County: **Not applicable**

- I.9. *Each organization shall have a capability to detect and measure radioiodine concentrations in air in the plume exposure EPZ as low as 10^{-7} uCi/cc (micro curies per cubic centimeter) under field conditions. Interference from the presence of noble gas and background radiation shall not decrease the stated minimum detectable activity.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP states (Radiological Field Monitoring Teams) RFMTs have the capability to detect and measure radioiodine concentrations in air in the plume exposure EPZ as low as 10^{-7} uCi/cc under field conditions. RFMT Manual, "Air Sampling Techniques," allows for the collection of sufficient quantities of radioiodine in a reasonable sampling time to permit field measurement in the presence of noble gases. The RFMT Manual describes the capability to collect an appropriate volume of air and within the plume and field counting equipment appears have sufficient sensitivity to detect radioiodine at the required 10^{-7} uCi/cc level.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 7, Section III.B

Additional Plans

- Alabama Radiological Field Monitoring Team (RFMT) Manual

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- I.10. *Each organization shall establish means for relating the various measured parameters (e.g., contamination levels, water and air activity levels) to dose rates for key isotopes (i.e., those given in Table 3, page 18) and gross radioactivity measurements. Provisions shall be made for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with the protective action guides. The detailed provisions shall be described in separate procedures.*

Criterion Statement

State of Alabama: Plans are adequate. The State of Alabama has established the means for relating various measured parameters (e.g., contamination levels, water and air activity levels) to dose rates for key isotopes and gross radioactivity

measurements. Provisions have been made for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with the protective action guides. The detailed provisions are described in separate procedures.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section III.A and C
- ESF #8, Tab 6, Section I, II and IV and Tab 7

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- I.11. *Arrangements to locate and track the airborne radioactive plume shall be made, using either or both Federal and State resources.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama Radiological Field Monitoring Team Manual, says that the State Radiological Monitoring and Assessment Center (SRMAC) controls and directs all off-site monitoring and sampling efforts within the State. All agencies coordinate their off-site radiological field monitoring through the SRMAC to insure completeness of area monitoring and to avoid duplication of effort. The field team coordinator at the direction of the Radiation Control team leader in the SRMAC is responsible for providing direct guidance to RFMTs.

The Alabama REPP states in part: "Should an evacuation be ordered by the Alabama Radiation Control Agency, the RFMTs should move to an area downwind of the plant just outside the evacuation area and continue to drive back and forth across the projected plume pathway taking readings every 15 minutes or as directed."

The State may obtain additional plume monitoring resources through the Southern Agreement for Mutual State Radiological Assistance. Assistance from other States is requested by the RCA. The Southern Mutual Radiation Assistance Plan includes an agreement and signatory page for each of the organizations committing mutual aid.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 7, Section III.A
- State of Alabama, Radiological Field Monitoring Team Manual, Radiation Control, July 2006
- Southern Mutual Radiation Assistance Plan (2005)

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

J. Protective Response: *A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate (66 FR 5427). Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.*

- J.2. *Each licensee shall make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density and specific radiological conditions.*

Criterion Statement

State of Alabama: Plans are adequate. Coordination of a site evacuation will be handled between TVA and the Jackson County Sheriff's office. The proposed Jackson County Radiological Emergency Plan (REP) establishes procedures to be followed to provide a coordinated law enforcement effort in the event of an accident at the Bellefonte Nuclear Plant.

Jackson County: Plans are adequate. Coordination of a site evacuation will be handled between TVA and the Jackson County Sheriff's office. The proposed Jackson County Radiological Emergency Plan (REP) establishes procedures to be followed to provide a coordinated law enforcement effort in the event of an accident at the Bellefonte Nuclear Plant. If the site evacuation is coincident with evacuation of the public to include traffic control point management, traffic escorting, access control and traffic impediment removal.

DeKalb County: Not applicable

Plan Reference

State of Alabama Emergency Operations Plan

- Incident Annex E, Section III.B.1.c

Alabama Radiological Emergency Preparedness Plan

- ESF #1

Proposed Jackson County Radiological Emergency Preparedness Plan
Annex K, Section VI
Proposed DeKalb County Radiological Emergency Preparedness Plan
Annex K, Section VI

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Not Applicable**

- J.9. *Each State and local organization shall establish a capability for implementing protective measures based on protective actions guides and other criteria. This shall be consistent with the recommendations for EPA regarding exposure resulting from the passage of radioactive plumes, (EPA-400-R-92-001, May 1992) and with those of FDA/DHHS regarding radioactive contamination of human food and animal feeds as published in the Federal Register of August 13, 1998 (63 FR 43402).*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP describes the process used by the State of Alabama for making initial PADs on the basis of Licensee notification of plant status (General Emergency and/or severe core damage), licensee recommended Protective Action Recommendations (PARs) and for the implementation of these PADs. Alabama REPP says that in the event of circumstances at the nuclear power plant that require an immediate action to protect the public health and safety, the Director of the Office of Radiation Control or his alternate is authorized to order or implement the necessary protective actions. After initial PADs have been made and additional information becomes available regarding potential or actual releases, the dose assessment group may provide additional PARs based on dose projections. The plan and procedures in Alabama REPP include evacuation and shelter PAGs and the capability to determine the PAG value that is appropriate for the situation. The plan includes direction to shelter or evacuate areas where doses are projected to exceed 1 rem TEDE or 5 rem CDE thyroid. For situations that involve a high-risk environment or high-risk groups (e.g. mobility- impaired or infirm), the plan provides flexibility to administer radio-protective drugs and shelter in place.

Alabama REPP describes the capability to communicate the essential contents of PADs to all affected jurisdictions and states, "The SEOC will ensure that the counties have activated the Prompt Notification System (PNS) and issued an Emergency Alert System (EAS) message."

Alabama REPP states, "Protective Action Guides (PAGs) are established in EPA-400 and are to be applied during a nuclear power plant accident. EPA-400 guidance limits the amount of radiation exposure to an individual after the initial

emergency phase to: two rem the first year; 500 millirem the second year; and a cumulative exposure total of five rem for the next 50 years.” Evaluation of radiation exposure from ingestion of contaminated food products will be performed in accordance with criteria and procedures established in EPA 400. The proposed Alabama REPP provides general information regarding the Department of Agriculture and Industries responsibilities to deploy crop monitoring teams, to make recommendations to local agricultural officials on impounding and disposing contaminated crops and livestock.

Jackson County: Plans are adequate. The proposed Jackson County plan provides information concerning protective measure for the schools and special facilities located within the plume EPZ. The proposed Jackson County REP says that the ORC or A&I will determine the disposition of all food and milk in Jackson County based on laboratory analysis. Their options range from releasing food stuffs for unrestricted sale to condemning and seizing it. Agriculture & Industries may also order livestock to be placed on stored feed.

DeKalb County: Plans are adequate. The proposed DeKalb County plan provides information concerning protective measure for the schools and special facilities located within the plume EPZ. The proposed DeKalb County REP says that the ORC or A & I will determine the disposition of all food and milk in DeKalb County based on laboratory analysis. Their options range from releasing food stuffs for unrestricted sale to condemning and seizing it. Agriculture & Industries may also order livestock to be placed on stored feed.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections III.A, C, and V, and ESF #8 Sections II, Section IV.A, V.B, IV, VI.B, and Tab 4 and Section VII, and Tab 5, Sections I.A, III B.3 and Tab 6, Section II and

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4, Section XI, ESF-11

Jackson County:

- Proposed Jackson County REP, Annex P, Section III.A

DeKalb County:

- DeKalb County REP, Annex P, Section III.A

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- J.10. The organization’s plans to implement protective measures for the plume exposure pathway shall include the following:

- J.10.a *Maps showing evacuation routes, evacuation areas, pre selected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas; (identification of radiological sampling and monitoring points shall include the designator in Table J-1 or an equivalent uniform system described in the plan);*

Criterion Statement

State of Alabama: Plans are adequate. The Evacuation Time Estimate Report contains maps of proposed evacuation routes. The proposed Alabama REPP contains a note that additional detailed planning is required and that the appropriate map will be inserted. Attachment 3 contains a list of schools and health facilities in Jackson County and DeKalb County. The Evacuation Time Estimate Report, Section 10, "Evacuation Routes," contains maps of evacuation routes out of all 13 planning sectors. Further planning will be adopted by March 2014 in accordance with the TVA milestone schedule.

Jackson County: Plans are adequate. Proposed Jackson County REP contains written descriptions of the planning zone boundaries and the reception center (town) for each zone. Annex K, Section VI provides narrative descriptions of the evacuation routes from the 12 Jackson County planning zones. Appendix 1 to Annex K contains a map of the 13 Bellefonte NP planning zones. Further planning will be adopted by March 2014 in accordance with the TVA milestone schedule.

DeKalb County: Plans are adequate. Proposed DeKalb County REP contains written descriptions of the planning zone boundaries and the reception center (town) for each zone. It also provides narrative descriptions of the evacuation routes from the 12 Jackson County planning zones. Appendix 1 to Annex K contains a map of the 13 Bellefonte NP planning zones. Further planning will be adopted by March 2014 in accordance with the TVA milestone schedule.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF-5, Section V.B

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 2 and 3 and Evacuation Time Estimate Report, Section 10

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex C, Appendix 3 and Annex K, Appendix 1 and Section VI

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex C, Appendix 3 and Annex K, Appendix 1 and Section VI

Additional References:

- Bellefonte NPP ETE Report (September, 2007)

Criterion Evaluation

State of Alabama: **Adequate**
Jackson County: **Adequate**
DeKalb County: **Adequate**

- J.10.b *Maps showing population distribution around the nuclear facility. This shall be by evacuation areas (licensees shall also present the information in a sector format);*

Criterion Statement

State of Alabama: Plans are adequate. Maps showing population distribution and special facility population data were provided. The Evacuation Time Estimate Report includes information on the expected transient population at facilities in the EPZ. Alabama REPP contains tables showing schools and special facilities in the EPZ and their respective populations.

Jackson County: Plans are adequate. Proposed Jackson County REP contains a list of the 12 Jackson County planning zones and populations.

DeKalb County: Plans are adequate. Proposed DeKalb County REP contains a list of the DeKalb County planning zone and population.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Evacuation Time Estimate Report, Section 3 and Section 8

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex K, and Appendix 1

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex K, p.K-5 and Appendix 1

Additional References:

- Bellefonte NPP ETE Report (September, 2007)

Criterion Evaluation

State of Alabama: **Adequate**
Jackson County: **Adequate**
DeKalb County: **Adequate**

- J.10.c *Means for notifying all segments of the transient and resident population;*

Criterion Statement

State of Alabama: The information in the plans provided for review does not address the means for notifying all segments of the transient and resident population in sufficient detail. The specific requirements of this criterion are addressed under criteria E.5, E.6, and E.7.

Jackson County: The information in the plans provided for review does not address the means for notifying all segments of the transient and resident

population in sufficient detail. The specific requirements of this criterion are addressed under criteria E.5, E.6, and E.7.

DeKalb County: The information in the plans provided for review does not address the means for notifying all segments of the transient and resident population in sufficient detail. The specific requirements of this criterion are addressed under criteria E.5, E.6, and E.7.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections A and E and X.C, and ESFs #2 Section VI.A and #15, Section VI.D

State of Alabama Emergency Operations Plan

- Support Annex D, Sections IV.I. and N.1

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X.G and Appendix 3, Section I.B; Attachment 4, Section I.A and B and Sections VI and X and Emergency Support Function #15,

Proposed Jackson County Plan

- Annex C, Appendix 1; 2; 3 and 6, and Annex E and Section III.B; Annex G, Appendix 4 and Annex Q

Proposed DeKalb County Plan

- Annex C, Appendix 1; 2; 3 and 6, and Annex E and Section III.B; Annex G, Appendix 4 and Annex Q

Criterion Evaluation

State of Alabama: **See Post COL Reasonable Assurance Tracking Form**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

J.10.d *Means for protecting those persons whose mobility may be impaired due to such factors as institutional or other confinement;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP indicates that in the event protective actions are ordered for areas containing persons institutionally confined, these persons and those individuals required for their supervision and care will initially be given radio-protective drugs and be instructed to remain in the institution under shelter conditions with building air intakes closed. Proposed Alabama REPP indicates the County EMA Coordinator will prepare plans, train faculty and support personnel, and conduct practical exercises on evacuation and radiological protection for the schools in the 10-mile EPZ. During periods of "Increased Readiness," the County EOC will coordinate the evacuation of schools based on information provided by the RCA staff at the SEOC or IOF. The County EOC will make prior arrangements with the local school superintendents to

ensure school buses for evacuation of students in the 10-mile EPZ schools who would normally not ride school buses.

Jackson County: Plans are adequate. The Proposed Jackson County REP indicates they will be evacuated if required and school evacuation destinations are identified only by city without names and addresses. The evacuation destination for private schools is (TBD). Daycares, health care centers and nursing homes are listed, but evacuation destinations are not identified (TBD). The Bellefonte ETE Report does not identify evacuation destinations by name and address. The proposed Jackson County REP outlines the process for transporting special needs and bedridden individuals to the (TBD) location. The plan says that the JCHD will dispatch teams to homes of individuals that have predetermined special needs.

DeKalb County: Plans are adequate. The Proposed DeKalb County REP indicates they will be evacuated if required and school evacuation destinations are identified only by city without names and addresses. The evacuation destination for private schools is (TBD). Daycares, health care centers and nursing homes are listed, but evacuation destinations are not identified (TBD). The Bellefonte ETE Report does not identify evacuation destinations by name and address. The proposed DeKalb County REP outlines the process for transporting special needs and bedridden individuals to the (TBD) location. The plan says that the DCHD will dispatch teams to homes of individuals that have predetermined special needs.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8,

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section I.B, ESF-6, and Attachment 3

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex I and J, Section III.C

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex I and J, Section III.C

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

J.10.e *Provisions for the use of radioprotective drugs, particularly for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult, including quantities, storage, and means of distribution.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP Plan describes the policy for the use of radio protective drugs, including groups who may be advised to use KI (e.g. emergency workers, institutionalized persons, or the general population who may be contaminated within the plume EPZ). The Alabama REPP Plan describes both the process for the decision to use KI as well as stating the initial stores of KI will be in the local health departments in the 10-mile EPZ around the NPPs in Alabama.

Jackson County: The proposed Jackson County REP describes record keeping; however, maintenance and storage of KI supplies in the new BNP EPZ counties are not addressed.

DeKalb County: The proposed DeKalb County REP describes record keeping; however, maintenance and storage of KI supplies in the new BNP EPZ counties are not addressed.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Appendix 1, ESF # 8, Section I.B, Section IV.C.1, Section IV.C.3.b, Section VI.C.2.b, Tab 4, Section V and VII and Tab 8, Section IV.F

Proposed Jackson County Radiological Emergency Preparedness Plan

- Basic Plan, Section IV.2, Section V, Annex N, Appendix 5, Annex O, and Annex Q, Section IV.L.3.a

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Basic Plan, Section IV.2, Section V, Annex N, Appendix 5, Annex O, and Annex Q, Section IV.L.3.a

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- J.10.f *State and local organizations' plans should include the method by which decisions by the State Health Department for administering radioprotective drugs to the general population are made during an emergency and the pre-determined conditions under which such drugs may be used by offsite emergency workers;*

Criterion Statement

State of Alabama: Plans are adequate. A description of the criteria used for evacuees for determining whether KI should be administered in the Alabama REPP which states, "The State Health Officer shall consider ordering that KI be made available to all evacuees who are believed to have been exposed to a time

averaged concentration of radioiodine that would result in a projected thyroid dose commitment in excess of 5 rem.” In addition to recommending KI at a calculated 5 rem projected committed dose equivalent to the thyroid, Alabama REPP says to consider evacuation and/or sheltering at 5 rem – adult thyroid. The proposed Alabama REPP also identifies the State Health Officer, or his designee as the decision maker for recommending the administration of KI. The proposed Jackson and DeKalb County REP, Annex O, says that KI will be dispensed to EWs at the forward command post with the instruction not to ingest the KI until they have been notified that a KI health Advisory has been issued by the State Health Officer or his designee. Nurses at reception areas will dispense KI to members of the general public after receiving information that a KI Public Health Order has been issued by the State Health officer or his representative.

Jackson County: Plans are adequate. The proposed Jackson County REP says that KI will be dispensed to EWs at the forward command post with the instruction not to ingest the KI until they have been notified that a KI health advisory has been issued by the State Health Officer or his designee. Nurses at reception areas will dispense KI to members of the general public after receiving information that a KI Public Health Order has been issued by the State Health officer or his representative.

DeKalb County: Plans are adequate. The DeKalb County REP says that KI will be dispensed to EWs at the forward command post with the instruction not to ingest the KI until they have been notified that a KI health Advisory has been issued by the State Health Officer or his designee. Nurses at reception areas will dispense KI to members of the general public after receiving information that a KI Public Health Order has been issued by the State Health officer or his representative.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Section I.B, Section II Tab 4, Section III.A and Section V

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section B

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex O, Section VI.J

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex O, Section VI.J

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

J.10.g *Means of relocation;*

Criterion Statement

State of Alabama: Plans are adequate. The Proposed Alabama REPP specifies that the Emergency Management Director of each risk county will solicit requirements for transportation. A method for estimating transit dependent people is provided in the BNP ETE Report.

Jackson County: Plans are adequate. The means for controlling and promoting a smooth flow of traffic during an evacuation are specified in the Proposed Jackson County REP. The proposed plan sections address setting up Traffic Control Points, escort of vehicles used for evacuation, oversight of traffic control and obstacle removal. Traffic control points are identified and described with locations by ERPAs; the TCPs provided in Annex.G are consistent with those identified in the BNP ETE Report.

DeKalb County: Plans are adequate. The means for controlling and promoting a smooth flow of traffic during an evacuation are specified in the Proposed DeKalb County REP. The proposed plan sections address setting up Traffic Control Points, escort of vehicles used for evacuation, oversight of traffic control and obstacle removal. Traffic control points are identified and described with locations by ERPAs; the TCPs are consistent with those identified in the BNP ETE Report.

Plan Reference

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 1, Section II.B

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex G, Section III.E, Annex J, Section II, Annex M, Appendix 2, Annex K, Section VI, and Section VII

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex G, Section III.E, Annex J, Section II, Annex M, Appendix 2, Annex K, Section VI, and Section VII

Additional References:

- Bellefonte NPP ETE Report (September, 2007)

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

J.10.h *Relocation centers in host areas which are at least 5 miles, and preferably 10 miles, beyond the boundaries of the plume exposure emergency planning zone; (see J.12).*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, ESF #8 identifies reception centers for the existing Browns Ferry and Farley NPPS; ESF #8 and will update with BNP information accordingly.

Jackson County: Proposed Jackson County REP only identifies the city or town for the Reception and Care Centers. Actual locations are not identified by name and addresses. The Bellefonte Nuclear Plant ETE Report does not identify relocation centers by name and addresses. The proposed Jackson County REP identifies the schools and special facilities located in the county. Host facilities/schools are identified city or town; names or addresses are not provided. Proposed Jackson County REP indicates the Department of Human Resources (DHR) will assume responsibility for Reception Centers and the American Red Cross (ARC) will assume responsibility for providing temporary shelter for evacuees at Mass Care Centers. No information is provided regarding organizations responsible for other facilities (e.g. host schools). Staffing requirements are not specified. As discussed in NUREG Criterion J.12, radiological monitoring of evacuees is addressed; however, monitoring of evacuated school children, hospital and nursing home patients, and inmates is not sufficiently described.

DeKalb County: Proposed DeKalb County REP only identifies the city or town for the Reception and Care Centers. Actual locations are not identified by name and addresses. The Bellefonte Nuclear Plant ETE Report does not identify relocation centers by name and addresses. The proposed DeKalb County REP identifies the schools and special facilities located in the county. Host facilities/schools are identified city or town; names or addresses are not provided. Proposed DeKalb County REP indicate the Department of Human Resources (DHR) will assume responsibility for Reception Centers and the American Red Cross (ARC) will assume responsibility for providing temporary shelter for evacuees at Mass Care Centers. No information is provided regarding organizations responsible for other facilities (e.g. host schools). Staffing requirements are not specified. As discussed in NUREG Criterion J.12, radiological monitoring of evacuees is addressed; however, monitoring of evacuated school children, hospital and nursing home patients, and inmates is not sufficiently described.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8

Proposed Alabama Radiological Emergency Preparedness Plan

- ESF #8, Section VI.E

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex I, Annex M, Appendix 2 and Section II

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex I, Annex M, Appendix 2 and Section II

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

J.10.i *Projected traffic capacities of evacuation routes under emergency conditions;*

Criterion Statement

State of Alabama: Plans are adequate. The ETE submitted had projected capacities of evacuation routes under emergency conditions.

Jackson County: Plans are adequate. The ETE submitted had projected capacities of evacuation routes under emergency conditions.

DeKalb County: Plans are adequate. The ETE submitted had projected capacities of evacuation routes under emergency conditions.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #5

Proposed Jackson County Radiological Emergency Preparedness Plan

- Annex K, Section VI, VII, VIII, and Appendix 1

Proposed DeKalb County Radiological Emergency Preparedness Plan

- Annex K, Section VI, VII, VIII, and Appendix 1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

J.10.j *Control of access to evacuated areas and organization responsibilities for such control;*

Criterion Statement

State of Alabama: Plans are adequate. In Alabama REPP states that at Increased Readiness the Director, AEMA will notify counties in the 10-mile EPZ and land, water, and air transportation modes that have routes through the EPZ that a "Site Area Emergency" has been declared and advise the Coast Guard that river traffic should not enter the 10-mile EPZ. At an Emergency the Director, AEMA will notify contiguous states and counties in the 50-mile EPZ, FEMA, state agencies' staff, the Coast Guard, and transportation modes of the emergency

situation so they can take appropriate measures. Alabama REPP, Emergency Support Function (ESF) #13 – Public Safety and Security, Section III.A, notes that additional law enforcement surveillance may be needed in the evacuated area to prevent looting. Law enforcement may be needed for access control of large areas that have been evacuated. Local law enforcement resources are used prior to requesting assistance from the SEOC.

Jackson County: Plans are adequate. Proposed Jackson County REP indicates Traffic Control Points should be set up at the appropriate locations and will be used to restrict traffic apparently by law enforcement. Law enforcement officials will determine the need for equipment. Proposed Jackson County REP states that county and local police officers will provide security by patrolling evacuated areas

DeKalb County: Plans are adequate. Proposed DeKalb County REP indicates Traffic Control Points should be set up at the appropriate locations and will be used to restrict traffic apparently by law enforcement. Law enforcement officials will determine the need for equipment. Proposed DeKalb County REP states that county and local police officers will provide security by patrolling evacuated areas

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan:

- Base Plan, Section XIII.C, and ESF#13, Section III.A

Proposed Jackson County REP Plan:

- Annex G, Section III.D and E, and Annex K, Section VII

Proposed DeKalb County REP Plan:

- Annex G, Section III.D and E, and Annex K, Section VII

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- J.10.k *Identification of and means for dealing with potential impediments (e.g., seasonal impassability of roads) to use of evacuation routes, and contingency measures.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP states that the Director, Department of Transportation will during:

Normal Readiness:

- Brief the SEOC on the status of evacuation routes and any known impediment to evacuation. Make recommendations for alternate routes.

- Provide resources to assist in traffic control. These will include, but are not limited to road barricades, emergency repair crews, and ice/snow removal equipment and crews.

Emergency:

- Provide resources to assure that evacuation routes are useable, or that alternate routes are identified and known to local law enforcement agencies.
- Coordinate local resources that can respond to emergencies or accidents that may impede evacuation.

Jackson County: Plans are adequate. Proposed Jackson County REP specify in that should an evacuation route become blocked, the law enforcement officer should contact the EOC immediately. If it's possible to remove the impediment, the officer should see that this is done by contacting the appropriate office, i.e. wrecker service, district tool shed, etc. If it is impossible to remove the impediment in a timely manner, the County EMA Director will determine an alternative route.

DeKalb County: Plans are adequate. Proposed DeKalb County REP specify in that should an evacuation route become blocked, the law enforcement officer should contact the EOC immediately. If it's possible to remove the impediment, the officer should see that this is done by contacting the appropriate office, i.e. wrecker service, district tool shed, etc. If it is impossible to remove the impediment in a timely manner, the County EMA Director will determine an alternative route.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XIII.G

Proposed Jackson County REP Plan:

- Annex K, Section VII

Proposed DeKalb County REP Plan:

- Annex K, Section VII, p K-8

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

J.10.1 *Time estimates for evacuation of various sectors and distances based on a dynamic analysis (time-motion study under various conditions) for the plume exposure pathway emergency planning zone (See Appendix 4); and*

Criterion Statement

State of Alabama: Plans are adequate. The information provided for review sufficiently addresses Evacuation Time Estimates for special populations, school

children, transit dependent people and all sectors or evacuation areas for the general public.

Jackson County: Plans are adequate. Proposed Jackson County REP, Annex K, Section V, provides evacuation times for all populations in accordance with NUREG 0654 criterion J.10.1 (to the 95% clearance level) for normal and adverse conditions for the Two Mile Zone, Five Mile Zone and Ten Mile Zone. These evacuation times (for the general public) agree with those shown in Table 7-1C in the Bellefonte Nuclear Plant ETE Report.

DeKalb County: Plans are adequate. Proposed DeKalb County REP, Annex K, Section V, provides evacuation times for all populations in accordance with NUREG 0654 criterion J.10.1 (to the 95% clearance level) for normal and adverse conditions for the Two Mile Zone, Five Mile Zone and Ten Mile Zone. These evacuation times (for the general public) agree with those shown in Table 7-1C in the Bellefonte Nuclear Plant ETE Report.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- ESF #5

Proposed Jackson County REP Plan

- Annex K, Section V

Proposed Jackson County REP Plan

- Annex K, Section V

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

J.10.m *The bases for the choice of recommended protective actions from the plume exposure pathway during emergency conditions. This shall include expected local protection afforded in residential units or other shelter for direct and inhalation exposure, as well as evacuation time estimates.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP describes various options within a range of available protective actions and the associated initiating conditions. These include evacuation or sheltering for projected doses of 1 rem TEDE, 5 rem CDE adult thyroid, plant conditions that make the above dosage probable, and any General Emergency. Public warning and/or sheltering are considered protective actions for any Site Area Emergency. Evacuation should be the selected provision unless environmental conditions or high-risk groups make evacuation hazardous or impossible. Included are definitions for evacuation, shelter, public warning and monitoring/shelter. Sheltering in place shall be

considered when the projected time in the area is less than three hours or when evacuation time and metrological conditions would cause cumulated exposure time to exceed 50% of the projected exposure time. The provision for sheltering in place, clearly addresses inclement weather and adverse road conditions. Sheltering in place is also addressed for immobile or confined individuals will initially be given radio-protective drugs and remains in the institution under shelter conditions.

Fast breaking incidents where the licensee immediately classifies a General Emergency directs the County EMA to follow the recommendations of the licensee. Bellefonte Units 3 & 4 COL Application stipulates that the licensee's initial PAR for any event classified as a General Emergency will be to evacuate a 2-mile radius and either 5 or 10 miles downwind, depending on projected radiological conditions.

Alabama REPP provides the general methodologies for calculating projected doses. This section includes an order of priority for determining protective actions: plant conditions and the potential for release of radioactive material, calculation of projected doses based on release rates, calculations based on field team data.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan:

- ESF #8, Section III.C, and Section IV.A, and Tab 4, Section II, Section III.A, and Section VI

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- J.11 *Each State shall specify the protective measures to be used for the ingestion pathway, including the methods for protecting the public health [from consumption of contaminated foodstuffs] in the event of food contamination. This shall include criteria for deciding whether dairy animals should be put on stored feed. The plan shall identify & describe procedures for detecting contamination, for estimating the dose commitment consequences from the ingestion pathway and for imposing protective measures such as impoundment, decontamination, processing, decay, product diversion and preservation. Maps for recording survey and monitoring data, key land use data (e.g., farming, dairies, food processing plants, watersheds, water supply intake and treatment plants and reservoirs) shall be provided. Provisions for maps showing general crop information may be met by including all of the 50-mile ingestion pathway EPZ. Up-to-date lists of the*

name and location of all facilities within the ingestion pathway EPZ which regularly process milk products and other food or agricultural products originating in that EPZ shall be maintained. (NUREG-0654/FEMA-REP-1, Rev. 1, p. 64.)

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP indicates that during an Emergency, the Agriculture Commissioner will monitor the situation and provide advice to the Radiation Control Agency (RCA) and the State Emergency Operations Center staff on animal or human food that may become contaminated; direct the field teams to collect food and soil samples that will be provided for analysis; identify food crops that are contaminated and in coordination with RCA, direct that these crops be seized and/or destroyed; make the determination of how crops and livestock are to be handled; and in conjunction with RCA, direct appropriate actions. The Director of the RCA will issue Public Health Orders to take action as necessary to meet the radiological emergency; keep all agencies and contiguous states advised of the radiological status of the incident, and the type and extent of protective actions ordered; direct and coordinate radiological monitoring programs; provide information for accident assessment and environmental protection; request federal assistance if needed through the National Response Plan (NRP) and the Federal Radiological Monitoring and Assessment Plan; coordinate monitoring of food crops; monitor and coordinate protective actions for milk distribution; monitor and coordinate protective actions for water supplies.

The Alabama REPP states that the "Evaluation of radiation exposure from ingestion of contaminated food products will be performed in accordance with criteria and procedures established in EPA-400. Human food including milk as well as animal feed will be considered and recommendations included in EPA-400 will be used to determine if levels of radiation encountered in food after a radiological incident warrant protective actions ... Milk from dairies located in the ingestion exposure pathway area will be considered to contain I-131 in excess of allowable limits and will be held at the dairy until a raw milk sample is tested. Analysis will be made daily and the decision to release or condemn milk will be made after daily sample results are reviewed. Raw milk containing I-131 in excess of .015 [microcuries per liter] will be condemned in accordance with EPA-400. All dairies within these areas will be advised to place lactating animals on stored feed. Isotopes other than I-131 will be monitored as appropriate.... Foodstuffs will be sampled at the farm prior to harvesting when possible, as described in ESF #11. Food crops will be condemned if sample results indicate contamination levels above the applicable preventive protection action guides established in EPA-400." The 1998 FDA Guidance is not referenced.

Alabama REPP says that when partial or full activation of the SEOC is implemented and at Alabama Emergency Management Agency's request, the

Environmental Laboratory of the Alabama Department of Environmental Management will dispatch available portable analysis equipment to the county health department nearest the IOF; provide sufficient staff to perform analysis at this location as well as utilizing the fixed equipment at the ADEM Lab in Montgomery; establish a central collection and screening point and distribute the samples collected and brought in for analysis to the various federal and state radiological laboratories providing assistance; collect and record the results of such analysis.

Alabama REPP indicates that the Water Division of the Alabama Department of Environmental Management will coordinate with RCA on the anticipated time of arrival at each public water supply intake of the suspected radioactivity and the protective actions ordered by the State Health Officer or his designee; notify the appropriate water authority and coordinate any protective actions and/or sampling programs ordered; ensure that samples are collected as requested at each public water supply and that these samples are promptly transported to a central analysis point. Samples should contain one gallon of raw water and shall be labeled or tagged for identification. The RCA will inform Public Water Supplies of the laboratory location(s) and time(s) available for analysis.

The Alabama REPP states that the "ingestion pathway maps are drawn on a scale of ½ inch to the mile, display all the 50-mile ingestion pathway EPZ within this State, and are mounted under a plastic or plexiglass covering. The locations of all producing commercial dairies are shown on the map by color coded dots. These maps are maintained in the RCA assigned space in the SRMAC and at the central sample analysis location (i.e. the Houston County Health Department). These maps are for recording survey and monitoring data, key land use data, dairies, food processing plants, water sheds, water supply intakes, and treatment plants and reservoirs."

State of Tennessee: Tennessee Emergency Management Plan indicates that the Department of Environment and Conservation - Division of Radiological Health will develop and enforce procedures for monitoring and assessment of radioactive releases; make protective action recommendations with respect to the threats imposed by radioactive releases; monitor/assure the clean-up of radioactive contaminants; work with TEMA, TVA and DOE to coordinate the response to off-site releases at their respective facilities; and provide an individual to act as the Emergency Services Coordinator (ESC) in the SEOC, as well as an alternate to insure 24-hour availability.

The Tennessee Emergency Management Plan indicates that as part of mitigation and preparedness activities, the Department of Environment and Conservation - Division of Radiological Health will develop procedures and policies concerning the response of Division of Radiological Health personnel to radiological incidents; develop procedures for deploying monitoring teams/equipment in

support of radiological response activities; develop capabilities of tracking exposure to radioactive materials by state and local emergency response personnel and providing display of radiation exposure/contamination data in SEOC (and provide same to federal officials if necessary); develop protective action guidance materials for use during fixed nuclear facility events and other radiological releases; develop format for distribution of emergency information to citizens in areas affected by potential or actual radiation releases (through PIO); coordinate with TVA and DOE the development of radiological response measures associated with respective facilities; develop database of organizations/companies that can decontaminate or clean areas contaminated with radioactive materials.

The Tennessee Emergency Management Plan indicates that as part of response and recovery actions, the Department of Environment and Conservation - Division of Radiological Health will deploy personnel to SEOC, RMCC, and other field sites as required by the situation; initiate monitoring activities as required; implement procedures for tracking personnel exposure to radiation; assist EMS units with decontamination (technical support); make protective action recommendations based on monitoring findings; disseminate public information through PIO staff; implement protective actions as required, tasking other participant organizations as required; provide monitoring and assessment data; and make arrangements with clean-up companies to remove damaged radioactive materials.

The Tennessee Emergency Management Plan indicates that the Department of Agriculture will assess the impact of radiological releases on dairy and food production capabilities and develop protective action guidance concerning the use of food produced in areas where radioactive contamination exists.

The Tennessee Emergency Management Plan indicates that as part of mitigation and preparedness activities, the Department of Agriculture will develop procedures for assessing impact of radiological releases on food and dairy production capabilities, develop format for distribution of public information concerning the consumption and distribution of foodstuffs and livestock in areas affected by radiation releases (through PIO).

The Tennessee Emergency Management Plan indicates that as part of response and recovery actions, the Department of Agriculture will deploy personnel to monitor and assess impact of radiation releases on food and dairy production facilities, distribute protective action guidance to farmers regarding appropriate measures to be taken with respect to protecting livestock and stored food from radiological contamination (through PIO), and disseminate public information concerning the consumption of food and dairy products produced in areas affected by radioactive releases.

Emergency Response Standard Operating Procedures for the Division of Radiological Health include procedures for sampling water, soil and/or sediment, vegetation, and milk.

A description of analytical laboratory capability to analyze various samples is included in the Southern Mutual Radiation Assistance Plan (SMRAP). Laboratory capabilities include gamma spectrometry of air samples; gross alpha counting of cartridges, gross beta counting of fish samples; analysis of milk for radium-226 and radium-228; analysis of sludge for strontium-89 and strontium-90; and analysis of soil for total uranium.

The Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant includes an Annex for ingestion exposure protection in the event of an incident at the Sequoyah Nuclear Plant. While parts of this annex are specific to the Sequoyah Nuclear Plant, other parts would be applicable to an incident at other nuclear power plants, including the Bellefonte Nuclear Plant. Additionally, parts of the 50-mile EPZ for the Sequoyah Nuclear Plant overlap parts of the 50-mile EPZ for the Bellefonte Nuclear Plant. Therefore, while the Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant is not explicitly included in plans for Bellefonte Nuclear Plant, it is included in this review.

The Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant indicates that the Tennessee Department of Agriculture (TDA), working with the TDEC, Division of Radiological Health (DRH), and other State and Federal response agencies will: advise the agricultural community within the 50-mile EPZ of protective and precautionary actions required to reduce the risk of radiological contamination to livestock and farm products; collect samples of milk, livestock feeds, water (drinking and agricultural) and human comestibles (all edible foods) in the affected areas of the IPZ for laboratory measurement of radioactivity; take steps to remove from access those substances that have become contaminated; and continue to evaluate available data concerning radiological contamination of foodstuffs, both human and animal, after the cessation of an incident. This is done in order to advise the public on the acceptability for consumption of diverse products in the food chain, and to determine the degree of protective control needed until the unsafe conditions cease to exist.

Media outlets will be utilized to notify the agricultural community of steps it can take to reduce the risk of injury or contamination to livestock and farm products. Prepared information, addressing general conditions, will be distributed through County Agents and media outlets. However, if specific situations not covered by the prepared information should occur, those situations will be addressed in a public information message and suggestions regarding the advisability of consumption of unprotected and unprocessed foods will be included.

TDA will collect samples of human food and livestock feeds for laboratory analysis, including milk samples from dairies that may be affected. DRH dose assessment personnel will determine the dairies from which samples will be taken based on the plume deposition pattern and/or hot spots. Relying on the laboratory data provided, TDA will take necessary steps to control human and animal food supplies in an attempt to reduce the potential for consumption of those that show radioactivity measurements above acceptable levels for food and feeds. The TDEC Office of Water Pollution Control (WPC) will notify local water supply systems to cease operations and close water intakes when laboratory testing of samples taken from the supplier's source of supply or distribution system indicate radioactivity levels above acceptable standards.

The Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant says that, "The U.S. Food and Drug Administration (FDA) has identified levels of radiological contamination that when exceeded, action should be taken to protect public health and safety." No reference was found for use of FDA guidance in general, or the proposed BNP.

The Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant includes protective actions for the following: milk, meat and meat products; poultry and poultry products; fruits and vegetables; grain; aquaculture, floriculture, forestry, and honey; game and wildlife.

The Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant describes the authority of the Tennessee Department of Agriculture Commissioner or the commissioner's duly authorized agent to collect samples, detain and embargo food, and to condemn and destroy contaminated food.

The Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant, indicates that the Tennessee Department of Agriculture (TDA) "maintains information on the number of farms in the IPZ, crops grown other, and pertinent information about land use. The data includes telephone numbers and points of contact in case of emergency. This data is updated as changes occur and readily available to the TDA ESC."

The Tennessee plan and procedures provided for review do not include the following:

Plans have not been updated for the proposed BNP; the addresses of contact points for obtaining permission to collect samples within the 50-mile EPZ for the Bellefonte Nuclear Plant; a description of the procedure for reporting analytical results to the appropriate organization; a description of the location of and the means of obtaining up-to-date information on the location of permanent agribusiness facilities within the 50-mile EPZ for the Bellefonte Nuclear Plant,

(this database should include facilities such as dairies, food processing plants, surface water supplies, water intakes, and other permanent facilities. Facilities outside the EPZ that could receive potentially contaminated products from within the EPZ and names and telephone numbers for points of contact should also be included in the database); a description of the location of and the means of obtaining up-to-date information on land use within the 50-mile EPZ for the Bellefonte Nuclear Plant (this database should include information on the status of harvesting); plans do not specify that the State of Tennessee uses the (1998) Food and Drug Administration publication Accidental Radioactive Contamination of Human Food and Animal Feeds: Recommendations for State and Local Agencies as the basis for their protective action decision; a description of the Derived Intervention Levels (DILs) that would warrant implementation of protective actions, including the rationale and assumptions used to develop the DILs; a description of the availability of suitable maps for recording various data.

State of Georgia: The Georgia Radiological Emergency Plan indicates that the Director of the Division of Environmental Protection, Department of Natural Resources and the Commissioner of the Department of Agriculture have the authority to make decisions for the Ingestion EPZ.

The State of Georgia REP indicates that the "basis for protective actions are Protective Action Guides (PAGs) developed by the Food and Drug Administration of the United States Department of Health and Human Services, and contained in the publication "Accidental Radioactive Contamination of Human Food and Animal Feeds: Recommendations for State and Local Agencies." The Georgia Radiological Emergency Plan indicates that the responsibilities of state agencies in responding to the radiological contamination of foodstuffs and/or water are set forth in the Georgia Emergency Operations Plan (GEOP). The Georgia Department of Natural Resources, Environmental Protection Division (DNR-EPD) is responsible for sample collection and protective action implementation relative to public drinking water supplies. The Georgia Department of Agriculture (DOA) is the lead agency responsible for the assurance for a safe food and milk supply. Listings of major food processors, grain dealers and warehouses, meat processing and packing facilities and dairies are maintained by the DOA. The University of Georgia Cooperative Extension Service will assist in providing information and data on other agriculture operations that are not regulated by DOA.

The Georgia Radiological Emergency Plan indicates that the Georgia Department of Natural Resources Radiological Emergency Coordinator (DNR-REC), upon receiving notification, will evaluate initial accident information and, directly or indirectly, contact the responsible authority in control of the scene, giving technical advice and direction based on his professional judgment, and with regard to health, safety and environmental consideration. The DNR-REC will consult with the SDC and the Emergency Coordinator from the Georgia DOA

regarding calculation of projected dose due to uncontrolled ingestion of food and/or water, recommended protective actions for food to the DOA, and recommend protective actions for public water supplies to the Director of DNR-EPD.

The DOA representative will establish liaison with similar authorities in adjacent states potentially affected by the incident. DNR will request federal assets in accordance with the Federal Radiological Emergency Response Plan (FRERP). These assets will include various components of the Federal Radiological Monitoring Assessment Center (FRMAC), as required. State agencies will work in coordination with these federal assets, which include the Consequence Management Team (CMT) in developing recommended protective actions as well as a Sampling and Monitoring Plan for the effected area.

The Advisory Team for Environment, Food, and Health (A-Team) is a component of the CMT that will be utilized extensively in Georgia. This team is represented by personnel from the Environmental Protection Agency (EPA), Health and Human Services (HHS), United States Department of Agriculture (USDA), and other federal agencies as required, and will provide guidance to Georgia on the environment, food and health issues; and interpret protective action recommendations. Another component of the CMT that will be utilized extensively is the radiological monitoring and assessment assets provided by the Department of Energy (DOE) and EPA. DOE will provide the coordination during the early and intermediate phase, with EPA assuming long-term coordination of federal assets and assistance.

According to the Georgia Radiological Emergency Plan the protective response related to foodstuffs and water has two primary objectives. The first objective is to prevent the contamination of food and water supplies through the implementation of relatively low impact protective measures. If such measures prove unsuccessful, the second objective is to identify and isolate contaminated foodstuffs and water and to prevent their consumption and/or introduction into commerce. The basis for protective actions are Protective Action Guides (PAGs) developed by the Food and Drug Administration of the United States Department of Health and Human Services and contained in the publication "Accidental Radioactive Contamination Of Human Food And Animal Feds: Recommendations for State and Local Agencies." Table G in the Georgia Radiological Emergency Plan, Annex F provides low and high impact protective actions for critical ingestion pathways, including drinking water, animal feed and water, milk and crops and animal products.

The following procedures describe the methodology for the collection of agricultural samples: DNR-EPD-ERP 1.0, "Off-Site Field Monitoring Operations;" DNR-EPD-ERP 2.0, "Ingestion Pathway/Re-entry Field Monitoring Operations;" DNR-EPD-ERP 3.0, "Radiation Emergency Coordinator

Operations;” DNR-EPD-ERP 4.0, “Field Team Coordinator Operations;” and DNR-EPD-ERP 8.0, “Packaging, Transport and Receipt of Emergency Environmental Samples.”

A description of analytical laboratory capability to analyze various samples is included in the Southern Mutual Radiation Assistance Plan (SMRAP). According to the SMRAP, routine laboratory analysis of environmental samples is conducted in the Environmental Radiation Laboratory (ERL), a low-level laboratory located on the campus of the Georgia Institute of Technology (Georgia Tech), and operated as a joint venture between DNR and Georgia Tech. The Mobile Radiation Laboratory (MRL), a 40-foot motor trailer is used for emergency response activities and on-site inspections. Major equipment items are listed in SMRAP, and include alpha/beta counters, liquid Scintillation Counters, high-resolution gamma spectrometer systems, thermoluminescent dosimeter (TLD) readers, low-level I-131 (beta-gamma coincidence counters), alpha scintillation counters (for radon gas counting of water supplies), and alpha spectrometry systems.

The Georgia Radiological Emergency Plan indicates that “Directives/Information relative to agricultural interests, distribution and use of agricultural products and other pertinent information will be disseminated to the media after coordination as described in the Radiological Emergency Preparedness Base Plan. Pre-scripted media releases will not be prepared due to the potential for the implementation of a wide range of protective actions and/or precautionary measures.”

Appendices are included in the Georgia Radiological Emergency Plan for nuclear power plants whose 50-mile Ingestion Pathway Zone (IPZ) includes part of Georgia. The appendix includes information about the power plant, the population at risk, and a map showing the Georgia counties in the 50-mile IPZ. Appendices are provided for Oconee Nuclear Station, Sequoyah Nuclear Plant, Watts Bar Nuclear Plant, Joseph M. Farley Nuclear Power Plant, Edwin I. Hatch Nuclear Power Plant, and Alvin W. Vogtle Nuclear Power Plant and the Savannah River Site, but no appendix has been provided for the Bellefonte Nuclear Plant.

The plan and procedures and procedures provided for Georgia do not include the following:

- A description of the methodology to be used to designate the areas of concern where monitoring and sampling are to be implemented;
- The addresses of contact points for obtaining permission to collect samples in the BNP Ingestion EPZ;
- A description of the procedure for reporting analytical results to the appropriate organization; the location of and the means of obtaining up-to-date information on the location of permanent agribusiness facilities within the Ingestion EPZ. (This database should include facilities such as dairies, food processing plants, surface water supplies, water intakes, and

other permanent facilities. Facilities outside the Ingestion that could receive potentially contaminated products from within the Ingestion EPZ and names and telephone numbers for points of contact should also be included in the database.);

- A description of the location of and the means of obtaining up-to-date information on land use. (This database should include information on the status of harvesting);
- The plans do not specify that the State of Georgia uses the (1998) Food and Drug Administration publication Accidental Radioactive Contamination of Human Food and Animal Feeds: Recommendations for State and Local Agencies as the basis for their protective action decisions.
- A description of the Derived Intervention Levels (DILs) that would warrant implementation of protective actions, including the rationale and assumptions used to develop the DILs should be included;
- A description of the availability of suitable maps for recording various field data.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan:

- Base Plan, Section XIII.B, ESF-8, Section XIII.F, ESF-11, ESF #8 and Tab 4, Section IV and Tab 7 and 9 and 10 and 11 and Appendix 3
- State of Alabama, Radiological Field Monitoring Team Manual, Radiation Control, July 2006

Tennessee Emergency Management Plan:

- ESF #10

Emergency Response Standard Operating Procedures for the Division of Radiological Health:

- Section 5

Tennessee Multi-Jurisdictional Radiological Emergency Response Plan for the Sequoyah Nuclear Plant

- Annex K

State of Georgia Radiological Emergency Plan:

- Annex F

Georgia Department of Natural Resources Procedure:

- DNR-EPD-ERP 1.0, 2.0, 3.0, 4.0 and 8.0

Criterion Evaluation

State of Alabama: **Adequate**

State of Tennessee: **See Post COL Reasonable Assurance Tracking Form**

State of Georgia: **See Post COL Reasonable Assurance Tracking Form**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- J.12 *Each organization shall describe the means for registering and monitoring of evacuees at relocation centers in host areas. The personnel and equipment available should be capable of monitoring within about a 12 hour period all residents and transients in the plume exposure EPZ arriving at relocation centers.*

Criterion Statement

State of Alabama: Plans are adequate. As stated in the proposed Alabama REPP the Public Health Official of County Public Health Department will establish evacuee monitoring and decontamination stations in conjunction with risk county Emergency Management Agencies and Emergency Welfare Services when ordered by the Radiation Control Agency and establish transportation for radiation victims from decontamination station to appropriate hospitals.

The Alabama REPP states that, "Contamination monitoring of emergency personnel and evacuees who are believed to have been exposed to high levels of radiation (greater than 100 mR/hr, or approximately 20 pCi/cm³ of radioiodine) or airborne particulate radioactivity for more than an hour will be monitored for contamination at the Evacuee Reception Center(s)."

According to the "Bellefonte Nuclear Plant Development of Evacuation Time Estimates," Emergency Response Planning Areas (ERPAs) 1, 5, and 11 are expected to evacuate to a reception center in Huntsville; ERPAs 2, 3, 6, 7, 8, and 12 are expected to evacuate to a reception center in Bridgeport; and ERPAs 4, 9, 10, and 13 are expected to evacuate to a reception center in Fort Payne. Assuming 20% of the evacuees arrive at the reception center, the number of evacuees at the reception centers in Huntsville, Bridgeport, and Fort Payne, respectively are 5,053; 1,226; 1,550. The time required to monitor all evacuees arriving at the reception centers in Bridgeport, and Fort Payne would be 35 and 28 seconds or less, respectively.

Jackson County: Procedures in proposed Jackson County REP describe the methods for decontaminating individuals, including emergency workers, and evacuees. County plan does not describe the location, set-up, lay-out or evacuee registration process.

DeKalb County: Procedures in proposed Jackson County REP describe the methods for decontaminating individuals, including emergency workers, and evacuees. County plan does not describe the location, set-up, lay-out or evacuee registration process.

Plan Reference

State of Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 5, Section II, and Tab 11, (Untitled)

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4, Section 2.C
Proposed Jackson County Radiological Emergency Preparedness Plan
- Annex K, Appendix 2, and Annex M, Section III.D, and Appendix 2 and 3, and Section II.C, and Appendix 9 and Tabs A , B and C, and Appendix 10 and Tab A
Proposed DeKalb County Radiological Emergency Preparedness Plan
- Annex M, Section III.D, and Appendix 3 and Annex N, Section II.C, and Appendix 9, and Tabs A, B and C and Appendix 10, and Tab A
Additional references:
- Bellefonte Nuclear Plant Evacuation Time Estimates (ETE) Report, 2007

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

K. Radiological Exposure Control: *Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.*

K.3.a. *Each organization shall make provision for 24-hour-per-day capability to determine the doses received by emergency personnel involved in any nuclear accident, including volunteers. Each organization shall make provisions for distribution of dosimeters, both self-reading and permanent record devices.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP requires 24-hour staffing of the response organizations. The plan requires that the SEOC, RCA and County Emergency Management Agencies maintain a 24-hour communication system with the NPPs. Alabama REPP, Base Plan, states that the SEOC and local EOCs in REP counties must be capable of operating 24-hours a day for extended periods. It further states that the AEMA Director will be responsible for maintaining and operating a SEOC capable of continuous (24-hour) operations for a protracted period.

Typically, the State of Alabama issues a low range and a high range self-reading dosimeter. The dosimeters are zeroed and charged by trained County personnel using a hand static charger or battery powered charging unit. Sufficient quantities of dosimeters are available to supply emergency workers.

Jackson County: Typically, the State of Alabama issues a low range and a high range self-reading dosimeter. The dosimeters are zeroed and charged by trained County personnel using a hand static charger or battery powered charging unit.

Sufficient quantities of dosimeters are available to supply emergency workers. Proposed plans for Jackson County were submitted with the Bellefonte Nuclear Power Plant Units 3 & 4 COLA to demonstrate the County's commitment to adapt existing emergency response plans to address each of the Planning Standards provided in NUREG-0654/FEMA-REP-1 and to identify areas where further development of these plans is warranted. Certain details associated with satisfying the Evaluation Criteria in NUREG-0654/FEMA-REP-1, such as specific numbers of dosimeters and chargers, are subject to further development and will be addressed by the State and County by March 2014 to support the full-participation exercise required in advance of fuel loading.

DeKalb County: Typically, the State of Alabama issues a low range and a high range self-reading dosimeter. The dosimeters are zeroed and charged by trained County personnel using a hand static charger or battery powered charging unit. Sufficient quantities of dosimeters are available to supply emergency workers. Proposed plans for DeKalb County were submitted with the Bellefonte Nuclear Power Plant Units 3 & 4 COLA to demonstrate County's commitment to adapt existing emergency response plans to address each of the Planning Standards provided in NUREG-0654/FEMA-REP-1 and to identify areas where further development of these plans is warranted. Certain details associated with satisfying the Evaluation Criteria in NUREG-0654/FEMA-REP-1, such as specific numbers of dosimeters and chargers, are subject to further development and will be addressed by the State and County by March 2014 to support the full-participation exercise required in advance of fuel loading.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8 – Section VI, Tabs 5 and 6 and Section III

Proposed Alabama Radiological Emergency Preparedness Plan

- ESF #8 – Section VI.E

Proposed Jackson County REP Plan

- Annex F and Appendix 1, 2, 3, and 4 and Annex G and Appendix 1 and 2 and Annex H and Appendix 1 and 2 and Annex L and Appendix 1 and 2 and Annex N and Appendix 5, 6, 7 and 8

Proposed DeKalb County REP Plan

- Annex F and Appendix 1, 2, 3 and 4 and Annex G, Appendix 1 and 2 and Annex L, Appendix 1 and 2 and Annex N, and Appendix 5, 6, 7 and 8

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- K.3.b. *Each organization shall ensure that dosimeters are read at appropriate frequencies and provide for maintaining dose records for emergency workers involved in any nuclear accident.*

Criterion Statement

State of Alabama: Plans are adequate. The provided plans instruct emergency workers to read their dosimeters every 15-30 minutes, to record their readings every 30 minutes on a form provided to them, to seek relief at a reading of 100 milliroentgen (mR), and to cease operations at a reading of 400 milliroentgen (mR).

Emergency workers are instructed on these wallet cards and forms to read their dosimeters every 15-30 minutes, to record their readings every 30 minutes, to seek relief at a reading of 100 milliroentgen (mR), and to cease operations at a reading of 400 milliroentgen (mR). Emergency workers are provided with a 0-200 mR and a 0-20 R dosimeter, it should not be necessary to re-zero their dosimeters in the field.

Jackson County: Plans are adequate. The provided plans instruct emergency workers to read their dosimeters every 15-30 minutes, to record their readings every 30 minutes on a form provided to them, to seek relief at a reading of 100 milliroentgen (mR), and to cease operations at a reading of 400 milliroentgen (mR).

Emergency workers are instructed on these wallet cards and forms to read their dosimeters every 15-30 minutes, to record their readings every 30 minutes, to seek relief at a reading of 100 milliroentgen (mR), and to cease operations at a reading of 400 milliroentgen (mR). Emergency workers are provided with a 0-200 mR and a 0-20 R dosimeter, it should not be necessary to re-zero their dosimeters in the field.

DeKalb County: Plans are adequate. The provided plans instruct emergency workers to read their dosimeters every 15-30 minutes, to record their readings every 30 minutes on a form provided to them, to seek relief at a reading of 100 milliroentgen (mR), and to cease operations at a reading of 400 milliroentgen (mR).

Emergency workers are instructed on these wallet cards and forms to read their dosimeters every 15-30 minutes, to record their readings every 30 minutes, to seek relief at a reading of 100 milliroentgen (mR), and to cease operations at a reading of 400 milliroentgen (mR). Emergency workers are provided with a 0-200 mR and a 0-20 R dosimeter, it should not be necessary to re-zero their dosimeters in the field.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8 –Tab 5, Section I.A

Proposed Jackson County REP Plan

- Annex F, Appendix 1 and 2 and Annex G, Appendix 1 and 2 and Annex H, Appendix 1 and 2 and Annex L, Appendix 1 and 2 and Annex N, Section III.B, and Appendix 5 and 6

Proposed DeKalb County REP Plan

- Annex F, Appendix 1 and 2 and Annex G, Appendix 1 and 2 Annex L, Appendix 1 and 2 Annex N, Section III.B, and Appendix 5 and 6

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- K.4. *Each State and local organization shall establish the decision chain for authorizing emergency workers to incur exposures in excess of the EPA General Public Protective Action Guides (i.e., EPA PAGs for emergency workers and lifesaving activities).*

Criterion Statement

State of Alabama: Plans are adequate. Only the Alabama Radiation Control Agency can authorize emergency workers to incur exposures in excess of the EPA General Public Protective Action Guides.

According to the Alabama REPP, ESF #8, Tab 5, Section IV, "Permissible Exposure," it is "the expressed policy of the State of Alabama that no emergency worker should exceed [the dose equivalent limits in] the 10 CFR 20 or Rules of the State Board of Health, Chapter 420-3-26, Radiation Control," but that the "Alabama Radiation Control Agency (Public Health) may grant exemptions to these exposure [dose] limits." Dose limits for emergency workers are provided in Alabama REPP ESF #8, Tab 5, Section I, "Emergency Worker Exposure." These limits are consistent with EPA 400-R-92-001, EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, (May 1992).

Jackson County: Plans are adequate. The Proposed Jackson County REP, Annex G, Appendix 1, "Radiation Dosage Limits for Emergency Workers", state that "authorization to exceed exposure limits can only be made by the State Health Officer, prior to any exposure limit being exceeded."

DeKalb County: Plans are adequate. The Proposed DeKalb County REP, Annex G, Appendix 1, "Radiation Dosage Limits for Emergency Workers," state that "authorization to exceed exposure limits can only be made by the State Health Officer, prior to any exposure limit being exceeded."

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 5, Section I and IV

Proposed Jackson County REP Plan

- Annex G, Appendix 1

Proposed DeKalb County REP Plan

- Annex G, Appendix 1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- K.5.a *Each organization as appropriate shall specify action levels for determining the need for decontamination.*

Criterion Statement

State of Alabama: Plans are adequate. This criterion is explained in the Alabama REP ESF 8. It states that unless otherwise directed by the Alabama Radiological Control Agency, contamination is considered to be an open window reading of twice pre-accident background (2 x backgrounds).

Jackson County: Plans are adequate. This criterion is explained in the Alabama REP ESF 8. It states that unless otherwise directed by the Alabama Radiological Control Agency, contamination is considered to be an open window reading of twice pre-accident background (2 x backgrounds).

DeKalb County: Plans are adequate. This criterion is explained in the Alabama REP ESF 8. It states that unless otherwise directed by the Alabama Radiological Control Agency, contamination is considered to be an open window reading of twice pre-accident background (2 x backgrounds).

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 5, Section II

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4, Section 2.C

Proposed Jackson County REP Plan

- Annex N, Appendix 5, 9 and Tab A and B, 10 and Tab A

Proposed DeKalb County REP Plan

- Annex N, Appendix 5 [or TBD], 9 and Tab A and B, 10 and Tab A

Criterion Evaluation

State of Alabama: **Adequate**
Jackson County: **Adequate**
DeKalb County: **Adequate**

- K.5.b *Each organization, as appropriate, shall establish the means for radiological decontamination of emergency personnel wounds, supplies, instruments and equipment, and for waste disposal.*

Criterion Statement

State of Alabama: Plans are adequate. As indicated in Alabama REPP ESF 8 Tab 5, screening for the presence of beta and gamma contamination on emergency personnel and equipment leaving evacuated areas will be performed at each county self-protection station or at stations along exit routes from the evacuated area, outside the plume, to monitor personnel and will be instituted as soon as possible. Contaminated materials will be stored in a manner that facilitates control of individual radiation doses and the dispersion of radioactive contamination, consistent with the ALARA process. Equipment which cannot be readily decontaminated will be placed in segregated storage until sufficient time, material, and manpower can be made available to complete the procedure.

Jackson County: Proposed plans for Alabama, Jackson and DeKalb Counties were submitted with the Bellefonte Nuclear Plant Units 3 & 4 COLA to demonstrate the State and County's commitment to adapt existing emergency response plans to address each of the Planning Standards provided in NUREG 0654/FEMA-REP-1 and to identify areas where further development of these plans is warranted. Certain details associated with satisfying the Evaluation Criteria in NUREG-0654/FEMA-REP-1, such as the specific locations for decontamination activities, specific storage locations for contaminated personnel items, number of personnel assigned to decontamination activities, listing of personnel decontamination supplies are subject to further development for inclusion into the Jackson and DeKalb Counties' plans. These details will be addressed by the State and Counties in sufficient time to support the full-participation exercise required prior to fuel load.

DeKalb County: Proposed plans for Alabama, Jackson and DeKalb Counties were submitted with the Bellefonte Nuclear Plant Units 3 & 4 COLA to demonstrate the State and County's commitment to adapt existing emergency response plans to address each of the Planning Standards provided in NUREG 0654/FEMA-REP-1 and to identify areas where further development of these plans is warranted. Certain details associated with satisfying the Evaluation Criteria in NUREG-0654/FEMA-REP-1, such as the specific locations for decontamination activities, specific storage locations for contaminated personnel items, number of personnel assigned to decontamination activities, listing of personnel decontamination supplies are subject to further development for

inclusion into the Jackson and DeKalb Counties' plans. These details will be addressed by the State and Counties in sufficient time to support the full-participation exercise required prior to fuel load.

Plan Reference

Alabama Radiological Emergency Preparedness Plan:

- ESF #8, Tab 5, Section II and , Section III-A

Proposed Jackson County REP Plan

- Annex N, Section VI, and Appendix 9, Tab B and C, and Appendix 10 and Tab A

Proposed DeKalb County REP Plan

- Annex N, Section VI, and Appendix 9, Tab B and C, and Appendix 10 and Tab A

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

L. Medical and Public Health Support: *Arrangements are made for medical services for contaminated injured individuals.*

- L.1. *Each organization shall arrange for local and backup hospital and medical services having the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately prepared to handle contaminated individuals.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP identifies the Radiation Control Agency with the responsibility to coordinate requirements for medical care and provide communication and information between the Radiation Control Agency, ambulance companies, rescue squads, and medical facilities. The ambulance companies and rescue squads will provide transportation of patients from within the evacuation zone, evacuation routes and from mass care facilities to designated medical care facilities. The designated medical care facilities provide medical care for patients from within the evacuation zone from evacuation routes and from mass care facilities; prepare plans and conduct training on methods to care for contaminated patients; and obtain and maintain special radiological equipment needed to monitor patients and dispose of contaminated material.

Alabama REPP includes a listing of agreements with primary and backup hospitals for Brown's Ferry NPP and Farley NPP. This section also states that

hospital agreements and ambulance agreements are maintained in the County Standard Operation Guides (SOGs) which were not provided for review.

Alabama REPP says that the County public Health Department will establish transportation for radiation victims from decontamination station to appropriate hospitals. Section IV, "ESF-8, Hospitals," provides information regarding the responsibilities of the designated hospital's administration to include:

Jackson County: Proposed Jackson County REP states that a formal agreement with the Huntsville Hospital in Huntsville, AL has been signed establishing procedures for the transport of contaminated patients. This appears to designate Huntsville Hospital as the primary hospital for Jackson County. Appendix 7 of the Bellefonte Emergency Plan has this letter of intent. The Director of Public Health will identify health care facilities that will support this plan. Plans and drills will be conducted by designated care facilities to ensure personnel are trained and equipment is available in an emergency. Further planning will be adopted by March 2016 in accordance with the TVA milestone schedule.

DeKalb County: Proposed DeKalb County REP says that formal agreement with the [HOSPITAL - TO BE DETERMINED] has been signed establishing procedures for the transport of contaminated patients. The Director of Public Health will identify health care facilities that will support this plan. Plans and drills will be conducted by designated care facilities to ensure personnel are trained and equipment is available in an emergency. Further planning will be adopted by March 2016 in accordance with the TVA milestone schedule.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Emergency Support Function (ESF) #8, Tab 5, Section III.D, and F

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4, Section II

Proposed Jackson County REP Plan

- Basic Plan, Section IV.A.2

Proposed DeKalb County REP Plan

- Basic Plan, Section IV.A.2

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- L.3. *Each State shall develop lists indicating the locations of public, private and military hospitals and other emergency medical service facilities within the State or contiguous States considered capable of providing medical support for any*

contaminated injured individual. The listing shall include the name, location, type of facility and capacity, and any special radiological capabilities. These emergency medical services should be able to radiologically monitor contamination personnel, and have facilities and trained personnel able to care for contaminated injured persons.

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP identifies two additional hospitals capable of handling contaminated patients:

- University of Alabama in Birmingham (UAB), Birmingham, Alabama, Capacity: 900 beds (nonambulatory).
- Huntsville Hospital, Huntsville, Alabama, Capacity: 508 beds (nonambulatory).

Jackson County: Not applicable

DeKalb County: Not applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 5, Section III.F

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- L.4. *Each organization shall arrange for transporting victims of radiological accidents to medical support facilities.*

Criterion Statement

State of Alabama: Plans are adequate. In the Alabama REP ESF 8 Tab 5, III-D, ambulance companies and rescue squads provide transportation of patients from within the evacuation zone, evacuation routes, and from mass care facilities to designated medical care facilities. They will assure crew members are trained to handle contaminated casualties or equipment in a continuous state of readiness. They coordinate with county EOCs on where and when to obtain special radiological monitoring devices that are maintained at the county EMA facilities.

Jackson County: The plans do not include detailed procedures for transportation providers, transport of individuals, maintaining communications, monitoring of individuals, contamination control measures or decontamination measures.

DeKalb County: The plans do not include detailed procedures for transportation providers, transport of individuals, maintaining communications, monitoring of individuals, contamination control measures or decontamination measures.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 5, Section III.D

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4, Section II

Proposed Jackson County REP Plan

- Basic Plan, Section IV.A.2
- Annex L., Section III.D.
- Annex F
- Annex N, Tab B, Appendix 9 and 10

Proposed DeKalb County REP Plan

- Basic Plan, Section IV.A.2,
- Annex L., Section III.D
- Annex F
- Annex N, Tab B, Appendix 9 and 10

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

M. Recovery and Reentry Planning and Post-accident Operations: *General plans for recovery and reentry are developed.*

- M.1. *Each organization, as appropriate, shall develop general plans and procedures for reentry and recovery and describe the means by which decisions to relax protective measures (e.g., allow reentry into an evacuated area) are reached. This process should consider both existing and potential conditions.*

Criterion Statement

State of Alabama: Plans are adequate. During the intermediate and late phases of an accident, the Radiation Control Agency will be responsible for continuing environmental radiation measurements and dose assessment and establishing restricted and buffer zones, and providing procedures for controlled reentry into the restricted areas. The County Emergency Welfare Service (EWS) Officer along with sheriffs and municipal police will assist in the orderly return of the public to previously evacuated areas. General procedures for recovery, including a listing of actions that may be needed and organizational responsibilities for carrying out these activities are included in master checklist guides.

Entry into zones established as restricted that exceed the established protective action limits in EPA-400 will be controlled to limit exposure to personnel to less than the occupational dose limits described in Rule 420-3-26-.03, Radiation Control of the Rules of the State Board of Health.”

The Alabama REPP states that “[u]sing the best available knowledge of ground deposition the Radiation Control Agency will classify all areas in the vicinity of the nuclear power plant, including both evacuated and non-evacuated areas as restricted or unrestricted zones in accordance with the guidance established in EPA-400. Members of the general public will be authorized to enter any unrestricted zone that is not subject to an evacuation order. Individuals whose residences are within a restricted zone will relocate to temporary residences outside of a restricted zone. Individuals will be authorized to enter and remain inside of a restricted zone only to perform essential services and only with appropriate personnel monitoring consisting of monthly dosimetry service and one low range (0-200 mR) pocket dosimeter. Individuals authorized to enter a restricted zone will do so under procedures and controls established for occupationally exposed radiation workers described in Chapter 420-3-26, Radiation Control, of the Rules of the State Board of Health.”

The proposed Alabama REPP states that the County Emergency Welfare Service (EWS) Officer and County EWS will assist in the orderly return of evacuees from care centers to their normal place of residence and assure EWS services and assistance as necessary in accordance with established procedures following any disaster. According to the proposed Alabama REPP, Appendix 3, Attachment 4,

Section VI.D, "Recovery," sheriffs and municipal police will continue to secure property until conditions return to normal, provide traffic control for returning evacuees, and phase down to normal operations, and according to the proposed Alabama REPP the commander of the State Trooper Post will continue to assist local law enforcement until the situation returns to normal.

Jackson County: Plans are adequate. County Emergency Welfare Service (EWS) Officer along with sheriffs and municipal police will assist in the orderly return of the public to previously evacuated areas. General procedures for recovery, including a listing of actions that may be needed and organizational responsibilities for carrying out these activities are included.

County EWS Officer and County EWS will assist in the orderly return of evacuees from care centers to their normal place of residence and assure EWS services and assistance as necessary in accordance with established procedures following any disaster. Sheriffs and municipal police will continue to secure property until conditions return to normal, provide traffic control for returning evacuees, and phase down to normal operations, and according to the proposed Alabama REPP the commander of the State Trooper Post will continue to assist local law enforcement until the situation returns to normal.

Directors of county Emergency Management Agencies, Public Health Official and County Public Health Department, County EWS Officer and County EWS, designated hospital administrators, rescue services, including ambulances and medical transport, Sheriffs and municipal police, the State Trooper Post, local schools, District I Supervisors of the Department of Conservation, and Department of Agriculture and Industries.

DeKalb County: Plans are adequate. County Emergency Welfare Service (EWS) Officer along with sheriffs and municipal police will assist in the orderly return of the public to previously evacuated areas. General procedures for recovery, including a listing of actions that may be needed and organizational responsibilities for carrying out these activities are included.

County EWS Officer and County EWS will assist in the orderly return of evacuees from care centers to their normal place of residence and assure EWS services and assistance as necessary in accordance with established procedures following any disaster. Sheriffs and municipal police will continue to secure property until conditions return to normal, provide traffic control for returning evacuees, and phase down to normal operations, and according to the proposed Alabama REPP the commander of the State Trooper Post will continue to assist local law enforcement until the situation returns to normal.

Directors of county Emergency Management Agencies, Public Health Official and County Public Health Department, County EWS Officer and County EWS,

designated hospital administrators, rescue services, including ambulances and medical transport, Sheriffs and municipal police, the State Trooper Post, local schools, District I Supervisors of the Department of Conservation, and Department of Agriculture and Industries.

Plan Reference

State of Alabama Emergency Operations Plan

- ESF #6

Alabama Radiological Emergency Preparedness Plan

- Base Plan Section XIII, and Appendix 1, Attachment 4, and Appendix 2, Attachment 4 and ESF #8, Tab 6

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- M.3. *Each licensee and State plan shall specify means for informing members of the response organizations that a recovery operation is to be initiated, and of any changes in the organizational structure that may occur.*

Criterion Statement

State of Alabama: Plans are adequate. The Department of Public Health, Office of Radiation Control and the Alabama Emergency Management Agency will inform members of the response organizations that a recovery operation is to be initiated, and of any changes in the organizational structure that may occur.

Jackson County: Not applicable

DeKalb County: Not applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XIII and Appendix 1, Attachment 4 and Appendix 2, Attachment 4 and ESF #8, Tab 6

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Attachment 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not applicable**

DeKalb County: **Not applicable**

- M.4. *Each plan shall establish a method for periodically estimating total population exposure.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama Radiation Control Agency will make initial and subsequent total population dose projections.

All off-site dose projections will be calculated by one of the following three methods (listed in order of preference): a computer system using appropriate software, NRC's Response Technical Manual, RTM '96, or the quick calculation number sheet, with the choice of method used based upon time, location, and availability of personnel, information, and equipment. In the absence of better information, the release rate provided by the power plant and a release duration of four hours will be used. If meteorological data is not available, the stability class "F" will be assumed.

From these data an initial projected population dose may be calculated. This initial value will be used to determine protective actions until more accurate information is available. As more accurate information becomes available, the projected dose to the population [sic] will be adjusted to reflect the corrected release rates. It is recognized that the initial projected population dose may result in the initiation of protective actions in excess of those found to be necessary after population doses are measured."

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- ESF #8, Tab 4, Section II

Criterion Evaluation

State of Alabama: Adequate

Jackson County: Not Applicable

DeKalb County: Not Applicable

N. Exercises and Drills: *Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.*

N.1.a. *An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. The emergency preparedness exercise shall simulate an emergency that results in offsite radiological releases which would require response by offsite authorities. Exercises shall be conducted as set forth in NRC and FEMA rules.*

Criterion Statement:

State of Alabama: Plans are adequate. The Alabama REPP Section I says that each State with a nuclear power plant is required to have an emergency response plan acceptable to NRC/FEMA. Various aspects of the plan must be tested and updated periodically to ensure a capability exists to protect the public health and safety. Section II further indicates that this capability has been exercised in the past through State and utility exercises. A proposed change to the Alabama EOP, Section VIII.B, includes adding the Bellefonte Nuclear Plant (BNP) to the list of facilities requiring an annual exercise.

The Alabama REPP, Appendix 3, Section III.A, indicates that the primary purpose of a full-scale exercise is to determine if tasked agencies, to the extent possible, can meet the responsibilities outlined in the plan. This plan section also indicates that one of the purposes of an exercise is to exercise all elements of the plan for maintaining currency, for training and for developing improved operational procedures. Section IV.A, says that Emergency Management and Public Health have the joint responsibility for development and execution of emergency response exercises.

Jackson County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises. It also says that exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. Additional information is included regarding general scenario content.

DeKalb County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises. It also says that exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. Additional information is included regarding general scenario content.

Plan Reference:

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII.B

Proposed State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section II.A, Section III.C and Attachment 1 and Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

DeKalb County: **Adequate**

Jackson County: Adequate

- N.1.b. *An exercise shall include mobilization of State and local personnel and resources adequate to verify the capability to respond to an accident scenario requiring response. The organization shall provide for a critique of the biennial exercise by Federal and State observers/evaluators.⁴ The scenario should be varied from exercise to exercise such that the major elements of the plans and preparedness organizations are tested within a six-year period. Each organization should make provisions to start an exercise between 6: 00 p. m. and 4: 00 a. m. within a six-year period for exercising under various weather conditions. At least one exercise over a period of six years should be unannounced.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Section III.C, states that this plan will be exercised by a Full Scale Exercise each year with one of the nuclear power plants in the state. The scenario should be varied each year to ensure that all major functions and organizations are tested during each six year period to include the Ingestion Pathway. Once every six years an exercise should begin between 6:00 p.m. and 4:00 a.m. or on a weekend. Alabama REPP, Base Plan, Attachment 1 to Appendix 3, Section B, states Annual exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. The exercises will be designed to allow free play for decision making and to cover the specific objectives of the exercise.

Proposed change to the Alabama EOP, Basic Plan, Section VIII.B, says that exercises are scheduled to be conducted on an annual basis. These include the Radiological Emergency Preparedness (REP) exercises for Farley and, Browns Ferry NPPs. A proposed change will include Bellefonte NPP.

Jackson County: Plans are adequate. REP exercises are coordinated and managed by the State; further planning will be adopted by March 2014 in accordance with the TVA milestone schedule.

DeKalb County: Plans are adequate. REP exercises are coordinated and managed by the State; further planning will be adopted by March 2014 in accordance with the TVA milestone schedule.

Plan Reference

Proposed State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII.B.

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section II.A, Section III.C, and Attachment 1 to Appendix 3

Proposed Jackson County Plan

⁴ Changes have been made to this criterion as specified by GM PR-1.
9-15-09

- None

Proposed DeKalb County Plan

- None

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

N.2. *A drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. A drill is often a component of an exercise. A drill shall be supervised and evaluated by a qualified drill instructor. Each organization shall conduct drills, in addition to the biennial⁵ exercise, at the frequencies indicated below:*

N.2.a. *Communications Drills: Three types of communication drills are addressed: (a) Communications with State and local governments within the plume exposure pathway emergency planning zone shall be tested monthly; (b) communications with Federal emergency response organizations and State(s) within the ingestion pathway shall be tested at least once quarterly in conjunction with the testing of plume exposure pathway measures of the State plan and (c) communications between the nuclear facility, State and local government emergency operations centers and field assessment teams shall be tested at least once every year. Communication drills shall also include the aspect of understanding the content of messages.¹⁰*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Section X.A, says that a communication system capable of immediate and sustained support operational functions during an incident at a NPP must be operational at all times. Periodic tests of the system must be conducted to verify and ensure its serviceability. Communication testing requirements are further detailed in the Alabama REPP.

The requirement for monthly communications testing between State and local governments within the plume EPZ is addressed in the Alabama REPP, Base Plan, Appendix 3, Section III.C, and in Appendix 3, Attachment 1, Section I.A, The REPP says that Communications with State and local governments within the plume exposure pathway Emergency Planning Zone shall be conducted monthly by the SIOC for counties in the 10-mile EPZ and 50-mile EPZ. The plan also indicates that communications are checked daily using the commercial telephone system.

¹⁰ Revised by FEMA GM PR-1.
9-15-09

The Alabama REPP, Base Plan, Appendix 3, Section III.C, states that communications with Federal emergency response organizations and states within the Ingestion Pathway shall be tested quarterly.

Communications between the nuclear facility, state and local emergency operations centers and field assessment teams are tested quarterly; this internal requirement is more conservative than the N.2.a criterion annual requirement.

Jackson County: Jackson County plan provided for review does not explain the mechanism that will be used during communications drills to verify that message content is understood.

DeKalb County: DeKalb County plan provided for review does not explain the mechanism that will be used during communications drills to verify that message content is understood.

Plan References

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Proposed State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section X, Appendix 3, Section III.C, and Attachment 1

Proposed Jackson County Plan

- None

Proposed DeKalb County Plan

- None

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

N.2.c. Medical Emergency Drills: A medical emergency drill involving a simulated contaminated individual which contains provisions for participation by local support services agencies (i.e., ambulance and offsite medical treatment facility) shall be conducted annually. The offsite portions of the medical drill may be performed as part of the required biennial exercise.⁶

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Section III.C, defines a medical emergency drill as a drill which involves simulated contaminated individual as well as local medical service agencies (i.e.,

⁶ Revised by FEMA GM MS-1.
9-15-09

ambulance, hospitals, etc.). Medical emergency drills will be conducted annually and be performed in conjunction with an annual exercise.

Alabama REPP, Base Plan, Appendix 3, Attachment 1, says that the State Public Health Department's Office of Radiation Control will conduct medical emergency drills involving a simulated contaminated individual annually. These drills will normally be done during annual exercise and the drills will include ambulance crews and off-site medical personnel.

Jackson County: Proposed Jackson County REP, Section IV.A.2, says that the Public Health Official in coordination with ambulance and medical services of Jackson County will develop plans, establish procedures, conduct training and participate in exercises to insure that health facilities and personnel are prepared to protect and care for the population during a radiological incident.

DeKalb County: Proposed DeKalb County REP, Section IV.A.2, says that the Public Health Official in coordination with ambulance and medical services of DeKalb County will develop plans, establish procedures, conduct training and participate in exercises to insure that health facilities and personnel are prepared to protect and care for the population during a radiological incident.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, III.C, and Appendix 3, Attachment 1

Proposed Jackson County Plan

- Proposed Jackson County REP, Section IV.A.2

Proposed DeKalb County Plan

- Proposed DeKalb County REP, Section IV.A.2

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- N.2.d. *Radiological Monitoring Drills: Requirements are set forth for two types of radiological monitoring drills: (a) Radiological monitoring drills related to the plume exposure pathway emergency planning zone shall be conducted at least annually and shall include provisions for communications and record keeping. (b) Radiological monitoring drills related to the ingestion exposure pathway emergency planning zone shall be conducted at least annually and shall include provisions for communications and record keeping.⁷*

Criterion Statement

⁷ Revised by FEMA GM PR-1:
9-15-09

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Section III.C, says that radiological monitoring drills shall be conducted annually. These drills shall include collection and analysis of all sample media (i.e., water, grass, soil and air). Alabama REPP, Base Plan, Appendix 3, Attachment 1, further states that radiological monitoring drills will be conducted off-site annually. These drills will include collection and analysis of samples such as water vegetation, soil and air. The drills will include communications and record keeping. These drills may be incorporated in the annual exercise.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section III.C, Attachment 1 to Appendix 3

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Change Appendix 3 to Appendix 4

Proposed Jackson County Plan

- Proposed Jackson County REP, Section IV.A.1

Proposed DeKalb County Plan

- Proposed DeKalb County REP, Section IV.A.1

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

- N.2.e. *Health Physics Drills Health Physics drills shall be conducted semi-annually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment. The State drills need not be at each site.*¹³

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Appendix 3, Section III.C, "Health Physics Drills," says that Health Physics drills shall be conducted annually which involve response to, and analysis of simulated elevated airborne and liquid samples and direct radiation measurements in the environment.

Jackson County: Not Applicable

DeKalb County: Not Applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section III.C

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation:

State of Alabama: **Adequate**

Jackson County: **Not Applicable**

DeKalb County: **Not Applicable**

N.3. Each organization shall describe how exercises and drills are to be carried out to allow free play for decision making and to meet the following objectives. Pending the development of exercise scenarios and exercise evaluation guidance by NRC and FEMA the scenarios for use in exercises and drills shall include, but not be limited to, the following:

N.3.a The basic objective(s) of each drill and exercise and appropriate evaluation criteria;

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP says that the Emergency Management Agency has been assigned the responsibility for coordinating all departments and agencies within the state for emergency management matters and for the total state preparedness program. Emergency Management and Public Health have the joint responsibility for development and execution of radiological emergency response exercises. Also, each tasked state agency and department has the responsibility to participate in an exercise that has been designed to test emergency and disaster response and applying appropriate post-exercise corrective action is essential in order to effectively meet the basic preparedness responsibility.

Alabama REPP, Base Plan, says that the scenario for exercises and drills should include basic objectives and evaluation criteria. Appendix 3, Attachment 1, says that annual exercises are designed to test the major players and SOGs/SOPs. The exercises will be designed to allow free play for decision making and to cover the specific objectives of the exercise. An outline of scenario content is specified and includes, "objectives of the exercise."

Jackson County: Plans are adequate. The county plans provided for review incorporate the basic objectives of the drill/exercise and appropriate evaluation criterion.

DeKalb County: Plans are adequate. The county plans provided for review incorporate the basic objectives of the drill/exercise and appropriate evaluation criterion.

Plan Reference:

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Proposed State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section II.A, Exercises and Drills, Appendix 3, Section IV.A, Appendix 3, and Section III.A and Appendix 3, Attachment 1

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Change Appendix 3 to Appendix 4

Proposed Jackson County Plan

- None

Proposed DeKalb County Plan

- None

Criterion Evaluation:

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

N.3.b *The date(s), time period, place(s) and participating organizations;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Attachment 1, Section I.B, "Exercises," says that annual exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. The exercises will be designed to allow free play for decision making and to cover the specific objectives of the exercise. The scenario for the exercise will include the date, time, place and participants.

Jackson County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

DeKalb County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

Plan Reference

Alabama Radiological Emergency Preparedness Plan references:

- Base Plan, Appendix 3, Section IV.A, and Appendix 3, Attachment 1

Proposed Alabama Radiological Emergency Preparedness Plan references:

- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**
Jackson County: **Adequate**
DeKalb County: **Adequate**

N.3.c *The simulated events;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Attachment 1, Section I.B, "Exercises," says that annual exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. The exercises will be designed to allow free play for decision making and to cover the specific objectives of the exercise. The scenario for the exercise will include the simulated event.

Jackson County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

DeKalb County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section IV.A, and Attachment 1

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**
Jackson County: **Adequate**
DeKalb County: **Adequate**

N.3.d *A time schedule of real and simulated initiating events;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Attachment 1, Section I.B, "Exercises," says that annual exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. The exercises will be designed to allow free play for decision making and to cover the specific objectives of the exercise. The scenario for the exercise will include a time schedule of real and simulating events.

Jackson County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

DeKalb County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section IV.A and Attachment 1

Proposed Alabama Radiological Emergency Preparedness Plan

- Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- N.3.e *A narrative summary describing the conduct of the exercises or drills to include such things as simulated casualties, offsite fire department assistance, rescue of personnel, use of protective clothing, deployment of radiological monitoring teams, and public information activities; and*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Attachment 1, Section I.B, "Exercises," says that annual exercises are designed to test the major players and the adequacy of plans and SOGs/SOPs. The exercises will be designed to cover the specific objectives of the exercise. The scenario for the exercise will include a narrative summary describing the conduct of the exercises or drills to include such things as simulated casualties, offsite fire department assistance, rescue of personnel, use of protective clothing, deployment of radiological monitoring teams, and public information activities in the exercises.

Jackson County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises and Drills, County Tasks." This section provides information regarding both practice and actual exercises.

DeKalb County: Plans are adequate. County responsibilities for exercises are provided in Alabama REPP, Base Plan, Appendix 3, Attachment 1, "Exercises

and Drills, County Tasks.” This section provides information regarding both practice and actual exercises.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section IV.A, and Attachment 1
- Proposed Alabama Radiological Emergency Preparedness Plan**
- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- N.3.f. *A description of the arrangements for and advance materials to be provided to official observers.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP Base Plan, Appendix 3, Section IV.B, states that The State Emergency Management Agency will provide FEMA with scenarios, and extent-of-play.

Jackson County: Not applicable

DeKalb County: Not applicable

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section IV.B,
- Proposed Alabama Radiological Emergency Preparedness Plan**
- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not applicable**

DeKalb County: **Not applicable**

- N.4. *Official observers from Federal, State or local governments will observe, evaluate, and critique the required exercises. A critique shall be scheduled at the conclusion of the exercise to evaluate the ability of organizations to respond as called for in the plan. The critique shall be conducted as soon as practicable after the exercise, and a formal evaluation should result from the critique.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Appendix 3, Section IV.B, “Responsibilities, ESF-5,” states that the AEMA will, “observe, evaluate and critique exercise operations whenever possible. Follow up

on areas requiring improvement and ensure corrective action has been taken as appropriate.” The term “critique” is used several times in Appendix 3, implying that after exercise critiques will be held.

Jackson County: Plans are adequate. The State of Alabama EMA oversees the conduct of exercises.

DeKalb County: Plans are adequate. The State of Alabama EMA oversees the conduct of exercises.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Proposed State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section IV.B, and Attachment 1, Section VI, and Appendix 3, Attachment 1, Section C

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- N.5. *Each organization shall establish means for evaluating observer and participant comments on areas needing improvement, including emergency plan procedural changes, and for assigning responsibility for implementing corrective actions. Each organization shall establish management control used to ensure that corrective actions are implemented.*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Appendix 3, Section IV.B, states that AEMA will observe, evaluate and critique exercise operations whenever possible. They will follow up on areas requiring improvement and ensure corrective action has been taken. AEMA must maintain a record of inter-agency exercises and drills and the critiques and incorporate lessons learned into SOPs and revisions to this plan. Section D, “ESF-8 Department of Public Health,” says that the Office of Radiation Control will observe, evaluate and critique those aspects of an exercise concerning Radiation Control. They will provide inputs to Emergency Management on operational

aspects of exercise and follow up on areas requiring improvement and ensure corrective action is taken.

The Alabama REPP, Base Plan, Appendix 3, Attachment 1, Section C, "After Action Reports," says that the counties will prepare a written report of the practice and annual exercises. The reports furnished by the counties will be forwarded to AEMA within 30 days of the completion of an exercise and will be based on critique comments of participants and observers or on events that occurred during the exercise. The report provided by the counties will direct corrective actions where necessary and will contain a narrative of lessons learned to assist in improving future exercises and changes to plans.

Jackson County: Plans are adequate. The State of Alabama EMA oversees the conduct of exercises.

DeKalb County: Plans are adequate. The State of Alabama EMA oversees the conduct of exercises.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Proposed State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Appendix 3, Section IV.B, and Section IV.D, and Attachment 1, Section C

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Change Appendix 3 to Appendix 4

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

O. Radiological Emergency Response Training: *Radiological emergency response training is provided to those who may be called on to assist in an emergency.*

- O.1. *Each organization shall assure the training of appropriate individuals.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, "Radiological Protection Training," says individuals that work to support the population in the event of an accident at a NPP require technical training in the use of instruments to protect themselves and assist in the protection of exposed individuals. Section B, "Concept of Operations," says that training will be through a cooperative effort by qualified instructors from AEMA, County EMA, RAC and the utility. Both initial and annual refresher training are addressed.

Jackson County: Plans are adequate. The proposed Jackson County REP, Section IV.A.1, "Jackson County Emergency Management Agency," says that it will develop plans, conduct training and exercise procedures to insure that plans are current and functional. Section VI, D, "Administration" says that each department and agency of local government, which has personnel tasked to participate in REP response, shall make provisions to insure each individual receives radiological emergency response training. It further states that required REP training will be scheduled through the County EMA.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Section IV.A.1, "DeKalb County Emergency Management Agency," says that it will develop plans, conduct training and exercise procedures to insure that plans are current and functional. Section VI, D, "Administration" says that each department and agency of local government, which has personnel tasked to participate in REP response, shall make provisions to insure each individual receives radiological emergency response training. It further states that required REP training will be scheduled through the County EMA.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Sections VI and Section XII

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII and Appendix 3, Attachment 4, Section I

Proposed Jackson County Plan

- Section IV.A, and VI.D

Proposed DeKalb County Plan

- Section IV.A, and VI.D

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- O.1.b. *Each offsite response organization shall participate in and receive training. Where mutual aid agreements exist between local agencies such as fire, police and ambulance/rescue, the training is also offered to the other departments who are members of the mutual aid district.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, "Radiological Protection Training," states that the level of training required depends on the tasks emergency workers are expected to perform. Four basic

categories of emergency workers are identified who receive technical training under this plan; they are described in NUREG Criterion O.1, above.

Jackson County: Plans are adequate. The proposed Jackson County REP, Section IV.A.1, "Jackson County Emergency Management Agency," says that it will develop plans, conduct training and exercise procedures to insure that plans are current and functional. Section IV, D, "Administration" says that each department and agency of local government, which has personnel tasked to participate in REP response, shall make provisions to insure each individual receives radiological emergency response training. It further states that required REP training will be scheduled through their respective county EMA.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Section IV.A.1, "DeKalb County Emergency Management Agency," says that it will develop plans, conduct training and exercise procedures to insure that plans are current and functional. Section IV, D, "Administration" says that each department and agency of local government, which has personnel tasked to participate in REP response, shall make provisions to insure each individual receives radiological emergency response training. It further states that required REP training will be scheduled through their respective county EMA.

Plan Reference

State of Alabama Emergency Operations Plan

- Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII.B

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Proposed Appendix 3, Section II.D

Proposed Jackson County Plan

- Section VI.D

Proposed DeKalb County Plan

- Section VI.D

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- O.4 *Each organization shall establish a training program for instructing and qualifying personnel who will implement radiological emergency response plans. The specialized initial training and periodic retraining programs (including the scope, nature and frequency) shall be provided in the following categories¹⁴:*

- O.4.a. *Directors or coordinators of the response organizations;*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, "Radiological Protection Training," describes training for directors, coordinators and other key personnel of local response organizations.

Jackson County: Plans are adequate. Alabama REPP, Base Plan, Appendix 3 states each local Emergency Management Director is responsible for coordinating and submitting updated material and applicable changes to the REP plan and certifying currency of the REP plan to the SEOC. The Director will coordinate local distribution procedures for the REP plan and ensure local emergency response organizations are current in this regard. The Director and immediate staff will be trained in accordance with appropriate FEMA courses designed for local Emergency Management personnel.

DeKalb County: Plans are adequate. Alabama REPP, Base Plan, Appendix 3 states each local Emergency Management Director is responsible for coordinating and submitting updated material and applicable changes to the REP plan and certifying currency of the REP plan to the SEOC. The Director will coordinate local distribution procedures for the REP plan and ensure local emergency response organizations are current in this regard. The Director and immediate staff will be trained in accordance with appropriate FEMA courses designed for local Emergency Management personnel.

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

O.4.b. Personnel responsible for accident assessment;

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Section XII.B Personnel who work to support the population in the event of a radiological accident at either of the NPPs in Alabama. These individuals require technical training in the use of instruments and procedures to protect themselves and to assist in the protection of exposed citizens. The level of training required depends on the tasks these workers are expected to perform.

Jackson County: Not applicable.

DeKalb County: Not applicable.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII.B and ESF #8

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Not applicable**

DeKalb County: **Not applicable**

O.4.c. *Radiological monitoring teams and radiological analysis personnel;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Section XII.B, Personnel who work to support the population in the event of a radiological accident at either of the NPPs in Alabama may be exposed to radiation. These individuals require technical training in the use of instruments and procedures to protect themselves and to assist in the protection of exposed citizens. The level of training required depends on the tasks these workers are expected to perform.

Jackson County: Not applicable

DeKalb County: Not applicable

Plan Reference

- Alabama Radiological Emergency Preparedness Plan

Criterion Evaluation:

State of Alabama: **Adequate**

Jackson County: **Not applicable**

DeKalb County: **Not applicable**

O.4.d. *Police, security and fire-fighting personnel;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Section XII, describes categories of training for radiological emergency response personnel. Detailed function specific training is described that applies to police, security and fire-fighting personnel. Initial and annual retraining is addressed. Training will be provided by qualified instructors from AEMA, County EMA, RCA and the utility.

Jackson County: Plans are adequate. The State is responsible for the overall coordination and conduct of all REP related training. Alabama REPP, Base Plan, Section XII, describes categories of training for radiological emergency response personnel. Detailed function specific training is described that applies to police, security and fire-fighting personnel. Initial and annual retraining is addressed. Training will be provided by qualified instructors from AEMA, County EMA, RCA and the utility.

DeKalb County: Plans are adequate. The State is responsible for the overall coordination and conduct of all REP related training. Alabama REPP, Base Plan, Section XII, describes categories of training for radiological emergency response personnel. Detailed function specific training is described that applies to police, security and fire-fighting personnel. Initial and annual retraining is addressed. Training will be provided by qualified instructors from AEMA, County EMA, RCA and the utility.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

O.4.f. *First aid and rescue personnel;*

Criterion Statement

State of Alabama: Plans are adequate. Alabama REPP, Base Plan, Section XII, describes categories of training for radiological emergency response personnel. Detailed function specific training is described that applies to first aid and rescue personnel. Initial and annual retraining is addressed. Training will be provided by qualified instructors from AEMA, County EMA, RCA and the utility. Additionally, Alabama REPP, ESF #8, Tab 5, Section III.D, "Responsibilities, Ambulance Companies and Rescue Squad," stated that they (the ambulance company) will assure crew members are trained on radiological self protection and on procedures to handle contaminated casualties or equipment.

Jackson County: Plans are adequate. The State is responsible for the overall coordination and conduct of all REP related training. Alabama REPP, Base Plan, Section XII, describes categories of training for radiological emergency response personnel. Detailed function specific training is described that applies to first aid and rescue personnel. Initial and annual retraining is addressed. Training will be provided by qualified instructors from AEMA, County EMA, RCA and the utility. Additionally, Alabama REPP, ESF #8, Tab 5, Section III.D, stated that they (the ambulance company) will assure crew members are trained on radiological self protection and on procedures to handle contaminated casualties or equipment.

DeKalb County: Plans are adequate. The State is responsible for the overall coordination and conduct of all REP related training. Alabama REPP, Base Plan, Section XII, describes categories of training for radiological emergency response personnel. Detailed function specific training is described that applies to first aid and rescue personnel. Initial and annual retraining is addressed. Training will be provided by qualified instructors from AEMA, County EMA, RCA and the utility. Additionally, Alabama REPP, ESF #8, Tab 5, Section III.D, "Responsibilities, Ambulance Companies and Rescue Squad," stated that they (the ambulance company) will assure crew members are trained on radiological self protection and on procedures to handle contaminated casualties or equipment.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII, and ESF #8, Tab 5, Section III.D

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

O.4.g. *Local support services personnel including Civil Defense/Emergency Service personnel;*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, says individuals that work to support the population in the event of an accident at a NPP require technical training in the use of instruments to protect themselves and assist in the protection of exposed individuals. Training for key personnel from local response organizations and local emergency management are addressed.

Jackson County: Plans are adequate. The State is responsible for the overall coordination and conduct of all REP related training. The Alabama REPP, Base Plan, Section XII, says individuals that work to support the population in the event of an accident at a NPP require technical training in the use of instruments to protect themselves and assist in the protection of exposed individuals. Training for key personnel from local response organizations and local emergency management are addressed.

DeKalb County: Plans are adequate. The State is responsible for the overall coordination and conduct of all REP related training. The Alabama REPP, Base Plan, Section XII, says individuals that work to support the population in the event of an accident at a NPP require technical training in the use of instruments to protect themselves and assist in the protection of exposed individuals. Training for key personnel from local response organizations and local emergency management are addressed.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII.B

Proposed DeKalb County Plan

- None.

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

O.4.h. *Medical support personnel;*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, says individuals that work to support the population in the event of an accident at a NPP require technical training in the use of instruments to protect themselves and assist in the protection of exposed individuals. Section B, says that training will be through a cooperative effort by qualified instructors from AEMA, County EMA, RAC and the utility. Both initial and annual refresher training are addressed. A note included in this section states that specialized training for medical personnel in hospitals who may have contact with contaminated individuals is too technical for the scope of this plan. This type of training will be provided through medical channels.

The Alabama REPP, Emergency Support Function (ESF) #8, Tab 5, Section III.D, states that the Radiation Control Agency will provide training support to care facility and staffs on radiological matters. The medical care facility is responsible for conducting training on methods to care for contaminated patients, obtain and maintain radiological equipment needed to monitor patients and dispose of radioactive material.

Jackson County: The Public Health Official in coordination with DAS will develop plans, establish procedure, conduct training and participate in exercises to insure that health facilities and personnel are prepared to protect and care for the population during a radiological incident. A formal agreement with the hospital (to be determined later) has been signed establishing procedures for the transport of contaminated patients. A representative of the Health Department and DAS will be provided to the EOC. The Health Department will provide KI to contaminated victims at the reception centers. The time interval for which the training program will be provided (initial and refresher) is not addressed.

DeKalb County: The Public Health Official in coordination with DAS will develop plans, establish procedure, conduct training and participate in exercises to insure that health facilities and personnel are prepared to protect and care for the population during a radiological incident. A formal agreement with the hospital (to be determined later) has been signed establishing procedures for the transport of contaminated patients. A representative of the Health Department and DAS will be provided to the EOC. The Health Department will provide KI to contaminated victims at the reception centers. The time interval for which the training program will be provided (initial and refresher) is not addressed.

Plan References

Alabama Radiological Emergency Preparedness Plan

- Section XII.B, and ESF #8 and Tab 5, Section III.D

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**
DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- O.4.j. *Personnel responsible for transmission of emergency information and instructions;*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, "Radiological Protection Training," describes training for directors, coordinators and other key personnel of local response organizations.

Jackson County: Plans are adequate. Alabama REPP, Base Plan, Appendix 3 states each local Emergency Management Director is responsible for coordinating and submitting updated material and applicable changes to the REP plan and certifying currency of the REP plan to the SEOC. The Director will coordinate local distribution procedures for the REP plan and ensure local emergency response organizations are current in this regard. The Director and immediate staff will be trained in accordance with appropriate FEMA courses designed for local Emergency Management personnel.

DeKalb County: Plans are adequate. Alabama REPP, Base Plan, Appendix 3 states each local Emergency Management Director is responsible for coordinating and submitting updated material and applicable changes to the REP plan and certifying currency of the REP plan to the SEOC. The Director will coordinate local distribution procedures for the REP plan and ensure local emergency response organizations are current in this regard. The Director and immediate staff will be trained in accordance with appropriate FEMA courses designed for local Emergency Management personnel.

Plan Reference:

Alabama Radiological Emergency Preparedness Plan

- Section XII, and ESF #15 and Section II.B

Criterion Evaluation:

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- O.5. *Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP, Base Plan, Section XII, "Radiological Protection Training," says individuals that work to support the

population in the event of an accident at a NPP require technical training in the use of instruments to protect themselves and assist in the protection of exposed individuals. Section B, "Concept of Operations," says that training will be through a cooperative effort by qualified instructors from AEMA, County EMA, RAC and the utility. Both initial and annual refresher training are addressed. Four types of training categories are identified.

Jackson County: Plans are adequate. The proposed Jackson County REP, Section IV.A, says that it will develop plans, conduct training and exercise procedures to insure that plans are current and functional. Section IV.D, says that each department and agency of local government, which has personnel tasked to participate in REP response, shall make provisions to insure each individual receives radiological emergency response training.

DeKalb County: Plans are adequate. The proposed DeKalb County REP, Section IV.A, says that it will develop plans, conduct training and exercise procedures to insure that plans are current and functional. Section IV.D, says that each department and agency of local government, which has personnel tasked to participate in REP response, shall make provisions to insure each individual receives radiological emergency response training.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section VIII

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII

Proposed Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section XII and Appendix 3, Attachment 4, Section I,

Proposed Jackson County Plan

- Section IV.A, and IV.D

Proposed DeKalb County Plan

- Section IV.A, and VI.D

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

P. Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans: *Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.*

- P.1. *Each organization shall provide for the training of individuals responsible for the planning effort.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REP Base Plan states that Directors, ADPH and AEMA, will be trained as appropriate in the technical and planning aspects of nuclear incidents necessary to fulfill their joint responsibilities. The plan further states that each local Emergency Management Director and immediate staff will be trained with appropriate FEMA courses designed for local Emergency Management personnel.

Jackson County: Plans are adequate. The State of Alabama EMA and ADPH – Radiation Control establish the criteria and conducts applicable training.

DeKalb County: Plans are adequate. The State of Alabama EMA and ADPH – Radiation Control establish the criteria and conducts applicable training.

Plan Reference

State of Alabama Emergency Operations Plan references:

- Basic Plan, Section VIII.A

Alabama Radiological Emergency Preparedness Plan references:

- Section VI, and XII

Proposed Alabama Radiological Emergency Preparedness Plan references:

- Appendix 3, Section II.A

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- P.2. *Each organization shall identify by title the individual with the overall authority and responsibility for radiological emergency response planning.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP identifies the Governor of the State of Alabama as the individual with overall authority and responsibility for radiological emergency planning.

Jackson County: Plans are adequate. Proposed Jackson County REP, Section IV, “Organizations and Responsibilities”, says that the Jackson County Emergency Management Agency has the overall responsibility for emergency preparedness and offsite local response concerning an incident at the Bellefonte Nuclear Plant.

DeKalb County: Plans are adequate. Proposed DeKalb County REP, Section IV, “Organizations and Responsibilities”, says that the DeKalb County

Emergency Management Agency has the overall responsibility for emergency preparedness and offsite local response concerning an incident at the Bellefonte Nuclear Plant.

Plan Reference

State of Alabama Emergency Operations Plan

- Base Plan, Section V.B

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section VI.A, IV.E, V.A, and XIII.A

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section I.B, II.A and Attachment 3, I.A

Proposed Jackson County Plan

- Section IV

Proposed DeKalb County Plan

- Section IV

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- P.3. *Each organization shall designate an Emergency Planning Coordinator with responsibility for the development and updating of emergency plans and coordination of these plans with other response organizations.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REP Plan states that Directors of State agencies, departments, and commissions, and County Emergency Management Directors are responsible for the development and updating of emergency plans and coordination of the plans with other response organizations.

Jackson County: Plans are adequate. Proposed Jackson County REP, Section VI, identifies the Jackson County Emergency Management Director as responsible for coordinating and submitting annually updated material and applicable changes to the plan, as well as coordinating local distribution and ensuring that local emergency response organizations are current in this regard.

DeKalb County: Plans are adequate. Proposed DeKalb County REP, Section VI, identifies the DeKalb County Emergency Management Director as responsible for coordinating and submitting annually updated material and applicable changes to the plan, as well as coordinating local distribution and ensuring that local emergency response organizations are current in this regard.

Plan Reference

State of Alabama Emergency Operations Plan

- Base Plan Section V.B

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section IV.E and VI, and Appendix 2 Section II.A

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section I.B and Appendix 3, Section II.A and I.A

Proposed Jackson County Plan

- Basic Plan Section VI

Proposed DeKalb County Plan

- Basic Plan Section VI

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- P.4. *Each organization shall update its plan and agreements as needed, review and certify it to be current on an annual basis. The update shall take into account changes identified by drills and exercises.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REP Base Plan indicates responsibility at the state and county levels for annual certification of the plan. The plan also identifies responsibility and the mechanism for updating the plan to reflect corrections identified through exercises and drills.

Jackson County: Plans are adequate. Proposed Jackson County REP, Section VI, identifies the Jackson County Emergency Management Director as responsible for coordinating and submitting annually updated material and applicable changes to the plan. The County will document the annual review of the REP and certify its currency to the AEMA.

DeKalb County: Plans are adequate. Proposed DeKalb County REP, Section VI, identifies the DeKalb County Emergency Management Director as responsible for coordinating and submitting annually updated material and applicable changes to the plan. The County will document the annual review of the REP and certify its currency to the AEMA.

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, Section III.C

Alabama Radiological Emergency Preparedness Plan

- Alabama REPP, Base Plan, Section VI.A, and Appendix 3, Section IV.B, and Attachment 1, I.C

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section II.A
Proposed Jackson County Plan
- Basic Plan, Section VI
Proposed DeKalb County Plan
- Basic Plan, Section VI

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- P.5. *The emergency response plans and approved changes to the plans shall be forwarded to all organizations and appropriate individuals with responsibility for implementation of the plans. Revised pages shall be dated and marked to show where changes have been made.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama EOP and Alabama REPP each contain a list of organizations and individuals who are provided with copies of the plan. Both plans specify who is responsible for distributing plans and revisions. Alabama EOP, Basic Plan, Section IX, "Preparedness and Plan Maintenance," outlines the types of changes that can be made in the plan, how changes are proposed and approved, and the distribution of official notices of change. It also indicates that the EOP will be reissued every four years, or more frequently if required.

Jackson County: Plans are adequate. The Jackson County EOP states that the County Emergency Management Director is responsible for coordinating and submitting annually updated material and applicable changes to the Count REP. The Director will coordinate local distribution procedures doe the plan and ensure local emergency response organizations are provided current versions of the REP

DeKalb County: Plans are adequate. The DeKalb County EOP states that the County Emergency Management Director is responsible for coordinating and submitting annually updated material and applicable changes to the Count REP. The Director will coordinate local distribution procedures doe the plan and ensure local emergency response organizations are provided current versions of the REP

Plan Reference

State of Alabama Emergency Operations Plan

- Basic Plan, *Foreword, Distribution, Record of Changes*, and Section IX, *Preparedness and Plan Maintenance*

Alabama Radiological Emergency Preparedness Plan

- Base Plan, p.vii to xiv, p.xv and Section VI.A and XIII.C

Proposed Alabama Radiological Emergency Preparedness Plan

- Appendix 3, Section II.A

Proposed Jackson County Plan

- Basic Plan, p.iv

Proposed DeKalb County Plan

- Basic Plan, p.iv

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- P.6. *Each plan shall contain a detailed listing of supporting plans and their source.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP contains a list of supporting plans and their sources.

Jackson County: The Jackson County plans submitted for review does not contain a list of supporting plans and their sources.

DeKalb County: The DeKalb County plans submitted for review does not contain a list of supporting plans and their sources.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Alabama REPP, Base Plan, Section XV

Proposed Alabama Radiological Emergency Preparedness Plan

- Proposed Alabama REPP, amendments to Base Plan, Section XV

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- P.7. *Each plan shall contain as an appendix listing, by title, procedures required to implement the plan. The listing shall include the section(s) of the plan to be implemented by each procedure.*

Criterion Statement

State of Alabama: Plans are adequate. The State of Alabama plans provided for review include specific list of implementing procedures with the plan and what sections(s) of the plans are implemented by each procedure.

Jackson County: The Jackson County plans provided for review do not include a list of implementing procedures associated with the plan and what section(s) of the plans are implemented by each procedure.

DeKalb County: The DeKalb County plans provided for review do not include a list of implementing procedures associated with the plan and what section(s) of the plans are implemented by each procedure.

Plan Reference

Alabama Radiological Emergency Preparedness Plan references:

- Alabama REPP, p.iii (incorrect reference)

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **See Post COL Reasonable Assurance Tracking Form**

DeKalb County: **See Post COL Reasonable Assurance Tracking Form**

- P.8. *Each plan shall contain a specific table of contents. Plans submitted for review should be cross-referenced to these criteria.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP contains a specific table of contents and a cross-reference to NUREG-0654.

Jackson County: Plans are adequate. Proposed Jackson County REP contains a full index of contents and a cross-reference to NUREG-0654.

DeKalb County: Plans are adequate. Proposed DeKalb County REP contains a full index of contents and a cross-reference to NUREG-0654.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Table of Contents, NUREG-0654 Crosswalk

Proposed Jackson County Plan

- Index, Cross Reference provided with RAI Response

Proposed DeKalb County Plan

- Index, Cross Reference provided with RAI Response

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

- P.10. *Each organization shall provide for updating telephone numbers, call-down lists and maps⁸ in emergency procedures at least quarterly.*

Criterion Statement

State of Alabama: Plans are adequate. The Alabama REPP specifies that telephone numbers listed in the plan and departments supporting the plan will update rosters of key personnel and phone numbers provide the updated information to AEMA on a quarterly basis.

Jackson County: Plans are adequate. The proposed Jackson County REP, Basic Plan states that all agencies must update rosters of key personnel and telephone numbers at least quarterly.

DeKalb County: Plans are adequate. The proposed Jackson County REP, Basic Plan states that all agencies must update rosters of key personnel and telephone numbers at least quarterly.

Plan Reference

Alabama Radiological Emergency Preparedness Plan

- Base Plan, Section V.B and VI.A

Proposed Jackson County Plan

- Basic Plan, Section VI.E

Proposed DeKalb County Plan

- Basic Plan, Section VI.E

Criterion Evaluation

State of Alabama: **Adequate**

Jackson County: **Adequate**

DeKalb County: **Adequate**

⁸ Revised by FEMA GM PR-1.
9-15-09

III. Post COL Reasonable Assurance Tracking

Time Frame ⁹	Evaluation Criterion ¹⁰	Action Needed and Applicable Exercise Evaluation Methodology ¹¹	Resolution Description and Date
E-18	E.2 (Local)	Procedures are established for alerting, notifying, and mobilizing emergency response personnel. (1.a.1)	Update/adopt proposed State/local emergency plan March 2015
	E.6 and J.10.c (State/Local)	Public Alert and Notification procedures are developed. (5.a.1, 5.a.3) Install and test outdoor warning systems (sirens)	Update/adopt proposed State/local emergency plan March 2014 Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.
	E.7 and J.10.c (State/Local)	Draft messages to the public giving instructions with regard to specific protective actions to be taken by occupants of affected areas shall be prepared and included as part of the State and local plans.	Update/adopt proposed State/local emergency plan March 2014 Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.
	H.7 (Local)	Plans indicate where offsite monitoring equipment is located. (1.e.1)	Update/adopt proposed State/local emergency plan March 2014. Complete initial SOPs/SOGs preparation March 2015

⁹ E - x = Months prior to qualifying exercise

¹⁰ NUREG 0654 FEMA-REP-1 Rev 1

¹¹ Federal Register Vol. 67 No. 80, April 25, 2002

Time Frame9	Evaluation Criterion10	Action Needed and Applicable Exercise Evaluation Methodology11	Resolution Description and Date
			<p>Complete equipment selection/preparation March 2016</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.</p>
	H.11 (Local)	Plans include emergency equipment inventory lists in an appendix.	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p> <p>Complete equipment selection/preparation March 2016</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.</p>
	H.12 (State)	Plans establish a central point for the receipt and analysis of all field monitoring data and coordination of sample media. (4.a.2)	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p>

Time Frame9	Evaluation Criterion10	Action Needed and Applicable Exercise Evaluation Methodology11	Resolution Description and Date
			<p>Complete equipment selection/preparation March 2016</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading</p>
	J.10.e (Local)	Plans describe provisions for the use of radio protective drugs, such as potassium iodide (KI), especially for emergency workers and institutionalized persons within the plume exposure EPZ. State plans and/or procedures, as appropriate, include the quantities, storage locations, and means of distribution of KI. (1.e.1, 2.a.1, 2.c.1, 3.b.1)	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p> <p>Complete equipment selection/preparation March 2016</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.</p>

Time Frame9	Evaluation Criterion10	Action Needed and Applicable Exercise Evaluation Methodology11	Resolution Description and Date
	J.10.h (see J.12) (Local)	Plans describe, as appropriate the locations of Congregate Care Centers in host areas which are at least 5 miles, and preferably 10 miles, beyond the boundaries of the plume exposure emergency planning zone. (6.a.1, 6.c.1)	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p> <p>Complete equipment selection/preparation March 2016</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.</p>
	J.11 (State)	Procedures for detecting contamination, for estimating the dose commitment consequences from the ingestion pathway and for imposing protective measures such as impoundment, decontamination, processing, decay, product diversion and preservation are developed and included in State plans. Maps for recording survey and monitoring data, key land use data are developed. Up-to-date lists of the name and location of all facilities within the ingestion pathway EPZ which regularly process milk products and other food or agricultural products originating in that EPZ are maintained. (1.e.1, 2.d.1, 3.e.1, 3.e.2, 4.b.1, 4.c.1)	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading</p>
	J.12 (Local)	Reception Center/Monitoring and Decontamination procedures	Update/adopt proposed State/local emergency plan March 2014

Time Frame9	Evaluation Criterion10	Action Needed and Applicable Exercise Evaluation Methodology11	Resolution Description and Date
			<p>Complete initial SOPs/SOGs preparation March 2015</p> <p>Facility selection and preparation March 2016</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading</p>
	K.3.a (Local)	Plans and/or procedures are developed, as appropriate, for the distribution of both self-reading and permanent record devices to State emergency workers. (1.3.1, 3.a.1)	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p> <p>Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading</p>
	K.5.b (Local)	Procedures for radiological decontamination of emergency personnel wounds, supplies, instruments and equipment, and for waste disposal are developed, as appropriate. (6.b.1, 6.d.1)	<p>Update/adopt proposed State/local emergency plan March 2014</p> <p>Complete initial SOPs/SOGs preparation March 2015</p>

Time Frame9	Evaluation Criterion10	Action Needed and Applicable Exercise Evaluation Methodology11	Resolution Description and Date
			Facility selection and preparation March 2016 Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.
	L.4 (Local)	Emergency medical services providers are identified and the appropriate LOAs are obtained. (6.d.1)	Update/adopt proposed State/local emergency plan March 2014 Complete initial SOPs/SOGs preparation March 2015 Facility selection and preparation March 2016 Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.
E-18	N.2.a (Local)	Establish procedures for communication verification per state communications plan.	Update/adopt proposed local emergency plan March 2014.
	O.4.h (Local)	Training for medical support personnel is conducted.	Update/adopt proposed local emergency plan March 2014
E-12	G. 1 (State/Local)	Public information materials are developed to include the required information.	Update/adopt proposed State/local emergency plan March 2014

Time Frame9	Evaluation Criterion10	Action Needed and Applicable Exercise Evaluation Methodology11	Resolution Description and Date
	G.2 (State/Local)	A description of the types, locations, means for annual updating, and means of distribution of public information materials is included in the State plan, as appropriate.	Update/adopt proposed State/local emergency plan March 2014
	L.1 (Local)	Establish MOA's with designated primary and backup hospitals.	Update/adopt proposed State/local emergency plan March 2016
	P.6 (Local)	The plan is updated to include all supporting plans.	Update/adopt proposed State/local emergency plan March 2014 Complete initial SOPs/SOGs preparation March 2015 Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.
E-6	N.2.c (Local)	Medical emergency drills are conducted prior to the qualifying exercise and a schedule for subsequent drills is established.	
E-2	P.7 (Local)	The plan is updated to include a listing of all implementing procedures and the plan sections to be implemented by each.	Update/adopt proposed State/local emergency plan March 2014. Complete initial SOPs/SOGs preparation March 2015 . Will be available for inspection prior in sufficient time to support the full participation exercise (September 2016) prior to fuel loading.

IV. Criterion Rating Summary

Any blank spaces in the table below will be evaluated prior to the IFR on Reasonable Assurance on the Adequacy of Offsite Radiological Emergency Response Preparedness. These items are listed and monitored on the Post COL Reasonable Assurance Tracking Form.

Element	Rating			Element	Rating			Element	Rating		
	Alabama	DeKalb County	Jackson County		Alabama	DeKalb County	Jackson County		Alabama	DeKalb County	Jackson County
A.1.a	A	A	A	H.3	A	A	A	M.1	A	A	A
A.1.b	A	A	A	H.4	A	A	A	M.3	A	N/A	N/A
A.1.c	A	A	A	H.7	A			M.4	A	N/A	N/A
A.1.d	A	A	A	H.10	A	A	A	N.1.a	A	A	A
A.1.e	A	A	A	H.11	A			N.1.b	A	A	A
A.2.a	A	A	A	H.12		N/A	N/A	N.2.a	A		
A.2.b	A	A	A	I.7	A	N/A	N/A	N.2.c	A		
A.3	A	A	A	I.8	A	N/A	N/A	N.2.d	A	N/A	N/A
A.4	A	A	A	I.9	A	N/A	N/A	N.2.e(1)	A	N/A	N/A
C.1.a	A	N/A	N/A	I.10	A	N/A	N/A	N.3.a	A	A	A
C.1.b	A	N/A	N/A	I.11	A	N/A	N/A	N.3.b	A	A	A
C.1.c	A	A	A	J.2	A	N/A	A	N.3.c	A	A	A
C.2.a	A	A	A	J.9	A	A	A	N.3.d	A	A	A
C.3	A	N/A	N/A	J.10.a	A	A	A	N.3.e	A	A	A
C.4	A	A	A	J.10.b	A	A	A	N.3.f	A	N/A	N/A
D.3	A	A	A	J.10.c				N.4	A	A	A
D.4	A	A	A	J.10.d	A	A	A	N.5	A	A	A
E.1	A	A	A	J.10.e	A			O.1	A	A	A
E.2	A			J.10.f	A	A	A	O.1.b	A	A	A
E.5	A	A	A	J.10.g	A	A	A	O.4.a	A	A	A
E.6	A			J.10.h	A			O.4.b	A	N/A	N/A
E.7				J.10.i	A	A	A	O.4.c	A	N/A	N/A
F.1.a	A	A	A	J.10.j	A	A	A	O.4.d	A	A	A
F.1.b	A	A	A	J.10.k	A	A	A	O.4.f	A	A	A
F.1.c	A	A	A	J.10.l	A	A	A	O.4.g	A	A	A
F.1.d	A	A	A	J.10.m	A	N/A	N/A	O.4.h	A		
F.1.e	A	A	A	J.11	A	N/A	N/A	O.4.j	A	A	A
F.2	A	A	A	J.12	A			O.5	A	A	A
F.3	A	A	A	K.3.a	A			P.1	A	A	A
G.1				K.3.b	A	A	A	P.2	A	A	A
G.2				K.4	A	A	A	P.3	A	A	A
G.3.a	A	A	A	K.5.a	A	A	A	P.4	A	A	A
G.4.a	A	A	A	K.5.b	A			P.5	A	A	A
G.4.b	A	A	A	L.1	A			P.6	A		
G.4.c	A	A	A	L.3	A	N/A	N/A	P.7	A		
G.5	A	A	A	L.4	A			P.8	A	A	A
A = Adequate; Blank space indicates the criterion is listed on the Post COL Tracking Form								P.10	A	A	A

V. Bellefonte Reasonable Assurance

After a thorough review of currently available Offsite Plans and Procedures, based upon the standards and criteria of NUREG-0654 FEMA-REP-1, Rev. 1, a determination has been made that the plans are adequate and there is Reasonable Assurance that the plans can be implemented with no corrections needed. A qualifying REP exercise will be demonstrated by the Bellefonte Nuclear Plant in conjunction with offsite State and county participation.

VI. Acronym Key

Acronym	Definition
A&I	Alabama Department of Agriculture and Industries
ACP	Access Control Point
ADEM	Alabama Dept. of Environmental Management
ADHS	Alabama Department of Homeland Security
ADPH	Alabama Department of Health
AEMA	Alabama Emergency Management Agency
ARC	American Red Cross
BFNPP	Browns Ferry Nuclear Power Plant
BNP	Bellefonte Nuclear Plant
CDE	Committed Dose Equivalent
CECC	Central Emergency Control Center (the licensee's EOF)
COL	Combined License
DCEMA	DeKalb County Emergency Management Agency
DHR	Department of Human Resources
DIL	Derived Intervention Level
DNR-REC	Georgia Department of Natural Resources Radiological Emergency Coordinator
DOA	Georgia Department of Agriculture
DOE	(U.S.) Department of Energy
DOT	Department of Transportation
DRD	Direct Reading Dosimeter
DRH	Division of Radiological Health
EAL	Emergency Action Level
EAS	Emergency Alert System

Acronym	Definition
ECL	Emergency Classification Level
EMA	Emergency Management Agency
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	(U.S.) Environmental Protection Agency
EPZ	Emergency Planning Zone
ERPA	Emergency Response Planning Area
ESC	Emergency Services Coordinator
ESF	Emergency Support Function
ETE	Evacuation Time Estimate
EW	Emergency Worker
EWS	Emergency Welfare Service
FDA	(U.S.) Food and Drug Administration
FEMA	Federal Emergency Management Agency
FEOC	Forward Emergency Operations Center
FMT	Field Monitoring Team
FNP	Farley Nuclear Plant
FRERP	Federal Radiological Emergency Response Plan
FRMAC	Federal Radiological Monitoring and Assessment Center
FRMAP	Federal Radiological Monitoring and Assessment Plan
GE	General Emergency
G-M	Geiger-Mueller
HHS	Health and Human Services
IOF	Interim Operating Facility
IPZ	Ingestion Pathway Zone
JCEMA	Jackson County Emergency Management Agency
JIC	Joint Information Center
KI	Potassium Iodide
LOA	Letter of Agreement
MOU	Memorandum of Understanding
mR/hr	milli-Roentgen per hour
MRL	Georgia Mobile Radiation Laboratory
NAWAS	National Warning Systems

Acronym	Definition
NIMS	National Incident Management System
NOUE	Notice of Unusual Event
NPP	Nuclear Power Plant
NRC	(U.S.) Nuclear Regulatory Commission
NRP	National Response Plan (now National Response Framework, March 2008)
NUREG	Nuclear Regulatory Commission Publication Alabama Dept. of Public Health/Office of Radiation
ORC	Control (RCA)
ORO	Offsite Response Organization
PAD	Protective Action Decision
PAG	Action Guideline, Protective Action Guide
PAR	Protective Action Recommendation
PIO	Public Information Officer
RACES	Radio Amateur Civil Emergency Services
RCA	Radiation Control Agency
REA	Radiological Emergency Area
rem	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
REPP	Radiological Emergency Response Plan
RFMT	Radiological Field Monitoring Team
RM	Radiological Monitor
SAE	Site Area Emergency
SEOC	State Emergency Operations Center
SERT	State Emergency Response Team
SFO	State Field Office
SMRAP	Southern Mutual Radiation Assistance Plan
SOG	Standard Operating Guide
SOP	Standard Operating Procedures
SRMAC	State Radiological Monitoring Assessment Center
TBD	To Be Determined
TCP	Traffic Control Point
TDA	Tennessee Department of Agriculture
TDEC	Tennessee Department of the Environment and Conservation

Acronym	Definition
TEDE	Total Effective Dose Equivalent
TEMA	Tennessee Emergency Management Agency
TLD	Thermoluminescent Dosimeter
TN	Tennessee
TVA	Tennessee Valley Authority
UHF	Ultra-High Frequency
VHF	Very-High Frequency
μCi	micro (μ) Curies