# **Southern Nuclear Operating Company**

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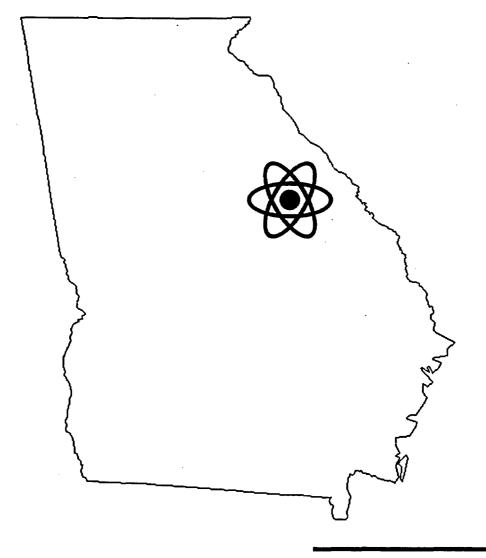
**Enclosure 6** 

Georgia Radiological Emergency Plan

Annex D – Plant Vogtle

# GEORGIA RADIOLOGICAL EMERGENCY PLAN

ANNEX D - PLANT VOGTLE





Mike Sherberger

MAY 2005

# RECORD OF CHANGE

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1	Review and update	4/20/02	Gwg
2	Review and update pg. 21-22	10/01/03	mrr
3	Review and update Pg. 25, 26, 27 & 28	2/27/04	mrr
4	Review and update new Agency name throughout document.	5/30/05	mrr
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### ANNEX D

### Alvin W. Vogtle Nuclear Plant

This annex addresses emergency planning and response actions related to any release or potential release of radioactive material in excess of normal operating levels which may affect areas beyond the controlled area of the Alvin W. Vogtle Nuclear Plant located in Burke County, Georgia.

The general concept of operation for development and implementation of the Georgia Radiological Emergency Response Plan (GA REP) and supporting site specific annexes is essentially the same as for any other emergency or disaster response planning conducted by the State of Georgia. Specifically, the Georgia Emergency Operations Plan (GEOP) provides for coordinated planning and response actions by all state agencies related to peacetime emergencies. The Executive Order contained in the GEOP assigns primary and support responsibilities for emergency and disaster services to state agencies based on their usual or normal functions and/or special capabilities. The Office of Homeland Security - Georgia Emergency Management Agency (OHS-GEMA) is designated as the agency to coordinate the activities of all state organizations in preparing for, responding to and recovering from an emergency or disaster situation. (See Preface to GA REP.)

Initial response to any emergency situation is a local responsibility. State assistance will be provided when requested by the local jurisdiction or when local capability to respond is clearly inadequate. Regardless of whether or not the local jurisdiction has requested state assistance, the Governor may declare a state of emergency and direct that the state assume control of emergency operations.

During a radiological emergency at a fixed nuclear facility, it is recognized that local capability to respond is limited and state assistance would probably be required. This annex provides for the notification of and, if necessary, the rapid deployment of state response elements to a near site facility which is designated as the OHS-GEMA Forward Emergency Operations Center (FEOC). The state response element has the capability to operate on a 24-hour basis, both from the FEOC in Waynesboro and the State Operations Center (SOC) in Atlanta. This capability for round-the-clock operation is based on current staffing in principal state response agencies using a 12-hour shift. It is anticipated that augmentation from appropriate federal agencies would be required to assist in radiological monitoring and assessment operations after 24 hours. Accordingly, an early state request for federal assistance would be based on the seriousness of the situation and the estimated duration of the emergency.

The local plan is an integral part of this annex and addresses specific responsibilities and actions of local authorities in responding to a radiological emergency at a fixed nuclear facility.

### A. NOTIFICATION METHODS AND PROCEDURES

### 1. Procedure for Notification

### a. Primary

(1) In the event of a radiological emergency at Plant Vogtle, the Plant Emergency Director or his designee will notify state and local authorities utilizing the Emergency Notification Network (ENN)\* in accordance with current procedures. The ENN terminal located within the (OHS-GEMA) Communications Center is manned 24 hours a day, seven days a week.

\*The ENN is a dedicated circuit with terminals located at the utility, the local Emergency Operations Center (EOC), the OHS-GEMA FEOC, the OHS-GEMA SOC (all manned 24 hours) and designated locations in South Carolina and the Savannah River Site.

- (2) OHS-GEMA, upon notification of an emergency by the facility operator, shall notify the Georgia Department of Natural Resources, Environmental Protection Division (DNR-EPD) in accordance with the current DNR-EPD emergency response notification procedure.
- (3) Other state agencies will be notified by OHS-GEMA as required in accordance with established procedures for activation of the State Operations Center (SOC). (See Section D.)

### b. Secondary

In the event the ENN is not operational, the OHS-GEMA Communications Center will be notified by commercial telephone at the 24-hour-a-day number as depicted in OHS-GEMA REP Resource Contacts SOP.

### c. Exception

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The only exception to the procedure specified above would be the occurrence (or likely occurrence) of a radiological incident classified as a general emergency as cited in Section VI.G. of the GA REP and a concurrent failure of the ENN. During such a situation, the utility will immediately notify, by telephone or radio, the local authorities potentially affected as listed in the local plans (Section I of this Annex). Once this

notification action has been accomplished, OHS-GEMA and DNR-EPD will be notified as quickly as possible via the above procedure.

### 2. Information to be Reported

- a. Information reported shall be in accordance with the Emergency Notification Form format adopted by the States of Georgia, North Carolina and South Carolina and by Georgia Power Company, Duke Power Company, Carolina Power and Light Company, South Carolina Electric and Gas Company and Savannah River Site Operations.
- b. Authenticity verification.
  - (1) ENN in accordance with published procedure.
  - (2) Commercial telephone call back.
- 3. General Notification of Affected Populace

The general populace will be notified by state and local government of an incident or an emergency situation in accordance with the requirements contained in NUREG-0654/FEMA REP 1, Rev. 1.

### 4. Prompt Notification of Affected Populace

Prompt notification of the population within the Plume Exposure Pathway Emergency Planning Zone (EPZ) will be conducted in accordance with OHS-GEMA Standard Operating Procedure (SOP) 3-5. This procedure meets all criteria required by NUREG-0654/FEMA REP 1, Rev. 1. (See Attachment G of the local plan.)

### 5. Information Exchange

Through the local EOC and/or the activated SOC or Forward EOC (FEOC), the general public and government agencies will be kept apprised of the status of the incident. Various mechanisms to transmit this information include telephone, radio systems and news releases to the media. News releases to the media will be coordinated through a joint media center. (See Section C.) An information officer will be assigned to each activated EOC to handle these matters. Agencies involved in radiological emergencies and their respective principal staff members are found in Section D of this annex.

### 6. Principal Utility Staff

State of Georgia GA REP – Annex D Page 4

A telephone directory of key personnel at the Southern Nuclear Operating Company who would be involved in radiological emergency response is provided to and maintained by local and state officials.

### 7. Adjacent States

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State Radiological Program Directors in adjacent states will be notified as soon as practical following a radiological emergency. This notification will be accomplished by the most expeditious means possible. This notification will serve to alert neighboring states of the situation in Georgia and, if necessary, to request assistance through the Southern Mutual Radiation Assistance Pact (SMRAP) agreement.



### **Georgia Emergency Management Agency**

Post Office Box 18055 Atlanta, Georgia 30316-0055 Tel: (404) 635-7000 In Georgia 1-800-TRY-GEMA Fax: (404) 635-7205 www.gema.state.ga.us



### **MEMORANDUM**

TO:

Holders of the GEMA SOP 3-5

(Plant Alvin W. Vogtle Prompt Notification System)

FROM:

Patrick Cochran ()

**Program Director** 

Radiological Emergency Preparedness

DATE:

January 4, 2005

SUBJECT:

**GEMA SOP 3-5 Revision** 

Attached is a revision of GEMA SOP 3-5. Please discard the copy you now have. This revision was necessary due to the deletion of Mr. Dan Brown, SOC Director and Mr. Desi Alexander, Commo Supervisor/Manager, with the addition of Mr. Joe Harworth, Radiological Training Officer.

# STATE OF GEORGIA GEORGIA EMERGENCY MANAGEMENT AGENCY STANDARD OPERATING PROCEDURE

# ACTIVATION OF THE PLANT ALVIN W. VOGTLE PROMPT NOTIFICATION SYSTEM

### I. PURPOSE

To set forth procedures and responsibilities for activation of the Alvin W. Vogtle Electric Generating Plant (VEGP) Prompt Notification System (PNS), as required by Appendix 3 of NUREG-0654, FEMA-REP, Rev. 1.

### II. GENERAL

The VEGP PNS is a composite system consisting of the National Oceanic and Atmospheric Administration (NOAA) Weather Radio (NWR) and the VEGP Siren System. The NWR is capable of providing an alerting signal and an instructional message as required by NUREG 0654/FEMA-REP-1, Rev. 1. The VEGP Siren System complements the PNS with 47 rotating electronic sirens strategically located throughout the affected area.

### III. CONCEPT OF OPERATIONS

- A. Because of the varying emergency responsibilities of the Georgia Emergency Management Agency (GEMA), South Carolina Emergency Management Division (SCEMD), and Burke County Emergency Management Agency (BEMA), together with interlocking operational and maintenance responsibilities, this Standard Operating Procedure (SOP) is subdivided into two parts as follows:
  - 1. GEMA SOP 3-5A/SCEMD SOP, addressing the activation of the activation of the NWR.
  - 2. GEMA/Burke County EMA SOP 3-5B, addressing the activation of the VEGP Siren System.
- B. While these components may be operated independently, for radiological emergency purposes they usually will be operated sequentially to provide maximum warning to the public. The sequence will be activation of the NWR first, followed as soon as possible by activation of the VEGP Siren System.

Authorization for activation of the PNS is reserved to only those C. individuals listed in ATTACHMENT # 1 to this SOP (3-5). On the specific authorization of any of those Georgia Emergency Management Agency (GEMA) personnel listed in the attachment, the National Weather Service Forecast Office (CAEWX) in Columbia South Carolina will activate the PNS. The request will specify the message to be transmitted, the conditions of broadcast, and will be verified.

#### IV. **ADMINISTRATION**

- The Radiological Program Manager for GEMA will coordinate and A. publish changes to this SOP as required.
- This SOP supersedes GEMA SOP 3-5 that was dated January 2004 with В. ensuing changes.

Date

Mike Sherberger

Director

**Georgia Emergency Management Agency** 

Authority for activation of the PLANT ALVIN W. VOGTLE PROMPT NOTIFICATION SYSTEM (PNS) is limited to the following GEMA personnel:

### **GROUP 1**

MIKE SHERBERGER, Director

**CHARLEY ENGLISH, Director of Operations** 

PATRICK COCHRAN, Program Director, Radiological Emergency Preparedness

Upon receipt of authorization from any of those in GROUP 1, the following GEMA staff members are authorized to activate the Plant Vogtle PNS.

### **GROUP 2**

RAY ROMAN, Radiological Emergency Planner

JOE HARWORTH, Radiological Emergency Trainer

NOTE: The National Weather Service (NWS) office in Columbia, South Carolina is authorized to activate the Plant Vogtle PNS upon direction from any of the names listed in GROUP 1 and GROUP 2 above. If the call is from a GROUP 2 designee, it is with the authority of a GROUP 1 member and is therefore authorized.

Standard Operating Procedure Plant Alvin W. Vogtle Prompt Notification System

Attachment # 1

### STATE OF GEORGIA/STATE OF SOUTH CAROLINA GEORGIA EMERGENCY MANAGEMENT AGENCY/ SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION STANDARD OPERATING PROCEDURE

# ACTIVATION of the VOGTLE ELECTRIC GENERATING PLANT NOAA WEATHER RADIO

### I. PURPOSE

To set forth procedures and responsibilities for activation of the Vogtle Electric Generating Plant NOAA Weather Radio (NWR), as required in Appendices A and B of the "Agreement for the Operation of a NOAA Weather Radio Transmitter by a Cooperator" (Agreement for Activation and use of NOAA Weather Radio in Response to an Emergency Condition at Georgia Power's Alvin W. Vogtle Electric Generating Plant, effective December 1, 1994).

### II. CONCEPT OF OPERATIONS

### A. Georgia

Authorization for Georgia activation of the NWR is reserved to only those individuals listed in **Attachment # 1** to GEMA SOP 3-5. On the specific authorization of any of those Georgia Emergency Management (GEMA) personnel listed in the attachment, the Columbia, South Carolina Weather Service (CAEWX) will activate the PNS. The request will specify the message to be transmitted, the conditions of broadcast, and will be verified.

### B. South Carolina

It is the intention of SCEMD to defer to GEMA for activation of NWR barring unusual circumstances.

### III. PROCEDURES

### A. Georgia

- 1. Prior to activation of the National Weather Service Tone Alert Radio (NWR), GEMA will coordinate message content with SCEMD. Coordination will ensure that SCEMD Emergency Alerting System messages are consistent with the NWR message.
- 2. Coordination with SCEMD will be accomplished by one of the means listed below, directly when conditions allow, or by patch call through the GEMA Radio Operator, if necessary.
  - a. Commercial telephone
    803-737-8500
    During non-duty hours, request call back from
    SCEMD Duty Officer.
  - b. Emergency Notification Network (ENN)
  - c. FEMA High Frequency (HF) Radio Network (3.975.00)
  - d. Any means possible.
- 3. On the direction as outlined above, the authorized GEMA Staff Member will instruct the GEMA Radio Operator to contact the National Weather Service Office (CAEWX) in Columbia, South Carolina for activation of the National Weather Radio (NWR). The GEMA Radio Operator will be provided a telephone number to reach the GEMA Staff Member (SOC, FEOC, home) who will request CAEWX to activate the NWR.

The GEMA Radio Operator will call CAEWX on the NAWAS circuit with the following message:

"Request Emergency Call to GEMA"

In the event of NAWAS malfunction or the urgency of the situation dictates immediate action, the GEMA Staff Member can contact CAEWX at one of the following commercial numbers:

803-822-8038 - primary number

803-822-8133 - backup number 803-822-8037 - backup number 803-822-8188 - fax number 4. In response to NAWAS (or telephone) contact, CAEWX will call the GEMA Radio Operator at the following number:

### 404-635-7200

The GEMA Radio Operator will ensure one of the telephone lines connected to the above number remains available to receive the call from CAEWX.

The GEMA Radio Operator will patch the CAEWX call to the number previously provided by the GEMA staff member who will request activation of the NWR. The Radio Operator will remain on the line for any assistance required.

When the CAEWX call is patched, the GEMA staff member will state that the purpose of the contact is to request activation of the NWR, then give his or her name. CAEWX will verify the authenticity of the request by checking the name given against the list of authorized personnel in **Attachment # 1** to GEMA SOP 3-5. (Note: If time is of the essence, the GEMA staff member may elect to contact CAEWX directly by commercial telephone and request activation as specified here and in Paragraph III.A.4 below.)

- 5. The GEMA staff member will request broadcast on the NWR of one of the prescript messages attached and will specify the desired message by color code and script name.
  - -YELLOW Script/First Alert (Attachment #1)
  - -BLUE Script/Shelter Notice (Attachment #2)
  - -RED Script/Evacuation Notice (Attachment #3)
  - -GREEN Script/All Clear (Attachment #4)
  - -WHITE Script/Test Message (Attachment #5)

Information needed to complete the wording of the scripts will also be provided to CAEWX, together with the number of times the message is to be automatically repeated on the NWR.

6. The GEMA staff member may request the broadcast of brief non-prescript messages during the duration of the emergency. Exact wording and repetition instructions will be determined by GEMA as the situation develops.

- 7. CAEWX will conduct weekly tests of the NWR equipment to ensure operational capability in accordance with NWS Instructions.
- B. South Carolina (See Paragraph II.B and III.A 1. above)
- IV. This SOP supersedes GEMA SOP 3-5A dated January, 2004 with ensuing changes.

MIKE	SHER	RER	RGER

Director

Georgia Emergency Management Agency

11-23-04

**Date** 

RONALD C. OSBORNE

Director

South Carolina Emergency Management Division

Doto

## YELLOW Script/First Alert

### (Sound Alert Tone)

THE DIRECTOR OF THE GEORGIA EMERGENCY MANAGEMENT AGENCY AND THE DIRECTOR OF THE SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION REPORT AN EMERGENCY AT PLANT VOGTLE. PRECAUTIONARY MEASURES ARE NOT, REPEAT IS NOT NECESSARY AT THIS TIME. IF SUCH MEASURES DO BECOME ADVISABLE, YOU WILL RECEIVE INSTRUCTIONS ON THIS NOAA WEATHER RADIO, LOCAL RADIO, AND AUGUSTA TELEVISION STATIONS. THIS NOTIFICATION IS FOR THOSE PERSONS WITHIN 10 MILES OF PLANT VOGTLE, WHICH INCLUDES PORTIONS OF BURKE COUNTY, GEORGIA AND THE SOUTH CAROLINA COUNTIES OF AIKEN, ALLENDALE, AND BARNWELL. ALTHOUGH AN EMERGENCY CONDITION DOES EXIST AT PLANT VOGTLE, PRECAUTIONARY MEASURES ARE NOT, REPEAT IS NOT NEEDED AT THIS TIME. YOU AND YOUR FAMILY SHOULD BECOME FAMILIAR WITH THE INFORMATION CONTAINED IN THE CALENDAR AND OTHER PRINTED MATERIAL THAT HAVE BEEN PROVIDED YOU BY PLANT VOGTLE.

Standard Operating Procedure
Plant Alvin W. Vogtle
Prompt Notification System

**ATTACHMENT #1** 

# **BLUE Script/Shelter Notice**

### (Sound Alert Tone)

THE DIRECTOR OF THE GEORGIA EMERGENCY MANAGEMENT AG	ENC! HIND
THE DIRECTOR OF THE SOUTH CAROLINA EMERGENCY MAN	IAGEMENT
DIVISION REPORT A SERIOUS EMERGENCY AT PLANT VOGTLE.	SHELTER
SHOULD BE TAKEN BY ALL PERSONS IN (CHECK AS APPROPRIATE):	
BURKE COUNTY, GEORGIA IN ZONE (S)	
AIKEN COUNTY, SOUTH CAROLINA IN ZONE G-10	
ALLENDALE COUNTY, SOUTH CAROLINA IN ZONE H-10	
BARNWELL COUNTY, SOUTH CAROLINA IN ZONE H-10	•

GO INDOORS, CLOSE WINDOWS AND DOORS. USE AIR CONDITIONING ONLY IF ABSOLUTELY NECESSARY. VERBALLY ADVISE OTHERS IN YOUR AREA TO TAKE SHELTER. YOU AND YOUR FAMILY SHOULD BECOME FAMILIAR WITH THE INFORMATION CONTAINED IN THE CALENDAR AND OTHER PRINTED MATERIAL THAT HAVE BEEN PROVIDED YOU BY PLANT VOGTLE.

FURTHER INFORMATION WILL BE PROVIDED ON THIS NOAA WEATHER RADIO, LOCAL RADIO, AND AUGUSTA TELEVISION STATIONS.

Standard Operating Procedure Plant Alvin W. Vogtle Prompt Notification System

**ATTACHMENT #2** 

# RED SchpyEvacuation Notice

(Sound Alert Tons):

BECAUSE OF THE SERIOUS EMERGENCY AT PLANT VOGTLE. (CHECK AS APPROPRIATE):

——THE GOVERNOR OF GEORGIA AND/OR

——THE GOVERNOR OF SOUTH CAROLINA

HAS (HAVE) DIRECTED EVACUATION OF ALL PERSONS FROM (CHECK AS APPROPRIATE):

——BURKE COUNTY, GEORGIA IN ZONE (S)

——AIKEN COUNTY, SOUTH CAROLINA IN ZONE G-10

——ALLENDALE COUNTY, SOUTH CAROLINA IN ZONE H-10

PERSONS WITHIN THIS ZONE (THESE ZONES) SHOULD ACT WITHOUT DELAY. TAKE CLOTHING, BLANKETS, AND NECESSARY MEDICATION. PROVIDE PETS AND LIVESTOCK WITH ADEQUATE FOOD AND WATER FOR SEVERAL DAYS. LOCK YOUR HOME AND DISPLAY A WHITE CLOTH AT THE FRONT OF THE DWELLING TO SHOW YOU HAVE EVACUATED. VERBALLY ADVISE OTHERS IN THE AREA TO EVACUATE. LEND ASSISTANCE WHERE POSSIBLE. POLLOW THE INSTRUCTIONS AND PROCEDURES AS OUTLINED IN THE CALENDAR AND OTHER MATERIAL THAT HAVE BEEN PROVIDED BY PLANT VOGILE. PROCEED TO THE RECEPTION CENTER OR SHELTER DESIGNATED FOR YOUR COUNTY.

PLEASE COOPERATE WITH THE AUTHORITIES IN CHARGE OF THIS EVACUATION, FURTHER INFORMATION WILL BE PROVIDED ON THIS NOAA WEATHER RADIO, LOCAL RADIO, AND AUGUSTA TELEVISION STATIONS.

Standard Operating Procedure Plant Alvin W. Vogtle Prompt Notification System

ATTACHMENT # 3

### **GREEN** Script/All Clear

### (Sound Alert Tone)

THE DIRECTOR OF THE GEORGIA EMERGENCY MANAGEMENT AGENCY AND THE DIRECTOR OF THE SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION REPORT THAT THE SERIOUS EMERGENCY CONDITION AT PLANT VOGTLE HAS ENDED. REPEAT - THE EMERGENCY AT PLANT VOGTLE HAS ENDED. THERE IS NO LONGER A THREAT TO PERSONS IN GEORGIA AND SOUTH CAROLINA IN THE VICINITY OF THE PLANT. NORMAL ACTIVITIES MAY BE RESUMED.\* YOUR COOPERATION IS APPRECIATED.

CITIZENS IN THE AREA SHOULD REMAIN ALERT AND MAINTAIN FAMILIARITY.
WITH THE INSTRUCTIONS AND PROCEDURES AS OUTLINED IN THE CALENDAR
AND OTHER MATERIAL THAT HAVE BEEN PROVIDED BY PLANT VOGILE.

- (NOTE: SHOULD THERE BE ANY LIMITATIONS ON NORMAL ACTIVITIES,
- THESE WOULD BE INJECTED AT THIS POINT WITH THE INTRODUCTION "EXCEPT AS FOLLOWS ...")

Standard Operating Procedure Plant Alvin W. Vogtle Prompt Notification System

**ATTACHMENT #4** 

# FOR EXERCISE USE ONLY

### WHITE Script/Test Message

(Sound Alert Tone)

THIS IS ONLY A TEST. EMERGENCY RESPONSE AGENCIES IN GEORGIA AND SOUTH CAROLINA ARE CONDUCTING A <u>SIMULATED</u> EMERGENCY DRILL AT PLANT VOGTLE.

THIS TEST IS ONLY FOR THOSE PERSONS WITHIN 10 MILES OF PLANT VOGTLE, WHICH INCLUDES PORTIONS OF BURKE COUNTY, GEORGIA AND THE SOUTH CAROLINA COUNTIES OF AIKEN, ALLENDALE, AND BARNWELL.

IF AN ACTUAL EMERGENCY <u>HAD</u> OCCURRED AT PLANT VOGTLE, YOU WOULD HAVE BEEN ADVISED OVER THIS RADIO OF THE INCIDENT AND WHATEVER PRECAUTIONARY MEASURES MIGHT HAVE BEEN REQUIRED.

PLEASE MAKE NOTE OF THE TIME YOU HEAR THIS MESSAGE. YOU MAY BE CONTACTED LATER TO DETERMINE WHAT TIME YOU HEARD THIS MESSAGE AND IF IT WAS UNDERSTOOD. THANK YOU FOR YOUR COOPERATION. THIS IS ONLY A TEST.

# FOR EXERCISE USE ONLY

Standard Operating Procedure
Plant Alvin W. Vogtle
Prompt Notification System

**ATTACHMENT #5** 

# STATE OF GEORGIA GEORGIA EMERGENCY MANAGEMENT AGENCY AND BURKE COUNTY EMERGENCY MANAGEMENT AGENCY STANDARD OPERATING PROCEDURE

# ACTIVATION OF THE PLANT VOGTLE SIREN SYSTEM

### I. PURPOSE

To set forth procedures and responsibilities for activation of the Vogtle Electric Generating Plant (VEGP) Siren System during a radiological emergency, and when testing the system for operability. A physical description of the system is provided in Attachment # 2. Testing and maintenance is addressed in Attachment # 3.

### II. CONCEPT OF OPERATIONS

#### A. General

The VEGP Siren System may be activated by either the State of Georgia or Burke County. For VEGP radiological emergency purposes, the system would usually be activated by state request in conjunction with activation of the NOAA Weather Radio (NWR). In an immediate emergency situation, Burke County Emergency Management Agency (BEMA) may elect to request Georgia Emergency Management Agency (GEMA) activation of the NWR in accordance with GEMA SOP 3-5A, and immediately thereafter, activate the Siren System.

### B. State of Georgia

Authorization for activation of the VEGP Siren System is reserved to only those individuals listed in ATTACHMENT # 1 to GEMA SOP 3-5. On the specific authorization of any of those Georgia Emergency Management Agency personnel listed in the attachment, the Burke County Emergency Management Agency will activate the Siren System. Such activation will be coordinated with activation of the NWR and will not be initiated prior to NWR activation unless the NWR is not in service. The request will specify the emergency condition that warrants siren activation and time to activate. GEMA personnel will notify the South Carolina Emergency Management Division (SCEMD) of impending siren activation in the event the NWR is not to be activated. Since the two elements (NWR and Sirens) will normally be activated in concert, coordination with SCEMD

would occur prior to NWR activation as specified in GEMA/SCEMD SOP 3-5A.

### C. Burke County

Authorization for county activation of the Siren System lies with the BEMA Director or his designee, under the Chairman of the, Board of Commissioners direction. On the specific authorization of the BEMA Director, county personnel will activate the Siren System using the control panel located at the BEMA Emergency Operations Center (EOC) which is manned on a 24-hour basis. The BEMA Director will coordinate impending activation with GEMA, either on station at the GEMA Forward EOC (FEOC) or at GEMA Headquarters in Atlanta. Coordination with NWR activation will be as specified in II.A and B. above. Siren activation for emergencies not related to VEGP is not addressed in this document. Activation for other emergencies will be the responsibility of BEMA in accordance with separate procedures.

### III. PROCEDURES

- A. On direction as outlined in II. A. above, a GEMA staff member will contact BEMA to request activation of the Siren System. BEMA may independently activate the System as specified in II.C. above. The following procedures will be used when GEMA requests activation of the System.
  - 1. If GEMA is operational at the FEOC, activation will be initiated by direct contact with the BEMA Director or his designee.
  - 2. GEMA activation from Atlanta will occur by one of two methods:
    - a. During normal duty hours or when State Emergency Operations Center (SOC) is activated by Emergency Notification Network (ENN) to BEMA Director or his designee.
    - b. During other than normal duty hours, on direction as outlined in II.B. above, a GEMA staff member will instruct the GEMA Radio Operator to contact the BEMA EOC with a request that the EMA Director, or his designee, make an emergency call to GEMA at 404-635-7200. The GEMA Radio Operator will ensure one of the three phone lines connected to the above number remains available to receive the call from BEMA.
    - c. Upon receipt of a call from the BEMA Director, or his designee, the GEMA Radio Operator will patch the call to

the GEMA staff member, who will initiate activation procedures.

- B. Activation of the Siren System is implemented by BEMA personnel on duty at the BEMA EOC. When authorized by the BEMA Director, or his designee, the system will be activated in accordance with current written instructions maintained in the BEMA EOC.
- C. In the event of a malfunction of the activation equipment, the operator at the BEMA EOC will immediately notify the BEMA Director or his designee. The BEMA Director will contact the VEGP Emergency Offsite Facility (EOF) (or Control Room if EOF is not activated or on standby) and request transmission of appropriate signal(s) through duplicate activation equipment at VEGP.

1	11-23-04
MIKE SHERBERGER Director Georgia Emergency Management Agency	Date

JESSE E. SANDERS

Director

**Burke County Emergency Management Agency** 

Date

Authority for activation of the PLANT ALVIN W. VOGTLE PROMPT NOTIFICATION SYSTEM (PNS)/SIREN SYSTEM is limited to the following GEMA personnel:

### **GROUP 1**

MIKE SHERBERGER, Director

**CHARLEY ENGLISH**, Director of Operations

PATRICK COCHRAN, Program Director, Radiological Emergency Preparedness

Upon receipt of authorization from any of those in GROUP 1, the following GEMA staff members are authorized to activate the Plant Vogtle PNS.

### **GROUP 2**

RAY ROMAN, Radiological Emergency Planner

JOE HARWORTH, Radiological Training Officer

NOTE: The National Weather Service (NWS) office in Columbia, South Carolina is authorized to activate the Plant Vogtle PNS upon direction from any of the names listed in GROUP 1 and GROUP 2 above. If the call is from a GROUP 2 designee, it is with the authority of a GROUP 1 member and is therefore authorized.

Standard Operating Procedure
Plant Alvin W. Vogtle
Prompt Notification System

SOP 3-5B Attachment # 1

### **VEGP SIREN SYSTEM DESCRIPTION**

The VEGP Siren System consists of 47 rotating electronic sirens mounted on poles strategically located throughout the populated area of the VEGP Emergency Planning Zone. Forty six of these sirens are radio controlled by the Burke County EMA. One is controlled by the Barnwell County Disaster Preparedness Agency in Barnwell, South Carolina. Each siren is capable of making four siren sounds: alert, attack, wail, and air horn. For VEGP emergencies, an alert signal consisting of a long blast of three to five minutes will sound. This alert signal may be repeated one or more times. All residents of the EPZ have been advised by the utility that when they hear this siren warning, they are to go inside and listen for emergency instructions on radio, television, or on the NWR (NOAA Weather Radio). Signs are placed at public locations in the EPZ to provide transients the same information.

Standard Operating Procedure Plant Alvin W. Vogtle Prompt Notification System

SOP 3-5B Attachment # 2

### **TESTING AND MAINTENANCE**

1. The testing and maintenance of the Siren System in the VEGP EPZ is the responsibility of VEGP Nuclear Operations. The performance of these maintenance actions will be conducted by VEGP maintenance personnel or contract personnel, under the direction of the VEGP Emergency Preparedness Staff (a component of Nuclear Operations).

### 2. Annual Siren Exercise

Annually, in coordination with state and local officials, a complete Siren System exercise will be conducted. The system will be activated from the BEMA EOC in the normal mode. Advance notice of the test will be provided to the public. Any failure or inadequacy of coverage detected during the exercise will be repaired by VEGP maintenance or contract personnel, under the direction of the VEGP Emergency Preparedness Staff.

3. Weekly Test

A weekly silent test of the Siren System will be conducted. The time of the weekly test will vary. Procedures for correcting unsatisfactory conditions detected by these tests will be as prescribed in paragraph 2. above.

- 4. The VEGP Siren System testing program will be coordinated as follows:
  - a. VEGP will contact BEMA via phone when problems are encountered with siren activation. Information given will specify siren(s) location(s) and timeframe for repair. Upon completion of repairs, the utility will notify BEMA and advise that the siren(s) is/are operational.
  - b. The scheduling of the testing of the Siren System will be between BEMA, GEMA, and the utility.
  - c. The BEMA Director will be advised of the result of the Siren System test.
- 5. Burke County will maintain current status of the VEGP Siren System operational capability. VEGP maintains operability data for the Siren System.

Standard Operating Procedure Plant Alvin W. Vogtle Prompt Notification System

> SOP 3-5B Attachment # 3

### B. <u>EMERGENCY COMMUNICATIONS</u>

- 1. Communications between Plant Vogtle and the State Operations Center (SOC) will be by ENN and/or telephone. In the event a state response element is dispatched to the State Forward EOC (FEOC), that element will establish communications with the plant and the State SOC by appropriate means (ENN or telephone).
- Operations under Emergency Support Function (ESF) 2 (Communications) of the <u>Georgia Emergency Operations Plan</u> (GEOP) will be utilized as required by the Director of OHS-GEMA, which may include use of the Emergency Alert System, National Warning System (NAWAS) and other state agency radio nets.
- 3. Department of Natural Resources field units will be capable of communicating with the Plant Vogtle Emergency Operations Facility (EOF) on Southern Linc radio or cellular telephone.
- 4. Department of Natural Resources personnel will be capable of communicating with the FEOC and Burke County EOC as well as other state agency units by radio on the Intrastate Coordinating Channel (154.905/154.935 MHz) or the Department of Natural Resources Statewide Repeater System. The Southern Linc portable radio system may be used for communication between OHS-GEMA, DNR-EDP and Burke County EMA.
- 5. Emergency Operating Centers (EOC) in the vicinity of Plant Vogtle will be:
  - a. State Forward EOC: Burke County EOC Building
    Perimeter Road
    Waynesboro, Georgia
  - b. Burke County EOC: Perimeter Road Waynesboro, Georgia
- 6. With few exceptions, communications equipment is used daily by the agencies involved in emergency activities. Any malfunction is detected immediately and repaired, rendering scheduled tests unnecessary. A limited amount of communications equipment in the Plant Vogtle EOF and the Georgia FEOC is not subject to daily use and, therefore, will be tested periodically in accordance with Paragraph N.2.a., NUREG-0654/FEMA REP 1, Rev. 1.
- 7. A quarterly update of emergency response telephone numbers (i.e., OHS-GEMA, DNR, utility and Federal Emergency Management Agency [FEMA]) will be conducted. All other telephone numbers will be verified during annual plan review.

### C. PUBLIC AFFAIRS

### 1. Control Over News Releases

When the State Operations Center in Atlanta has been activated, only the Public Affairs Director, or his/her designee, will be authorized to issue news releases. Prior to release, all information will be coordinated to the fullest extent practicable with the utility and the State of South Carolina. If subsequent activation of the State FEOC should be required, that facility will assume the primary command-and-control role for the state, including all public affairs activities. If a joint media center is established (among the states of Georgia, South Carolina, Burke County EMA and the utility) all public affairs activities will be coordinated there by designated OHS-GEMA Public Affairs Director. The physical location of the near site joint media center will be in the Burke County Office Park in Waynesboro. In the event that the SOC or FEOC are not activated (i.e., minor incident), news releases may be handled by the DNR-EPD Radiation Emergency Coordinator or the DNR-Public Information Officer in conjunction with the Public Affairs Office at OHS-GEMA.

### 2. Information to be Released

The types of information to be released will depend upon a number of factors including type of accident; type, quantity and form of material(s) released; meteorological conditions; type of release (air or water); and proximity to population centers.

### 3. Dissemination of Information

Dissemination of emergency information to the public will be in accordance with Attachment J of the local plan.

### 4. Rumor Control

Rumor control procedures are addressed in Attachment J to the local plan (paragraph H).

#### General

Section VI.I. of the GA REP addresses the purpose and concept of public information activities in a radiological emergency situation.

### D. Manpower, Equipment and Instrument Resources

This section deals with coordination of available resources during a radiological emergency. Resources are generally available from four distinct sources, i.e., federal, state and local government agencies and private firms/organizations.

### 1. Federal Agency Coordination and Support

A number of federal agencies have a role in radiological emergency response. The types of equipment resources vary greatly from agency to agency and are not delineated in this plan. However, each agency may provide manpower and other support, technical advice and other support on a case-by-case basis.

Presented in the OHS-GEMA REP Resource Contacts SOP is a listing of regional (Southeast USA) federal agencies having a role in radiological emergency response, along with a listing of principal staff and their telephone numbers.

### 2. State Agency Support/Coordination

The SOC will be activated in accordance with procedures contained in the GEOP and Section VI. of the GA REP. Key state agencies and principal management and emergency response coordinators for the respective agencies are listed in the OHS-GEMA REP Resource Contacts SOP. The organization for state government operating during a radiological emergency is shown in Section VI.F. of the GA REP.

### 3. Resources in Jurisdictions Adjacent to Facility

Key resources of the state and local organizations and jurisdictions located in the vicinity of SRS that could be called upon in the event of a radiological emergency are also listed in the OHS-GEMA REP Resource Contacts SOP.

### 4. Inventories of Radiological Instruments

Primary sources of radiological equipment in state government are the Georgia DNR-EPD, Environmental Radiation Program and Radioactive Materials Program, and OHS-GEMA. Portable instrument resources are also available from the Georgia Tech Nuclear Research Center.

<u>DNR-EPD</u> Environmental Radiation Program Portable Instruments - The DNR-EPD Radiation Program has access to portable hand-held betqa gamma type detectors, portable low-volume air samplers, pocket dosimeters and portable alpha detection devices.

<u>DNR-EPD Radioactive Materials Program Portable Instruments</u> - The DNR-EPD Radioactive Materials Program has access to beta gamma detecting devices.

OHS-GEMA - OHS-GEMA maintains 13 field-monitoring kits, eight of which are maintained in the six "nuclear counties." Five of the kits are maintained in a calibrated status and "ready reserve" at OHS-GEMA headquarters.

Georgia Tech Nuclear Research Center – The Georgia Tech Nuclear Research Center and the Office of Radiological Safety have portable radiological detection equipment that could be used in an emergency. Equipment includes numerous hand-held survey meters and air samplers.

### 5. Meteorological Equipment/Facilities

Georgia will be expecting weather information from the SRS Operations Center.

An almost inexhaustible supply of current meteorological information and forecasts can be obtained from the Meteorological and Statistical Unit, Air Quality Control Branch of DNR. This unit receives up-to-the-minute information directly from the National Weather Service (NWS) on a Service Teleprinter and other related equipment. Past, present and future meteorological information (including fallout patterns) can be obtained on a moment's notice for any section of the state. The staff includes personnel trained to take over during an emergency situation and ensure that important information is readily available.

Other sources of meteorological data are the National Weather Service Offices located in Peachtree City; Jacksonville, Florida and Columbia, South Carolina. Of the five offices, the Peachtree City office would be able to supply the most extensive information.

In addition, the Data Transmission Network (DTN), a commercial provider of weather information has terminals in both the SOC and the State Communications Center

In addition to these, the Air Protection Branch of the DNR-EPD has over 70 high-volume air-monitoring stations located throughout the state, some of which have capabilities for monitoring wind speed and direction.



### 6. Radiological Laboratories

The primary laboratory to conduct analyses for radioactivity in the environment would be DNR-EPD – Environmental Radiation Program labratory. The facility is primarily a low-level laboratory but could be used for radiological emergencies. Laboratory equipment includes Ge(Li) and Nal. detectors, automatic and manual alpha/beta analyzers, liquid scintillation system, alpha spectrometer and environmental TLD readers/annealer.

The Environmental Radiation Program also has a mobile radiological capability. This mobile facility could be driven to the site or the FEOC and used for certain radiological assessments. Radiological instruments in the mobile lab include multichannel analyzer (MCA) with intrinsic germanium (IG) detector, alpha/beta analyzer and liquid scintillation counter.

Other field laboratories, which have similar capabilities, include the Georgia Tech Environmental Resource Center/Georgia Institute Center, the United States Department of Energy and Environmental Protection Agency (EPA).

### ...7. Equipment Inspection and Calibration

Most equipment and supplies that are to be used during a radiological emergency are also used routinely in support of such program activities as radiological environmental surveillance, Radioactive Material inspections and nonradiological emergency response planning. Since the equipment and supplies are used in such a manner, their operability and performance is checked on a frequent basis. All DNR-EPD portable radiological instruments are calibrated at least annually and after each repair. Operational checks are performed daily when equipment is in use. Radiological laboratory instruments and other equipment are calibrated at a frequency recommended by the supplier.

### 8. Equipment Inventory

Inventories of radiological emergency response supplies and equipment will be conducted immediately following an incident response. Action will be taken to replace missing equipment if inventories show discrepancies. Normally, quarterly inventories are conducted for essential radiological emergency response equipment.

### E. E.RADIATION PROTECTION

This section addresses three principal radiological planning aspects: accident and response assessment, protective response and radiological exposure control. Recovery and reentry planning are addressed in Section VI.H. of the GA REP.

- 1. Accident Response and Assessment
  - a. Deployment of State Response Element (Rapid Assessment)

Because the capability of local personnel for initial assessment and monitoring is limited, a State Response Element may be dispatched by aircraft directly to the OHS-GEMA Forward EOC (FEOC). The State Response Element will normally be composed of the Director of OHS-GEMA, the DNR-EPD Radiation Emergency Coordinator and additional support personnel from these agencies as required within space limitations. In accordance with the Georgia Emergency Operations Plan (GEOP), OHS-GEMA will coordinate the activities of all state agencies involved in emergency response. Direction and control of emergency operations while the State Response Element is in transit will be exercised from the SOC in Atlanta. Personnel in this element will arrive on site within flight time plus approximately thirty minutes for initial mobilization. Additional support personnel and equipment, including the OHS-GEMA Mobile Communications Vehicle (MCV) and the DNR-EPD mobile laboratory, will arrive within driving time plus thirty minutes for initial mobilization. The OHS-GEMA MCV will normally be utilized as a communications backup facility and will be located near the OHS-GEMA FEOC. When operational, the State Response Element will assume control of all operations at the OHS-GEMA FEOC. The SOC in Atlanta will revert to a support role upon activation of the FEOC. Radiological assessment operations will be conducted as discussed below.

b. Deployment of State Response Element (Rapid Assessment Not Required)

In the event of an incident requiring implementation of this plan, but not requiring rapid assessment capability, deployment of the State Response Element will normally be by surface transportation. The composition of the State Response Element and concept of operation will be essentially the same as in rapid assessment. Radiolgical assessment operations will be the responsibility of a primary team consisting of technically qualified personnel from the DNR-EPD

Radiation Program and Radioactive Materials Program. The primary team will be under the command/control of the DNR-EPD Radiation Emergency Coordinator who will be designated as Team Captain. Personnel will carry a complement of portable radiation detectors and protective equipment. The DNR-EPD mobile lab will be placed on alert.

Once on the scene, the primary team will be in a position to make recommendations to the Radiation Emergency Coordinator regarding the need for additional radiological resources. Additional resources for use in radiological survey parties and environmental sample collection are available from such state agencies as Department of Agriculture, Department of Natural Resources, OHS-GEMA, Department of Public Safety and Georgia Forestry Commission.

### c. Facility Operator Responsibility

In the event of an accident at Plant Vogtle, the facility personnel have the responsibility for initial accident assessment and notification actions based on that assessment. In Section A of this plan, notification procedures are delineated. Provisions are made in these notification procedures for immediate notification to local authorities prior to notification to the state under certain incident conditions (i.e., General Emergency). If the situation warrants, it is the responsibility of the plant staff to provide recommended protective actions to local authorities until state personnel are in place.

### d. Radiological Assessment

### (1) Procedures

A Radiological Emergency Response Team using the model specified in Section VI.G.2.a. of the GA REP will perform off site dose projections. In performing these calculations, on-site meteorological information will be obtained from the Southern Nuclear Operating Company and utilized. If, for some reason, no on-site meteorological information is available, meteorological data will be obtained from the most readily available source specified in Section D.5. of this annex. Prior to arrival of state personnel at the FEOC, the Plant Vogtle staff will provide the following information in accordance with current Memorandum of Understanding. (See Section A.2. of this annex.)

### (2) Protective Action Recommendations/Orders

- (a) It will be the responsibility of the DNR-EPD Radiation Emergency Coordinator to make appropriate protective action recommendations to the senior OHS-GEMA representative (normally the Director).
- (b) After receipt of protective action recommendations the DNR-EPD Radiation Emergency Coordinator, the senior OHS-GEMA representative may, in coordination with Burke County officials, recommend appropriate protective action for the affected public. If the situation warrants, the senior OHS-GEMA representative may recommend to the Director of OHS-GEMA that the Governor of Georgia declare that a state of emergency exists. Upon the declaration by the Governor that a state of emergency exists, the Director of OHS-GEMA on behalf of the Governor may direct evacuation or other necessary actions to protect the public.

### (3) Control

The control of field monitoring activities, including dispatch of field teams, receipt of field monitoring data, receipt of laboratory data and analysis of field monitoring data will be coordinated at the FEOC. Standard Southern Nuclear Operating Company 10-mile and 50-mile EPZ maps will be used at the FEOC to record field monitoring data, in addition to the use of data recording forms. These maps, in addition to Georgia Department of Transportation county maps, will be used to dispatch and control field teams and will be available to field teams.

e. Correlation of Dose Projections and Actual Dose Measurements (See section VI.G. of the GA REP)

As an incident progresses, the Radiation Emergency Coordinator will evaluate the need for correlation of dose projections and actual dose measurements. As soon as field measurements are made, they can be compared with "projected" values, but only after sufficient data is gathered will a decision be made as to whether

correlation or scaling factors should be developed for use in the emergency dose projections. Population dose estimates will be made using release rate and meteorological data for the period of release, and data from Southern Nuclear Company, DNR-EPD and TLDs, as well as DOE aerial measurements as such data becomes available. It is anticipated that much of this activity will be coordinated with the Federal Radiological Emergency Response Plan (FRERP).

### f. Emergency Communications – Radiological Teams

The primary radiological team referenced in paragraph d. above will be equipped with portable radio communication equipment and vehicular mounted radios. If additional radiological teams are assembled in order to cope with the situation, these teams may be equipped with portable radio equipment to the extent such is available. OHS-GEMA will coordinate acquisition of such resources if needed. In all cases and in situations where portable radio communications are unavailable, commercial telephone numbers for the FEOC will be given to the respective team captains.

### g. Characteristics of Surrounding Area

### (1) Maps/Evacuation Routes

Maps provided in the local plan show the major road network around the facility. These roads are expected to be the principal evacuation routes during a serious radiological emergency. Details of evacuation plans are delineated in the local plans in Section I of this annex. The map also shows the population centers surrounding the facility. Primary means of evacuation will be by private automobile.

### (2) Evacuation Impediments

There are no significant obstacles to impede the flow of traffic on designated evacuation routes. The routes designated for evacuation are state and federal highways in the vicinity of the facility and are designed in such a manner that at least 850 vehicles per hour per lane could be accommodated in evacuation conditions where weather and darkness were not factors. Under nighttime and poor weather conditions, this rate of evacuation could be reduced up to 50 percent. The climatology of the area is such that

severe weather phenomena, i.e., snow, icing, hurricane, tornado, flooding, are infrequent. All major evacuation routes are above the floodplain of the Savannah River. Should an impediment to an evacuation route be created, the State Emergency Coordinator will designate alternate routes after consultation with local officials, State Department of Transportation officials and representatives of the Department of Public Safety.

# (3) Area Affected

The counties within the plume exposure pathway and ingestion pathway are listed below. Additionally, a map showing location of counties in relation to the Vogtle Nuclear Plant is provided as Figure E-1. A description of generic operations relative to Ingestion Exposure Pathway operations is contained in Annex F, Ingestion Pathway, to the Georgia Radiological Emergency Plan (GA REP).

Georgia Counties within Plume Exposure And Ingestion Pathway (Plant Vogtle)

Plume Exposure Pathway (10-Mile EPZ) County\*

# Burke

Ingestion Exposure Pathway (50-Mile EPZ) Counties

Bulloch Glascock
Burke Jefferson
Candler Jenkins
Chatham McDuffie
Columbia Richmond
Effingham Screven
Emanuel Warren

<sup>\*</sup>A small area in Richmond County located between nine and ten miles from Plant Vogtle has been excluded from the Plume Exposure EPZ. This area (about 1.8 square miles) is a swampy uninhabited area near the Savannah River.

# (4) Population Affected

Table E-1 defines the population within the 50-mile radius of Plant Vogtle that could potentially be affected. Detailed discussion of population distribution within the 10-mile radius of the plant is discussed in the local plan in Section I of this annex.

(5) Those portions of the Plume and Ingestion Pathway EPZs, which are in the State of South Carolina, will be addressed in plans prepared by that state.

# h. Existing Sampling/Monitoring Network

In the event of a radiological incident involving the release of radioactive material, existing DNR-EPD monitoring resources could be utilized. These resources consist of TLD stations, low-volume air samples and high-volume air samplers, which are part of the Georgia Ambient Air Sampling Network (non-radiological). The TLD stations and low-volume air samplers are operated and maintained by the Environmental Radiation Program of DNR-EPD. All program personnel are familiar with location and necessary procedures for samples, sample handling/preparation and analysis. Local personnel under contract with the DNR-EPD Air Protection Branch generally operate the high-volume samplers of the Georgia Ambient Air Sampling Network. In order to get these samplers into service either the Branch Chief of the DNR-EPD Air Protection Branch or the Section Chief of the Air Protection Evaluation Section is notified, who in turn, notifies the appropriate local contact.

# i. Dairy Operations/Milk Sampling and Control

Because of its effect on certain segments of the population, milk is one of the more important foodstuffs requiring the implementation of control measures in the event of radiological contamination. The Georgia Department of Agriculture is the lead agency responsible for assurance of a safe milk supply. The Commissioner of the Georgia Department of Agriculture has the ultimate responsibility for the control of milk distribution and consumption due to radiological contamination.

Should there be a radiological emergency involving the release of radioactive materials into the environment, and it becomes

necessary to collect raw milk samples from dairy farms near Plant Vogtle. Established procedures require that inspectors from the Department of Agriculture collect the milk samples and turn them over the DNR-EPD. These samples will then be analyzed for their radionuclide content by the DNR-EPD as outlined in their established laboratory procedures.

The Georgia Department of Agriculture maintains a list of the location of dairies operating within the state. Should it become necessary, the Georgia Department of Agriculture will be able to provide the names and locations of dairies within the 50-mile radius of Plant Vogtle.

# j. Major Food Processors

Should there be an actual or potential contamination of foodstuffs, there will be a need to contact all food processors in the vicinity of Plant Vogtle. The processors will be asked to provide samples to DNR-EDP for laboratory analysis. In an extreme situation, processors will be asked to withhold their products from the market until they can be sampled and analyzed by DNR-EPD in cooperation with DOA. The evaluation of food products will be based upon the PAG for foodstuff contained in the Food and Drug Administration (FDA) publication "Accidental Radioactive Contamination of Human Food and Animal Feeds: Recommendations for State and Local Agencies."

Initial notification to the food processors would come from DOA, the United States Department of Agriculture (USDA) and the local Agriculture Stabilization Conservation Service (ASCS) offices, as these groups maintain extensive, up-to-date lists of all the processors in the state. A listing is maintained of the food processors, grain dealers and warehouses and meat processing and packaging facilities located within the 10-mile and 50-mile planning zones surrounding Plant Vogtle.

# k. Administrative Information

The emergency coordinator will ensure that steps are taken to record and retain relevant information for future use. The actual documentation of record keeping requirements will be prescribed on a case-by-case basis. However, a number of expedient measures which could be utilized includes logbooks, field notes, data sheets and tape recorders.

As the situation dictates, the emergency coordinator may appoint an individual(s) to conduct interviews and/or reviews in order to ascertain facts about existing radiological conditions or causes of radiological problems.

# 2. Protective Response

# a. Protective Action Guides (PAGs)

PAGs, which are applicable to SRS are delineated in Section VI.G. of the GA REP. The guides delineated in the referenced section deal with: incident classification and response, protection of foodstuffs, protection of emergency workers and decontamination of land areas.

# b. Removal of Contaminated Foodstuff

After radiological assessments of various foodstuffs have been conducted and results have been evaluated, a need may arise to withhold such foodstuffs from the market. Authority for such action is vested with the Commissioner of DOA. Should such action be required, the Commissioner would implement procedures necessary to withhold foodstuffs from the market. Additionally, DOA has identified important marketing channels and maintains liaison with other agencies such as the State Office of Consumer Affairs, the FDA and USDA.

# c. Sources of Protected Animal Feed

Should a release of radioactive material occur of such magnitude that forage for dairy cattle becomes contaminated above the PAG levels specified in Action V.G. of Annex F, then alternate feed sources must be identified. This function will be handled by the Department of Agriculture. The approach will be on two fronts. First, agriculture inspectors from the Dairy Division of the Department of Agriculture will alert dairymen in the affected area to utilize stored feed. Stored feed will consist of those feeds in silos, covered bunkers, protective plastic covering and those stored in grain bins and under shelter. Department of Agriculture personnel in the nearest field office and the Atlanta office will ascertain the availability of feed from commercial or other sources.

# d. Evacuation Planning

Evacuation areas affected by a radiological release will be accomplished via the most expedient methods available. Evacuation routes will normally be the major thoroughfares in close proximity to the site. Details concerning evacuation of potentially affected areas are described in the local plan in Section I of this annex. Resources available to assist in such evacuation include local emergency management personnel, local law enforcement personnel, Department of Public Safety personnel and Department of Transportation personnel. A listing of available resources, which could be used in evacuation, is presented in Section D of this annex.

# e. Alternate Protective Measures

# (1) General Public

If a decision is made that areas should not be evacuated. there are certain passive and active measures that could be taken to minimize exposure to radiation and radioactive materials from a plume or from deposition on the ground. The first course of action would be to stay indoors. In a residence or building which is without a basement, the centermost room (i.e., the one that provides the greatest shielding characteristics) should be chosen. If a basement is available, personnel should take cover there instead of in a room. Next, all windows and doors should be opened and provide necessary makeup closed briefly to Air-conditioning systems in buildings and homes should be shut off, if practical. If air conditioners and fans must be operated, they should only be operated for the time necessary to provide the desired temperature/humidity control.

# (2) Industries

For those industries located within the 10-mile radius of the facility, it might not be possible to affect timely evacuation; therefore, consideration must be given to sheltering. The following actions are recommended in the event of an off site release which meets or exceeds the action level.

- (a) Direct all employees to immediately seek shelter in a building.
- (b) Turn off air-conditioning and outside air intake systems. If air conditioners and fans must be operated, they should only be operated for the time necessary to provide desired temperature/humidity control.
- (c) Remain sheltered until otherwise instructed.

# f. Land and Water Use Information

# (1) Land Use

Land use surrounding Plant Vogtle is primarily agricultural in nature. Generally speaking, the area within a 10-mile radius of the plant is of relatively low population density. The area adjacent to the Savannah River is swampy, generally inaccessible and subject to periodic flooding. Agricultural activities consist of row crop production of commodities such as corn, soybeans and small winter and summer grains. Maps showing detailed crop information are impractical to provide due to constantly changing agricultural practices.

# (2) Water Use

The Savannah River is the principal waterway in the area. The river is used for the most part for navigation and recreation. The source of most drinking water in the area is from groundwater, i.e., deep wells.

Should there be a radiological incident at Plant Vogtle, a potential exists for contamination of the river. Users of river water downstream from the point of any contamination would be affected. In the event of a waterborne release, samples of river water collected by DNR and/or local emergency

management personnel would be analyzed for the radionuclide content. These samples would be analyzed by either the DNR-EPD mobile laboratory or a designated fixed laboratory. Should the capacity of state laboratories be exceeded, contract laboratory resources will be utilized.

Should the samples analyzed indicate levels of radioactivity above action points, the users of river water affected would have a need to be notified. The DNR-EPD Water Quality Branch maintains a listing of known domestic and commercial water users downstream of Plant Vogtle. Should there be a requirement to stop river water withdrawals, contact with the known water users downstream would be made by the DNR-EPD Water Quality Branch. If the situation requires immediate notification, the local emergency management agency may be utilized.

The legal authority for emergency activities related to safe drinking water is vested with the Director of DNR-EPD. This authority is granted through the Georgia Safe Drinking Act.

g. In the event that evacuation is necessary, the boundaries of the evacuated area will be controlled to prevent unauthorized access. The principal means used to accomplish this will be roadblocks on major thoroughfares. These roadblocks will be established by local emergency management, local law enforcement and Department of Public Safety personnel. Radiological survey teams will be assigned to such roadblocks as required. These survey teams will conduct necessary surveys of personnel and equipment leaving the controlled area. The survey team leader will be authorized to release or retain personnel and equipment based upon survey results.

# h. Evacuation Accountability

Access and egress to areas evacuated will be controlled as delineated in Paragraph g above. The mechanism will help control the spread of radioactive material. Aerial reconnaissance of the affected area may be conducted to check on the status of evacuation. If conditions warrant, motorized ground patrols will be used to ascertain status of evacuation. Personnel in an evacuated area will be told by available broadcast systems (vehicular mounted systems, radio and television) that a white flagging device (towel, sheet, handkerchief) should be placed in view in front of the building or residence evacuated. This flagging device will serve to

acknowledge to evacuation personnel that evacuation at that location has been completed.

# 3. Radiological Exposure Control

# a. Protective Actions Guides (PAGs) for Emergency Personnel

Protective Actions Guides for various conditions/situations are presented in Section VI.G. of the GA REP. Among the PAGs listed in this section are those for emergency response personnel involved in rescue or lifesaving missions. If the exposures are on the order of those specified for emergency activities in Section VI.G. of the GA REP, provisions will be made to record and document exposures so that information may be used for further management/utilization for the individual so affected.

# b. Dosimetry Evaluations

Personnel engaged in emergency response activities that may lead to radiation exposures will be provided pocket dosimeters. These dosimeters will be the self-reading type. If necessary, TLD chips may be issued to certain personnel or placed in certain areas as a means of assessing exposure. TLD chips collected after the exposure period will be "read" by private vendors. In situations where TLDs or low range pocket dosimeters are not appropriate, exposure controls may be affected by measurement of radiation levels with conventional survey meters and controlling the "stay-time" in the area.

# c. Bioassays

A need may arise to evaluate the internal exposure of individuals to various radionuclides. The techniques utilized to perform this evaluation are somewhat dependent on the type and form of material involved. A useful technique for soluble form material would be a bioassay involving analysis of urine, saliva or other body fluids. Also, samples could be sent to commercial labs or other agencies for analyses. A listing of other agencies/commercial labs that could perform such bioassays can be found in the OHS-GEMA REP Resource Contacts SOP.

Should an insoluble material be involved, other techniques are necessary to evaluate internal exposure. Evaluation of acute exposure may sometimes be accomplished by fecal analyses. Evaluation of chronic exposures may be accomplished by whole-body counting.

# d. Personnel Contamination Control/Decontamination

In situations where evacuees become contaminated, radiological survey and decontamination parties will be organized and dispatched to the assembly areas or similar areas where contaminated personnel may be located. These parties will see that decontamination is accomplished. Members of the general public should be decontaminated to background levels (if possible).

Emergency response personnel should be decontaminated to the limits prescribed for decontamination of emergency response personnel in Section VI.G. of the GA REP. Local procedure is contained in Attachment I to the local plan.

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TABLE E-1

	njotal-georgia-po o-milie ingestioni o-atelian	PRULATION AT RISK XFOSURE PATHWAY DVOCTEEN E	
County if	Ropualia Zodo Cepsus		ra Ropulation
Burke	22,243	100	22,243
Bulloch	55,983	. 60	33,590
Candler	9577	20	1915
Chatham	232,048	100	232,048
Columbia	89,288	100	89,288
Effingham	37,535	15	5,630
Emanuel	21,837	50	10,915
Glascock	2,556	50	1,278
Jefferson	17,266	100	17,266
Jenkins	8,575	100	8,575
McDuffie	21,231	60	12,739
Richmond	199,775	100	199,775
Screven	15,374	100	15,374
Warren	6,336	10	634
Total	•		651,273

# F. Medical/Public Health Support

# 1. Medical Care Facilities

# a. Primary Medical Care

Agreements (Page 31, Section H) have been made with both the Burke County Medical Center and (Columbia-Augusta Medical Center) Doctor's Hospital for the care of radiological contaminated injured victims in the event of an accident or incident at Plant Alvin W. Vogtle.

# b. Intensive Medical Care

In the event a radiation accident victim requires more definitive care than can be provided at the primary or secondary facility, he or she may be transported to the Oak Ridge Associated Universities Medical Division, Oak Ridge Hospital of the Methodist Church (ORHMC), Oak Ridge, Tennessee. ORHMC telephone numbers can be found at the OHS-GEMA REP Resource Contacts SOP.

# c. Capabilities

Burke County Hospital has a licensed bed capacity of 40, Doctors Hospital has a licensed bed capacity of 374. These hospitals have the necessary equipment and protective clothing to treat contaminated injured victims. If need arises, each hospital will have at least one (1) medical doctor and one (1) registered nurse available within two (2) hours to supervise treatment of contaminated injured. As many as thirty (30) ambulatory patients can be treated per twenty-four (24) hour period.

A private contract corporation provides training for the hospital staffs. As necessary, supplemental training for Emergency Medical Technicians (EMTs) and hospital emergency room personnel will be provided by the State of Georgia.

# 2. Communications

All ambulance services and hospitals within the state are interconnected in a statewide hospital communications network, which operates on 155.340 MHz frequency. This network also provides the capability of communicating with local sheriffs' departments in the event of an emergency. The

frequency of 155.280 MHz is also available for hospital-to hospital communication.

# 3. Transportation of Accident Victims

#### a. Ambulance Service

The Burke County Ambulance Service has agreed to transport accident victims to the primary and secondary medical facilities. University Ambulance Service (Augusta) may be called if additional ambulances are needed.

Telephone numbers for local ambulance services can be found at OHS-GEMA REP Points of Interest SOP.

# b. Military Assistance to Safety and Traffic (MAST)

In the event of an accident, which requires immediate transport of a victim for a considerable distance, the services of the MAST facilities at Fort Stewart near Savannah will be requested. Response to requests will be handled on an availability basis.

# 4. Training of EMTs and Emergency Room Personnel

Appropriate training for EMTs and hospital emergency room personnel will be provided.

# 5. Radioprotective Drugs

In the event of an accident which involves a sudden environmental release of large quantities of radionuclides, which might include a number of isotopes of radioiodine, it is considered appropriate that authorities be prepared to take effective measures to prevent or curtail markedly the accumulation of radioiodines by the thyroid gland of offsite radiation emergency workers.

Since evacuation or sheltering is considered a more effective measure for the general public, no dependence has been placed on distribution of radioprotective drugs to the general public.

# a. Decision Process for Distribution of Radioprotective Drug

If the release data received from the facility indicates a potential for radiation exposures to the thyroid equal to or above the level indicated in the Memorandum of Understanding between DNR-EPD,

# 5.a (cont.)

DHR-PH, and OHS-GEMA, a recommendation to administer a radioprotective drug to all emergency workers entering the affected areas may be given. The DNR-EPD representative will make this recommendation to OHS-GEMA. (A Memorandum of Understanding (MOU) between DNR-EPD and the Division of Public Health of DHR is in effect. The MOU outlines the procedures that will be followed in distributing the radioprotective drugs to the emergency workers.) OHS-GEMA, acting on behalf of the Governor, will assure that this directive is communicated to all state and local agencies involved.

# b. Distribution of Radioprotective Drug

In the event of an accident, which warrants offsite monitoring or other emergency duties, all state and local emergency workers, prior to entering the area of possible exposure, would report to the FEOC in Burke County for receipt of a radioprotective drug.

# 6. Medical Consultants

Arrangements have been made for obtaining medical consultative advice during radiological emergencies. Physicians that have agreed to provide assistance to the state during a radiological emergency, along with the methods to contact them can be found in the OHS-GEMA REP Resource Contacts SOP.

# 7. Health System Resources in Contiguous States and Military Facilities

#### a. Contiguous States

Out-of-state medical facilities and health system resources would not be sought or utilized unless all Georgia resources were depleted or a particular resource did not exist in Georgia, but existed out of state. In the event out-of-state health system and medical facility resources were needed, the Oak Ridge Associated Universities Medical Division, ORHMC in Oak Ridge, Tennessee, would be contacted first (see procedure in Paragraph F.1.c. above). Hospital facilities with some capabilities exist in the major cities of neighboring states (e.g., Birmingham, Alabama; Columbia, South Carolina; Charleston, South Carolina; Charlotte, North Carolina; Chattanooga, Tennessee; Jacksonville, Florida; and Knoxville, Tennessee). Requests from supporting states would be made in accordance with the Southern Mutual Radiation Assistance Plan (SMRAP); however, initial contact and technical discussions of health and safety needs would be



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discussed with the appropriate State Radiological Health Director prior to initiating a request for assistance under SMRAP. A listing of phone numbers for adjacent State Radiological Health Directors can be found in the OHS-GEMA REP Resource Contacts SOP.

# b. Military Facilities

As a rule, medical and health system resource support from military facilities would not be requested or utilized unless Georgia resources were depleted or unless a particular expertise existed at a particular military facility that did not exist elsewhere in Georgia. The radiological capabilities at military facilities in Georgia vary greatly. In the event support was needed from a military facility located in Georgia, the State Medical Officer would act on behalf of the Governor to request assistance from various military facilities. Initial contact with military authorities would normally be through either the installation commander, installation duty officer or installation medical officer. A directory that lists major military medical facilities in Georgia along with appropriate emergency information phone numbers are contained in the OHS-GEMA REP Resource Contacts SOP.



# G. DRILLS/EXERCISES/TRAINING AND REVIEW

# 1. Drills/Exercises

Major exercises will be scheduled for Plant Vogtle at least every two years. The State of Georgia will fully participate in such exercises at least once every six years. Burke County government is required to participate in a full-scale exercise at least once every two years. Plans for exercises will be coordinated with the Plant Vogtle Emergency Preparedness staff. Development of exercise scenarios, conduct of the exercise, critiques and evaluation will be in accordance with current FEMA guidance.

# 2. Training

DNR-EPD-Radiation Program and OHS-GEMA will develop a joint radiological training program. This program will be oriented toward providing training to support personnel involved in radiological emergency response. A typical training program will include the following elements

- a. Familiarization with emergency plan.
- b. Use of radiological survey instruments.
- c. Sample collection procedures.
- d. Health physics fundamentals.
  - (1) Basic radiation protection
  - (2) Protective devices
  - (3) Decontamination procedures
  - (4) Exposure controls
- e. Notification and reporting procedures.

Details of other training programs are provided in Section VII.B. of the GA REP.

#### 3. Review

The emergency response plan (to include the GA REP and annexes) will be reviewed annually. This review will be coordinated by OHS-GEMA and will include appropriate state agencies. Based on the review and

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experience gained from plan implementation, revisions will be made. Changes or revisions to the plan will be sent to all holders of the plan who either have a key role in radiological emergency response planning or have requested to be on the plan distribution list for the emergency plan and planning information. Further details on plan development, review and distribution are provided in Section VIII of the GA REP.

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# H. AGREEMENTS:

This section contains the following agreements:

Burke County Hospital Columbia-Augusta Medical Center Georgia Power Company/OHS-GEMA



July 15, 1999

Gary W. McConnell Georgia Emergency Management Agency PO Box 18055 Atlanta, GA 30316

Dear Mr. McConnell:

You are hereby authorized to designate Burke County Hospital as the primary support medical facility in Georgia's Radiological Emergency Plan for Plant Alvin W. Vogtle.

Sincerely,

Michael A. Haddle, CPA

CEO/CFO

3651 Wheeler Road Augusta, Georgia 30909 (706) 651-3232

www.columbia-augusta.com

July 21, 1999

Mr. Gary W. McConnell Director of Georgia Emergency Management Agency P.O. Box 18055 Atlanta, Georgia 30316

Dear Mr. McConnell:

Columbia-Augusta Medical Center would be pleased to be named in Georgia's Radiological Emergency Plan as a secondary medical support facility for Annex D to Plant Alvin W. Vogtle.

If further information is needed please do not hesitate to contact me.

Sincerely,

Kathy L. Mitchell, RN,BS

Vice President/Patient Care

KLM/sj

J.B. Woodard
Executive Vice President

Southern Nuclear Operating Company, Inc. 40 Inverness Center Parkway P.O. Box 1295 Birmingham, Alabama 35201 Tel 205.992.5086



Energy to Serve Your World\*

November 22, 1999

Mr. Gary W. McConnell, Director Georgia Emergency Management Agency P. O. Box 18055 Atlanta, Georgia 30316-0055

Dear Mr. McConnell:

Georgia Emergency Management Agency (GEMA) has requested that Southern Nuclear Operating Company (SNC) provide a letter committing the availability of the services of SNC radiation protection technicians to supplement other emergency management workers available to the State of Georgia for medical emergencies involving radioactive contamination. The purpose of this letter is to set forth an offer of the availability of services of Southern Nuclear technicians, pursuant to  $\xi$  38-3-31 (b), Code of Georgia.

As you know, SNC Emergency Plans and Procedures call for health physics technicians to accompany any injured/contaminated plant worker to local medical facilities and provide radiological support. Beyond this obligation, SNC is willing to furnish its radiation protection technician employees at the State of Georgia's request, to any state, county or municipal hospital on an "as available" volunteer basis to provide radioactive contamination survey and control support during radiological emergencies.

Requests for support would be made through existing emergency communication channels in the Emergency Plans. This assistance, unless directly associated with an injured/contaminated plant worker as discussed above, would be provided by SNC within the context of and pursuant to the State of Georgia emergency management statutes, in particular  $\xi$  38-3-35 (b).

McConnell Letter Georgia Emergency Management Agency Page 2

We are glad to be able to assist the State of Georgia by making available radiological support services. If the State chooses to accept this offer of services, please so indicate by endorsing this letter below and returning to me. Should you have questions, please call Mr. Merrill Maddox at 205/992-6399.

Sincerely,

J. D. Woodard

Accepted:

Title: Directo

JDW/NMM EP-99-050

cc:

C. K. Brown W. H. Lee, III L. E. Mayo

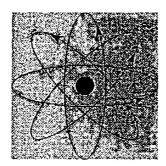
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7

# I. LOCAL PLANS

Provided in this section are emergency operations plans that have been developed by Burke County Emergency Management Agency for the Vogtle Nuclear Plant. Burke County is the only Georgia county within the 10-mile EPZ for Plant Vogtle. Local plans are not included herein for local agencies that are outside the plume exposure EPZ but within the ingestion pathway EPZ. Ingestion exposure pathway planning for those areas so affected is provided for in the GA REP and in other portions of this annex. The affected jurisdictions will use the state planning information as a supplement to their planning programs.

# **ANNEX D**



# PLANT VOGTLE BURKE COUNTY EMERGENCY MANAGEMENT RADIOLOGICAL PLAN

May 2005



# RECORD OF CHANGE

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1	Review and update	4/20/02	gwg
2	Review and Update Pg. 34, 39, 42 & 43	10/01/03	mrr
3	Review and update Pg. 7, 15, 16, 17, 19, 20, 22, 34, 59, 63, 69, & 72.	2/27/04	mrr
4	Review and update new Agency name for Georgia Emergency Management Agency	5/30/05	mrr
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# **PREFACE**

This plan has been developed to supplement the existing Emergency Operations Plan for the Burke County Emergency Management Agency. The plan is keyed to the functions that must be performed to protect the population in the event of a nuclear incident at the Vogtle Electric Generating Plant located in Burke County. The plan establishes the department s and agencies that have primary and support functions and outlines the concept of operations and direction and control necessary to support emergency response operations.

Timely warning of a nuclear incident and possible release of radioactive materials within the plant is assured. Officials from the nuclear power plant will be working closely with officials from the responsible departments and agencies of local, state and federal governments in overall emergency planning and operations and will provide notification in the event of a nuclear incident occurs.

Attachments to the plan identify the organizational structure of local government, plan implementation, key personnel roster, Plum Exposure Pathway Emergency Planning Zone (EPZ), equipment resources, communications, notification and warning procedures, evacuation, reception and care service areas, emergency information and training and exercises requirements.

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# BURKE COUNTY EMERGENCY MANAGEMENT AGENCY RADIOLOGICAL EMERGENCY PLAN FOR NUCLEAR INCIDENTS

# I. INTRODUCTION

The Burke County Radiological Emergency Plan has been developed to provide responsibility, concept of operations and direction and control for a coordinated response to an emergency situation occurring from a nuclear incident at the Vogtle Electric Generating Plant. The plant is located on the southwestern bank of the Savannah River in Burke County and is approximately fifteen miles east-northeast of Waynesboro. The small township of Girard is approximately seven miles south with the nearest population center being the City of Sardis about twelve miles to the south.

The possibility of a nuclear incident occurring that would release radioactive material outside the plant site and present a health hazard is extremely remote and highly unlikely; however, the possibility exists. In the event such as incident should occur, the release of radioactive materials could constitute a health hazard for a radius up to fifty miles from the plant site. All persons living within the ten mile radius known as the Plume Exposure Pathway Emergency Planning Zone (EPZ) adjacent to the plant may have to be evacuated to a safe area, and the intake of food and water may be restricted within a 50-mile radius (reference State of Georgia Radiological Emergency Plan, Annex F, Ingestion Pathway). This plan is applicable to a nuclear incident occurring at Plant Vogtle that affects the portion of Burke County adjacent to the plant and extending ten miles outward. This area of the county is depicted on the map in Attachment D. For ease of operations and to facilitate accountability during evacuation, the Plume Exposure Pathway Emergency Planning Zone (EPZ) in Burke County has been divided into 11 zones, with each zone lettered and having readily identifiable geographical boundaries. In the event an incident occurs at the plant, evacuation or restrictive measures will be directed only for the population living in the zones within the affected area. Zone boundaries and population distribution for each sector are listed in Tables D-1 and D-2 of Attachment D.

This plan establishes a course of action for key local governmental authorities to exercise direction and control to evacuate the residents from the affected area to a place of safety and/or initiate action to provide in-place protection. In the event of evacuation, the evacuees will move along designated road nets leading to the reception center at the Burke County Comprehensive High School located on Perimeter Road in Waynesboro. Upon arrival at the reception center, all evacuees will be monitored and decontaminated if necessary, registered, and provided shelter, health and social service care within the designated shelter area of the high school.

# II. PURPOSE

This plan is designed to provide effective response which will assure the safety of the population in Burke County living within the ten mile radius adjacent to the Vogtle Electric Generating Plant. It has been developed upon the premise that, upon official notification that a nuclear incident has occurred at the plant, portions of, or perhaps the entire area, may have to be evacuated as quickly as possible, and/or other protective action such as in-place sheltering initiated. The plan establishes a system for the expeditious movement of people from the area of danger to a place of safety with minimum confusion and hardship to the evacuees. The plan outlines the activities and functions of city and county officials, departments/agencies heads and personnel and other agencies involved in support of this plan (reference Attachment B). The emergency actions outlined in the plan can be implemented quickly upon proper notification that a nuclear incident has occurred at the Vogtle Electric Generating Plant.

# III. AUTHORITY - LEGAL BASIS

- A. Federal Civil Defense Act of 1950 (P.L. 920), as amended.
- B. Georgia Emergency Management Act of 1981, as amended.
- C. State of Georgia Emergency Operations Plan, as revised.
- D. Burke County Resolution dated February 1992.
- E. Burke County Emergency Operations Plan dated February 1992.
- F. Radiation Control Act, Official Code of Georgia Annotated, Chapter 31-13-1-et seq.

# IV. CONCEPT OF OPERATIONS

- A. Coordination among all responsible departments and agencies will be performed to ensure emergency operational readiness.
  - 1. Burke County Emergency Management Agency will maintain coordination with officials from the Vogtle Electric Generating Plant and representatives from all local and state departments and agencies that are involved in emergency planning and operations relative to an incident at the nuclear power plant. Upon official receipt of notification that a nuclear incident has occurred at the plant, the Emergency Management Director will notify local governmental officials and initiate action consistent with this plan. Attachment B illustrates the operational structure of the county response effort.

Attachment F contains information pertaining to Communications and Attachment G provides information pertaining to Notification and Warning.

- 2. The Georgia Department of Natural Resources, Environmental Protection Division, will monitor the situation at Plant Vogtle and be responsible for keeping the State Disaster Coordinator (Director, Office of Homeland Security - Georgia Emergency Management Agency) and pertinent federal agencies informed on planning, training and operational requirements related to environmental health and safety matters.
- 3. The Office of Homeland Security Georgia Emergency Management Agency (OHS-GEMA) will maintain liaison with the Environmental Protection Division, all other state response agencies, officials from Plant Vogtle, Burke County Emergency Management Agency and appropriate federal agencies relative to environmental health and safety factors in the event of a nuclear incident at the plant. Upon official receipt of notification that a nuclear incident has occurred at the plant, OHS-GEMA will notify the Georgia Department of Natural Resources, Environmental Protection Division, Burke County Emergency Management Agency and all state response agencies and will be responsible for overall coordination of emergency response operations.
- 4. Officials at Vogtle Electric Generating Plant will maintain liaison with the OHS-GEMA, Burke County Emergency Management Agency and responsible federal agencies. Plant officials will be responsible for keeping appropriate officials from these local, state and federal agencies informed on emergency plans and will report any emergency situation resulting from a nuclear incident or accident. Incidents will be reported by class as defined in NUREG-0654/FEMA-REP-1, Rev. 1.

# a. Notification of Unusual Event

This condition is declared when unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occurs. Plant officials will notify state and local authorities who will stand by until the situation is verbally closed out or escalated to a more severe class.

# b. Alert

An Alert condition exists when events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to a small fraction of the EPA Protective Action Guideline (PAG) exposure levels.

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State and local authorities will be notified of the alert condition, emergency response centers will be activated as a precautionary measure and emergency staff will be placed on an alert status. The alert status will be maintained until verbal closeout or escalation of emergency class.

# c. Site Area Emergency

A Site Area Emergency is declared when events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public. Any releases are not expected to exceed PAG exposure levels, except near the site boundary. State and local authorities will be notified of the condition. State and local Emergency Operations Centers (EOCs) will be fully activated and staffed, and appropriate protective action measures will be initiated as deemed necessary. The Site Area Emergency status will be maintained until verbal closeout or redirection/escalation of emergency class.

# d. General Emergency

A General Emergency exists when events are in process or have occurred that involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Releases can be reasonably expected to exceed PAG exposure levels off-site for more than the immediate site area. State and local authorities will be notified of the condition, and plant officials will keep authorities assessed on release and dose projections based on available plant condition and foreseeable contingencies. State and local emergency response plans will be fully implemented and appropriate protective action will be taken to care for the population residing within the affected area. The General Emergency status will be maintained until verbal closeout or reduction of emergency class.

- B. Operations necessary to cope with a nuclear incident at Plant Vogtle include, but are not limited to, the following:
  - 1. The nuclear plant operating staff will ascertain that an incident involving nuclear materials has occurred at the plant, and the operating staff will determine the class of the incident. In accordance with Plant Vogtle's call list, the following departments and agencies will be notified:
    - a. Burke County Emergency Management Agency
    - b. Office of Homeland Security Georgia Emergency Management Agency
    - c. United States Nuclear Regulatory Commission

- 2. The Georgia Department of Natural Resources, Environmental Protection Division is assigned primary responsibility by Executive Order for implementation and administration of the state radiological emergency response function.
- 3. The Office of Homeland Security Georgia Emergency Management Agency serves as the overall states-coordinating agency and will coordinate the Department of Natural Resources emergency response activities with state, county and municipal department and agencies as stated in the <u>Georgia Emergency Operations Plan</u>.
- 4. The emergency plan at the nuclear power plant will be put into effect immediately, and officials and personnel from the plant will advise and assist local and state agencies in coping with the emergency consistent with available resources and the nature of the incident. Plant personnel and employees that may be released to go home will be processed and evacuated as outlined in Attachment H (Evacuation and Sheltering), Paragraph B.
- 5. Upon receipt of notification that a nuclear incident has occurred at Plant Vogtle, the Burke County Emergency Management Agency Director, or his representative, will place this plan into effect and will initiate emergency operations in accordance with the classification of the incident as shown below (reference Attachment A, Implementation, Paragraph B).

Response activities by Burke County Emergency Management Agency (EMA) will be determined by the assessed severity of the incident as follows:

# a. Notification of Unusual Event

- (1) Provide fire, medical and security assistance, if requested;
- (2) Escalate to a more severe class, if appropriate; or
- (3) Stand by until verbal closeout.

# b. Alert

- (1) Provide fire, medical and security assistance, if requested.
- (2) Augment resources, partially activate EOC and bring other response centers and Emergency Alert Systems (EAS) (local radio station) to standby status.

- (3) Alert to standby status key emergency personnel including monitoring teams and associated communications.
- (4) Escalate to a more severe class, if appropriate or
- (5) Maintain alert status until verbal closeout.

# c. Site Area Emergency

- (1) Provide fire, medical and security assistance, if requested.
- (2) If protective actions are required or the situation warrants, the OHS-GEMA will activate the Prompt Notification System (PNS) in accordance with OHS-GEMA SOP 3-5 and advise the population of actions required (reference Attachment A, Implementation).
  - (a) The notification system will be augmented by vehicles equipped with sirens and/or public address systems traveling the road net in the affected area to warn the population.
  - (b) If deemed necessary, personnel from the sheriff's, police and fire departments and Emergency Management Agency volunteer force will make door-to-door contact to assure that all residents in the affected area are alerted to the emergency.
  - (c) Boats from the Georgia Department of Natural Resources, Law Enforcement Section, and/or Burke County Emergency Management Agency will patrol the waterways within the affected area to warn sportsmen.
- (3) After the Prompt Notification System has been activated, activate EAS (local radio station) and provide the public with periodic updates on the emergency situation in accordance with procedures set forth in Attachment J, Emergency Information.
- (4) Fully activate the Emergency Operations Center and, if desirable, dispatch a representative to Plant Vogtle near site Emergency Operations Facility (if not done previously).
- (5) Dispatch the assigned Public Information Officer to the Joint Media Center located at the Burke County Office Park if not already directed by the EMA director.

- (6) Dispatch monitoring teams and other key emergency personnel with associated equipment and communications to duty stations.
- (7) Alert other emergency personnel (e.g., those needed for evacuation and reception/care service) and dispatch personnel to respective duty stations.
- (8) Evacuate handicapped personnel living within the Plume Exposure Pathway EPZ (reference Attachment H, Evacuation and Sheltering, Paragraph D).
- (9) Activate reception and care facility to receive evacuees in the event evacuation of the public residing within the affected area is directed (reference Attachment I) and set up decontamination sites for emergency workers, their vehicles and equipment.
- (10) Continuously assess information from Plant Vogtle and OHS-GEMA regarding recommended protective actions for the public.
- (11) Provide press briefings, as set forth in Attachment J, Emergency Information.
- (12) Return any evacuated population to their homes when the affected area is safe for reentry in accordance with the procedures set forth in the GA REP, Section VI.H.2., and Reentry.
- (13) Escalate to General Emergency class if appropriate or
- (14) Maintain Site Area Emergency status until closeout or reduction of emergency class.

# d. General Emergency

- (1) Provide fire, medical and security assistance, if requested.
- (2) OHS-GEMA will activate the Prompt Notification System (PNS) in accordance with OHS-GEMA SOP 3-5 and inform the public of the emergency status and advise on recommended protective action (reference Attachment A, Implementation).
  - (a) Vehicles equipped with sirens and/or public address systems traveling the road net in the affected area to warn the population will augment the Prompt Notification System.

- (b) If deemed necessary, personnel from the sheriff's, police and fire departments, and Emergency Management Agency will make door-to-door contact to assure that all residents in the affected area are alerted to the emergency.
- (c) Boats from the Georgia Department of Natural Resources, Law Enforcement Section, and/or Burke County Emergency Management Agency will patrol the waterways within the affected area to warn sportsmen.
- (3) After the Prompt Notification System has been activated, activate EAS (local radio station) and provide the public with periodic updates on the emergency status in accordance with procedures set forth in Attachment J, Emergency Information.
- (4) Activate the Emergency Operations Center and, if desirable, dispatch a representative to the Plant Vogtle near site Emergency Operations Facility (if not done previously).
- (5) Dispatch monitoring teams and other personnel and associated equipment and communications equipment to duty stations.
- (6) Alert other emergency personnel (e.g., those needed for evacuation and reception/care service) and dispatch personnel to respective duty stations.
- (7) If not completed, evacuate handicapped personnel living within the Plume Exposure Pathway EPZ (reference Attachment H, Evacuation and Sheltering, Paragraph D).
- (8) If not completed, activate reception and a care facility to receive evacuees in event evacuation of the public residing within the affected area is directed (reference Attachment I, Reception and Care).
- (9) Coordinate activities with adjacent jurisdictions relative to support needs, e.g., establishing roadblocks at county line road nets and assistance at the reception center/shelter area.
- (10) Continuously assess information from Plant Vogtle and OHS-GEMA regarding recommended protective actions for the public.
- (11) If evacuation is directed, alert reception and care and law enforcement personnel.

- (a) Initiate traffic control procedures and area security, and channel evacuees to the reception and care center.
- (b) Coordinate the movement of school buses and other vehicles used to transport evacuees.
- (c) If not completed, coordinate transportation for the evacuation of schools, other institutions and non-ambulatory persons form the affected area.
- (d) Conduct check of evacuated area to assure that all persons have left (reference Attachment H, Evacuation and Sheltering, Paragraph E.)
- (12) Conduct reception and care service activities consistent with the Burke County Emergency Operations Plan as specified in this plan.
  - (a) If a release has occurred, monitor evacuees for radioactive contamination upon arrival at the Reception and Care Center. Contaminated personnel will proceed through the decontamination area at the center and vehicles will be moved to the designated vehicle parking area for monitoring and decontamination if necessary.
  - (b) Register all evacuees and assign to a shelter area. Provide health, welfare and social service support to care for the evacuees.
- (13) Return the evacuated population to their homes when the affected area is safe for reentry in accordance with procedures set forth in the GA REP, Section VI.H.2., Reentry.
  - (a) Provide traffic control to assure an orderly return of the evacuees to their homes.
  - (b) Provide transportation to return non-ambulatory persons to their homes.
  - (c) Provide technical assistance for the decontamination of homes and property if necessary.
  - (d) Provide guidance on use of water and food supplies for personnel and livestock.

(14) During all phases of operations, provide press briefings in accordance with Attachment J, Emergency Information.

#### V. RESPONSIBILITIES

- A. Responsibility for overall radiological emergency response planning, training and operations in Burke County rests with the Chairman, Burke County Board of Commissioners. It is their responsibility to initiate action and provide direction and control at the local level to conduct emergency operations to cope with the effects of a nuclear incident consistent with the incident classification.
- B. The Burke County Emergency Management Director is responsible for actual plan development and updating this plan to keep it current with existing conditions and procedures. He will establish a training program and maintain coordination with the department and agency heads of local governments to make available appropriate personnel for training and participation in drills and exercises. The Director will be responsible for coordinating emergency operations at the local level and keeping local governmental officials advised on the status of the situation. He will maintain coordination with OHS-GEMA, the OHS-GEMA Area 3 Field Coordinator, state support agencies and officials from the nuclear power plant on overall emergency operations and support needs.
- C. The Georgia State Department of Natural Resources, Environmental Protection Division is assigned primary responsibility for implementation of Emergency Support Function (ESF) 19 (Hazardous Materials), Georgia Emergency Operations Plan. The State Disaster Coordinator is responsible for coordinating the activities of the Department of Natural Resources, provided for in referenced annex, with overall state response efforts in an emergency or disaster situation.
- D The Office of Homeland Security Georgia Emergency Management Agency is responsible for state emergency planning and will exercise overall direction and control of emergency or disaster operations as assigned by Executive Order.
  - 1. The State Disaster Coordinator, under direction of the Governor, will provide overall coordination between the state agencies supporting this plan and local government in conducting emergency operations.
  - 2. In the event an emergency situation is beyond local control, or after the Governor has declared that a state of emergency exists, the State Disaster Coordinator, under direction of the Governor, may assume direct operational control over all or any necessary part of the emergency operations functions within the state.

- 3. The Director, OHS-GEMA, or other duly appointed OHS-GEMA staff member, will effect overall coordination between the above agencies and coordinate overall operations from the OHS-GEMA Forward EOC (FEOC) in the event a state response element is dispatched to the area.
- E. The Georgia Department of Natural Resources EPD Representative may recommend administering a radioprotective drug (thyroid blocking agent) to emergency workers entering an affected area if release data from the facility indicates a potential for radiation exposure to the thyroid. (A Memorandum of Understanding [MOU] between the Environmental Protection Division of the Department of Natural Resources and the Division of Public Health of the Department of Human Resources is in effect. The MOU outlines the procedures that will be followed in distributing radioprotective drugs to emergency workers.) This recommendation will be made to the State Disaster Coordinator, who will assure that this directive is communicated to local agencies.
  - 1. Radioprotective drugs in quantities sufficient for emergency workers are prepositioned at Burke County EOC. It is the responsibility of the Burke County EMA Director to maintain access to the radioprotective drug twenty-four (24) hours per day.
  - 2. It is the responsibility of OHS-GEMA to maintain a current stock of this drug.
  - 3. In the event the use of the radioprotective drug is authorized for emergency workers, it is the responsibility of the Burke County Emergency Management Director to distribute the drug to personnel under his jurisdiction who may enter the affected area (reference Annex D, Section F, Paragraph 5.b., for distribution to state emergency workers).
  - 4. Emergency response personnel may only be allowed to incur radiation exposures up to the limits set forth in the Protective Action Guide for Emergency Response Personnel in the GA REP, Section VI.G.3. (Emergency Response Personnel). Exposures up to these limits may only be authorized by OHS-GEMA upon receipt of a recommendation from the DNR-EPD Radiation Emergency Coordinator.
- F. Departments/Agencies, Roles and Notification:
  - 1. Burke County Emergency Management Agency will:
    - a. Be notified by one or more of the following agencies:
      - (1) Operating staff from Vogtle Electric Generating Plant.

- (2) Office of Homeland Security Georgia Emergency Management Agency.
- (3) Georgia Department of Natural Resources.
- b. Put this plan into effect immediately (reference Attachment A, Implementation) and, consistent with the incident classification, activate the Emergency Operations Center and notify all local governmental and non-governmental departments and agencies (reference Attachment C, Roster of Key Emergency Staff Personnel) supporting emergency operations to include:
  - (1) Burke County Emergency Management Agency emergency staff.
  - (2) Burke County Sheriff's Department.
  - (3) Burke County and municipal engineering departments.
  - (4) Burke County Board of Education.
  - (5) Burke County and City of Waynesboro Fire Departments (county-wide coverage).
  - (6) Burke County Health Department.
  - (7) Burke County Hospital Administrator
  - (8) Burke County Department of Family and Children Services.
  - (9) American Red Cross representative.
  - (10) Area Engineer, Georgia Department of Transportation.
  - (11) Georgia Forestry Commission, District 3 (Washington).
  - (12) District Office (Thompson), Georgia Department of Natural Resources, Law Enforcement Section.
  - (13) County Agency and Home Economist.
  - (14) Radio Station WYFA (FM 100.9) and WBBQ (AM 1340 and FM 104.3)
- c. Notify all adjacent jurisdictions that are affected by the incident as well as those that can provide support and assistance.

- d. Coordinate emergency operations of all local governmental and non-governmental departments and agencies assigned functional responsibilities in this plan and procure service support consistent with requirements and availability of resources.
- e. Coordinate with OHS-GEMA, OHS-GEMA Area 3 Field Coordinator, the state department and agencies supporting this plan and adjacent jurisdictions on overall emergency operations and service support needs.
- f. Prepare radioprotective drugs for distribution to emergency personnel under local jurisdiction who may enter affected area.
- g. In coordination with Plant Vogtle, OHS-GEMA and Georgia Department of Natural Resources (DNR-EPD), prepare news releases and information to be disseminated to the public by the news media.
- h. Activate the jurisdiction's Emergency Alert System (EAS) Plan (local radio stations) in accordance with established procedures.
- 2. Burke County Sheriff's Department will:
  - a. Be notified by one or more of the following agencies:
    - (1) Burke County Emergency Management Agency.
    - (2) Office of Homeland Security Georgia Emergency Management Agency.
    - (3) Georgia Department of Public Safety (GSP Post 21, Sylvania).
  - b. Notify City of Waynesboro and Sardis Police Departments.
  - c. Provide security service support at Plant Vogtle if requested.
  - d. Consistent with protective action directed, effect operations to evacuate the population from the affected area to reception centers or assist with inplace sheltering by providing:
    - (1) Dissemination of warning and emergency information and communication support.
    - (2) Traffic control and law enforcement measures.

- (3) Area security and control of ingress and egress within affected area and along evacuation routes.
- (4) Surveillance in affected area to determine that all individuals have been evacuated (reference Attachment H, Evacuation and Sheltering, Paragraph E).
- (5) Surveillance and security to safeguard homes in evacuated area.
- e. If in-place sheltering of the population living in the affected area is directed, disseminate emergency information to the public on recommended action and procedures to follow.
- f. Provide assistance to the Burke County Board of Education Police in maintaining area security and law enforcement within the reception and care center located in Waynesboro.
- g. Provide traffic control and law enforcement measures to assist the evacuated population on returning to their homes upon departure from the reception and care center and facilities after emergency is over.
- h. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Cities of Waynesboro and Sardis Police Departments.
  - (2) Sheriffs' Department from adjacent jurisdictions.
  - (3) County and municipal engineering departments.
  - (4) Burke County Hospital.
  - (5) Georgia Department of Public Safety (GSP Post 21, Sylvania).
  - (6) Region 3 Office (Thomson), Georgia Department of Natural Resource Law Enforcement Section.
  - (7) Georgia Department of Transportation (Area Engineer).
- (8) Georgia Forestry Commission (County Ranger).3. Cities of Waynesboro and Sardis Police Departments will:
  - a. Be notified by the Burke County Sheriff's Department.

- b. Provide assistance to the Burke County Sheriff's Department in disseminating warning and emergency information, communications support, traffic control, law enforcement and area security as needed during evacuation of population from affected area.
- c. Effect operations to move the evacuated population to the reception and care center located in Waynesboro.
  - (1) Provide traffic control and law enforcement measures.
  - (2) Provide and maintain area security within reception and care areas.
- d. Provide traffic control and law enforcement measures to assist the evacuees on movement to traffic routes leading to their homes upon departure from the reception and care facility. Assist the Burke County Sheriff's Department in the return movement.
- e. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Burke County Sheriff's Department.
  - (2) City Police Department from adjacent jurisdictions.
  - (3) County and municipal engineering departments.
  - (4) Georgia Department of Public Safety (GSP Post 21, Sylvania).
  - (5) Georgia Department of Transportation (Area Engineering).
- 4. County and Municipal Engineering Departments (Public Works) will:
  - a. Be notified by the Burke County Emergency Management Agency.
  - b. Provide assistance to the Burke County Sheriff's Department in disseminating warning and emergency information, communications support, traffic control and area security for evacuation purposes.
  - c. Effect operations to provide the following services:
    - (1) Establish road blocks, provide and position route markers and traffic control signs to support evacuation.

- (2) Equipment and manpower for maintenance and sanitation support at reception and care center.
- (3) Garbage and waste pickup and disposal at reception and care center.
- (4) Equipment and manpower for any decontamination measures needed in area affected by incident.
- d. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Burke County Sheriff's Department.
  - (2) Cities of Waynesboro and Sardis Police Departments.
  - (3) Burke County Health Department.
  - (4) Burke County Board of Education.
  - (5) Burke County Department of Family and Children Services.
  - (6) Georgia Department of Transportation (Area Engineer).
  - (7) Georgia Department of Public Safety (State patrol personnel in area).
- 5. Burke County Board of Education will:
  - a. Be notified by the Burke County Emergency Management Agency.
  - b. Provide the following services to support emergency operations:
    - (1) Upon receipt of "Alert" notification from the Burke County Emergency Operations Center, contact all key emergency personnel to include school bus drivers and place them on standby status.
    - (2) Maintain communications with the principal (shelter manager) at the school designated as the reception and shelter center. Open center to receive evacuees when requested by the EMA Director or designee.
    - (3) Maintain communications with the Burke County Emergency Operations Center and dispatch representative to center when requested by the EMA Director or designee.

- (4) Provide security at shelter/reception center.
- c. Provide the following resources to support evacuation, reception and care and food service operations:
  - (1) School buses with drivers to assist in moving personnel from the area to be evacuated to reception and care center (Attachment E, EOC, Emergency Equipment and Service Support, paragraph E.2).
  - (2) School facility to provide reception center, shelter and feeding services for the evacuated population (Attachment I, Reception and Care, Table I-1).
  - (3) Manpower for shelter management and to augment the reception and care staff in registering the evacuees, assisting in shelter management and providing food service support.
- d. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Burke County Department of Family and Children Services.
  - (2) Burke County Health Department.
  - (3) County and municipal engineering departments.
  - (4) Burke County Sheriff's Department.
  - (5) Cities of Waynesboro, Sardis and Midville Police Departments.
  - (6) American Red Cross.
  - (7) United States Department of Agriculture, Agricultural Stabilization and Conservation Service, County Agent and Home Economist.
  - (8) State Department of Education.
- 6. Burke County Fire Department will:
  - a. Be notified by the Burke County Emergency Management Agency.
  - b. Provide the following services to support emergency operations:

- (1) Provide fire service support at Plant Vogtle if requested (Burke County Fire Department only).
- (2) Assist the Burke County Sheriff's Department in dissemination of warning and emergency information and provides communications support.
- (3) Provide fire surveillance and suppression service in the reception and care service center area.
- (4) Provide decontamination service in area affected by the incident and at vehicle decontamination point near Reception Center.
- c. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Burke County Sheriff's Department.
  - (2) Cities of Waynesboro and Sardis Police Departments.
  - (3) Burke County Board of Education.
  - (4) Burke County Department of Family and Children Services.
  - (5) Burke County Health Department.
  - (6) Georgia Forestry Commission (County Ranger).
  - (7) Fire departments from adjacent jurisdictions.
- 7. Burke County Health Department will:
  - a. Be notified by one or more of the following agencies:
    - (1) Burke County Emergency Management Agency
    - (2) Georgia Department of Human Resources.
  - b. Provide the following services to support emergency operations in the reception and care center:
    - (1) Health service and disease prevention and control measures.
    - (2) Sanitation services, personal hygiene and waste disposal.

- (3) Procurement of public health service support.
- (4) Perform radiation surveys of evacuees for radioactive material contamination and record results.
- (5) Decontamination of personnel utilizing proper techniques.
- c. Coordinate with and assist the Georgia Department of Natural Resources on radiological protection procedures to include:
  - (1) Identifying health hazards resulting from intake of contaminated food and water (DNR-EPD) will coordinate with the Georgia Department of Agriculture on food products.
  - (2) Providing copies of the recorded radiation survey results.
- d. Coordinate with the EMA Director or designee and the Department of Family and Children Services on assisting with the evacuation of handicapped personnel living within the Plume Exposure Pathway EPZ.
- e. Ensure necessary health orders, restrictions and emergency information to the evacuees housed in reception and care facility, as well as the general population of Burke County to include:
  - (1) Disease prevention and control measures.
  - (2) Sanitation and waste disposal.
  - (3) Safe food and water supply.
- f. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Georgia Department of Human Resources
  - (2) Burke County Department of Family and Children Services.
  - (3) Burke County Hospital Administrator.
  - (4) Burke County Emergency Medical Service (includes personnel and vehicles).

- (5) Burke County Board of Education.
- (6) Burke County Sheriff's Department.
- (7) United States Department of Agriculture, Agricultural Stabilization and Conservation Service, County Agent and Home Economist.
- (8) State and local Emergency Management Radiological Protection Officers (RPOs).
- 8. Burke County Hospital will:
  - a. Be notified by one or more of the following agencies:
    - (1) Burke County Emergency Management Agency.
    - (2) Burke County Health Department.
  - b. Provide the following services to support an emergency:
    - (1) Primary facility for the treatment of off-site victims of a radiological accident, including the contaminated injured (see Attachment A, Implementation, paragraphs C.2 and C.3).
    - (2) In-patient hospital care and hospital facility support.
    - (3) Coordination with emergency medical service support (personnel and vehicles).
    - (4) Professional medical service support in reception and care service facility.
    - (5) Procurement of additional medical practitioners and medical service support as necessary.
  - c. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
    - (1) Burke County Health Department
    - (2) Georgia Department of Human Resources.
    - (3) Burke County Department of Family and Children Services.

- (4) Local medical professionals (MDs, RNs, LPNs).
- (5) Hospitals from adjacent jurisdictions to include Doctor's Hospital in Augusta (secondary medical care facility for off-site victims of a radiological accident, including the contaminated injured).
- (6) Emergency Medical Service Technicians.
- (7) Burke County Sheriff's Department.
- 9. Burke County Emergency Medical Service will:
  - a. Be notified by one or more of the following agencies:
    - (1) Burke County Emergency Management Agency (911).
    - (2) Alvin W. Vogtle Electric Generating Plant.
  - b. Provide the following services to support emergency operations:
    - (1) Medical assistance at Plant Vogtle is requested.
    - (2) Assist in warning of the public as requested.
    - (3) Evacuate non-ambulatory persons from affected area.
    - (4) Respond as necessary to emergency calls within the 10-mile EPZ.
    - (5) Provide medical support at Reception Center and shelter area.
    - (6) Maintain emergency medical service support within the community.
  - c. Maintain communications with Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
    - (1) Burke County Health Department.
    - (2) Burke County Sheriff's Department.
    - (3) Burke County Hospital.
    - (4) Doctor's Hospital in Augusta.

- (5) Hospitals and Emergency Medical Service units from adjacent jurisdictions.
- 10. Burke County Department of Family and Children Services will:
  - a. Be notified by one or more of the following agencies:
    - (1) Burke County Emergency Management Agency.
    - (2) Burke County Health Department.
    - (3) Georgia Department of Human Resources.
  - b. Assist with reception and care operations and social service support for the evacuees in reception and care service facility (see Attachment H).
    - (1) Coordinate with the Burke County Board of Education to determine that the school designated as reception center and/or reception and care facility has been opened.
    - (2) Coordinate with the Shelter Manager on overall operations and provide staff assistance at reception center to register evacuees upon arrival and further assign the evacuees to lodging sections. Maintain records of all assignments.
    - (3) Provide social and welfare services to support the evacuees housed in the reception and care facility.
    - (4) Coordinate with Burke County Health Department on health service, disease prevention and control and sanitation service support.
    - (5) Coordinate with the EMA Director or designee and the County Health Department on assisting with the evacuation of handicapped personnel living within the Plume Exposure Pathway EPZ.
    - (6) Coordinate with the County Agency and Home Economist, United States Department of Agriculture (USDA), Agricultural Stabilization and Conservation Services (ASCS), the Food Service Coordinator, Burke County Board of Education and the American Red Cross on procuring food and maintaining feeding services for the evacuees.

- c. Maintain communications with the Emergency Operations Center on operations and support needs and coordinate with the following agencies on support services:
  - (1) Department of Family and Children Services Region Director (resource staff support).
  - (2) Burke County Board of Education.
  - (3) Burke County Health Department.
  - (4) County Agent, Home Economist, USDA and ASCS.
  - (5) Burke County Hospital.
  - (6) American Red Cross.
  - (7) Local nursing homes.
- 11. American Red Cross will:
  - a. Be notified by Burke County Emergency Management Agency.
  - b. Provide shelter, welfare and feeding services for evacuees consistent with needs.
  - c. Maintain coordination with Emergency Operations Center on service support and operations.
- 12. Georgia State Department of Public Safety (GSP Post 21, Sylvania) will:
  - a. Be notified by one or more of the following agencies:
    - (1) Georgia State Department of Public Safety Headquarters.
    - (2) Office of Homeland Security Georgia Emergency Management Agency.
    - (3) Burke County Emergency Management Agency.
    - (4) Burke County Sheriff's Department.
  - b. Provide the following services to support emergency operations:

- (1) Traffic control, area security and control ingress and egress in area affected by the incident and along evacuation routes.
- (2) Communication, warning and dissemination of emergency information.
- c. Assist the Burke County Sheriff's Department in evacuating the affected areas, moving the evacuees to reception center and providing surveillance and security in evacuated area as well as reception and care areas.
- d. Carry out emergency operations consistent with primary and support functional responsibilities assigned in the <u>Georgia Emergency Operations</u>

  <u>Plan</u> in event the Governor declares that a state of emergency exists in the area and/or determines operational requirements exceed local capability.
- e. Maintain coordination with the following agencies on emergency operation and service support:
  - (1) OHS-GEMA and OHS-GEMA Area 3 Field Coordinator.
  - (2) Various state law enforcement agencies providing support services.
  - (3) Burke County Sheriff's Department.
- 13. Georgia State Department of Transportation (Area Engineer) will:
  - a. Be notified by one or more of the following agencies:
    - (1) Georgia Department of Transportation Headquarters or Division Office.
    - (2) Office of Homeland Security Georgia Emergency Management Agency.
    - (3) Georgia Department of Public Safety.
    - (4) Burke County Emergency Management Agency.
  - b. Provide the following services to support emergency operations:
    - (1) Establish road net and road use procedures.
    - (2) Position traffic control signs and route markers and establish road blocks/barricades to control ingress and egress in affected areas and to maintain effective evacuation and return.

- (3) Communication, warning and dissemination of information.
- c. Render assistance to city/county public works departments.
- d. Provide heavy equipment and manpower resources as needed.
- e. Carry out emergency operations consistent with primary and support functional responsibilities assigned in the <u>Georgia Emergency Operations</u>

  <u>Plan</u> in event the Governor declares a state of emergency in the area and/or determines operational requirements exceed local capability.
- f. Maintain coordination with the following agencies on emergency operations and service support:
  - (1) OHS-GEMA and OHS-GEMA Area 3 Field Coordinator.
  - (2) Various state agencies providing support services.
  - (3) Burke County Emergency Operations Center.
  - (4) County and municipal engineering departments.
  - (5) Burke County Sheriff's Department.

#### 14. Health District-6 will:

- a. Be notified by one or more of the following agencies:
  - (1) Burke County Health Department.
  - (2) Burke County Emergency Management Agency.
  - (3) Georgia Department of Human Resources.
- b. Provide support services to the Burke County Health Department, if requested, at reception and care facilities and in the community to include:
  - (1) Providing medical service support by public health nurses to assess the physical status of evacuees.
  - (2) Ensuring a safe food and water supply.

- (3) Providing health services and disease prevention and control measures.
- (4) Providing sanitation services, personal hygiene and waste disposal.
- (5) Providing mental health services and professional counseling to evacuees.
- c. Maintain communications with the OHS-GEMA State Operations Center (Atlanta) and the Forward Emergency Operating Center (near site).
- 15. Georgia Department of Human Resources will:
  - a. Be notified by one or more of the following agencies:
    - (1) Office of Homeland Security Georgia Emergency Management Agency.
    - (2) Georgia Department of Natural Resources, Environmental Protection Division.
  - b. Provide health and social services resources to Health District-6 consistent with the primary and support functional responsibilities assigned in the <u>Georgia Emergency Operations Plan</u>, Emergency Support Function (ESF) 8, Health and Medical, if the Governor declares a state of emergency exists and/or determines operational requirements exceed local capability.
  - c. Provide health services to support emergency operations to include:
    - (1) Responding with and manpower resources, as required, to incidents at the Plant Vogtle Nuclear Facility.
    - (2) Providing information, assistance and guidance in conjunction with DNR and Agriculture on health hazards and safety precautions relative to:
      - (a) Food and water quality in area affected by nuclear incident;
      - (b) Providing guidance and instructions to appropriate local and state officials on the issuance and use of Potassium lodide for the emergency workers.

- d. Provide representation at the State Operations Center (Atlanta) and the Georgia Forward Emergency Operations Center (near site) to coordinate delivery of services listed in paragraphs b. and c. above and to provide status reports to appropriate governmental representatives at these operations centers.
- 16. Georgia Department of Natural Resources (Region 3 Office-Thomson) will:
  - a. Be notified by one or more of the following agencies:
    - (1) Georgia Department of Natural Resources Headquarters.
    - (2) Office of Homeland Security Georgia Emergency Management Agency.
    - (3) Burke County Emergency Management Agency.
  - b. Carry out emergency operations consistent with primary and support functional responsibilities assigned in the <u>Georgia Emergency Operations</u>

    <u>Plan</u> in the event the Governor declares a state of emergency and/or determines operational requirements exceed local capability.
  - c. Maintain coordination with the following agencies on emergency operations and service support:
    - (1) Office of Homeland Security Georgia Emergency Management Agency.
    - (2) Vogtle Electric Generating Plant.
    - (3) Various state agencies providing support services.
    - (4) Burke County Emergency Operations Center.
    - (5) Appropriate federal agencies.

## The DNR Law Enforcement Section (District Office-Thompson) will:

- a. Assist in traffic control, area security, communications, warning and dissemination of emergency information.
- b. Conduct water patrol activities in affected area to evacuate fishermen, hunters, campers, etc. from the area.

- c. Establish boundaries and place restrictions upon entry by water into the affected area.
- d. Enforce all laws relative to conduct of effective operations.

# The Department of Natural Resources Environmental Protection Division (in Atlanta) will:

- a. Respond with equipment and manpower resources, as required, to incidents at the Vogtle Electric Generating Plant.
- b. Make technical assessments of radiological conditions and make recommendations pertaining to protective actions to include:
  - (1) Assessment of radiation levels in the area affected by the incident.
  - (2) Assessment of radioactive contamination of personnel, food and water supply.
  - (3) Establishment of decontamination procedures.
  - (4) Conducting radiological monitoring operations.
  - (5) Restriction on the use of contaminated water supplies.
- 17. Georgia Forestry Commission (District Office) will:
  - a. Be notified by one or more of the following agencies:
    - (1) Georgia Forestry Commission Headquarters.
    - (2) Office of Homeland Security Georgia Emergency Management Agency.
    - (3) Burke County Emergency Management Agency.
  - b. Provide the following services to support emergency operations:
    - (1) Assist in evacuation, area security, communications, warning and dissemination of emergency information.
    - (2) Fire surveillance and suppression service.

- (3) Air and land transportation.
- (4) Disposal equipment and personnel.
- c. Carry out emergency operations consistent with primary and support functional responsibilities assigned in the <u>Georgia Emergency Operations</u>

  <u>Plan</u> in the event the Governor declares that a state of emergency exists and/or determines operational requirements exceed local capability.
- d. Maintain coordination with the following agencies on emergency operations and service support:
  - (1) OHS-GEMA and OHS-GEMA Area 3 Field Coordinator.
  - (2) Various state agencies providing support services.
  - (3) Burke County Emergency Operations Center.
  - (4) Burke County Sheriff's Department.
  - (5) Cities of Waynesboro and Sardis Fire Departments.
- 18. Georgia Department of Agriculture (District Office, Thomson) will:
  - a. Be notified by one or more of the following agencies:
    - (1) Office of Homeland Security Georgia Emergency Management Agency.
    - (2) Burke County Emergency Management Agency.
  - b. Provide the following services to support emergency operations:
    - (1) Emergency provisions for petroleum and fuel.
    - (2) Food inspection.
  - c. In conjunction with the Georgia Departments of Human Resources and Natural Resources, issue necessary orders and restrictions to safeguard the health and well being of the population.
    - (1) Condemn and seize foods that are unwholesome or unsafe for human consumption.

- (2) Restrict feeding certain foodstuff to farm animals to prevent contamination of food by-products.
- (3) Restrict growing crops for human consumption and for animal feed in unsafe areas.
- d. Maintain coordination with the County Agent, USDA and ASCS offices.
- e. Carry out emergency operations consistent with primary and support functional responsibilities assigned in <u>Georgia Emergency Operations</u>

  <u>Plan</u> in the event the Governor declares that a state of emergency exists and/or determines operational requirements exceed local capability.
- f. Maintain coordination with the following agencies on emergency operations and service support:
  - (1) Office of Homeland Security-Georgia Emergency Management Agency.
  - (2) Various state agencies providing support services.
  - (3) Burke County Emergency Operations Center.
  - (4) Burke County Health Department.
  - (5) County Agent, USDA and ASCS offices.
- 19. USDA and ASCS offices in Burke County, to include County Agent will:
  - a. Be notified by one or more of the following agencies:
    - (1) Office of Homeland Security Georgia Emergency Management Agency.
    - (2) Georgia Department of Agriculture.
    - (3) Georgia Department of Human Resources.
    - (4) Burke County Emergency Management Agency.
  - b. Provide service support consistent with the emergency situation, assistance requested and guidelines relative to federal disaster assistance programs. General areas administered by USDA and relative to a nuclear incident emergency situation include:

- (1) Crop loss.
- (2) Emergency conservation measures.
- (3) Emergency livestock feed.
- (4) General assistance information (County Agent, USDA).
- (5) Emergency food stamps (USDA Food and Nutrition Service).
- c. Maintain coordination with the following agencies:
  - (1) Office of Homeland Security Georgia Emergency Management Agency.
  - (2) Burke County Emergency Management Agency.
  - (3) Georgia Department of Agriculture.
  - (4) Georgia Department of Natural Resources.
  - (5) Appropriate federal agencies.
- 20. Radio station WYFA (FM 100.9) in Waynesboro and WBBQ (AM 1340 and FM 104.3) in Augusta will:
  - a. Be notified by one or more of the following agencies:
    - (1) Burke County Emergency Management Agency.
    - (2) Office of Homeland Security Georgia Emergency Management Agency.
    - (3) Georgia Department of Natural Resources.
  - b. In coordination with local governmental officials, Burke County Emergency Management Agency, Office of Homeland Security - Georgia Emergency Management Agency, Department of Natural Resources, Environmental Protection Division and officials from Plant Vogtle, and in accordance with Attachment J, Emergency Information, provide the following services to support emergency operations:

- (1) Broadcast all alert warnings, emergency information, instructions and pertinent information requiring timely and expeditious dissemination.
- (2) Broadcast emergency information and instructions to the populace to ensure their support and assistance.
- (3) Broadcast instructions and information relative to recovery operations.
- c. Maintain communications with the Burke County Emergency Operations Center on operations and coordinate with the following agencies to provide service support and release information:
  - (1) Office of Homeland Security Georgia Emergency Management Agency.
  - (2) Burke County Emergency Management Agency.
  - (3) Georgia Department of Natural Resources.
  - (4) Vogtle Electric Generating Plant.

In the event local Emergency Alert System (EAS) (local radio station) stations must be activated, the EMA Director or designee will activate the stations in accordance with procedures outlined in the jurisdiction's Emergency Alert System Plan.

## VI. DIRECTION AND CONTROL

- A. Direction and control to initiate action and conduct emergency operations necessary to protect the population of Burke County from the effects of a nuclear incident occurring at the Vogtle Electric Generating Plant will be exercised by the Chairman, Burke County Board of Commissioners. In his absence, the duly appointed representative from the elected county government will exercise direction and control.
- B. When local resources are clearly not adequate to deal with the emergency created by the nuclear incident, or the incident is of such magnitude the Governor may declare a state of emergency or disaster and direct execution of the Georgia Emergency Operations Plan, whereby heads of state departments or agencies will execute emergency service functions assigned in the Governor's Executive Order and Exhibit D listed in the plan.
- C. Direction and control of state emergency management operations will be exercised by the Governor through the Director, OHS-GEMA, in his role as State

Disaster Coordinator. All state department and agencies and local governmental emergency services mobilized pursuant to this plan will be coordinated by the State Disaster Coordinator to assure maximum response and efficient use of personnel and other resources. In the event the emergency situation is beyond local control, the State Disaster Coordinator (Director, OHS-GEMA), under the direction of the Governor, may assume direct operational control over all or any necessary part of the emergency operations functions.

- D. This plan will be reviewed, updated or revised on an annual basis, or as otherwise required. All changes will be dated by page, added to plan and recorded on Record of Changes included in Annex D.
- E. The various departments/agencies of local government supporting this plan will develop Standing Operating Procedures to support functional assignments.

## VII. EFFECTIVE DATE

This plan is effective immediately and will be activated upon direction of the Chairman, Burke County Board of Commissioners.

Chairman
Burke County Board of Commissioners

Burke County Emergency Management Agency

#### ATTACHMENTS:

- A Implementation
- B Operational Relationships Among County Response Organizations
- C Roster of Key Emergency Staff Personnel
- D Affected Area

(Map 1, Plume Exposure Pathway EPZ and Evacuation Zones)

(Table D-1, Geographical Boundaries of Evacuation Zones)

(Table D-2, Population Distribution Within Plume Exposure Pathway EPZ)

- E EOC, Emergency Equipment and Service Support
- F Communications
- G -Notification and Warning
- H Evacuation and Sheltering

(Map 2, Evacuation Routes, Traffic Control Points, Boat Landings, Reception Center, Hospital and EOC Locations)

(Table H-1, Key Global Positioning System Locations)

(Table H-2, Primary Evacuation Routes and Traffic Control Points)

(Table H-3, EPZ Vehicle Totals/Total Evacuation Time Estimates)

- Reception and Care
   (Table I, Reception and Care Facility Capacities)
- J Emergency Information
- K Training and Exercises

ATTACHMENT A

#### **IMPLEMENTATION**

## A. Activation of Radiological Emergency Plan

This plan will be activated by the Burke County Emergency Management Agency (EMA) Director or his designee upon receipt of notification from officials at Plant Vogtle and/or Office of OHS-GEMA that an incident has occurred at Plant Vogtle.

- 1. The EMA Director will initiate emergency operations in accordance with the incident classification.
- 2. If the situation dictates, the Director will fully activate the Burke County Emergency Operations Center (EOC) and contact members of the key emergency staff by telephone, radio or pagers and if necessary by personal contact.
- 3. The staff personnel will report to the EOC and initiate emergency response activities consistent with the incident classification and recommend protective measures for the health and safety of the population within the area affected by the incident.
- 4. When deemed necessary, the EMA Director will dispatch a representative to Plant Vogtle's near site Emergency Operations Facility (EOF) to coordinate initial off-site response activities and serve in liaison capacity.
- 5. The Public Information Officer assigned to the Joint Media Center located at Burke County Office Park will normally report to the center when a Site Area Emergency is declared or sooner if directed by the EMA Director.
- The EMA Director will develop and maintain a twelve (12) hour shift roster for key staff personnel. Department/agency personnel will be assigned to shifts and/or operate on day-to-day shift schedules.

## B. Notification of the Public

In the event an incident occurs at Plant Vogtle that poses a threat to the safety of people living in the Plume Exposure Pathway EPZ within Burke County, plant officials will notify the Burke County Emergency Management Agency and OHS-GEMA and recommend the necessary protective actions.

- 1. The Prompt Notification System (PNS) will be activated in accordance with OHS-GEMA SOP 3-5 (Parts A and B, NOAA Weather Radio with a tone alert and voice message, and the backup siren system), and the public will be provided emergency information and instructions in accordance with Attachment J, Emergency Information.
- 2. Consistent with an accident classification, the EMA Director will activate the Emergency Alert System (EAS) (local radio station) Plan and have additional information and instructions broadcast to the public (reference Attachment J, Paragraph G).
- 3. In the event that officials from Burke County desire to initiate protective action measures, the Burke County EMA Director, acting upon direction from local elected officials, will initiate action to activate the Prompt Notification System in accordance with OHS-GEMA SOP 3-5. (See Attachment G, Notification and Warning.)

## C. Response

Response will begin at the time the Radiological Emergency Plan and Emergency Operations Center are activated as described above in Section A of this attachment.

- 1. The primary medical facility for the care of off-site victims of an incident at Plant Vogtle, including the contaminated injured, will be Burke County Hospital in Waynesboro, Georgia. Should the capacity of this facility be exceeded, the secondary medical facility for the care of these victims will be Doctor's Hospital located on Wheeler Road in Augusta, Georgia (for procedures relative to use of primary and secondary medical facilities, see Annex D, Section F).
- 2. In the event a radiation accident victim requires more definitive care than can be provided at the primary or secondary facility, he may be transported to the Oak Ridge Associated Universities Medical Division, Oak Ridge Hospital of the Methodist Church (ORHMC), Oak Ridge, Tennessee (reference Annex D, Section F for telephone numbers).
- 3. If fire, emergency medical and security service support is needed at the plant site, plant officials will contact the Burke County EOC and request assistance.
- 4. The Burke County Emergency Management staff, all local governmental department/agency personnel and EMA volunteers assigned functional and support responsibilities in this plan will respond to the incident under direction and/or coordination of the Burke County EMA Director.

5. Overall direction and control to initiate action and conduct emergency operations will be exercised in accordance with this plan, the <u>Burke County Emergency Operations Plan</u> and <u>Georgia Emergency Operations Plan</u>.

## D. Public Information

Dissemination of information to the public and the news media will be coordinated and controlled by the Public Affairs and Public Information Officers from Georgia Power, OHS-GEMA and Burke County Emergency Management Agency operating out of the designated Joint Media Center at the Burke County Office Park. These officials will obtain first hand information from the individuals in charge of the various response activities and disseminate the information to the press and public through regularly scheduled press releases or as otherwise required (reference Attachment J, Emergency Information).

## E. Protective Actions

#### 1. Evacuation

The decision to evacuate the population from an area affected by an incident at Plant Vogtle will originate from the Chairman, Burke County Board of Commissioners, if, upon recommendations from Plant Vogtle officials, he deems the situation to be an immediate threat to the citizens of Burke County. Otherwise, the Chairman will base his decision upon advice and guidance from the OHS-GEMA, consistent with recommendation from the Environmental Protection Division, Georgia Department of Natural Resources (reference GA REP, Section VI.G.).

## 2. Sheltering

The decision to shelter the population in an area affected by an incident at Plant Vogtle will originate from the Chairman, Burke County Board of Commissioners in coordination with officials from Plant Vogtle, Office of Homeland Security - Georgia Emergency Management Agency and Environmental Protection Division, Georgia Department of Natural Resources (reference GA REP, Section VI.G.).

## 3. Radioprotective Drugs

If the release data received from the facility indicated a potential for hazardous exposure to the thyroid, a recommendation to administer a radioprotective drug to all emergency workers entering the affected area may be given. This recommendation will be made to the State Disaster Coordinator by the Georgia Department of Natural Resources' EPD Representative. (See Section V.,

Responsibilities, E). The State Disaster Coordinator or his representative, acting in behalf of the Governor, will ensure that this directive is communicated to the state and local agencies involved.

## 4. Radiological Exposure Control

- a. Field monitoring operations may initially be conducted by Burke County Emergency Management Agency until state agency monitoring support arrives. At that time, the local teams will join state agency teams for continuation of monitoring operations. Prior to arrival of state agency teams, the local monitoring teams may collect and report data to the Burke County EOC for relay to DNR-EPD.
- b. Personnel engaged in emergency response activities that may lead to radiation exposures will be provided pocket dosimeters. Generally, these will be the self-reading, low range and high range dosimeters. TLDs will be used as well. Personnel engaged in field monitoring operations will use equipment designed for taking environmental direct radiation readings, soil and vegetation samples and air samples. Generally, only low range survey meter (0-50 mr/hr) will be used for monitoring personnel and vehicles.
- c. All emergency personnel entering the affected area will carry "exposure control forms" to record exposure received while operating in this area. These forms will be returned to the Burke County EMA Radiation Officer upon return from the area. A continuous 24-hour per day capability will be maintained to determine doses received by emergency response personnel, including volunteers.
- d. Exposure control and contamination guidelines will be in accordance with Protective Action Guides (PAGs) for emergency response personnel as listed in the GA REP.
- Dosimetry kits developed for use by personnel entering the affected area will
  contain appropriate criteria and instructions for exposure control and reporting
  procedures, contamination, decontamination procedures and location of
  decontamination areas for personnel, equipment and vehicles.

## F. Reentry and Recovery

Reentry and recovery operations will be initiated only when plant officials verify that the emergency situation has been eliminated and state officials, acting on their field data, ascertain that there is no longer a threat to the health and safety of persons living nearby. Local officials will maintain coordination with OHS-GEMA on the

situation, and decisions will be made in accordance with Environmental Protection Agency (EPA) Protective Action Guidelines (PAGs).

## G. Supporting Plans and Documents

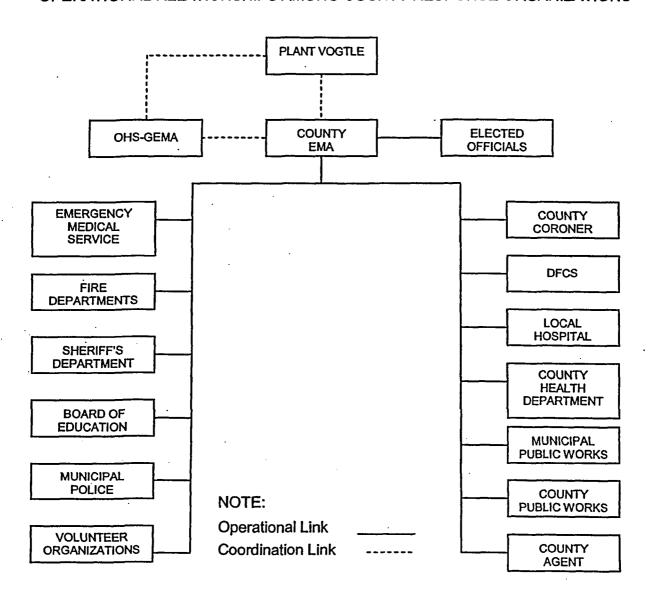
- 1. This plan will be implemented and executed in accordance with the authority of state laws as listed in the GA REP, Section II, and county and municipal laws as listed in Section III of this plan.
- 2. This plan will be executed within the organizational and functional parameters of the following supporting state and local plans:
  - (a) Burke County Emergency Operations Plan.
  - (b) State of Georgia Emergency Operations Plan.
  - (c) State of Georgia Radiological Emergency Plan (GA REP).
  - (d) State of Georgia Radiological Emergency Plan, Annex D (Plant Vogtle).

## H. Distribution

The Burke County Emergency Management Agency office will maintain a list of all parties receiving a copy of this plan and will, as necessary, furnish all addresses with changes or revisions to the plan.

## ATTACHMENT B

## OPERATIONAL RELATIONSHIPS AMONG COUNTY RESPONSE ORGANIZATIONS



## ATTACHMENT C

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#### ATTACHMENT D

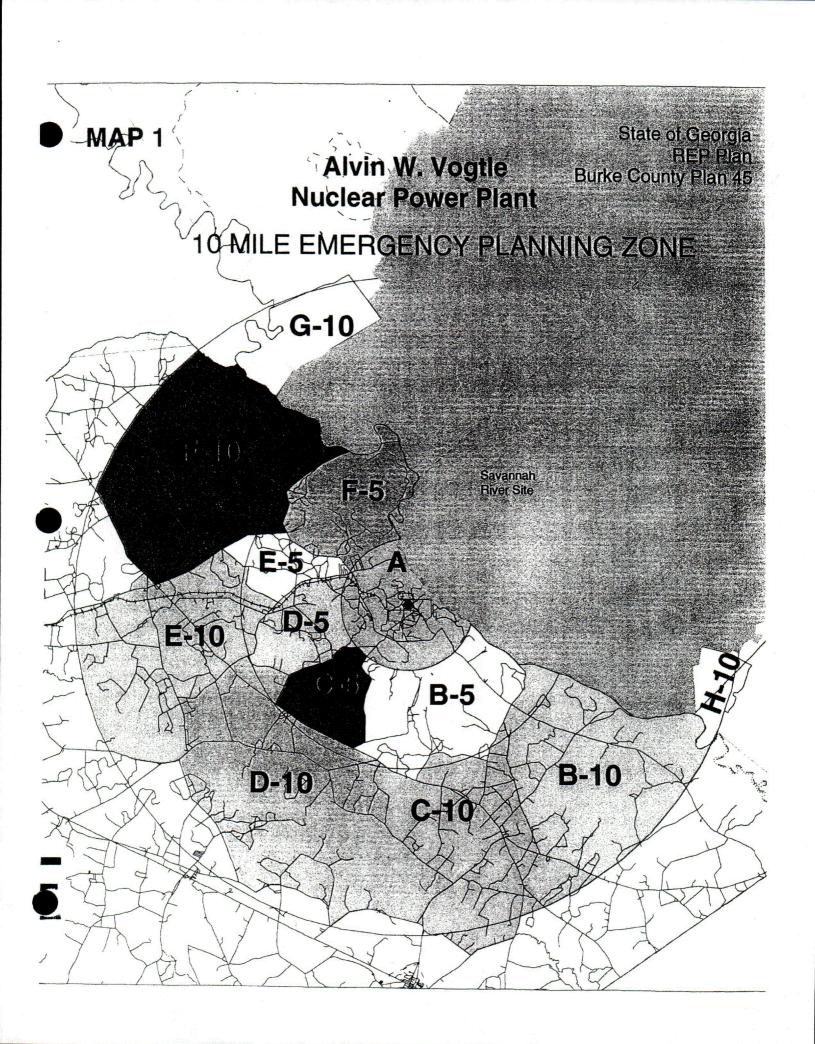
#### AFFECTED AREA

A. In the event that a major incident should occur at the Vogtle Electric Generating Plant, it is envisioned that an area 10 miles in radius from the plant site could possibly be affected. This area is known as the Plume Exposure Pathway Emergency Planning Zone (EPZ). Weather and wind conditions will play a major role in the direction, distance and lateral spread that a plume may extend when drifting from the plant site. Normally, the lateral pattern will spread wider as the down wind movement increases.

The total area of the Plume Exposure Pathway EPZ that extends into Burke County has been divided into zones having readily identifiable boundaries (highways, roads, rivers). Each zone is identified with a letter system. Protective action measures (sheltering or evacuation) will be based on this zone scheme and will be transmitted to local authorities and the general public accordingly. Radiation protection operations can readily determine which zones are affected by an incident at the plant, thus providing reliable information and instructions to the population living in the affected area. Evacuation and/or restrictions would normally be directed only within the boundaries of the zones determined to be affected by the incident.

B. The portion of Burke County that is in the Plume Exposure Pathway EPZ is depicted on Map 1. There are eleven zones located in the county. The approximate two-mile radius around the plant that extends into Burke County is included on Zone A. Zones B-5 through F-5 includes the approximate two to five mile radius and Zones B-10 through F-10 includes the approximate five to ten mile radius. Geographical boundaries of each zone are listed in Table D-1.

The Plume Exposure Pathway EPZ consists primarily of a rural farming area with no concentrated population centers, recreational areas (except fishing and hunting sites near and along the Savannah River), and hotel or tourists centers. Most of the traffic on the road nets within the area is local residents and Plant Vogtle personnel. Georgia Highway 23 is the major roadway through the area and is located beyond the five-mile radius. There are no schools or institutions within the EPZ. Throughout the area are several commercial establishments (convenience stores). Population studies indicate that transient population is minimal within the area. Population distribution for general public, transient population and Plant Vogtle site work force are listed in Table D-2.



### TABLE D-1

### GEOGRAPHICAL BOUNDARIES OF EVACUATION ZONES

Α

Northeast Savannah River

Southeast, south/southwest and west-northwest 2-mile boundary

**B-5** 

North 2-mile boundary

West Ebenezer Church Road Southwest Georgia Highway 23

South Chance Road

Southeast Griffin's Landing Road

Northeast Savannah River

B-10

Northwest Griffin's Landing Road

West Dixon Road and east boundary, City of Girard

Southwest Stoney Bluff Road

Southeast 10-mile boundary, Royal Road and then 10-mile boundary

Northeast Savannah River

(Includes Brigham and Griffin Landings)

C-5

Northwest Jack DeLaigle Road Southwest Georgia Highway 23

East Ebenezer Church Road and then 2-mile boundary

(Includes the Plant Vogtle Recreation Area)

C-10

North Georgia Highway 23, Chance Road and then Griffin Landing Road

West Buck Road, Briar Creek Road and Georgia Highway 23

South Johnson Road, Ellison Bridge Road, Murray Hill Road and then

10-mile boundary

Northeast Stoney Bluff Road

East boundary, City of Girard and Dixon Road

(Includes the Town of Girard)

D-5

North Hancock Landing Road

West Hancock Landing Road and Thomas Road

South Thomas Road
Southeast Jack DeLaigle Road
East 2-mile boundary

# TABLE D-1 (continued) -

D-10

North Thomas Road, then Jack DeLaigle Road and Georgia Highway 23

Northwest Hancock Landing Road and Botsford Church Road

West Seven Oak Road, Thompson Bridge Road and Hatcher Mill Road South West Quaker Road, Gordon Road and Tom Bargereon Road

East Georgia Highway 23, Briar Creek Road and Buck Road

(Includes the Boll Weevil Plantation)

E-5

North Ben Hatcher Road and River Road

East 2-mile boundary

South Hancock Landing Road Southwest Nathaniel Howard Road (Includes the DeLaigle Trailer Park)

E-10

Northeast Nathaniel Howard Road

North Ben Hatcher Road, Georgia Highway 23 and Georgia Highway 80

West 10-mile boundary

South Bates Road and Thompson Bridge Road

East Seven oak Road

Southeast Botsford Church Road and Hancock Landing Road

(Includes a portion of the Shell Bluff Community)

F-5

North Savannah River
East Savannah River

West 5-mile boundary and River Road South River Road and 2-mile boundary

F-10

Northeast Savannah River

North Richmond County Line

West 10-mile boundary and Georgia Highway 23

South Ben Hatcher Road

East River Road and 5-mile boundary

(Includes Shell Bluff Landing and a portion of the Shell Bluff Community)

TABLE D-2

# BURKE COUNTY POPULATION DISTRIBUTION WITHIN PLUME EXPOSURE PATHWAY EPZ\*

PERMANENT POPULATION				
ZONE	POPULATION			
Α	94			
B-5	81			
C-5	40			
D-5	77			
E-5	109_			
F-5	172_			
B-10	265			
C-10	749			
D-10	618			
E-10_	518 ·			
F-10	425			
TOTAL	3148			

EPZ MILES	POPULATION
0 to 2	94
2 to 5	479
5 to 10	2575
TOTAL	3148

<sup>\*</sup> Population count in the Plume Exposure Pathway EPZ within Burke County is under continuous review by officials from the Southern Nuclear Operating Company as well as local authorities.

### TRANSIENT POPULATION

The transient population in the Burke County portion of the Plume Exposure Pathway EPZ is comprised of non-resident (1) hunters, fishermen, other sportsmen. (Most of this activity is near the four public and private landings identified on Map 2. The roads that lead to the landings are the only means for access to the river due to existence of massive swamp areas elsewhere); (2) motorists passing through the areas; (3) employees working in the area (i.e., the Vogtle work force, farmers and forestry workers) and (4) individuals making occasional brief visits to attend church, the Plant Vogtle Visitors Center, commercial establishments or other such reasons.

TABLE D-2 (continued)

edre socialismolne of exception	Fed Rophilellon, Estimate : 7,5
R1 – Shell Bluff	50
R2 – Hancock	50
R3 – Griffin's	50
R4 – Brigham's	50
Total	200

The above population data is based on fall weekend periods during the hunting season (normally mid-September through early January). Law enforcement officials estimate that this figure would be one-half or less during the remainder of year.

### WORK FORCE AT PLANT VOGTLE

The Plant Vogtle site employment is approximately 500 for normal daytime operations. There is a variance from time to time because of outages, etc. Plant Vogtle personnel will keep Burke County EMA apprised of employment figures during an emergency.

# INSTITUTIONAL POPULATION

There are no schools or institutions located with the Plume Exposure Pathway Emergency Planning Zone.

### **ATTACHMENT E**

### EOC, EMERGENCY EQUIPMENT AND SERVICE SUPPORT

- A. The Burke County EOC located on Perimeter Road in Waynesboro provides adequate space, communications and supporting equipment to allow local governments and the OHS-GEMA FEOC, co-located with the EOC, to conduct sustained operations during an emergency situation.
- B. An inventory of equipment, vehicles and communication support systems housed in or located at the EOC is maintained by the Burke County EMA. In addition, all governmental and volunteer agencies maintain an inventory list of equipment and supplies necessary for the day to day activities and sustained emergency operations.
- C. Additional radiological monitoring and protective equipment for support is available from various state agencies.
- D. Locally held radiological monitoring equipment is exchanged for refurbishment on an annual basis.
- . E. General Inventory, Local Governments (Municipal and County)
- F. Maintenance of Equipment and Vehicles
  - 1. All locally held and owned equipment and vehicles are employed daily in routine performance of assigned responsibilities and, therefore, kept operationally ready. Those items of equipment used on an infrequent basis are checked for operational readiness quarterly.
  - 2. The Burke County Public Works Department maintains equipment and vehicles owned by Burke County. Special repair needs are done on contract basis.
  - 3. The Burke County Board of Education maintains all buses and equipment at the bus maintenance shop.
  - 4. The municipal governments maintain respective vehicles and equipment at local maintenance shops or on contract basis.
- G. Mutual Aid Support From Adjacent Jurisdictions
  - Burke County Sheriff's Department.

- a. Richmond County Police Department.
- b. Jefferson County Sheriff's Department.
- c. Emanuel County Sheriff's Department.
- d. Jenkins County Sheriff's Department.
- e. Screven County Sheriff's Department.
- 2. Burke County Emergency Management Agency
  - a. Richmond County Emergency Management Agency.
  - b. Jefferson County Emergency Management Agency.
  - c. Emanuel County Emergency Management Agency.
  - d. Screven County Emergency Management Agency.
- 3. Hospital and emergency medical service support is available from all above jurisdictions. Common communications on statewide hospital/emergency medical service is available.
- 4. As appropriate, training will be conducted for personnel providing support service within the Plume Exposure Pathway EPZ. Otherwise, use of support service personnel will be limited to normal day-to-day functional assignments.

### H. Wrecker Service

- 1. Service is available from the private sector on 24-hour basis. Listings are maintained in the Burke County EOC.
- 2. Burke County Public Works Department will provide equipment to maintain roadway clearance as needed. The Georgia Department of Transportation will provide assistance when requested.

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### ATTACHMENT F

### COMMUNICATIONS

- A. The Burke County Emergency Management Agency can be contacted 24 hours daily through either regular telephone, OHS-GEMA statewide radio network, Burke County Sheriff's Department/ICC radio network, (ENN) by OHS-GEMA, Plant Vogtle and SRS officials (dedicated circuit), Burke County EMA radio network and the State Fire Mutual Aid Radio Network or State HEAR (EMS)...
- B. The primary means of communication among local governments and respective department/agency personnel within the Plume Exposure Pathway EPZ are telephone and each department/agency radio network link with the EMA EOC. If the primary communications links are unavailable for use, the OHS-GEMA statewide radio network and/or the Sheriff's/ICC radio network are available for backup communications.
  - 1. The Burke County Emergency Management Agency and Sheriff's Department are linked to the OHS-GEMA SOC by above channels.
  - 2. When the OHS-GEMA FEOC is activated, Burke County EMA will be linked with the FEOC by all above channels. The FEOC will be linked to DNR Radiological Field Team radio networks.
- C. To ensure rapid notification of an incident, Plant Vogtle officials will use the ENN installed between the site and the OHS-GEMA SOC and the Burke County EOC. Burke County EMA radio network will serve as a backup channel between Plant Vogtle EOF and Burke County EOC.
- D. The Burke County EMA's emergency workers and other emergency response personnel will be notified by a "fan out" call list utilizing the telephone, the above radio network channels and pagers. Reference Section V, Paragraph F and Attachment C of this plan for notification procedures.
- E. In accordance with the GEOP, OHS-GEMA will assume operational control and coordinate the response activities of all state and federal agencies. This eliminates any requirement for direct contact between Burke County EMA and federal response agencies.
- F. The authenticity of messages received by dedicated circuits, through OHS-GEMA radio network, Burke County EMA radio network, or Sheriff's/ICC radio network, will be accepted without challenge. Messages received via commercial telephone line

will be verified by calling back to authenticated telephone numbers held by Burke County EMA and Sheriff's offices.

G. The requirement for testing the Emergency Management Agency radio networks and Sheriff's/ICC radio networks are minimal because the systems are in daily use. For this reason, malfunctions are detected immediately and systems are repaired. The same applies for all other radio networks utilized by Burke County EMA, i.e., municipal police, fire departments, hospital/emergency medical service and city/county public works departments.

The backup radio frequencies are used daily; however, a test on Burke County EMA radio network is conducted on a monthly basis between Plant Vogtle EOF and Burke County EOC.

#### ATTACHMENT G

### NOTIFICATION AND WARNING

### A. Prompt Notification System (PNS)

Plant Vogtle officials have installed emergency notification system in Plume Exposure Pathway Emergency Planning Zone (EPZ) by placing tone alert radio receivers in each household and business and outdoor sirens throughout the area (reference OHS-GEMA SOP 3-5, Parts A and B). The total system meets the performance specifications for notification as required by NUREG-0654/FEMA-REP-1. The system will be used to alert the population living in the Plume Exposure Pathway EPZ that a problem exists at the power plant and advise them to turn on their radios/television sets for emergency information and instructions.

# B. Supplementary Notification System

As a backup system and for use as deemed necessary, the population living in the Plume Exposure Pathway EPZ may be notified of an emergency situation at the plant by means of the following local area resources:

- 1. Law enforcement vehicles equipped with sirens or public address systems traveling the road network throughout the affected area.
- 2. Burke County Emergency Management Agency and Department of Natural Resources Law Enforcement Section vehicles will move through wooded areas near boat landings, and boats will travel portions of the Savannah River in the affected area of EPZ to warn sportsmen. The United States Coast Guard will close or authorize the state to close the river to water traffic at points outside the Plume Exposure Pathway EPZ. Reference Map 2, Evacuation, for location of control points and boat landings.
- 3. Emergency Management Agency workers and volunteers traveling the road network area in EPZ for door-to-door canvass.
- 4. Locally based state agency personnel from Departments of Transportation, Natural Resources Law Enforcement Section, Public Safety and Forestry Commission traveling road network in affected area to assist in warning the public, transients, farm workers and timber personnel.
- 5. Activation of local EAS (local radio station) by designated officials of local government and broadcasting information and instructions to the public.

Utilization of local radio station(s) and, if required, activation of the Emergency Alert System by designated local officials in order to broadcast information and instructions to the public.

# C. Notification Time

- Employment of the Prompt Notification System described above in Paragraph A
  will provide both an alert signal and an informational or instructional message to
  the population within the Plume Exposure Pathway EPZ within 15 minutes after
  OHS-GEMA (or Burke County EMA) has decided an incident at Plant Vogtle
  warrants activation of the system.
- Notification to hunters, fishermen and other sportsmen will be performed on an area wide basis and will be completed within 45 minutes. The Burke County Sheriff's Department and Emergency Management Agency will maintain close coordination with hunting clubs that use the area for necessary assistance.
- 3. Notification and evacuation procedures for handicapped persons living in Plume Exposure Pathway EPZ are addressed in Standing Operating Procedures maintained by Burke County Emergency Management Agency, Health Department and Department of Family and Children Services.

### D. Notification Procedures

In the event of a radiological emergency at plant Vogtle, the Georgia Power Company official designated as Emergency Director will be responsible for notifying state and local authorities utilizing the Emergency Notification Network (ENN) in accordance with Section E, Vogtle Electric Generating Plant Emergency Plan, Volume 1.

- 1. Should the ENN become inoperable, Burke County Emergency Operations Center will be notified at the 24 hours a day telephone number.
- 2. The Burke County EMA radio network will serve as a backup channel between Plant Vogtle EOF and Burke County EOC.
- 3. In the event the above procedures are not successful, the Burke County Sheriff's Department will be notified at their 24 hours a day telephone number.
- 4. As specified in the Burke County EMA Central Dispatcher's procedure, the Central Dispatcher will contact the most senior EMA official available, in accordance with the following line of succession: EMA Director/Chief, Assistant Chief, Battalion Chief and Chief of Operations.

- 5. The Burke County Emergency Management Agency's key staff, emergency workers and other emergency response personnel will be notified in accordance with procedures outlined in Section V, paragraph F and Attachment C of this plan.
- 6. Burke County EMA will initiate request through OHS-GEMA for assistance from DOE Savannah River Site and/or State of South Carolina relative to notification and warning of transient population along Savannah River.

### ATTACHMENT H

#### **EVACUATION AND SHELTERING**

A. Evacuation routes, traffic control points, boat landing areas on river, reception center, hospital and EOC locations are depicted on Map 2 and maps located in EOC. Table H-1 depicts GPS Locations of Key Facilities, H-2 further expands the evacuation routes and Table H-3 provides vehicle totals and evacuation time estimates. The selected evacuation routes are adequate to move the population from any part of or the entire Plume Exposure Pathway EPZ and channel the evacuees to the Reception Center at the Burke County Comprehensive High School located at 1057 Perimeter Road in Waynesboro. Georgia Highways 24 and 56 serve as main routes with Highway 24 channeling evacuees northwest to Perimeter Road and Highway 56 channeling evacuees southwest to Perimeter Road.

Movement of evacuees along the predetermined routes could be affected by one or more of the following factors related to the incident at the nuclear power plant:

- 1. A General Emergency resulting in a major release which affects a large area could dictate rerouting the evacuation traffic.
- 2. A light wind causing the plume containing radioactive materials to drift slowly over all or a portion of an evacuation route would require rerouting the evacuation route.
- 3. A temperature inversion, i.e., a reversal of the normal atmospheric temperature gradient, causing releases of radioactive materials to remain near the ground surface could result in rerouting of the evacuation traffic.
- B. There are no physical barriers to the movement of evacuation traffic within the Plume Exposure Pathway EPZ. Adequate traffic control points, road blocks and route markers will be manned and set up to keep the traffic flow moving out of the affected area and deny access into area (reference Table H-1). The principal routes have the capacity to carry approximately 550 vehicles per lane per hour in one direction at a safe, constant flow where weather and darkness are not factors. Under nighttime and poor weather conditions, this rate of traffic flow could be reduced up to thirty (30) percent. (The vehicle rate and percentage reduction are based on a study of the road system designated for evacuation routes. Reference Annex D, Section E, paragraph 1.g.).

In the event an incident should occur at Plant Vogtle that would require evacuation, approximately 95 percent of the total plant work force would be processed and released in accordance with procedures set forth in Section J of the Vogtle Electric Generating Plant Emergency Plan. Plant personnel and employees that may be

released to go home will move along designated evacuation routes leading to the Reception Center in Waynesboro if a release has occurred and their homes are in the affected area. If their homes are outside of the affected area, they will move along designated routes that will clear them to routes leading to their homes.

- C. Actual and/or projected releases of radioactive material for the Plant Vogtle facility in conjunction with meteorological conditions and/or field samples will be the basis for determining which zones to evacuate. (See Map 1, Attachment D.)
- D. Privately owned vehicles will be the primary mode of transportation if evacuation is directed. County school buses, traveling their regular routes will provide transportation to those individuals lacking personal transportation. Standing Operating Procedures (SOP) for the case of handicapped individuals is maintained in the Burke County EOC. A roster of the individuals residing within the Plume Exposure Pathway EPZ is included in the SOP. Special equipped vehicles will be dispatched directly to the homes of handicapped and/or non-ambulatory individuals requiring special transportation means. The EMA Director will coordinate with the Burke County Health Department and Burke County Department of Family and Children Services on implementation of the SOP to assure that the handicapped are safely evacuated from the area and proper care provided.

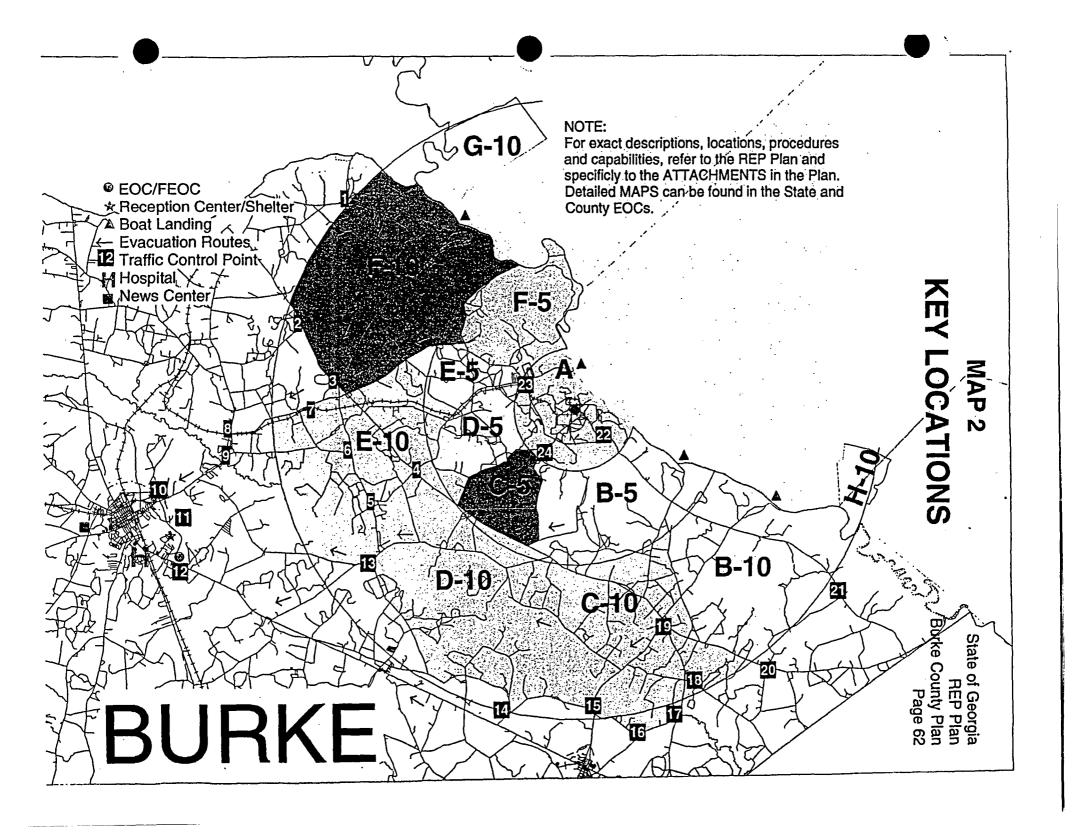
There are no schools or institutional facilities within the Plume Exposure Pathway EPZ that will require special consideration in an evacuation.

E. Evacuation confirmation process determines whether the evacuation has been completed. Specifically, confirmation of the evacuation is performed to assure that the entire population has left the affected area and to assist those persons having difficulties in evacuating.

Evacuation confirmation will be accomplished by the Burke County Sheriff's Department and supporting law enforcement agency personnel that will traverse roadways throughout the affected area to ensure that the residential population has evacuated their homes. Personnel from Burke County EMA and Georgia Department of Natural Resources, Law Enforcement section, will move along the Savannah River and tributaries in boats to ensure that hunters and fishermen have evacuated the area. Additional assistance is available from other state agencies, i.e., Georgia Forestry Commission and Department of Transportation (reference Attachment G, Paragraph B). Officials from Plant Vogtle will advise Burke County EOC when evacuation is confirmed at the plant site.

F. Sheltering of the population residing in an affected area within the Plume Exposure Pathway EPZ will be based upon existing conditions and recommendations from officials at Plant Vogtle, OHS-GEMA and Department of Natural Resources Environmental Protection Division and:

- 1. May be desirable within at least two miles of Plant Vogtle if a <u>Site Area</u> <u>Emergency</u> is declared.
- 2. Should be recommended for area within two miles of plant site boundary and five miles downwind when a <u>General Emergency</u> is declared and evacuation has not been recommended at that time.
- 3. Will be necessary when evacuation of affected area cannot be accomplished in ample time due to:
  - a. Sudden airborne release of radioactive materials during an incident at Plant Vogtle that covers a large area.
  - b. Projected whole body and/or thyroid doses would exceed Protective Action Guides (PAGs) before evacuation could be completed.
- 4. The population within affected area will be provided guidance on what to do if sheltering or evacuation is directed (reference Attachment J, Sections F.9 and F.10).
- G. Evacuation planning measures and protection afforded by sheltering are addressed in the GA REP, Section VI.G. Further references are in Annex D, Section E. Attachment A, Section E of this plan provides for implementation of protective actions.



# TABLE H-1

# KEY GLOBAL POSITIONING SYSTEM (GPS) LOCATIONS

Following is a list of key locations in Burke County as identified by the Global Positioning System (GPS).

LOCATION	LATTITUDE/LONGITUDE
Burke County Emergency Operations Center	33.04.26N
and State Forward Emergency Operations Center	81.59.42W
SCHOOLS	
Burke County Comprehensive High School	33.05.11N
(Reception Center/Shelter)	81.59.30W
Burke County Alternative School	33.04.52N
24	82.01.21W
Waynesboro Elementary	33.05.36N
	82.01.15W
Blakney Elementary/Junior High	33.05.00N
	81.00.48W
·	
TRAFFIC CONTROL POINTS	
1. Georgia Highway 56 (River Road) at McBean Club Roa	ad 33.14.17N/81.53.35W
2. Georgia Highway 23 at Spring Branch Church Road	33.10.48N/81.55.04W
3. Georgia Highway 80 at Georgia Highway 23	33.09.18N/81.53.59W
4. Georgia Highway 23 at Botsford Church Road/Har	ncock 33.06.49N/81.51.15W
Landing Road	
5. Botsford Church Road at Seven Oaks Road	33.06.01N/81.52.52W
6. Cates Mead Road at Seven Oaks Road	33.07.19N/81.53.26W
7. Georgia Highway 80 at Shell Bluff Spur	33.08.45N/81.54.27W
8. Georgia Highway 56 at Georgia Highway 80	33.07.50N/81.57.22W
9. Georgia Highway 56 at Cates Mead Road	33.07.16N/81.57.40W
10. Georgia Highway 56 at Perimeter Road	33.05.59N/81.59.51W
11. Reception Center at Perimeter Road	33.04.26N/81.59.42W
12. Georgia Highway 24 at Perimeter Road	33.04.26N/81.59.42W
13. Thompson Bridge Road at Hatches Mill Road	33.04.21N/81.52.50W
14. Georgia Highway 24 at Tom Bargereon Road	32.59.44N/81.48.30W
15. Georgia Highway 23 at Tom Bargareon Road	33.00.05N/81.45.12W
16. Ellison Bridge Road at Johnson Road	32.59.20N/81.43.41W
17. Ellison Bridge Road at Murray Hill Road	32.59.57N/81.42.21W
18. Millhaven Road at Stanov Bloff Bood, Coordin Highway	33.00.47N/81.41.41W
19. Millhaven Road at Stoney Bluff Road, Georgia Highway	<del>*</del>
20. Stoney Bluff Road at Oak Grove Road	33.01.14N/81.39.11W
21. Royal Road at River Road	33.03.12N/81.36.47W
22. VEGP main access road at River Road	33.07.40N/81.46.27W
23. River Road at Hancock Landing Road	33.09.21N/81.47.31W
24. Jack DeLaigle Road at Ebenezer Church Road	33.07.23N/81.46.45W

# TABLE H-1 (continued)

33.05.00N/81.00.48W

BOAT LANDINGS	<u>LATTITUDE/LONGITUDE</u>
Shell Bluff	33.13.34N/81.49.22W
Hancock Landing	33.09.40N/81.46.01W
Griffin's Landing	33.06.53N/81.42.13W
Brigham's Landing	33.05.51N/81.39.10W
HOSPITAL	

**Burke County Hospital** 

TABLE H-2

### PRIMARY EVACUATION ROUTES AND TRAFFIC CONTROL POINTS

Georgia Highway 56, Southwest to Waynesboro (Major Access Routes)

- Ben Hatcher Road to Georgia Highway 80 and Georgia Highway 80 to Georgia Highway 56
- Hancock Landing Road to Botsford Church Road to Seven Oaks Road to Cates Mead Road to Georgia Highway 56

Georgia Highway 24, Northwest to Waynesboro (Major Access Routes)

- Brigham's Landing Road to Georgia Highway 23 to Tom Bargereon Road to Georgia Highway 24
- Royal Road to Stoney Bluff Road to Georgia Highway 23 to Tom Bargereon Road to Georgia Highway 24
- Briar Creek Road to Thompson Bridge Road to Georgia Highway 24
- Georgia Highway 23 to Thompson Bridge Road to Georgia Highway 24

### TRAFFIC CONTROL POINTS

EOC Map Number	Location
1	Georgia Highway 56 SP (River Road) at McBean Club Road
2	Georgia Highway 23 at Spring Branch Church Road
3	Georgia Highway 80 at Georgia Highway 23
. 4	Georgia Highway 23 at Botsford Church Road/Hancock Landing Road
5	Botsford Church Road at Seven Oaks Road
6	Cates Mead Road at Seven Oaks Road
7	Georgia Highway 80 at Shell Bluff Spur
. 8	Georgia Highway 56 at Georgia Highway 80
9	Georgia Highway 56 at Cates Mead Road
10	Georgia Highway 56 at Perimeter Road
11	Entrance to Reception Center, Perimeter Road
12	Georgia Highway 24 at Perimeter Road
13	Thompson Bridge Road at Hatcher's Mill Road
14	Georgia Highway 24 at Tom Bargereon Road
15	Georgia Highway 23 at Tom Bargereon Road
16	Ellison Bridge Road at Johnson Road
17	Ellison Bridge Road at Murray Hill Road
18	Millhaven Road at Bethlehem Church
· 19	Millhaven Road, Stoney Bluff Road, Georgia Highway 23 Intersection in Girard
20	Stoney Bluff Road at Intersection of Oak Grove Church

# **Traffic Control Points (continued)**

EOC Map Number	<u>Location</u>
21	Royal Road at River Road
22	VEGP main access road at River Road
23	River Road at Hancock Landing Road
24	Intersection at Jack DeLaigle Road and Ebenezer Church Road

Each traffic control point will be manned and/or roadblocks will be employed to channel the evacuees out of the affected area and to deny access into the area. Route markers will be placed along the evacuation routes at critical intersections and at roadblock locations to assist the traffic flow and increase movement time.

TABLE H-3

### **EPZ VEHICLE TOTALS**

Vehicle totals are included for all population groups. Totals for permanent residential population are based on three persons per household traveling in one vehicle, while the transient population and Plant Vogtle work force vehicle totals are based on one person per vehicle. Approximately 80 percent of the work force would evacuate the plant site in event of a severe incident at the plant (i.e. declaration of Site Area/General Emergency).

VEHICLE TOTALS				
Zone	Vogtle Work Force			
0 to 2 miles 94		0	*500	
0 to 5 miles 573		100	0	
5 to 10 miles 2575		100	0	
0 to 10 miles	3148	200	500	

Resident Population (3146) 3 persons per vehicle - 1050 Transient Population (200) 1 person per vehicle - 200 \*Work Force, (80% of 500) 1 person per vehicle - 400

### **EVACUATION TIME ESTIMATE SUMMARY**

Time estimates include movement of the entire residential and transient population plus approximately 80 percent of the plant work force. Estimates include both fair and adverse weather conditions during weekday, weeknight and weekend time frames. Severe weather conditions, i.e., snowstorm, winter freeze or heavy rains, could increase time estimates by 30 percent.

Time estimates will vary among the population groups evacuating the area. The transient group, including hunters and fishermen, will require a longer evacuation time period due to time involved in notifying the personnel and moving to their vehicles. All estimates include time periods for response after notification and travel time required to move out of affected areas. An average preparation time of 30 minutes is included for the residential population and Plant Vogtle work force. Estimates for the transient population include 15 to 45 minutes to receive notification and 15 to 60 minutes required for personnel to reach their vehicles and be ready to evacuate area.

The evacuation time estimates listed reflect the entire 0-2 mile, 0-5 mile and 0-10 mile radius within the Plume Exposure Pathway EPZ. There will be little difference in estimates

if all zones within each radius should be evacuated and/or designated zones within each radius should be evacuated.

# **EVACUATION TIME ESTIMATES (MINUTES)**

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		(iVis) <sub>faist</sub>	Heilr <i>ali</i>	/elx(elteter		(4)/(6)/(6)/
0-2 mile	90	120	75	100	80	105
0-5 mile	· 100	130	85	115	90	120
0-10 mile	110	145	100	130	100	130

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		dvence	itali =/,	viy/e rs 2)	45/aije=7/	(olvejesét)
0-5 mile	150	225	180	270	150	225
0-10 mile	150	225	180	270	150	225

(Schools and Institutions)

There are no schools or institutions within the Plume Exposure Pathway EPZ.

#### ATTACHMENT I

### RECEPTION AND CARE

# A. Reception Center and Shelter Facility

The Burke County Comprehensive High School located at 1057 Perimeter Road, Waynesboro, Georgia 30830 is the only facility designated to serve as the Reception Center and Shelter Area to receive, process and house evacuees. (See Map 2.) Adequate space and suitable accommodations are available within the facility to care for the population located within the Plume Exposure Pathway EPZ of Burke County. The facility is approximately 15 miles from Plant Vogtle.

If the entire population within the Plume Exposure Pathway EPZ of Burke County should have to be evacuated, the facility listed above would provide more than adequate space and accommodations to process and care for the entire population within the Plume Exposure Pathway EPZ. (See Table I-1.) It is anticipated that many of the individuals and families that are evacuated will move into the homes of friends and relatives after they have been processed at the Reception Center. Regardless of where evacuees are eventually lodged, it is imperative that all evacuees report to the Reception Center for:

- Screening for contamination, if necessary.
- Decontamination, if necessary.
- Registration and accountability.
- Emergency information and instructions.
- Assignment to lodging space, if requested.

The facility designated for Reception and Care Services will provide the following accommodations:

- Reception Center will have adequate shower space (gymnasium) for personnel decontamination.
- The facility has a kitchen and dining areas suitable to prepare food and feed the housed personnel.
- Adequate lavatories and toilet facilities are available.
- Adequate space is available for sleeping quarters.

First aid stations.

# B. Reception and Care Services

Reception and care services will be conducted in accordance with this plan and the <u>Burke County Emergency Operations Plan</u>. Specific primary and support functional responsibilities for local and state governmental departments and agencies are outlined in Paragraph V, Responsibilities, of this plan. Checklists have been developed for all local governmental and local based state governmental departments/agencies providing service support.

- Monitoring equipment and trained monitoring personnel from local and state agencies will be assigned to the Reception Center to monitor evacuees arriving from the Plume Exposure Pathway EPZ. The personnel should be capable of monitoring all potentially contaminated residents and transients from the EPZ within 10 to 12 hours after their arrival at the center.
- 2. Trained Shelter Managers and staff will be assigned to the Reception Center and Shelter Area to conduct operations necessary to receive, process, shelter and care for evacuees assigned to this facility.
- 3. Upon activation of the Burke County EOC, the Shelter Manager (normally the school principal) will establish and maintain coordination and communications with the EOC; school officials; and local, state and private departments, agencies and organizations supporting Reception and Care Service operations. Promptly after a decision is reached that evacuation of people from the EPZ is likely or is mandated, the Shelter Manager will maintain close coordination with school officials on opening the facility as needed.
- 4. School system personnel will be available at the facility to maintain coordination with the Shelter Manager and staff on support needs and facility maintenance.
- 5. Schematic drawings of the Reception and Care Service Area have been prepared and placed in the center and attached to specific checklists to illustrate the following:
  - a. Vehicle entrance to area.
  - b. Evacuee unloading and monitoring point.
  - c. Path for contaminated personnel to decontamination area, to registration area and to shelter area.

- d. Path for non-contaminated personnel to registration and shelter areas.
- e. Registration and shelter assignment areas.
- 6. All evacuees' vehicles will be parked in a designated area in close proximity to the reception center complex.

### C. Decontamination Areas

- 1. Contaminated evacuees will be processed through decontamination area located in gymnasium at Burke County Comprehensive High School (shower area).
- 2. Evacuees' vehicles will be surveyed for contamination consistent with available manpower, and those found to be contaminated will be decontaminated at a designated site.
- 3. All local and state emergency workers returning from the affected area will report to the vehicle decontamination point in the field area near the Burke County Comprehensive High School recreation area off Perimeter Road. Personnel and vehicles will be monitored, and contaminated personnel will move to the decontamination area (gymnasium) in the Burke County Comprehensive High School for decontamination. Vehicles will be decontaminated at water point on field.
- 4. Ambulances used to transport off-site patients, upon completion of their mission, will be directed to the vehicle decontamination area for vehicle and personnel decontamination.
- D. Checklists further expand reception and care services such as health, medical, welfare and social service. Support will be provided by the American Red Cross and local parochial groups. Consistent with needs, additional service support is available from state and federal agencies through the State Disaster Coordinator (Director, Office of Homeland Security Georgia Emergency Management Agency).

TABLE I

# \*RECEPTION AND CARE FACILITY CAPABILITIES

# **Processing Capability**

Burke Co Comprehensive High School
1057 Perimeter Road
Waynesboro, GA 30830
(Primary)

Students Present
4,675
5,980
5,980

<sup>\*</sup> For cross reference of total evacuees in the EPZ, see Attachment D.

ATTACHMENT J

# **EMERGENCY INFORMATION**

- A. Emergency information is classified into two broad categories. The first is pre-emergency information which is used to educate the citizens about Plant Vogtle and, in general, what protective actions should be taken should there be a health threatening accident at the plant. The second category is actual emergency information issued in response to a confirmed incident and provides the public with specific information regarding what protective actions should be taken.
- B. Working jointly, the public information officers for the utility and public affairs officers for OHS-GEMA and Burke County EMA will coordinate the preparation of emergency information material to be distributed, at least annually, to residents in the Plume Exposure Pathway Emergency Planning Zone (EPZ). This emergency information material will address such topics as the nature of radiation, where to obtain more detailed information, notification procedures, and protective actions, identification of evacuation zones and routes and location of reception and care centers. The material will be mailed and/or delivered by Southern Nuclear Operating Company personnel to each household, to include handicapped personnel that have been issued tone activated radios.

Information will be provided to transients in the Burke County portion of the EPZ as follows:

- 1. Posted signs at strategic locations in the Plume Exposure Pathway EPZ, such as commercial establishments, gas stations, churches, the Vogtle Visitors Center and public recreational areas, and in the Augusta Office of the Agricultural Stabilization and Conservation Service.
- 2. The Vogtle emergency public brochure will be made available within the EPZ to transients at commercial establishments, churches, the motel, hunting clubs and the Vogtle Visitors Center and through residents whose land is used by non-residents (e.g., the occasional non-resident hunter). The brochure will also be provided to timber company offices outside of the Plume Exposure Pathway EPZ for distribution to employees who enter the EPZ to visit company land holdings and to the Augusta Office of the Agricultural Stabilization and Conservation Service for distribution to farmers who farm, but do not reside, in the EPZ.
- C. Public Affairs and Public Information Officers from the utility, OHS-GEMA and Burke County will develop fill-in-the-blank news releases dealing with various aspects of the Plant Vogtle operation and emergency procedures. These news releases will be available for adaptation to the current emergency situation.

- D. The news media will be invited to participate in Plant Vogtle's emergency exercises to acquaint them with emergency planning, organization and execution of emergency response operations. A training and orientation program will be conducted annually to keep media personnel informed of their roles during an actual emergency.
- E. In the event of an incident at the plant which threatens the off-site population, the designated point of contact for the news media is the Joint Media Center, located at Burke County Office Park. From this location, the public affairs and public information officers from state, local EMA and the utility will carefully coordinate, approve and disseminate information regarding the incident through regularly scheduled press conferences releases. Prior to dissemination, these news releases will be generated by a Public Information Officer located in the FEOC. Technical content and emergency instructions from local and state input will be approved for release by signature from the FEOC Chief and the Radiation Emergency Coordinator. Coordination with the county PIO representative and/or EMA Director and the utility will also occur prior to release. Should the incident occur prior to ENC activation, this sequence of events will take place from the SOC in Atlanta.
- F. During an actual emergency, the population in the affected area will be kept informed by local radio broadcasts of information coordinated through the public affairs and public information officers of the state, local EMA and utility. The public will be kept informed of the following:
  - 1. Whether a nuclear incident poses a threat or has occurred at the Vogtle Electric Generating Plant.
  - 2. Identification of government and utility agencies authorized to disseminate information.
  - 3. Type of emergency and nature of the hazard.
  - 4. Potential risk to the population or absence of any risk.
  - 5. Area affected if a risk exists.
  - 6. Protective measures to be taken by residents in the affected area.
  - 7. Official communication channels over which additional information will be given.
  - 8. Emergency response organizations, departments and agencies involved in conduct of operations and recovery.

- 9. The following are general instructions to be given the population residing in the affected area if evacuation is directed:
  - a. Begin evacuation upon receipt of information released through official broadcast; Prompt Notification System, tone alert radio receivers; outdoor siren system; sound of sirens from official vehicles; or, when advised, through door-to-door notification by official personnel.
  - b. Follow instructions given over radio station WYFA (100.9) in Waynesboro or WBBQ (AM 1340 and FM 104.3) in Augusta; over Augusta television stations, Channels 6, 12 or 26; or by official personnel entering the affected area.
  - c. Plan to take the following items:
    - (1) Change of clothing.
    - (2) Important papers.
    - (3) Special medications and non-food supplies for infants.
    - (4) Do not carry food, pets, firearms or alcoholic beverages.
    - (5) Prior to departure, close all windows and doors in the home and turn off gas and electricity.
    - (6) After securing the home, tie a white cloth or towel on the front door of the home or mailbox to notify law enforcement and Emergency Management Agency officials or other emergency personnel of departure.
  - d. Follow local road nets that lead to the evacuation routes prescribed by local officials. Pick up pedestrians along the routes. Do not move against the flow of traffic or through roadblocks or any restricted area.
  - e. If transportation is not available, coordinate a ride with neighbors or remain at your home. Transportation will be furnished for individuals and families. School buses and other official vehicles will move through the affected area to pick up anyone requiring transportation. Special equipped vehicles will be dispatched to pick up handicapped and non-ambulatory individuals.
  - f. Notify the Burke County Emergency Management Office or Burke County Sheriff's Department of emergency transportation needs for persons requiring special care.

- g. Go directly to the designated reception center. Each individual and family evacuating the affected area must report to the reception center for registration, processing and further instructions. If families are separated, the reception center will have a record of location and will be able to coordinate and affect contact with members of family that are separated. Upon completion of registration at "in-processing," each individual and/or family will be assigned to lodging facilities or permitted to relocate to relative's or friend's homes.
- h. For additional information, contact the Burke County Emergency Management Office.
- i. Remember, follow instructions. Time is important move out of area quickly but safely. Go directly to the Reception Center.
- G. The following are general instructions to be given to the population residing in the area affected if evacuation is not necessary and sheltering is required:
  - a. Move inside home or shelter area upon receipt of official information.
  - b. Follow instructions given over radio station WYFA (100.9) in Waynesboro and WBBQ (AM 1340 and FM 104.3) in Augusta; over Augusta television stations, Channels 6, 12 or 26; over tone alert radio receivers; or by official personnel entering the affected area on:
    - (1) Protective measures to be taken:
      - (a) Remain inside the home.
      - (b) Close all windows and doors.
      - (c) Seek best-protected area in home.
      - (d) Improvise ventilation controls as respiratory protection.
  - (2) Restrictive measures on:
    - (a) Consumption of food and water.
    - (b) Use of crops and animal by-products for food.
    - (c) Other restrictions placed by Departments of Agriculture, Human Resources and Natural Resources.

- (3) Contamination and decontamination procedures.
- H. To facilitate dissemination of accurate information to the public, written messages keyed to specific types of incidents will be prepared in advance of an actual emergency. These "prescript" messages will include instructions pertaining to sheltering, evacuation and other protective actions.

Copies of the messages will be included in a package for the Emergency Management Director and Public Information Officers and will be disseminated to the public through EAS (local radio station) broadcast when appropriate. All EAS (local radio station) messages will be coordinated with the state and utility prior to release.

I. Rumor control measures will be initiated through a coordinated effort by officials and public affairs and public information officers from state, local EMA and the utility located at the Joint Media Center. A telephone number will be provided for public use that will enable concerned citizens to receive accurate and reliable information. Coordination will be maintained with the broadcast media on supportive assistance to keep the public advised and aware of the emergency situation.

ATTACHMENT K

#### TRAINING AND EXERCISES

# A. Training

Burke County Emergency Management personnel as well as other governmental department/agency personnel and emergency workers train regularly through state and locally sponsored programs. The OHS-GEMA Training Office assists and monitors local training activities.

- 1. Training in radiological monitoring and decontamination is provided by the OHS-GEMA Radiological Programs and the Georgia Department of Natural Resources, Environmental Protection Division as needed to local emergency management organizations and other response organizations, such as police, fire, EMS and public works.
- 2. The Radiological Programs Section of OHS-GEMA provides training as needed to reception and care center, shelter and decontamination center staffs.
- 3. Specialized initial training and periodic retraining programs are conducted for the personnel involved in conducting radiological emergency response operations. Training modules have been developed and are used by qualified instructors who conduct the training courses. Each module provides objectives and scope related to the particular course of instruction (reference OHS-GEMA 4-2, Radiological Emergency Series Instructor Guide).

The training program is designed for local officials; EMA Director and staff; personnel involved in accident assessment, radiological monitoring, law enforcement, security and fire fighting operations; and first aid and rescue, medical, communications and mutual aid support.

- 4. The local Emergency Management Director and staff, other local officials and department/agency personnel are provided emergency preparedness training through OHS-GEMA sponsored Professional Development Series courses. This program enhances the capabilities of these officials to carry out their responsibilities in administration, planning and response.
- 5. Refresher training for local rescue specialist and other emergency workers is provided in conjunction with OHS-GEMA rules and regulations certification requirements as follows:
  - a. Rescue Specialist every 3 years.

- b. First Aid every 3 years.
- c. Emergency Medical Technician every 2 years.
- d. Fire Fighting every 2 years.
- e. Hazardous Materials as requested.
- f. Radiological Protection every 2 years.
- g. Crash Victim Extrication as requested.
- 6. See the GA REP, Section VII.B., and the Plant Vogtle Plan, Annex D, Section G, for additional training programs for the enhancement of local emergency preparedness.

### B. Exercises and Drills

To ensure that county emergency preparedness is kept at a high level of readiness, periodic local exercises and drills will be conducted to test plans and personnel and to identify any organizational or operational deficiencies.

Procedures and guidelines will be established to assist in evaluating the formal critique. The Emergency Management Director or designated Planning Coordinator will be responsible for revising this plan to reflect the findings of the critique.

- 1. Plant Vogtle will conduct an exercise on an annual basis, and Burke County will conduct at least one full-scale exercise every two years. An exercise involving full state participation will be held at least every six years.
- Communication drills between Burke County EMA and OHS-GEMA will be conducted monthly. Drills between the plant and Burke County EMA will be held at least once a year.
- 3. Scenarios for exercises and drills will be developed locally and in cooperation with plant officials and state agencies. Each scenario will address the following elements:
  - Basic objectives and appropriate evaluation criteria.
  - Date, time period, place and participating organizations.
  - Simulated events.

- Time schedules of real and simulated initiating events.
- Narrative summary describing the conduct of the drill or exercise.
- Participation of qualified observers.

Each scenario will contain timed messages and actions scripted in a real time sequence to simulate events as they would unfold in an actual emergency. The exercise and drill scripts will address, as appropriate, simulated casualties; fire, police, rescue and other support personnel; use of specialized equipment; radiological monitoring teams; communications; and public information (see the Vogtle Electric Generating Plant Emergency Plan, Volume 1, Section N, Exercises and Drills). The EMA Director will coordinate with OHS-GEMA on use of state and federal agencies as observers or evaluators. OHS-GEMA will provide advance notification to federal agencies if they become involved.

### C. Checklists

To enhance the training program and further ensure emergency operational readiness, checklists have been prepared for local officials and department/agency personnel. Each checklist has been developed to correspond with the Emergency Action Level guidelines in reference to an incident at the nuclear power plant. Each checklist expands the functional responsibilities of local governmental departments/agencies as outlined in Section V of this plan. Checklists have been prepared for the following:

- 1. Emergency Management Agency Director
- 2. Local Elected Officials
- 3. Public Information Officer
- 4. Sheriff's Department
- 5. City Police Departments
- 6. City and County Fire Departments
- 7. Emergency Medical Service
- 8. County Department of Family and Children Services
- 9. County Health Department

- 10. Board of Education (County School Superintendent)
- 11. County and Municipal Engineering Department (Public Works)
- 12. Hospital Administrator
- 13. County Ranger, Georgia Forestry Commission
- 14. County Ranger, DNR, Law Enforcement
- 15. County Agent, USDA
- 16. Radiation Protection Officer
- 17. Shelter Manager
- D. Operational Procedures
  - 1. Decontamination Procedures Personnel, Vehicles and Equipment
  - 2. Use of Radiological Drugs (Emergency Workers Only)
  - 3. Radiation Exposure Control Criteria
  - 4. Standing Operating Procedures for Communication Center Dispatchers
  - 5. Standing Operating Procedures for Care of Handicapped Personnel

Final Sheet of Enclosure

## **Southern Nuclear Operating Company**

AR-06-1721

Enclosure 7

**Barnwell County Emergency Operations Plan** 

Annex F – Q2

Vogtle Radiological Emergency Response Plan

## Appendix F - Q2 Vogtle Radiological Emergency Response Plan

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#### I. GENERAL

### A. Purpose

To provide for the Radiological Emergency Response to protect the populace and property of Barnwell County from harmful effects of ionizing radiation in the event of a radiological accident at the Vogtle Electric Generating Plant.

### B. Authority

- 1. South Carolina Legislative Act Number 199, Section 21, 1979 which places Emergency Preparedness responsibilities under the Office of the Adjutant General and provides for Emergency Preparedness.
- 2. South Carolina Legislative Act Number 223 of 1967 with subsequent amendments, which assigns State Radiological duties to the Department of Health and Environmental Control (DHEC).
- 3. Barnwell County Resolution dated March 7, 2000.

### C. Reference

- 1. South Carolina Emergency Operation Plan, February 1999 as amended.
- 2. South Carolina Operational Radiological Emergency Response Plan, (SCOREP) (EPD) October 1997 as amended.
- 3. South Carolina Technical Radiological Emergency Response Plan, (SCTREP) (DHEC) October 1998 as amended.
- 4. Vogtle Electric Generating Plant Site Specific Radiological Emergency Response Plan, Part 5, to the South Carolina Operational Radiological Emergency Response Plan, June 1997 as amended.
- 5. NUREG-0654/FEMA REP-1. November 1980.
- 6. NUREG-0610, FNF Emergency Action Levels, September, 1979.

#### D. Maps

- 1. VEGP, 10-Mile EPZ (Attachment 1)
- 2. VEGP, 50-Mile EPZ (Attachment 2)

## E. Definitions

- Administrative Decision Line (ADL) A dedicated telephone line facilitating
  communications between the Georgia and South Carolina SEOCs, FEOCs and
  the Plant Vogtle EOF during an emergency. This line will be used for the
  discussion and coordination of protective action decisions and other coordination
  issues.
- 2. <u>The County</u> Barnwell County, South Carolina.
- 3. <u>DHEC/BRH</u> South Carolina Department of Health and Environmental Control/Bureau of Radiological Health.
- 4. <u>Emergency Operations Center (EOC)</u> A facility with the necessary communications from which essential functions are directed and controlled by county government.
- 5. Emergency Planning Zones (EPZ) of the Off-Site Area
  - a. Ten-Mile Plume Exposure Pathway Zone -- An approximate ten-mile radius centered on a Fixed Nuclear Facility having an operational nuclear reactor. This EPZ is divided into two-five-and-ten mile zones which are further divided into sub-sectors for area identification. The EPZ represents that area in which, under a worst case nuclear accident, ionizing radiation could spread and from which the population might have to be evacuated. (Attachment 1.)
  - b. Fifty-Mile Ingestion Pathway -- A fifty-mile radius (approximate) centered on an FNF. This EPZ is that area which must be monitored and for which plans made to prevent human ingestion of ionizing radiation from food products such as milk, vegetables, and water that may have been contaminated. Plans must be made also for protection of animals from ingestion of contaminated feed and water. (Attachment 2.)
- 6. <u>Emergency Radiological Assistance Team (ERAT)</u> -- A team of Bureau of Radiological Health personnel trained in radiological accident response.
- 7. <u>Fixed Nuclear Facility (FNF)</u> -- A permanently located nuclear facility, which could present a radiological hazard off site from the facility.
- 8. Forward Emergency Operations Center (FEOC) -- A facility located within the periphery of a disaster area where state government exercises direction and control of forces and resources.

- 9. <u>LGR -- South Carolina EPD Local Government Radio</u> -- A state-owned radio system that provides command and control functions for state deployed forces. County governments are also members of this network.
- 10. Off-Site -- All land and water areas outside the FNF site boundary and within Barnwell County that could be affected by a radiological incident at the Savannah River Plant. Such area is under the operational control of the local jurisdiction affected and for which the jurisdiction is responsible for Radiological Emergency Response Planning.
- 11. On-Site All land and water areas within the FNFs site boundary. That area cannot be used for Radiological Emergency Response Planning without authorization from the facility operators.
- 12. <u>Price-Anderson Act</u> -- Federal legislation which establishes an insurance pool over and beyond that available to the nuclear industry through private insurance firms. It would enable those affected by a radiological accident to recover through the Federal government certain losses that are not covered by private insurance policies.
- 13. Radiation Protective Actions -- Actions taken to avoid or reduce the effects of ionizing radiation releases due to a radiological incident.
- 14. Radiological Accident -- Any unexpected occurrence of a condition which could or does result in the exposure of the public to any source of ionizing radiation.
- 15. RER -- Radiological Emergency Response.
- 16. State Emergency Operations Center (SEOC) -- A facility with the necessary communication control capabilities from which essentially all disaster functions are directed and controlled by the Governor. The SEOC is located at 1100 Fish Hatchery Road West Columbia, South Carolina.
- 17. The State -- The State of South Carolina.
- 18. <u>Prompt Notification System</u> -- An integrated system of mobile sirens and NOAA-activated tone alert radios which blankets the 10-mile EPZ and provides a means for notifying residents and transients of an emergency at Plant Vogtle.
- 19. RERP -- Radiological Emergency Response Plan.
- 20. SRS -- Savannah River Site.
- 21. VEGP -- Vogtle Electric Generating Plant.

## F. Organization

The principal organizations, including utilities that are part of the overall response organization for emergency planning zones are listed below:

- 1. Federal: See the S.C. Operational Emergency Response Plan.
- 2. State: See the S.C. Operational Emergency Response Plan.
- 3. County:
  - a. The Barnwell County Radiological Emergency Response (RER) Organization consists of those agencies/organizations specified in the Barnwell County Emergency Operations Plan.
  - b. Appendix 1, Barnwell County RER organization.

#### 4. Private Sector:

The principal organizations in the private sector that are part of the overall response for emergency planning zones are:

- a. Georgia Power Company and Southern Nuclear Operating Company (Vogtle Electric Generating Plant).
- b. Bell South Telephone Company.
- c. Williston Telephone Company.
- d. Radio and Television Companies.
- e. Private Hospitals.
- f. The Salvation Army.
- g. The American Red Cross.
- h. Volunteer Organizations.

### II. SITUATION

#### A. National

The Nuclear Regulatory Commission (NRC), through NUREG-0654, November 1980, has specified criteria that the state, and the local governments, which lie within the Emergency Planning Zones, must meet in order to provide for off-site Radiological

Emergency Response to protect the populace and property vulnerable to the effects of ionizing radiation in the event of a nuclear accident. The Department of Energy (DOE) exercises authority over the Savannah River Plant. The criteria are specific, precise and detailed. It varies from natural and man-made disaster planning as follows:

- 1. The NRC has federal responsibility for RER within the boundaries of the Vogtle Electric Generating Plant, which is specified as "on-site." The state and Barnwell County have no responsibility on-site other than that negotiated through written agreement with the facility..
- 2. The Federal Emergency Management Agency (FEMA) has federal agency responsibility for RER "off-site." The state secures federal assistance and support through FEMA and through letters of agreement with other state and federal agencies. Federal support off-site in any case will be requested only by the state.
- 3. The capability to warn the populace in a five-mile EPZ within 15 minutes and those in the ten-mile EPZ within 45 minutes from the time the County officials decide to order prompt notification. (NOTE: No Public lands of Barnwell County are within the five-mile EPZ, however Savannah River Site (Government Property) is within the 5 mile EPZ and they have the emergency action responsibility for this area.)
- 4. An emergency classification system for nuclear power reactor accidents with attendant facility, state, and local actions to be taken is specified.
- 5. Command, control, and communications capabilities and procedures are precisely stated.
- 6. Public Information requirements are continuous and must be specifically stated in the Plans.
- 7. Specified exercises and drills for Radiological Emergency Response are required.
- 8. Radiological Emergency Response training for response forces will be detailed in the Plan and given as programmed.
- 9. Periodic review/update of RER Plans is required.
- 10. Local and state plans <u>must</u> include each aspect of the criteria in NUREG-0654 as referenced for each planning entity so that the plan may be considered adequate.

## B. State

The State of South Carolina has four nuclear power generating stations (Robinson, Oconce, V.C. Summer and Catawha) currently in operation, and is affected by several in adjacent state.

### C. Local

1. An area in southwestern Barnwell County lies within the 10-mile EPZ of VEGP. The area is part of the privately owned Creek Plantation and lies approximately 9.2 miles east-southeast of Plant Vogtle. There are 27 permanent residents.

Saint Mary's Baptist church is located on Hwy 125 across from Creek Plantation. The congregation consists of about 110 people.

2. Boundaries of the zone (shown as H-10 on Attachment 1, this Annex) are the Barnwell County line on the east, the Savannah River on the south, S.C. Route 125 on the north, and on the west a dirt road one-half mile east of the entrance to Creek Plantation that stretches southward from Route 125 to the river on Plantation property.

## 3. Vogtle Electric Generating Plant

- a. The Vogtle Electric Generating Plant is located in Burke County, Georgia, northwest of Barnwell (SC) County. (Longitude 81°45' West: Latitude 330° 45' North).
- b. The Vogtle Electric Generating Plant (VEGP) is a two-unit pressurized water reactor operated by Southern Nuclear Operating Company for Georgia Power Company. The plant is on a 3,169-acre site located in the eastern portion of Burke County, Georgia, approximately 23 river miles upstream from the intersection of the Savannah River with U.S. Highway 301. Attachment I shows the site.
- The nuclear-fueled reactors are contained within steel-reinforced concrete structures.
- d. The plant cooling system consists of two cooling towers, which make use of water drawn from and discharged into the Savannah River.
- e. When completed, each unit of VEGP will be capable of generating 1,160 net megawatts of electricity.

## D. Supporting Organizations

- 1. South Carolina Department of Health and Environmental Control, Bureau of Radiological Health. (South Carolina Technical Radiological Emergency Response Plan, 1998 as amended.)
- 2. South Carolina Office of the Adjutant General, Emergency Management Division, which coordinates all state agency support in accordance with the South Carolina Emergency Operation Plan (SCEOP), February 1999, and subsequent Radiological Emergency Response Plans and Site Specific Radiological Emergency Response Plans.

## 3. American Red Cross (ARC):

ARC will manage shelters assisted by the Department of Social Services and will provide food, bedding, and clothing. ARC will register evacuees upon arrival at designated shelters. Emergency Medical Services will receive assistance from ARC in providing medical care to evacuees.

## 4. Salvation Army:

Salvation Army will assist in feeding, housing, and clothing individuals in emergency situations. They will aid in identifying and registering evacuees, as well as provide furniture, bedding, and household needs to disaster victims.

- 5. Barnwell County will provide sheltering and EWS Service for evacuces.
- 6. Barnwell County has mutual aid agreements with adjacent counties for emergency support. (See Appendix 9.)

## E. Assumption

A radiological accident will occur at Vogtle Electric Generating Plant in the State of Georgia that could have ionizing radiation effects of varying degree on Barnwell County. Emergency response capabilities will be needed at the local level to meet the emergency situations.

#### F. Wind Data

1. Vogtle Electric Generating Plant is located in Burke County, Georgia, northnorthwest of Barnwell County. Wind frequency percentages and directions from the Vogtle Electric Generating Plant are as follows:

<u>Direction</u>	Designator	Percentage
North	(N)	5.3
	App.F-Q2-7	

_		
North Northeast	(NNE)	6.1
Northeast	(NE)	6.9
East Northeast	(ENE)	5.8
East	(E)	4.4
East Southeast	(ESE)	4.5
Southeast	(SE)	4.9
South Southeast	(SSE)	4.5
South	(S)	5.8
South Southwest	(SSW)	5.8
Southwest	(SW)	7.1
West Southwest	(WSW)	9.2
West	(W)	10.3
West Northwest	(WNW)	8.3
Northwest	(NW)	6.9
North Northwest	(NNW)	4.2

(Wind percentages were obtained from the Vogtle Electric Generating Plant Final Safety Analysis Report.)

2. As a result, a radiological accident at Vogtle Electric Generating Plant could have an ionizing radiation effect of varying intensities on Bantwell County.

## G. Planning Basis

- 1. Any radiological accident in South Carolina or adjacent states that presents an off-site radiological hazard to Barnwell County is the initial responsibility of Barnwell County.
- 2. Technological radiological emergency response support will be furnished to Barnwell County by Vogtle Electric Generating Plant and the South Carolina Bureau of Radiological Health.
- 3. The first three hours from notification of a radiological accident at the Vogtle Electric Generating Plant are critical to the county. The county will be prepared to initiate an immediate Radiological Emergency Response in reaction to the Vogtle Electric Generating Plant and DHEC's assessments and by notification by Emergency Management Division. Such response will be in absence of full state support, except that which may be immediately available within the county. State forces will react in accordance with the State RERP.
- 4. State response and support will be available within three hours of the initiation of an emergency condition. Immediate technological support will be available from BRH based on the most expeditious means of transportation to the County from Columbia.

- 5. Barnwell County may cease direct contact with the Vogtle Electric Generating Plant upon notification by state that the Emergency Operations Center is operational.
- 6. State resource support will be requested only after exhaustion or overload of county resources or for resources not usually available to Barnwell County.
- 7. Municipal emergency response forces will coordinate in support as required.

#### III. MISSION

Barnwell County will provide for the protection of the county populace and their property from the effects of ionizing radiation from a radiological accident at the Vogtle Electric Generating Plant through an organized and coordinated Radiological Emergency Response.

## IV. EXECUTION

## A. Concept of Operations

- 1. Successful accomplishment of the mission is visualized to include the following requirements for Radiological Emergency Response:
  - a. Capability to warn the populace within the ten-mile EPZ in Barnwell County, which consists only of transients, within 45 minutes from the decision to order prompt notification. (NOTE: No part of Barnwell County is within the five-mile EPZ.)
  - b. Coordination and control.
  - c. Exhaustive Public Information.
  - d. Communications.
  - e. Training of response forces.
  - f. Exercising and testing.
  - g. Integration with other than county agencies.
  - h. Capability to selectively evacuate and/or shelter the populace.
  - i. Capability to provide for recovery through decontamination.
  - j. Periodic updating and rewriting of response plans.

- k. Procurement and maintenance of Radiological Emergency Response Equipment.
- 2. Two distinct aspects of Radiological Emergency Response capability are required based on time limits:

## a. <u>Immediate Reaction</u>

The county is prepared to immediately initiate the Radiological Emergency Response Plan in the event of a sudden and uncontrollable radiological accident that could affect off-site areas within a very short time frame and before the state could position support or control. In such a situation, the county must react to the facility assessment and immediately provide for such protective actions as are recommended by the facility to include possible evacuation and/or sheltering of the populace. This occurrence has a low probability.

## b. <u>Escalating Reaction</u>

The county would be provided longer reaction time to assemble forces and to execute the plan in this situation. The radiological accident would intensify over a longer time frame, which would allow state forces to be positioned to assume overall coordination and technical instruction. In such case, the county would be instructed by the state as opposed to the facility for required protective actions.

- 3. In the event of an immediate action requirement, Barnwell County activates its Radiological Emergency Response right away and carries out protective action instructions issued by authorities from the Vogtle Electric Generating Plant. State government is informed through the State Emergency Operations Center and immediately places the State RERP into action. The county continues operations within its own resources until such time as state support is operational in the area of the accident and assistance can be provided by the county. The Vogtle Electric Generating Plant will establish an emergency operations facility as part of their RERP.
- 4. In the event of escalating reaction, time should be available to alert and assemble county and state response forces, inform the public, and prepare for protective actions. The state would, through BRH, establish technological coordination with the Emergency Operations Facility (Vogtle Electric Generating Plant Training Center) located in Burke County, Georgia and assess the radiological situation. BRH would recommend protective actions to the Emergency Operations Center, which would direct protective actions to affected areas of the county and would provide for coordination of evacuation, radiological monitoring, decontamination, registration, and sheltering of evacuees.

The state will assist county efforts in monitoring and decontamination of personnel and vehicles from contaminated areas. The county will provide security of evacuated areas and assist in return of the populace to their homes upon clearance of radiological hazards.

5. In either reaction situation, the combined and total efforts of the facility, the county and the state, will be utilized to reduce and neutralize any radiological hazard.

## B. Direction and Control

The direction and control for Barnwell County is as follows:

- 1. Chairman, County Council.
- 2. County Administrator.
- 3. Emergency Management Director.
- 4. Support Services:

Transportation (ESF 1)

Communications (ESF 2)

Public Works and Engineering (ESF 3)

Fire Fighting (ESF 4)

Information and Planning (ESF 5)

Mass Care (ESF 6)

Resource Support (ESF7)

Health and Medical (ESF 8)

Search and Rescue (ESF 9)

Hazardous Materials Accidents (ESF 10)

Food Services (ESF 11)

Energy and Utilities (ESF 12)

Law Enforcement (ESF 13)

Volunteer Services (ESF 14)

Military Services (ESF 15)

Evacuation and Traffic Control (ESF 16)

Animal Emergency (ESF17)

Special Medical Needs (ESF 20)

Emergency Operations Center (Appendix B)

Fixed Nuclear Facility (Annex Q1)

#### C. Communication/Warning

- 1. ESF 2 Communication.
- 2. The design objective for warning the population shall be as follows:

- a. To provide both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10-mile EPZ, within 15 minutes after decision to activate the Prompt Notification System is made.
- b. To insure that the initial notification system will assure direct coverage of essentially 100% of the population within 5 miles of the site. (No Public Lands of Barnwell County are within 5 miles of VEGP. There is no resident population within the plume EPZ in Barnwell County.)
- c. Special arrangements will be made to assure 100% coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure EPZ.
- 3. The County Warning Point is located in the Barnwell County Administration Building F-911 Communications Center 57 Wall Street, Barnwell, S.C.
- 4. The County Warning Point provides 24-hour emergency response.
- 5. Initial warning of a radiological emergency and any changes in emergency classifications (Unusual Event, Alert. Site Area Emergency, and General Emergency) will be provided to the County Warning Point by VEGP directly using the Emergency Notification Network (ENN), with Backup ENN, Southern LINC Radio Telephone and commercial telephone providing a backup. The State and County Warning Points receive this warning simultaneously. These warning points are staffed on a 24-hour basis.
- 6. In addition to the ENN, and Southern LINC Radio Telephone; counties and the State EPD are equipped with a facsimile machine to receive hard copy transmissions from VEGP. This can be used for hard copy transmission of technical or administrative information.
- 7. Once Barnwell County has been notified of a <u>Site Area Hmergency</u> or a <u>General Emergency</u> at the Vogtle Electric Generating Plant (VEGP) and protective actions are determined, the public notification system will be activated.
- 8. The dispatcher at the County Warning Point will follow procedure and notify key EOC staff included in the Assignment of Responsibility for RER Planning (Appendix 2, Tab B). The notification will serve to either put key personnel on a standby status, or to mobilize them to activate the emergency response organization.
- 9. See ESF 2 and Appendix 2, this annex, for procedures for alerting county warning teams and residents of the 10-mile EPZ.

10. See ESF 2, Public Information. (SCOREP)

## D. <u>Notification Communication/Emergency Classification Levels</u>

- Follow-up contacts between South Carolina EPD and the county will be via commercial telephone with the South Carolina EPD LGR network as a backup system.
- 2. Based on the emergency classification, local government and State Radiological Response Forces will react on a continuous 24-hour basis in accordance with RER plans.
- VEGP has responsibility for classification of an emergency in accordance with NUREG-0654. State and local Emergency Management officials will review and certify their agreement with VEGP's EALs annually. The following EAL notification procedures will be followed:

## EMERGENCY CLASSIFICATION LEVELS, SCORERP, NOTIFICATION OF UNUSUAL EVENT

CLASS	NOTIFICATION OF UNUSUAL EV	VENT		
Unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occur.				
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS		
1) Promptly inform Highway Department Warning Point (HDWP) and affected counties of nature of unusual condition as soon as discovered.  2) Augment on-shift resources.  3) Assess and respond.  4) Escalate to a more severe class, if appropriate.  5) Close out with verbal summary to off-site authorities followed by written summary within 24 hours.	1) HDWP notifies EPD and DHEC.  2) EPD verifies county notification.  3) DHEC assesses situation with plant and confirms with EPD.  4) EPD notifies Governor's Office & OTAG.  5) Escalate response to more severe class; if appropriate.  6) Stand by until verbal closeout.	1) Provide fire, medical, or security assistance if required.  2) Escalate response to more severe class if so notified.  3) Stand by until verbal close out.		

EMERGENCY CLASSIFICATION	LEVELS, SCORERP, ALERT

CLASS	ALERT	
CLASS DESCRIPTION	Events are in process or have occurred substantial degradation of the level of s Any releases expected to be limited to s Action Guideline exposure levels.	afcty of the plant.
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
<ol> <li>Promptly inform Highway Department Warning Point (HDWP) and affected counties of Alert status.</li> <li>Augment resources, activate on-site Technical Support Center and on-site Operational Support Center Emergency Operations Facility (EOF) and other key personnel to standby.</li> <li>Assess and respond.</li> <li>Consider activating the Joint Information Center/Media Center.</li> <li>Dispatch on-site monitoring teams and associated communications.</li> <li>Provide periodic plant status updates to off-site authorities (at least every 15 minutes).</li> <li>Provide periodic meteorological assessments to off-site authorities, and dose estimates for actual releases.</li> <li>Escalate to a more severe class, if appropriate.</li> </ol>	DHEC  2) EPD verifies county notification.  3) DHEC assesses situation with plant and confirms with EPD. Recommends response required.  4) EPD notifies Governor's Office. OTAG, North Carolina, Georgia and FEMA.  5) Governor considers declaring a State of Emergency.  6) Alert key emergency response personnel and communications to stand by status.  7) EPD staff activates SEOC. Dispatch and activate FEOC if recommended.	<ol> <li>Provide fire, medical, or security assistance on request.</li> <li>Augment resources and bring EOC(s) to standby status. Consider activation of EOC(s) downwind from facility.</li> <li>Bring alert and notification systems to standby status.</li> <li>Activate siren system and EBS in 10-mile EPZ if recommended.</li> <li>Alert key personnel to standby status.</li> <li>Escalate to more severe class if notified.</li> <li>Maintain Alert status until verbal closeout or reduction or emergency class.</li> </ol>

## EMERGENCY CLASSIFICATION LEVELS, SCORERP, ALERT

CLASS	Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant.		
CLASS DESCRIPTION			
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS	
9) Close out or recommend reduction in emergency class to off-site authorities followed by written summary within 8 hours.	9) Coordinate activation of siren system and EBS in 10-mile EPZ if recommended.  10) Consider precautionary evacuation of schools within 5-mile EPZ and 10-mile downwind.  11) Provide any assistance requested from counties and facility.  12) Escalate response to more severe class if appropriate.  13) Maintain Alert status until verbal closcout or reduction of emergency class.		

## EMERGENCY CLASSIFICATION LEVELS, SCORERP, SITE AREA EMERGENCY

CLASS	SITE AREA EMERGENCY		
Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site boundary.			
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS	
1) Promptly inform SEOC/ FEOC and affected counties of Site Area Emergency status and reason for emergency. If SEOC/ FEOC not operational, notify Highway Department Warning Point (HDWP) and affected counties.  2) Augment resources by activating on-site Technical Support Center, on-site Operational Support Center and near-site Emergency Operations Facility (EOF).  3) Assess and respond.  4) Dispatch on-site and offsite monitoring teams and communications.  5) Activate Joint Information Center/Media Center.  6) Provide a dedicated individual for plant status updates to off-site authorities and periodic press briefings.	1) HDWP notifies EPD and DHFC.  2) EPD verifies county notification.  3) DHEC assesses situation with plant and confirms with EPD.  4) DHEC/EPD recommend protective actions to Governor.  5) EPD relays protective action decision to counties.  6) Coordinate activation of public alert system and EBS in 10-mile EPZ so residents will turn on radios/televisions. Provide public with periodic updates.  7) Activate SHOC if not already operational.  8) EPD notifies state response forces to send	1) Activate EOC and emergency personnel to full status.  2) Dispatch representatives to the Joint Information Center.  3) Issue desimeters to emergency workers.  4) Be prepared to assist with radiological monitoring on request.  5) After coordination with SEOCYFEOC, activate public alert system in 10-mile EPZ (fixed, mobile or electronic tone signal).  6) Broadcast notification information on direction of the County PiO at the Joint Information Center.  7) Prepare to activate Reception Centers and Shelters as needed.  8) Establish predetermined Traffic Control Points.	

CLASS SITE AREA EMERGENCY				
Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site boundary.				
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS		
7) Make senior technical and management staff on-site available for consultation with NRC and State on a periodic basis.  8) Provide meteorological and dose estimates to off site authorities for actual release via a dedicated individual or automated data transmission system.  9) Provide release and dose projections based on available plant condition information and foreseeable contingencies.  10) Escalate to General Emergency Class, if appropriate.  11) Close out or recommend reduction in ornergency class by briefing the off-site authorities at EOF and by phone followed by written summary within 8 hours.	9) FPD notifies Governor's Office, OTAG, North Carolina, Georgia and FEMA.  10) EPD considers dispatching the FEOC.  11) EPD dispatches State liaison to affected county EOC(s).  12) Dispatch Public Information group to the Joint Information Center. Provide periodic press updates for public within at least 10-mile EPZ.  13) Place on standby status other emergency personnel (e.g. those required for evacuation and dispatch to near-site duty stations).  14) DHEC/FPD recommends if Potassium Iodide should be distributed to emergency	9) Direct protective actions as recommended and deemed appropriate.  10) Request State assistance as needed.  11) In an immediate emergency and FEOC/SEOC are not operational: (a) Initiate protective actions recommended by plant as appropriate; (b) Activate the public alert system and EBS for 10-mile FPZ; and (c) Take actions appropriate at Alert.  12) Escalate to General Emergency if required.  13) Maintain Site Area Emergency status until closeout or reduction of emergency class.		
	workers.  15) Establish 2-mile road blocks and control access to the area on order.			

## EMERGENCY CLASSIFICATION LEVELS, SCORERP, SITE AREA EMERGENCY

CLASS	SITE AREA EMERGENCY			
Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site boundary.				
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS		
	16) Consider precautionary evacuation of 2-mile EPZ and sheltering of downwind areas.  17) Consider evacuation of lakes, rivers, and forests.  18) Provide assistance requested by county and facility.  19) Escalate to General Emergency, if appropriate.  20) Maintain Site Area Emergency status until closeout or reduction of emergency class.			

## EMERGENCY CLASSIFICATION LEVELS, SCORERP, GENERAL EMERGENCY

CLASS	GENERAL EMERGENCY	· · · · · · · · · · · · · · · · · · ·
substantial substa	rity. Release can be reasonably ex	with potential for loss on containment
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
Promptly inform SEOC/ FEOC and affected counties of General Emergency status and reason for	1) HDWP notifies EPD and DHEC. DHEC coordinates with EPD and recommends	Activate Reception     Centers and Shelters as needed.
omergency. If SEOC/FEOC not operational, notify Highway	protective actions.  2) EPD verifies county	2) Conduct evacuation and/or sheltering as ordered by Governor.
Department Warning Point (HDWP) and affected counties.	notification.  3) DHEC/EPD recommend	Conduct off site     radiological monitoring and
2) Recommend protective actions necessary for public	areas requiring evacuation and/or sheltering, if required, to	decontamination as required.
protection.  3) Augment resources by	the Governor. 4) EPD obtains Governor's	4) Broadcast notification information on direction of the County PIO at the
activating on-site Technical Support Center, on-site Operational Support Center	order for evacuation and/or sheltering if required.	Joint Information Center.  5) Provide security for
and near-site Emergency Operations Facility (EOF).	5) EPD relays Governor's decision to affected	evacuated area.  6) Request state assistance as
4) Assess and respond.	counties.	needed.
<ol> <li>Dispatch on-site and off- site monitoring teams and communications.</li> </ol>	6) Coordinate activation of public alert system and EBS in 10-mile EPZ.	7) Direct protective actions as recommended and deemed appropriate.
6) Provide a dedicated individual for plant status updates to off-site authorities and periodic press briefings.	7) EPD notifies PEMA, North Carolina and Georgia.	

## EMERGENCY CLASSIFICATION LEVELS, SCORERP, GENERAL EMERGENCY

CLASS		GENERAL EMERGENCY			
Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss on containment integrity. Release can be reasonably expected to exceed EPA Protective Action Guideline exposure levels off-site for more than immediate site area.					
LICENSEE ACTIONS		STATE ACTIONS	LOCAL ACTIONS		
<ul> <li>7) Make senior technical and management staff on site available for consultation with NRC and State on a periodic basis.</li> <li>8) Provide meteorological and dose estimates to off-site authorities for actual releases via a dedicated individual or automated data transmission.</li> <li>9) Provide release and dose projections based on available plant condition information and foresceable contingencies.</li> <li>10) Close out or recommend reduction of emergency class by briefing of off-site authorities at LOC and by phone followed by written summary within 8 hours.</li> </ul>		8) FPD coordinates evacuation, sheltering, and radiological monitoring if required.  9) Provide periodic press updates for public within at least 10-mile EPZ.  10) Consider distribution of Potassium lodide tablets to emergency response organizations.  11) Coordinate and allocate state support rescurces.  12) Request Federal support as needed.  13) Provide protective actions in 50-mile Ingestion Pathway EPZ.  14) In an immediate emergency and FEOCI SEOC is not operational, state forces will rapidly take appropriate actions required at Alen and Site Area Emergency to achieve requisite direction and control.  15) Maintain General Emergency status until closeout or reduction in emergency classification.	8) In an immediate emergency and FEOC/ SEOC is not operational:  (a) Initiate protective actions recommended by plant as appropriate;  (h) activate the public alert system and EBS for 10-mile EPZ;(c) Take actions appropriate at Alert and Site Area Emergency.  9) Maintain General Emergency status until closeout or reduction of emergency class.		

## E. <u>Public Information</u>

- 1. See section D of Annex A in SCORERP, Part 7, for a description of the Public Education and Information Program in South Carolina. The following discussion contains a description of the transient population and dissemination of pre-emergency information in Barnwell County. The transient population in this part of the EPZ is limited to Creek Plantation employees and visitors, motorists on Route 125, and any Scaboard Coast Line crew operating in the area. The Creek Plantation management will be provided with a supply of the Vogtle emergency public information brochure (Appendix 2, Tab C), for distribution to all employees and visitors to the plantation. The Seaboard Coast Line railroad will also be provided with a supply of the emergency public information brochures for distribution to all railroad employees who work in the EPZ. Finally, the local telephone directory will include emergency public information such as means of notification, actions to be taken if a warning is received, and appropriate EAS stations for the area.
- 2. Attachment I, Evacuation Sectors, Routes, Shelters, and Procedures.
- 3. Public Information, SCORERP.
- 4. FAS/ETV Procedures, Annex A, to Part 5 of Vogtle Site Specific.

#### F. Public Health and Sanitation

Public Works and Engineering (ESF 3), Fire Fighting (ESF 4), Information and Planning (ESF 5), Mass Care (ESF 6), Resource Support (ESF 7), Health and Medical (ESF 8), Search and Resource (ESF 9)

#### G. Mass Care

- 1. ESF 6.
- 2. Attachment 1, Map, Evacuation Sectors, Routes, Shelter Areas, Shelters, and Procedures.
- On notification that an evacuation of the population of all or a portion of the tenmile EPZ has been ordered, or is being considered, the Barnwell County DSS will provide emergency workers who will assist the Red Cross at the predesignated shelters. Evacuees will be directed through these shelters to be monitored and registered.
- 4. Appendix 11 to this Annex. List of shelters and capacities.
- 5. See Basic Plan, Attachment 4 for supporting county's plans.

## H. Fire and Rescue

- 1. ESF 4, Fire Fighting.
- 2. ESF 9, Search and Rescue.
- I. Health and Medical Service (EMS)

ESF 8

## J. Law Enforcement

- 1. ESF 13, Law Enforcement to Barnwell County EOP.
- 2. Attachment 1, Map, Traffic Control Points and Routes. South Carolina Highway Patrol will operate state traffic control points on roads leading into EPZ from the county. Staffing of predetermined traffic control points will be assigned to county law enforcement. Barnwell County will assist as needed.

## K. Transportation

- 1. ESF I, Transportation.
- 2. In the event of an evacuation of the populace of the 10-mile EPZ, the limited populace within the EPZ is expected to evacuate using available personal vehicles. County resources will be made available, if required, for special cases.
- 3. Designated emergency medical service vehicles will accomplish transportation of contaminated victims. Protective measures will be taken to prevent the spread of any contamination from the victims. Upon arrival at a designated medical facility and removal of the victims, both the vehicle and attendants will go through decontamination procedures.

## L. <u>Protective Response</u>

- 1. The South Carolina Technical RERP provides for protective action guides and other criteria consistent with existing EPA guides. Barnwell County provides the mechanism for implementing protective actions such as sheltering and/or evacuation of the county populace in and from sectors recommended by BRH and ordered by the Governor of the State.
- 2. Radio Protective Drugs Emergency Workers:

The State of South Carolina provides for policies and procedures for storing and distributing Radio Protective drugs to <u>all</u> emergency workers including Barnwell County. See S.C. Technical RERP.

3. Radio Protective Drugs (KI) - Local Populace:

The State of South Carolina and Barnwell County will not prescribe and issue Radio Protective drugs to the general populace of the county. See S.C. Technical RERP. This decision rests upon the Board of Commissioners of the Department of Health and Environmental Control.

4. Protective Sheltering:

In the event of an accident at Vogtle Electric Generating Plant resulting in the release of a radioactive plume, it may be necessary for the populace to stay in place at their respective locations. Certain procedures would be taken by the populace as recommended by the facility of BRH:

- a. Stay inside their homes with all windows and doors closed.
- b. All air conditioners, attic fans, etc., should remain turned off.
- c. Anyone outside should, immediately upon entering the home, remove all clothing and take a thorough shower. Removed clothing should be placed inside a closed container.
- d. Hot water heaters should be turned off.

#### 5. Evacuation:

a. The population distribution of the 10-mile EPZ located in Bamwell County is as follows:

Sector	Population	<b>Evacuation Times</b>	(Minutes)	
	_		Average	Adverse
			Weather	Weather .

H-10 27 Residents\*\* 155 160

- b. Barnwell County will evacuate to shelters in Allendale County, which are more than 15 miles from VEGP. (See Attachment 3.)
- c. Site specific issues include:

- (1) Access to the evacuated area will be stringently enforced by local law enforcement, and only pre-designated forms of identification will allow entrance to the evacuated area (see Appendix 4 to this Annex).
- (2) Evacuation estimates have been computed to give local officials time data when evacuation decisions become necessary.
- \* The residents are located in Barnwell County but will evacuate through Barnwell County.
- \*\* Sector H-10 is estimated to have a potential of 200 transients. Sector H-10 encompasses portions of both Barnwell and Allendale Counties, which are in the VEGP EPZ but outside the Savannah River Site.

## M. Radiological Monitoring and Decontamination

#### 1. Ten-Mile FPZ:

- a. Under DHEC's supervision, the Barnwell County Radiological Officer will direct all county radiological monitoring teams, which will monitor the following:
  - (1) Local RER personnel.
  - (2) Local emergency vehicles at decontamination points.
  - (3) Evacuees and their vehicles at shelters.
- b. Monitoring team assignments listed in Appendix 3, Annex S (Radiological Protection) will be utilized to complete the above task. Teams and individual monitors will be assigned by the county Radiological Officer to the locations and tasks required.
- c. Equipment to be utilized by monitoring teams.
- d. If radiation is detected, decontamination will occur as outlined in Appendix 9. After decontamination, people and vehicles will be remonitored.
- e. Barnwell County will maintain monitoring records for evacuees and their vehicles. Monitors at the shelters will complete the form below and forward information to the Radiological Officer on a regular basis. If an exposure increase is noted for a specific area, the Radiological Officer will be immediately notified.

## MONITOR REPORT

- (1) Name of Evacuee
- (2) Address
- (3) Reading
- (4) Time of Reading
- (5) Clothing/Material Involved
- (6) Problem areas/requests
- (7) Monitor Identification
- f. Procedures for monitoring RER personnel are detailed in Paragraph IV.N.
- g. The Radiological Officer is responsible for notifying DHEC of any significant radiological exposure.
- h. Non-radiological accident assessment is outlined in Annex T to the EOP.
- 2. Ingestion Pathway Monitoring:
  - a. DHEC will coordinate the monitoring and technical assessment of the 50-Mile EPZ.
  - b. Under DHEC's supervision, Barnwell County may be requested to monitor and to possibly provide soil, crop, and milk samples for analysis.
  - c. Monitoring teams will give reports to DHEC on a regular basis, and these reports will be prepared on the forms shown below:
    - (1) Monitoring Teams:
      - (a) Radioactive level reading upon arrival at assigned area, half hourly thereafter until terminated.
      - (b) Significant elevation or decrease of radioactivity reported immediately.
      - (e) Report format (Report by line item).

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M <u>ON</u>	ITOR REPORT				
1)	Location(Sufficient detail for plotting)				
2)	Reading				
3)	Time of Reading				
4)	Clothing/Food Stuffs Involved				
5)	Problem Areas/Requests				
6)	Monitor Identification				
(2)	Decontamination Teams:				
	(a) Report to DHEC/BRH at assigned area.				
	(b) Report to completion of task.				
	(c) Report format (Report by line item).				
DECONTAMINATION REPORT					
1)	Team Identification				
2)	Area Decontaminated				
3)	Time Required for Completion				
4)	Personnel Utilized (Numbers)				
5)	Equipment Utilized (Type & Numbers)				
6)	Problem Areas/Requests				
	d. See Ingestion Pathway Procedures, SCOREP				
	e. See STRERP.				
3.	Decontamination:				

a.

Decontamination of the 10-mile EPZ and the 50-mile EPZ will be

coordinated by DHEC. Barnwell County will be requested to

decontaminate local RER personnel, evacuees, and vehicles under DHEC's guidance.

- b. Procedures for decontamination are outlined in Appendix 9.
- c. See Decontamination, SCORERP.
- d. Contaminated personnel and equipment will be decontaminated according to Appendix 7, STRERP.
- e. Barnwell County will maintain exposure records of evacuees. Monitors at the shelters will obtain, record, and report, as a minimum, the information listed below for each contaminated person:
  - (1) Name
  - (2) Address
  - (3) Type Instrument Used and Reading Obtained
  - (4) Time of Reading
  - (5) Effectiveness of Decontamination
  - (6) Location and Name of Monitor

#### N. Radiation Exposure Control

- 1. <u>Emergency workers</u> (individuals whose emergency job is inside the EPZ) and Radiation Workers (individuals whose emergency job is outside the EPZ) in Barnwell County who have a responsibility which could result in their exposure to radiation from an accident at the Vogtle Electric Generating Plant will be issued dosimeters. Emergency workers will be issued two dosimeters: (1) a CDV-742, which can accumulate exposure readings from 0-200 R; and (2) a CDV-730, which can accumulate exposure readings from 0-20 R and one permanent record dosimeter (PRD). <u>Radiation Workers</u> will be issued one permanent record dosimeter PRD and one direct reading dosimeter (CDV-730).
- 2. Priority of issue of dosimeters will be to persons working with:
  - a. Law enforcement
  - b. Fire-fighting
  - c. Rescue and Emergency Medical Services

Dosimeters and dosimeter chargers will be permanently assigned to the chiefs of each of the emergency services listed above for subsequent issue to their personnel who are required to perform a service under this plan at time of emergency.

- 3. Additional dosimeters and chargers will be available at the Barnwell County Emergency Management Office for further emergency uses.
- 4. Emergency service chiefs or their designated representatives will sign for any equipment issued and will be responsible for its return to the EOC.
- 5. All dosimeters will be issued to emergency personnel from the service chief's office. Before distribution, each worker will check his equipment for functionality and sign a clearance sheet to insure that all equipment can be accounted for at the end of a shift.
- 6. Each emergency/radiation worker who is issued a dosimeter will be responsible for reading and recording his own dose rate as well as for submitting the accumulated dosage to his superior. (See dose record form, Appendix 7.)
- 7. Chiefs of services will compile dosage reports and submit them to the Radiological Officer on a daily basis before midnight.
- 8. The Radiological Officer will maintain permanent dose file cards for all emergency personnel and he is responsible for having this information available to the Bureau of Radiological Health upon request.
- 9. Each individual will recharge dosimeters after his shift dosage has been determined. Re-chargers will be located in the service chief's office.
- 10. Approximately one hour before a shift change, the Radiological Officer or the Emergency Management Director will brief the service chiefs on the dose rates calculated for specific area at that time interval. This briefing will be held in the EOC. Service Chiefs will be instructed to closely monitor personnel who are working in contaminated areas and to arrange personnel rotations to limit accumulated dosages.
  - a. If a dosimeter reads 0.1R, instruct that worker to notify EOC...
  - b. If a dosimeter shows a maximum reading of 1.R, instruct that worker to notify the EOC and return to this department for further instructions and decontamination.

- 11. Each service chief will arrange communication checks with his field personnel to determine dose rates on a 24-hour basis for the duration of the accident.
- 12. Exposure control will be regulated by guidelines from South Carolina Technical RERP. In the event workers must incur doses in excess of EPA established standards, authorization to do so will come from the Chairman, Barnwell County Council or his representative. All decisions will be discussed and authorization will be granted only when the exceeding or excess dose is absolutely necessary.

### O. Medical

- Contaminated victims will be treated at Columbia Augusta Medical Center, Augusta, Georgia; should a radiological accident occur at Vogtle Electric Generating Plant. See Annex C, Health and Medical Support to Part 5, Vogtle Site Specific to SCORERP.
- 2. The training of persons providing medical services to contaminated victims is the responsibility of DHEC.
- 3. Transportation of contaminated victims is outlined in Paragraph IV.K., Transportation, in this Annex.

#### P. Recovery and Re-entry

- 1. Barnwell County will rely on South Carolina Technical RERP and its procedures as carried out by DHEC for relaxing protective measures. Notification to relax protective measures will come from the SCEOC to Barnwell County's EOC.
- 2. Barnwell County will follow procedures as directed by the State Technical RERP for general recovery plans.

## Q. Equipment

- 1. Radiation detection equipment assigned to Barnwell County monitoring stations may be used within its limitations for monitoring purposes, under the guidelines of BRH.
- 2. See Paragraph IV.N., Radiological Exposure Control, this Annex.
- 3. Barnwell County does not have any off-site radiological monitoring equipment to set up near the nuclear facility. In-place monitoring and sampling stations have been established by BRH as outlined in STRERP.

- 4. BRH provides monitoring service and has available at the DHEC Central Office the following supplies:
  - a. Radiation monitoring equipment, including personnel dosimeters (PRD's), portable survey meters and air samplers.
  - b. Protective clothing.
  - c. Sampling equipment for water, air, milk, vegetation, soil, etc.
  - d. Bio-assay collecting containers.
  - c. Decontamination supplies and equipment.
  - I. Up-to-date set of maps showing environs of each nuclear facility are maintained in the Central Office and aboard the Mobile Radiological Laboratory. These maps show the location of each nuclear facility, motoring and sampling locations, hospitals, and landing strips, etc.
  - g. See STRERP for further details.
- 5. BRH also maintains a Mobile Radiological Laboratory (MRL) equipped with emergency response supplies and equipment. The MRL can be dispatched to an accident site to perform field sample analyses, radiological monitoring, and decontamination tasks. The MRL is equipped with radio communications on the state-wide DHEC network and on the South Carolina Emergency Management Division state-wide network.
- 6. The receipt and analysis of all field monitoring data and the coordination of sample media will be handled by BRH as outlined in STRERP.
- 7. Identification of emergency kits:
  - a. Protective Equipment See STRERP.
  - b. Communications Equipment See ESF 2, Communications, Barnwell EOP. See also Paragraph VLB., Communications, this Annex.
  - e. Radiological Monitoring Equipment See Paragraph IV.Q., Equipment, this Annex. See also STRERP.
  - d. Emergency Supplies -- Barnwell County has no emergency supplies on hand other than those supplies used by emergency response teams on a

daily basis. See ESF 7 Resource Support, Barnwell County EOP for procedures to procure any emergency supplies from state resources.

8. Each emergency service is responsible for operationally checking its equipment quarterly and after each use. Calibration of equipment shall be at intervals recommended by the supplier of equipment.

### R. Exercise and Drills

Barnwell County will participate in Radiological Emergency Response Exercises in conjunction with exercises at the facility. Exercises will be conducted on a frequency and as set forth in FEMA and NRC Rules.

#### Exercises:

- a. Barnwell County will participate in Radiological Emergency Response Exercises prepared by EPD, DHEC and the Vogtle Electric Generating Plant. These exercises will be observed and evaluated by federal and/or state and local official.
- b. Exercises will be conducted under varying weather conditions. Once every six years an exercise must commence between 1800 and 2400 and between 2400 and 0600.

### 2. Drills:

Barnwell County will conduct and participate in subsystem drills, in addition to the annual RER exercise. Such drills will be supervised and evaluated by a qualified instructor. Each emergency service organization/component will conduct drills as indicated below:

### a. Communication Drills

Communications between the county, the Vogtle Electric Generating Plant and the EPD will be tested monthly. Such drills will include the understanding and transmission of emergency messages.

### b. Medical Emergency Drills

Medical Emergency Drills will be conducted at unannounced frequencies. A drill involving a simulated contaminated individual will be performed biannually.

## c. Radiological Monitoring Drills

Conducted in coordination with DHEC/BRH. See STRERP.

## d. <u>Health Physics Drills</u>

Conducted in coordination with DHFC/BRH. See STRERP.

### 3. Conduct of Exercise:

Exercises and drills will be designed and executed in such a manner to allow free play for decision making and to meet the following objectives: NOTE: (Barnwell County is not responsible for designing and conducting RER exercises. This responsibility rests with the facility and the state. Barnwell County will provide for organizational drills).

- a. Drills in Barnwell County will consist of the following, with a basic objective of qualification:
  - (1) Notification Communications.
  - (2) Notification Warning Procedures.
  - (3) Shelter Procedures and Sheltering.
  - (4) Emergency Operations Center: Operations, Procedures and Communications.
  - (5) Medical Emergency Response Capability.
  - (6) Rescue Response Capability.
  - (7) Law Enforcement Traffic Control and Security Capability.
  - (8) Fire Response Capability.
- b. Evaluation will be provided for every drill. A critique will be made and retraining, if required, will be conducted.
- c. The EPD will be notified of each drill and requested to observe.
- d. Each drill will be planned and prepared to include the following:
  - (1) Date, time period, place and participating county organizations.
  - (2) Simulated events.

- (3) A time schedule of real, initiating and anticipated events. (Scenario)
- (4) A narrative summary describing the conduct of the exercise.
- (5) Description of arrangements for advanced materials to be issued to official observers.
- (6) Evaluating, critiquing, and method of implementing corrective actions.
- e. For RER exercises with the Vogtle Electric Generating Plant or the state, Barnwell County is a participant and does not conduct such exercises. See SCORERP and State RERP for conduct of exercises.

## S. Radiological Emergency Response Training

The Barnwell County Emergency Management Agency is responsible for training offsite emergency personnel to respond effectively to an accident involving Vogtle Electric Generating Plant. Personnel to receive initial and follow-up training are: law enforcement, fire, rescue, emergency medical, shelter managers, and radiological defense personnel.

The annual training program for off-site emergency response personnel shall consist of classroom training, tabletop exercises and governmental conferences. In addition, such emergency service and governmental officials with emergency assignment will participate in an annual radiological emergency response exercise with the facility.

- 1. Barnwell County Emergency Management Director:
  - a. The County Emergency Management Director will receive initial and follow-up training by the SCEPD. Training will consist of daily responsibilities, radiological defense, governmental conferences, management seminars, workshops, and career development courses. (Reference SCORERP, Annex B.)
  - b. The County Emergency Management Director is responsible for the county training program to include responsibilities of county government and specific duties of the emergency services. Assistance will be obtained from the SCEPD. (Reference SCORERP, Annex B.)

#### 2. Accident Assessment:

Accident assessment is a state responsibility. (See STRERP.)

3. Radiological Monitoring Teams and Radiological Analysis Personnel:

Radiological Protection Officer and Monitors:

a. Barnwell County Emergency Management Director has the overall responsibility of training Radiological Monitors. The county has a Radiological Officer who is responsible for conducting training and refresher courses and his instructors training is from the State Emergency Management Division, Radiological Section. Instructors take periodic refresher courses. In order to become a local radiological monitor, one must take the standard 12-hour course and make a passing grade on the final exam.

A refresher course is given every year, and it must be taken to remain certified. Monitors must also participate in exercises and drills that involve radiological monitoring.

This radiological monitoring is designed for RER, however, the basic principles of the instruction is translatable to FNF accidents for understanding of conditions, nuclear theory, and sheltering. Should low-level monitoring instrumentation become available to the county, previously trained monitors could be easily trained.

- b. Radiological monitoring is offered to the following county and municipal agencies:
  - (1) County Law Enforcement
  - (2) County Volunteer Rescue Squads
  - (3) Volunteer Fire Departments
  - (4) County EMS
  - (5) Municipal Fire Departments
  - (6) Municipal Police Departments
  - (7) Local Red Cross Workers
- 4. Police, Security and Fire Fighting Personnel:

Law enforcement and fire fighting personnel will be trained locally with assistance from SCEPD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert

procedures, sector assignments and familiarization with their service SOP. Governmental conferences, tabletop exercises and participation in the annual radiological emergency response exercise with the facility will do this.

### 5. First Aid and Rescue Personnel:

Rescue Squads and the Emergency Medical Service will be trained locally with assistance from SCEPD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service SOP. This will be done by governmental conferences, tabletop exercises and participation in the annual radiological emergency response exercise with the facility.

## 6. Medical Support Personnel:

Training of medical support personnel is a DHEC responsibility. (Reference SCORERP, Annex B.)

### 7. Public Information and Instructions:

The Public Information Officer will receive initial training by Bamwell County EPA with assistance from SCEPD. Training will include responsibilities, RER Plan, dissemination of information and development of an SOP. Follow-up training will consist of participation in tabletop exercises, governmental conferences and the annual RER exercise.

#### T. Coordinating Instructions

- 1. This Radiological Emergency Response Plan will be reviewed/updated annually prior to the anniversary of the Plan.
- 2. Supporting RER Standing Operating Procedures will be reviewed/updated by responsible agencies at the time of the RERP update.
- 3. Population risk factors for radioactive exposures in all categories are as shown in the South Carolina Peacetime Radiological Emergency Response Plan. Any changes to such criteria will be directed by BRII.
- 4. All radiological emergency response personnel, employees or volunteers, must receive radiological emergency response training as outlined in Paragraph IV.S., above.
- 5. All telephone numbers will be updated quarterly by Barnwell County Emergency Management.

6. Letters of Agreement and Mutual Aid Pacts for RER will be initiated and promulgated.

### V. ADMINISTRATION AND LOGISTICS

## A. Administration

- 1. Barnwell County EOP.
- South Carolina Operational Radiological Funergency Response Plan, October 1997.
- 3. South Carolina Technical Radiological Emergency Response Plan, October 1998
- 4. Administrative matters not contained in the above will be directed to the EOC.
- 5. Personnel effectiveness reports to EOC.

## B. Logistics

- Bamwell County EOP.
- 2. South Carolina Operational Radiological Emergency Response Plan. October 1997.
- 3. South Carolina Technical Radiological Emergency Response Plan, October 1998.
- Logistical matters not contained above will be directed to the EOC.
- 5. Equipment and transportation effectiveness reports to the EOC.

### VI. DIRECTION AND CONTROL

## A. <u>Direction and Control</u>

- 1. The Barnwell County EOC is located in the Lower Level of the County Administration Building at 57 Wall Street, Barnwell, SC and will be made operational immediately upon receipt of an Emergency Action Condition requiring activation.
- 2. The State EOC is located in the basement of the Rutledge Building, 1429 Senate Street, Columbia, S. C.

- 3. The Vogtle Electric Generating Plant Operations Facility (EOF) is located at the Vogtle Electric Generating Plant Training Center. The EOF will be staffed by Southern Nuclear Operating Company Personnel. The Technical Support Center is located near the station control room.
- 4. Adjacent County EOC's are located at:
  - Aiken County Council Building, 736 Richland Avenue. Aiken, S.C.
- Chairman, Barnwell County Council will provide county liaison with communications capability to the State FEOC, adjacent affected county EOC's and Georgia Power Company's EOF.
- The Barnwell County Council will provide liaison to operate shelters if evacuation is required.
- 7. Chiefs of Services or their designated representatives will be present in the Barnwell County EOC to direct and control their service(s) upon direction of council.
- 8. The EOC will provide space and communications for State and federal liaison personnel.
- 9. The Barnwell County Airport is a General Aviation facility located on Route 278, 1.0 miles northwest of the Town of Barnwell. It consists of a two-paved 5,000-foot runway. On-site capacity exists for storage of 4,000 gallons of AVGAS and jet-fuel. A part-time Fixed Base Operator (FBO) is available.

The alternate is Bush Field in Augusta, GA., a commercial airport 35 air miles west-northwest of Barnwell.

### B. Conununications/Warning

1. During an emergency in Barnwell County which results in the opening of the Emergency Operations Center, continuous communications with the different agencies that respond is most vital. The following communications will be used:

## a. County Law Enforcement Radio System

The following frequencies will be utilized to coordinate county & municipal law enforcement personnel.

- (1) The Barnwell County Sheriff's Department transmits and receives on 453,800 MHz. The City of Barnwell also transmit and receives on 453,800 MHz so that inter jurisdictional communication is possible.
- (2) See ESF 2, Communications.

## b. Fire and Rescue Service

- (1) All Barnwell County Fire Departments utilize frequency 154.400 MHz for communications.
- (2) All rescue squads utilize frequency and 155,205 MHz for communications.
- (3) See Annex F (Fire Service) Barnwell County EOP.
- (4) Sec Annex G (Rescue Service) Barnwell County EOP.

### c. County Emergency Medical Service

The Hospital and Emergency Medical Service (EMS), can communicate with the Sheriffs and all the Rescue Squads via their base station on 155,205 MHz.

#### d. <u>SLED Telctype</u>

The SLED reletype is located in the County Sheriff's Dispatch Section at the County Law Enforcement Center. It can be used to send and receive messages to the South Carolina Emergency Management Division and other counties.

- e. Other public and private communication systems, such as telephone companies, electric and gas companies, school has maintenance shops, etc., having an emergency communications capability, when needed and having a desire to assist.
- 2. Upon establishment of the State EOC South Carolina Emergency Management Division will provide the Barnwell County EOC temporarily a two-way radio capable of communicating in the South Carolina Emergency Management Division radio system.
- 3. See Annex B, Communications to the Barnwell County EOP.
- 4 Annex A-2, Communication to the South Carolina Comprehensive Emergency Management Plan.

### C. Reports

- 1. South Carolina Emergency Operation Plan, October 1997 as amended.
- Civil Defense Operational Reporting System (CEDORS) will be in accordance with CPG2 - 10/7 Local Government Operational Situation Reporting Procedures.
- 3. Situation reports will be submitted to the Barnwell County EOC as necessary and/or as required. These reports will include such information as follows:
  - a. Agencies activated; operations undertaken and personnel/equipment strength.
  - b. Status of evacuation (if undertaken)
    - (1) Area and number of population affected.
    - (2) Location and number of persons in shelter on an hourly basis to include by age and sex.
    - (3) Completion time of evacuation.

### c. Casualties

- (1) Radiation related and where hospitalized or stored.
- (2) Non-radiation related and where hospitalized/stored.
- (3) Nature and extent of injuries (death) of casualties.

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support required specifically defined as to Who, What, Wand Why.			
e.	After inclu	Action reports required from each Emergency Response Service to de:	
	(1)	Number of personnel involved (total).	
	(2)	Hours devoted by personnel (total).	
	(3)	Average hours devoted by personnel.	
	(4)	Equipment involved and cost estimate for each piece of equipment for operation.	
	(5)	Support received from non-county assets.	
	(6)	Overall dollar cost for the service for the operation.	
f. <u>Danı</u>		age Reports	
	(1)	County property.	
	(2)	Personal property to include animals and crops.	
Barnwell County Administrator		Date	
Barnwell County Emergency Management Director		Date	

### **A'ITACHMENTS**

- Attachment 1 Map, Vogtle Electric Generaling Plant, 10-Mile EPZ, S.C. Primary Highways, Sectors, Evacuation Routes, Shelters, Traffic Control Points, Procedures.
- Attachment 2 Map, Vogtle Electric Generating Plant 50-Mile 1PZ.
- Attachment 3 Map, Population Distribution of the Barnwell County 10-Mile and 50-Mile IPZ's.
  - Tab A Traffic Capacities for Evacuation Routes.

## <u>APPENDICES</u>

- Appendix 1 County Organization Chart.
  - Tab A Responsibility Summary Table.
- Appendix 2 Procedures for Alerting and Notifying Residents and Warning Teams of the 10 Mile EPZ.
  - Tab A -Emergency Notification Message Form
  - Tub B -General Alert List
  - Tab C Plant Vogtle Emergency Information Calendar.
  - Tab D-EPD-43 Accident/Incident Report Form.
- Appendix 3 Traffic Control Procedures.
- Appendix 4 Two-Mile Evacuation and Roadblock Plan for Vogtle Electric Generating Plant.
- Appendix 5 Nursing Homes, Industries, and Schools in the 10-Mile EPZ of Barnwell County.
- Appendix 6 SLED SOP.
- Appendix 7 Dose Rate Record.
- Appendix 8 Procedures to Implement the Barnwell County RERP.
- Appendix 9 Radiological Decontamination.
  - Tah A Decontamination Procedures.
- Appendix 10 Letters of Agreement.
- Appendix 11 Shelters and Capacities.

## ATTACHMENT I TO ANNEX Q2

Map, Voglle Electric Generating Plant, 10-Mile EPZ, S.C. Primary Highways, Sectors, Evacuation Routes, Shelters, Traffic Control Points, and Procedures.

ATTACHMENT 2 TO ANNEX Q2,

Map, Vogtle Electric Generating Plant, 50-Mile IPZ.

ATTACHMENT 3 TO ANNEX Q2.

Map, Population Distribution of the Barnwell County 10-Mile and 50-Mile IPZ.

ATTACHMENT 3, TAB A TO ANNEX Q2 - TRAFFIC CAPACITIES FOR EVACUATION ROUTES.

Traffic Capacities for Evacuation Routes.

County	Secondary	Number of <u>Lanes</u>	Pavoment	Roadway2 Distance To Obstruction		Capae, (vph)
Aiken	Rt. 437 (Brown Road), east of Route 5	2	Din	6 ft.	25mph	1288
	Rt. 5, between Route 437 and Route 63	2	Paved	6 ft.	35mph	1400
	Rt. 63,between Route 5 and Route 57	2	Paved	6 ft.	35mpli	1400
·	Rt. 57, between Route 63 and Route 278	2	Paved	6 N.	35mph	1400
	HWY 278. Route 57 and Route 302	2	Paved	6 ft.	35mph	1400
	Rt. 302	2	Paved	6 ft.	35mph	1512
Barnwell South of I	Rt. 493, Route 125	2	Paved	6 ft.	35mph	1400
Baruwell	Rt. 125		Paved	6 ft.	35mph	1624

<sup>&</sup>lt;sup>1</sup> In both directions.

<sup>&</sup>lt;sup>2</sup>Capacity is defined in vehicles per hour, for both directions of travel.

APPENDIX 1 TO ANNEX Q2, ORGANIZATION CHART.

## APPENDIX I, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE.

FUNCTION Command &	AGENCY Barnwell County Council	RESPONSIBILITY Primary Support
Control	Chairman County Administrator	X X
	Director, Emergency Man- agement Division Chiefs, County Emergency	X
	Services	Х
Warning Radiological	Barnwell County Sheriff (Transient)	X
Emergency Response	Barnwell County Sheriff (Transient)	X
	Barnwell County Sheriff (Residents)	X
	Barnwell County Sheriff (Residents)	X
	Energency Management Radio & TV Stations	x x
	S.C. Educational Network State Law Enforcement Div.	X X
	(SLED) (When requested)	
	Municipalities	X
Notification Communications	Sheriff Director, Emergency Man-	X
	agement Utilities	X X
	Telephone Companies Local Government and	X
	Municipalities Chiefs, County Emergency	X
	Services	X
Public Information	PIO Officer (County) Director, Emergency Man-	X
	agement Barnwell County Council Chairman	x x
	Local Newspapers TV & Radio Serving County	X X

## APPENDIX 1, TAB A TO ANNEX Q2 RESPONSIBILITY SUMMARY TABLE (CONTINUED)

EUNCTION	AGENCY	RESPONSIBILITY Primary Support
	Municipalities Utility	X X
Accident Assessment (Nuclear Accident)	Dept. of Health & Environ- mental Control RAP & IRAP (Upon Request) Director, Emergency Man-	x x
Social Services	agement Division  County Dept. of Social Services	x x
(EWS)	School Districts County Red Cross Salvation Army (When Available)	X X X
Fire Service	Chief, Fire Service Local & Fire Departments S.C. Forestry Commission S.C. Office of Fire Marshal Adjacent Counties (Mutual Agreement)	X X X X X
Rescue Service	Chief, Rescue Service Local Rescue Squads S.C. Wildlife & Marine Resources S.C. Forestry Commission S.C. Aeronautics Commission S.C. Civil Air Patrol Adjacent Counties (Mutual Agreement)	x x x x x x
Traffic Control,	Barnwell County Sheriff (Transients)	X
Security & Law Enforce- ment	Barnwell County Sheriff (Transients) Barnwell County Sheriff (Residents)	X X

## APPENDIX I, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE (CONTINUED)

<u>FUNCTION</u>	AGENCY	RESPONSIBILITY Primary Support
	Barnwell County Sheriff (Residents)	X
	Municipal Police Forces	X
	State Law Enforcement Div.	· X
	S.C. Wildlife & Marine	
÷	Resources	X
	S.C. Highway Parrol	X
	S.C. Army National Guard (If Available)	X
Emergency	Chief, County Emergency	
Medical	Medical Services	Х
Services	County Rescue Service	X
(EMS)	County Ambulance Service Hospitals (Serving EPZ)	X X
	Adjacent Counties (Mutual	^
	Agreement)	X
Transportation	County School Bus	
<b>1</b>	Maintenance Supervisor	X
	Local Trucking Firms	X
	S.C. Public Service Comm.	X
	S.C. Aeronautics Commission	X
	S.C. Adjutant General	X
	Adjacent Counties (Mutual Agreement)	X
	•	
Protective	Barnwell County Council	.,
Response	Chairman	X
	County Emergency Welfare Services	v
	Sheriff's Office	X X
	Director, Emergency Man-	A
	agement	X
	Chiefs, County Emergency	
	Services	X
Radiological	S.C. Dept. of Health & En-	
Exposure	vironmental Control (DHFC)	X

## APPENDIX 1, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE (CONTINUED)

<u>FUNCTION</u>	<u>AGENCY</u>	RESPONSIBILITY Primary Support	
Control	Director, Emergency Management	X	
	Barnwell County Council Chairman	A	
		X	
Corrective Actions and	Director, Emergency Management	x	
Plan Changes	Chiefs, County Emergency		
-	Service	X	

APPENDIX 2 TO ANNEX Q2 PROCEDURES FOR ALERTING AND NOTIFYING RESIDENTS AND WARNING TEAMS OF THE 10-MILE EPZ.

### I. GENERAL

#### Purpose

To describe procedures, organization, and facilities used to alert and notify the populace in the Plume Exposure (10-mile) LPZ in the event of a radiological emergency at Vogtle Electric Generating Plant.

#### II. EXECUTION

### A. General

#### I. Alen

Sirens, both fixed and mobile and tone alert radios will be used to ALERT both the residents and transient population in the VEGP 10-mile EPZ.

#### 2. Notification

The resident populace will be initially notified through the NOAA tone-alert radio, telephone and through mobile sound equipment for the transient population. Follow-up public information will be made by the respective states over the Emergency Alert System (EAS). Savannah River Site (SRS) will notify workers and members of the public within their boundaries, including persons traveling through SRS on the public highway and hunters.

## B. Concept of Operations

#### 1. Alerting

- a. State agencies and local governments are notified of radiological emergencies as specified in Annex A, SCORERP.
- b. In the event there is an <u>immediate</u> declaration of Site Area Emergency or General Emergency by VEGP and the SEOC is not operational, the decision to sound the signals and to issue emergency instructions to the public will be made and executed by county authorities based on recommendations by VEGP officials.

- Once the SEOC is operational, the decision to sound alerting signals will be made by the Executive Group of the State Emergency Organization (SEO).
- d. Sirens will be activated by County EOCs and the NOAA tone-alert system will be activated by the Georgia Emergency Management Agency (GEMA) in coordination with the South Carolina EOC. Alerting of persons boating or fishing on the Savannah River will be accomplished by the Georgia Department of Natural Resources, Game and Fish Division, and Burke County EMA in coordination with the South Carolina Department of Wildlife.

#### 2. Notification

- a. The primary means of notification is the NOAA tone-alert radio system. It will be utilized to provide the initial notification of the public for residents. The transient population will be primarily notified by mobile sound equipment.
- b. The EAS will be utilized as the primary means for follow-up public information. Follow-up emergency action messages will be formulated and coordinated by the respective state EOCs. The message(s) will be relayed by the State PIO Organization at the Emergency News Center (ENC).

## C. State Procedures

- 1. Upon declaration of an emergency at the VEGP, the plant notifies GEMA, the S.C. Highway Department Warning Point (SCEPD), SRS, and all counties over the dedicated Emergency Notification Network (ENN), (SEOC), if operational). Backup ENN and commercial telephone will be used as backup means of notification. Recommendations will be made by VEGP to the appropriate state(s) for their respective portions of the EPZ.
- SCEPD and GEMA emergency response officials will coordinate protective actions and the content of NOAA messages over the Administrative Decision Line (ADL).
- 3. If Georgia and South Carolina SEOCs are operational, protective actions will be coordinated.
- 4. The Georgia EMA, upon coordination and agreement of the NOAA message with South Carolina, activates the NOAA message from the Augusta Weather

Service, via the transmitter located at VEGP using existing GEMA/NOAA procedures. The combined message is thereby sent to all NOAA radios in the EPZ (both states) giving initial protective actions for all local planning zones and instructs all to turn to an EAS radio and/or television station.

- 5. Concurrently with the NOAA message transmission, the respective states will cause the counties to sound their sirens, both fixed and mobile.
- 6. An initial EAS message will have been coordinated between officials of Georgia and South Carolina during the same coordination concerning the NOAA message. The EAS message will be transmitted to the respective states' Public Information personnel at the Emergency News Center for transmission over the EAS network(s) in their respective state(s). (See Appendices 1 and 2, EAS Operational Areas.)
- 7. Subsequent changes of recommended protective actions will be made using the above procedures.

### D. Public Information

Emergency Public Information will be issued by the South Carolina spokesperson from the Emergency News Center located in the Burke County Office Park on Georgia Highway 80/56 in Waynesboro. Georgia, in coordination with the State of South Carolina, SRS, respective counties and the Georgia Power Company.

### E. County Procedures

## Receipt of Warning

- a. If an emergency is declared at the Vogtle Electric Generating Plant, authorized VEGP personnel will notify the Barnwell County Law Enforcement Center Warning Point simultaneously with state and other county warning points by Emergency Notification Network (ENN) phones, or commercial telephone. Verification of the call will be established to insure authenticity.
- b. In the event the Prompt Notification System is accidentally activated, corrective procedures will be followed.
- e. See ESF 2, to the County EOP.

#### 2. Dissemination of the Warning

Upon confirmation of an immediate General Emergency, the dispatcher will immediately notify/advise any one of the following Barnwell County officials:

Barnwell County Director Emergency Management Agency

Office Phone: 259-7013 Home Phone: 584-3343

Barnwell County Sheriff Office Phone: 259-3083 (24-Hour) 259-1727

Barnwell County Council Chairman

Office Phone:

Home Phone: 259-3986

Barnwell County Administrator

Office Phone: 541-1010 Home Phone: 259-1405

Each of these officials has the authority to request activation of the Prompt Notification System and the EAS message system.

- 3. In cases where immediate response is required to protect the populace, one of the above listed Barnwell County officials will direct activation of the Emergency Alert System and issuance of appropriate messages.
- 4. If the radiological situation allows orderly activation of the SEOC, EAS activation will be made after consultation between Georgia Emergency Management Agency and S.C. Emergency Management Division regarding protective actions.

## F. Methods of Notifying the Population of the 10-Mile EPZ

1. Barnwell County has no resident population within the VEGP plume EPZ. The population here consists only of transients. If the decision is made to activate the prompt notification system. The fixed siren located in Barnwell County will be audible in the Barnwell County portion of the VEGP EPZ and constitutes the initial means of prompt notification. In addition, the Barnwell County Sheriff's Office will dispatch warning teams using vehicles equipped with sirens, bullhorns, loudspeakers, or other public address systems to warn transient population within that portion of Barnwell County that falls within the VEGP

plume EPZ. Those warning teams will proceed to and drive through that part of the plume EPZ disseminating appropriate warning messages. Those warning teams will provide notification within 45-minutes to any transients in that part of the plume EPZ who were not warned by the initial notification.

In addition to providing additional warning to the Barnwell County portion of the VEGP plume EPZ, the Barnwell warning teams will also provide initial notification to transients in the Barnwell County portion of the VEGP EPZ.

2. Warning teams consist of the following along with assigned areas of responsibility:

Sheriff's Office - Sector II-10 in Barnwell County including Creek Plantation (off Rt. 125).

Other police, fire and rescue units are available to augment above resources if necessary.

- 3. Notification of Warning Teams
  - a. Rescue pager or telephone.
  - h. Fire Departments radio or telephone.
  - c. Police Departments -- radio or telephone.
  - d. All units above can be contacted/controlled from Barnwell County Law Enforcement Center.
- 4. Warning Messages to be Disseminated will consist of one of the following:
  - a. Attention -- A radiological accident occurred at the Vogtle Electric Generating Plant at (date/time) that could cause barm to persons in this neighborhood. You are requested to stay inside your homes and businesses with doors and windows closed. Turn on your radio or TV to receive further information.
  - b. Attention -- A radiological accident occurred at the Vogtle Electric Generating Plant at (date/time) that could cause harm to persons in this neighborhood. We urge you to leave your homes or businesses in a safe, orderly manner and report to your assigned shelters. Turn on your radio or TV to receive further information.

c. Attention — The Governor of South Carolina has declared a state of emergency due to an accident at the Vogtle Electric Generating Plant at (date/time). You are requested to begin movement to your shelter in accordance with instructions listed in the Vogtle Electric Generating Plant brochure and information furnished by radio and TV stations.

## G. Emergency Alert System (EAS)

EAS will be activated along with the prompt notification system. Information advising the population of protective actions will be given out over the EAS via standard messages in place at the EAS stations. (See Appendix 3, Annex C, SCORERP)

The widest coverage by the EAS will be utilized to convey the public warning and follow-up messages.

II. Alert and Notification Communications Directory (Tab E).

APPENDIX 2, TAB A TO ANNEX Q2 - EMERGENCY NOTIFICATION MESSAGE FORM (ENMF)

(INSERT ENMF)

APPENDIX 2, TAB A TO ANNEX Q2 - EMERGENCY NOTIFICATION MESSAGE FORM (ENMF)

(INSERT ENMF)

## APPENDIX 2, TAB B TO ANNEX Q1 - GENERAL ALERT LIST.

T > (1 *)		A * 2 T R 2	****	
EME	KUL	NC Y	1111	ıĿ

TELEPHONE NUMBERS
BUSINESS RESIDENCE

Chairman, County Council

County Administrator

Director, Emergency Management

Warning Officer

Communications/Law Enforcement

Public Information

Chief, Emergency Welfare Service

Shelter Officer

Chief, Transportation Service

Chief, Fire Service

County Rescue Squad

**Public Works** 

Chief, Emergency Medical Service

Radiological Officer

County Attorney

## MAYORS OF MUNICIPALITIES

**MUNICIPALITY** 

Barnwell

Blackville

Hilda

Snelling

Williston

•

TELEPHONE

APPENDIX 2, TAB C TO ANNEX Q2 - PLANT VOCTLE EMERGENCY INFORMATION CALENDAR

(INSERT CALENDAR)

APPENDIX 2 TO ANNEX Q2 - EPD-43 ACCIDENT/INCIDENT REPORT FORM.

(INSERT EPD-43)

APPENDIX 2 TO ANNEX Q2 - EPD ACCIDENT/INCIDENT REPORT FORM - (CONTINUED)

## APPENDIX 3 TO ANNEX O2 - TRAFFIC CONTROL PROCEDURES.

The following is an evacuation and road-block plan to be used when ordered by proper authorities regarding a nuclear accident at the Vogtle Electric Generating Plant.

Evacuation data was evaluated to identify key intersection locations where potential vehicle conflicts during an evacuation would warrant management or control. The locations identified for traffic control are identified below:

### Aiken County:

- o Route 437 (Browns Road) at Route 5 (direct traffic north on Route 5; restrict vehicles from traveling south on Route 437).
- o Route 5 at Route 299 (direct traffic north on Route 5).
- o Route 5 at Route 63 (direct traffic west on Route 63),
- o Route 63 at Route 125 (allow traffic to flow on Route 63).
- v Route 63 at Route 57 (direct traffic north on Route 57).

## Bamwell County:

o Route 125 at Route 493 (direct traffic south on Route 125).

### Allendale County:

- o Route 125 at Route 12 (direct traffic south on Route 125).
- o Route 125 at Route 17 (direct traffic south on Route 125).

These locations are illustrated in Attachment 3.

The responsibility for traffic control during an evacuation of the South Carolina portion of the VEGP EPZ will be shared by Aiken and Barnwell County Emergency Management Law Enforcement Agency personnel and State as available. Barnwell County Law Enforcement personnel will be available as backup to Allendale personnel if required. Each traffic management location will be manned and/or road blocks will be positioned to direct evacuees out of the EPZ and to restrict unauthorized access in the affected area. Route markers will be placed along the evacuation route at the above critical location to promote more efficient traffic flow out of the EPZ.

The stationing of traffic controllers at these Traffic Management Locations would not be expected to significantly reduce the time required to evacuate the South Carolina portion of the EPZ, since the time estimates are most influenced by the various preparations and mobilization times. However, controllers at these key locations would reduce the number of vehicle conflicts and promote progress movement through the area. The traffic controllers would also act to instill confidence in evacuees by directing evacuating traffic in the most efficient manner possible and by being available to respond to unpredictable or changing events.

APPENDIX 4 TO ANNEX Q2 - NURSING HOMES, INDUSTRIES AND SCHOOLS IN THE 10-MILE EPZ OF BARNWELL COUNTY.

There are no schools, hospitals, nursing homes, or industries located in the Barnwell County portion of the Vogtle Electric Generating Plant EPZ.

## APPENDIX 5 TO ANNEX Q2 - STATE LAW ENFORCEMENT DIVISION (SLED), SOP.

The security identification that will be used to control egress and ingress in the case of a nuclear emergency is as follows:

## PUBLIC SAFETY

All bona fide uniforms of public safety agencies will be honored. This includes but is not limited to the uniforms of Police, Fire and Emergency Medical Personnel. Personnel of public safety agencies and/or National Guard who are not in uniform will display appropriate agency identification or obtain an Approved Identification Pass from the SLED representative at the SEOC or FEOC.

### STAFF SUPPORT

All personnel of agencies and organizations supporting governmental response to a nuclear emergency will be issued Approved Identification Passes.

## NEWS MEDIA

Members of the media should display official identification from their employing or sponsoring organization. Generally, the media will be directed to a near site media center and not to the Forward Emergency Operating Center.

### **CIVILIANS**

A pass is available for evacuees who may be authorized re-entry to an evacuated area in the event of urgent duties.

# Barnwell County Emergency Operations Plan Appendix F - Q2 VOGTLE RADIOLOGICAL EMERGENCY RESPONSE PLAN

# APPENDIX 6 TO ANNEX Q2- RADIATION RATE RECORD.

## RADIATION EXPOSURE RECORD

NAME		· · · · · · · · · · · · · · · · · · ·	
AGE			
SOCIAL SEC	URITY NUMBER		<del></del>
DOSIMETER	SERIAL NUMBER_		<del>-</del>
DATE	INITIAL READING	FINAL. READING	EXPOSURE
	·		
<del></del>			
	· · · · · · · · · · · · · · · · · · ·	·	·
<del> </del>			
			<u></u>
•		<del> </del>	
DATE	TOTAL	EXPOSURE	
SIGNATURE			

App.F-Q2-68

# Barnwell County Emergency Operations Plan Appendix F - Q2 VOGTLE RADIOLOGICAL EMERGENCY RESPONSE PLAN

APPENDIX 7 TO ANNEX Q2 - PROCEDURES TO IMPLEMENT THE BARNWELL COUNTY RER PLAN.

#### NUREG-0654 Criteria II P:7

- 1. IICA Aiken Regional Medical Centers Operational Procedures.
- 2. <u>Standing Operations Procedures</u>, State Emergency Operations Center, Emergency Management Division, Office of the Adjutant General.
- 3. <u>Local Government Radio/Signal Operating Instructions</u>, Emergency Management Division, Office of the Adjutant General.
- 4. <u>Duty Officer/Staff Duty Officer Instructional Manual</u>, Emergency Management Division, Office of the Adjutant General.
- 5. <u>Standard Operating Procedures, EMS Division, South Carolina Department of Health & Environmental Control.</u>
- 6. <u>Chief Elected Official</u>, Implementing Procedures.
- 7. Emergency Management Agency, Implementing Procedures.
- 8. Barnwell County Sheriff's Office, Implementing Procedures.
- 9. Rescue Squad/Ambulance, Implementing Procedures.
- 10. Shelter Manager, Implementing Procedures.
- 11. <u>County Law Enforcement Communications Center</u>, Implementing Procedures.

# Barnwell County Emergency Operations Plan Appendix F - Q2 VOGTLE RADIOLOGICAL EMERGENCY RESPONSE PLAN

## APPENDIX 8 TO ANNEX Q2 - RADIOLOGICAL DECONTAMINATION

#### A. General

- Radiological decontamination is the reduction or removal of contaminating radiological
  material from structures, areas, objects or persons. The object is to reduce the
  contamination to an acceptable level with the least expenditure of labor and materials,
  and with radiation exposure to decontaminate personnel commensurate with the urgency
  of the task.
- 2. Decontamination procedures will be implemented on the recommendations of DHEC, Bureau of Radiological Health.

#### B. Execution

- 1. Decontamination points will be established at the following locations and be under direction of the Radiological Officer:
  - a. Shelters

Barnwell High School
Guinard Butler Elementary School

b. <u>Decontamination Points:</u>

Personnel Vehicles: Chem. Nuclear Systems

Official Vehicles: Chem. Nuclear Systems

## C. Procedures

- The method of decontamination will depend upon the type and extent of contamination.
- 2. Personnel and Clothing:

As described in Tab  $\Lambda$ .

- 3. Decontamination of food and water will be conducted under the technical advice/supervision of DHEC/BRH.
- 4. Contaminated areas will be roped off and marked with <u>CAUTION-RADIOACTIVITY</u> signs.
- 5. Action levels for decontamination will be conducted as outlined in Appendix I STRERP.

# Barnwell County Emergency Operations Plan Annex Q-2 FIXED NUCLEAR FACILITY RADIOLOGICAL EMERGENCY RESPONSE PLAN

TAB A TO APPENDIX 8

# Barnwell County Emergency Operations Plan Annex Q-2 FIXED NUCLEAR FACILITY RADIOLOGICAL EMERGENCY RESPONSE PLAN

# APPENDIX 9 TO ANNEX Q2-LETTERS OF AGREEMENTS

Letters of agreements are on file in Barnwell County Emergency Management Office.

# Barnwell County Emergency Operations Plan Annex Q-2 FIXED NUCLEAR FACILITY RADIOLOGICAL EMERGENCY RESPONSE PLAN

APPENDIX 10 TO ANNEX Q2 - DESIGNATED SHELTERS IN BARNWELL COUNTY FOR EVACUEES FROM BARNWELL COUNTY, S.C.

#### I. GENERAL.

The shelters listed in this appendix are in compliance with American Red Cross Disaster Services Guidelines and Procedures, ARC 3074, dated August 1976.

## II. PURPOSE

The shelter marked with an asterisk below is the primary shelter. As primary shelter, it is opened immediately upon notification that an incident has occurred and that sheltering will be required for evacues. The alternate shelter will be opened as needed. These shelters will accommodate 100% of the population.

## III. Shelter Listing with phone number is indicated below:

<u>COUNTY</u>	NAME/ADDRESS	<u>CAPACITY</u>
HARNWELL	*Barnwell High School Jackson Street, Barnwell, SC Phone: 803-541-1300	675
BARNWELL	Guinard Butler Middle School Allen Street Barnwell, S.C. Phone: 803-541-1370	265

Final Sheet of Enclosure

# **Southern Nuclear Operating Company**

AR-06-1721

**Enclosure 8** 

Annex Q2, Fixed Nuclear Facility

Radiological Emergency Response Plan

To The

**Allendale County Emergency Operations Plan** 

## ANNEX Q2, FIXED NUCLEAR FACILITY (FNF) RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP) TO THE ALLENDALE COUNTY EMERGENCY OPERATIONS PLAN (EOP)

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# ANNEX Q2, FIXED NUCLEAR FACILITY (FNF) RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP) TO THE ALLENDALE COUNTY EMERGENCY OPERATIONS PLAN (EOP)

All FNF and RERP will be trained on the principles of the National Incident Management System (NIMS) and integrate those principles into all FNF and RERP planning and response operations.

Ensure all FNF and RERP personnel integrate NIMS principles in all planning. As a minimum, primary action officers for all FNF and RERP agencies will complete FEMA's NIMS Awareness Course, or an equivalent course.

#### I. GENERAL

#### A. Purpose

To provide for the Radiological Emergency Response to protect the populace and property of Allendale County from harmful effects of ionizing radiation in the event of a radiological accident at the Vogtle Electric Generating Plant.

## B. Authority

- South Carolina Legislative Act Number 199, Section 21, 1979 which
  places Emergency Management responsibilities under the Office of
  the Adjutant General and provides for Emergency Management.
- 2. South Carolina Legislative Act Number 223 of 1967 with subsequent amendments, which assigns State Radiological duties to the Department of Health and Environmental Control (DHEC).
- 3. Allendale County Resolution dated April 21, 1979 and revised August 21, 1986.

#### C. Reference

- 1. South Carolina Emergency Operations Plan.
- 2. South Carolina Operational Radiological Emergency Response Plan,
- 3. South Carolina Technical Radiological Emergency Response Plan.
- 4. Vogtle Electric Generating Plan Site Specific Radiological Emergency Response Plan, to the South Carolina Operational Radiological Emergency Response Plan.
- 5. NUREG-0654/FEMA REP-1.
- 6. NUREG-0610, FNF Emergency Action Levels.

#### D. Maps

1. Allendale County Special Map, sectors, shelters evacuations routes, instructions and traffic control points. (Attachment 1).

#### E. Definitions

- 1. Administrative Decision Line (ADL) A dedicated telephone line facilitating communications between the Georgia and South Carolina SEOCs, FEOCs and the Plant Vogtle EOF during an emergency. This line will be used for the discussion and coordination of protective action decisions and other coordination issues.
- 2. DHEC South Carolina Department of Health and Environmental Control.
- 3. The County Allendale County, South Carolina.
- 4. **DHEC** South Carolina Department of Health and Environmental Control.
- 5. Emergency Operations Center (EOC) -- A facility with the necessary communications from which essential functions are directed and controlled by county government.
- 6. Emergency Planning Zones (EPZ) of the Off-Site Area
  - a. Ten-Mile Plume Exposure Pathway Zone -- An approximate ten-mile radius centered on a Fixed Nuclear Facility having an operational nuclear reactor. This EPZ is divided into two-five-and-ten mile zones which are further divided into sub-sectors for area identification. The EPZ represents that area in which, under a worst case nuclear accident, ionizing radiation could spread and from which the population might have to be evacuated. (Attachment 2.)
  - b. Fifty-Mile Ingestion Pathway -- A fifty-mile radius (approximate) centered on an FNF. This EPZ is that area which must be monitored and for which plans made to prevent human ingestion of ionizing radiation from food products such as milk, vegetables, and water that may have been contaminated. Plans must be made also for protection of animals from ingestion of contaminated feed and water. (Attachment 2.)

- 7. Emergency Radiological Assistance Team (ERAT) -- A team of Bureau of Radiological Health personnel trained in radiological accident response.
- 8. Fixed Nuclear Facility (FNF) -- A permanently located nuclear facility, which could present a radiological hazard off-site from the facility.
- 9. Forward Emergency Operations Center (FEOC) -- A facility located within the periphery of a disaster area where state government exercises direction and control of forces and resources.
- LGR South Carolina EMD Local Government Radio A stateowned radio system that provides command and control functions for state deployed forces. County governments are also members of this network.
- 11. Off-Site -- All land and water areas outside the FNF site boundary and within Allendale County that could be affected by a radiological incident at the Savannah River Plant. Such area is under the operational control of the local jurisdiction affected and for which the jurisdiction is responsible for Radiological Emergency Response Planning.
- 12. On-Site -- All land and water areas within the FNFs site boundary. That area cannot be used for Radiological Emergency Response Planning without authorization from the facility operators.
- 13. Price-Anderson Act Federal legislation which establishes an insurance pool over and beyond that available to the nuclear industry through private insurance firms. It would enable those affected by a radiological accident to recover through the Federal government certain losses that are not covered by private insurance policies.
- 14. Prompt Notification System. An integrated system of sirens and NOAA-activated tone alert radios which blankets the 10-mile EPZ and provides a means for notifying residents and transients of an emergency at Plant Vogtle.
- 15. Radiation Protective Actions Actions taken to avoid or reduce the effects of ionizing radiation releases due to a radiological incident.
- 16. Radiological Accident -- Any unexpected occurrence of a condition which could or does result in the exposure of the public to any source of ionizing radiation.
- 17. RER Radiological Emergency Response
- 18. RERP -- Radiological Emergency Response Plan.

- 19. SRS Savannah River Site
- 20. State Emergency Operations Center (SEOC) A facility with the necessary communication control capabilities from which essentially all disaster functions are directed and controlled by the Governor. The SEOC is located in the basement of the 1100 Fish Hatchery Road, Columbia, South Carolina.
- 21. The State The State of South Carolina.
- 22. VEGP -- Vogtle Electric Generating Plant.

## F. Organization

The principal organizations, including utilities that are part of the overall response organization for emergency planning zones are listed below:

#### 1. Federal:

See the S.C. Operational Emergency Response Plan.

## 2. State:

See the S.C. Operational Emergency Response Plan.

## 3. County:

- a. The Allendale County Radiological Emergency Response (RER) Organization consists of those agencies/organizations specified in the Allendale County Emergency Operations Plan.
- h. Appendix 2, Allendale County RER organization.

#### 4. Private Sector:

The principal organizations in the private sector that are part of the overall response for emergency planning zones are:

- a. Georgia Power Company and Southern Nuclear Operating Company (Vogtle Electric Generating Plant).
- b. Southern Bell Telephone Company.
- c. General Telephone Company.
- d. Radio and Television Companies.
- e. Private Hospitals.

- f. The Salvation Army.
- g. The American Red Cross.
- h. Volunteer Organizations.

#### H. SITUATION

#### A. National

The Nuclear Regulatory Commission (NRC), through NUREG-0654, and FEMA REP1, RER1, November, 1980, has specified criteria that the state, and the local governments which lie within the Emergency Planning Zones must meet in order to provide for off site Radiological Emergency Response to protect the populace and property vulnerable to the effects of ionizing radiation in the event of a nuclear accident. The Department of Energy (DOE) exercises authority over the Savannah River Plant. The criteria is specific, precise and detailed. It varies from natural and man-made disaster planning as follows:

- 1. The NRC has federal responsibility for RFR within the boundaries of the Vogtle Electric Generating Plant, which is specified as "on-site." The state and Allendale County have no responsibility on site other than that negotiated through written agreement with the facility..
- 2. The Federal Emergency Management Agency (FEMA) has federal agency responsibility for RER "off-site." The state secures federal assistance and support through FEMA and through letters of agreement with other state and federal agencies. Federal support off-site in any case will be requested **only** by the state.
- The capability to warn the populace in Allendale County Sector H-10.
- 4. An emergency classification system for nuclear power reactor accidents with attendant facility, state, and local actions to be taken is specified.
- Command, control, and communications capabilities and procedures are precisely stated.
- 6. Public Information requirements are continuous and must be specifically stated in the Plans.

- Specified exercises and drills for Radiological Emergency Response are required.
- 8. Radiological Emergency Response training for response forces will be detailed in the Plan and given as programmed.
- 9. Periodic review/update of RER Plans is required.
- 10. Local and state plans must include each aspect of the criteria in NUREG-0654, FEMA REP1, as referenced for each planning entity so that the plan may be considered adequate.

#### B. State

The State of South Carolina has four nuclear power generating stations (Robinson, Oconec, V.C. Summer and Catawba) currently in operation, and is affected by several in adjacent states.

#### C. Local

- 1. A small portion of Allendale County lies within the 10-mile EPZ of the Vogtle Electric Generating Plan. Included in this zone are approximately 1.5 square miles of land 37 residents. The area is part of the privately owned Creek Plantation and lies approximately 9.2 miles cast-southeast of Plant Vogtle.
- 2. The remainder of Allendale County lies within the 50-mile EPZ Ingestion Pathway, in which approximately 10,200 people reside. The County as a gently rolling topography. Approximately 48,000 acres of Allendale is uninhabited forest. Crop and meat production data is available through the County/Clemson University Cooperative Extension Service.

## 3. Vogtle Electric Generating Plant

- a. The Vogile Electric Generating Plant is located in Burke County, Georgia, northwest of Allendale (SC) County. (Longitude 81°45' West; Latitude 330° 45' North) will produce 1,200 megawatts of electricity from its 2 nuclear reactor units.
- b. The containment buildings, which house the reactors, are domed structures rising approximately 200 feet above graded level with 3 feet, 9 inches thick steel reinforced concrete walls and a 3 feet, 9 inches thick dome.

- c. The containment spray system is a system design to limit the peak pressure after a LOCA (loss of coolant accident).
- d. The cooling towers at Vogtle Electric Generating Plant are a passive system designed to limit the heat input to the Savannah River. This function is accomplished by dissipating the heat into the atmosphere instead of the Savannah River. There are 2 cooling towers on-site.
- e. Water used to cool the plant condensers will be drawn from the Savannah River to the cooling tower basins. Water from the Savannah River will not come into contact with fuel elements.
- 4. Agreement exists between the Vogtle Electric Generating Plant and Allendale County for RER support.

## D. Supporting Organizations

- 1. South Carolina Department of Health and Environmental Control. (South Carolina Technical Radiological Emergency Response Plan, 1985.)
- 2. South Carolina Office of the Adjutant General, Emergency Management Division, which coordinates all state agency support in accordance with the South Carolina Emergency Operation Plan (SCEOP), October 1997, and subsequent Radiological Emergency Response Plans and Site Specific Radiological Emergency Response Plans.

#### 3. American Red Cross (ARC):

ARC will manage shelters assisted by the Department of Social Services and will provide food, bedding, and clothing. ARC will register evacuees upon arrival at designated shelters. Emergency Medical Services will receive assistance from ARC in providing medical care to evacuees.

#### 4. Salvation Army:

Salvation Army will assist in feeding, housing, and clothing individuals in emergency situations. They will aid in identifying and registering evacuees, as well as provide furniture, bedding, and household needs to disaster victims.

5. Hampton, Bamberg, Aiken and Barnwell Counties will provide sheltering and EWS Service for evacuees.

6. Allendale County has signed the state-wide mutual aid agreements.

## E. Assumption

A radiological accident could occur at Vogtle Electric Generating Plant in the State of Georgia that could have ionizing radiation effects of varying degree on Allendale County. Emergency response capabilities will be needed at the local level to meet the emergency situations.

## F. Wind Data

1. Vogtle Electric Generating Plant is located in Burke County, Georgia, north-northwest of Allendale County. Wind frequency percentages and directions from the Vogtle Electric Generating Plant are as follows:

Direction		Percentage
North	(N)	5.3
North Northeast	(NNE)	1.6
Northeast	(NE)	6,9
East Northeast	(ENE)	<i>5</i> .8
Hast	(E)	4.4
East Southeast	(ESE)	4.5
Southeast	(SE)	4.9
South Southeast	(SSE)	4.5
South	(S)	<i>5</i> .8
South Southwest	(SSW)	5.8
Southwest	(SW)	7.1
West Southwest	(WSW)	9.2
West	(W)	10.3
West Northwest	(WNW)	8.3
Northwest	(NW)	6.9
North Northwest	(NNW)	4.2

(Wind percentages were obtained from the Vogtle Electric Generating Plant Final Safety Analysis Report.)

2. As a result, a radiological accident at Vogtle Electric Generating Plant could have an ionizing radiation effect of varying intensities on Allendale County.

## G. Planning Basis

- 1. Any radiological accident in South Carolina or adjacent states that presents an off-site radiological hazard to Allendale County is the initial responsibility of Allendale County.
- 2. Technological radiological emergency response support will be

furnished to Allendale County by Vogtle Electric Generating Plant and DHEC.

- 3. The first three hours from notification of a radiological accident at the Vogtle Electric Generating Plant are critical to the county. The county will be prepared to initiate an immediate Radiological Emergency Response in reaction to the Vogtle Electric Generating Plant and DHEC's assessments and by notification by Emergency Management Division. Such response will be in absence of full state support, except that which may be immediately available within the county. State forces will react in accordance with the State RERP.
- 4. State response and support will be available within three hours of the initiation of an emergency condition. Immediate technological support will be available from DHEC based on the most expeditious means of transportation to the County from Columbia.
- 5. Allendale County will cease direct contact with the Vogtle Electric Generating Plant upon notification by state that the State Forward Emergency Operations Center is operational. This does not include Allendale County pre-negotiated agreements for support to the facility.
- 6. State resource support will be requested only after exhaustion or overload of county resources or for resources not usually available to Allendale County.
- 7. Municipal emergency response forces will coordinate in support as required.

## III. MISSION

Allendale County will provide for the protection of the county populace and their property from the effects of ionizing radiation from a radiological accident at the Vogtle Electric Generating Plant through an organized and coordinated Radiological Emergency Response.

#### IV. EXECUTION

## A. Concept of Operations

- 1. Successful accomplishment of the mission is visualized to include the following requirements for Radiological Emergency Response:
  - Capability to warn the populace within the ten-mile EPZ in Allendale County, which consists only of transients,
  - b. Coordination and control.
  - c. Exhaustive Public Information.

- d. Communications.
- e. Training of response forces.
- f. Exercising and testing.
- g. Integration with other than county agencies.
- h. Capability to selectively evacuate and/or shelter the populace.
- i. Capability to provide for recovery through decontamination.
- j. Periodic updating and rewriting of response plans.
- k. Procurement and maintenance of Radiological Emergency Response Equipment.
- 2. Two distinct aspects of Radiological Emergency Response capability are required based on time limits:

#### a. Immediate Reaction

The county is prepared to immediately initiate the Radiological Emergency Response Plan in the event of a sudden and uncontrollable radiological accident that could affect off site areas within a very short time frame and before the state could position support or control. In such a situation, the county must react to the facility assessment and immediately provide for such protective actions as are recommended by the facility to include possible evacuation and/or sheltering of the populace. This occurrence has a low probability.

#### b. Escalating Reaction

The county would be provided longer reaction time to assemble forces and to execute the plan in this situation. The radiological accident would intensify over a longer time frame, which would allow state forces to be positioned to assume overall coordination and technical instruction. In such case, the county would be instructed by the state as opposed to the facility for required protective actions.

3. In the event of an immediate action requirement, Allendale County

activates its Radiological Emergency Response right away and carries out protective action instructions issued by authorities from the Vogtle Electric Generating Plant. State government is informed through the State Emergency Operations Cemer and immediately places the State RERP into action. The county continues operations within its own resources until such time as state support is operational in the area of the accident and assistance can be provided by the county. The Vogtle Electric Generating Plant will establish an emergency operations facility as part of their RERP. The county will provide Vogtle Generating Plant with pre-negotiated support form county resources.

4. In the event of escalating reaction, time should be available to alert and assemble county and state response forces, inform the public, and prepare for protective actions. The state would, through DHEC, establish technological coordination with the Emergency Operations Facility (Vogtle Electric Generating Plant Training Center) located in Burke County, Georgia and assess the radiological situation. DHEC would recommend protective actions to the State Forward Emergency Operations Center, which would direct protective actions to affected areas of the county and would provide for coordination of evacuation, radiological monitoring, decontamination, registration, and sheltering of evacuees.

The state will assist county efforts in monitoring and decontamination of personnel and vehicles from contaminated areas. The county will provide security of evacuated areas and assist in return of the populace to their homes upon clearance of radiological hazards.

5. In either reaction situation, the combined and total efforts of the facility, the county and the state, will be utilized to reduce and neutralize any radiological hazard.

#### B. Direction and Control

The direction and control for Allendale County is as follows:

- 1. Chairman, County Council.
- 2. County Administrator.
- 3. Emergency Management Director (EMA)

## 4. Support Services:

Emergency Operations Center (Annex A) Communications (Annex B) Warning (Annex C) Public Information (Annex D) Law Enforcement (Annex E) Fire Control (Annex F) Rescue (Annex G) Medical Service (MS). (Annex H) Emergency Medical Service (Amb.) (Annex I) Mental Health (Annex J) Emergency Welfare Service/Shelter (Annex K) Transportation (Annex 1.) Engineering and Public Works (Annex M) Supply and Procurement (Annex N) Evacuation (Annex O) Hazardous Materials Accidents (Annex P) Fixed Nuclear Facility (Annex Q2) War (Annex R) Radiological Protection (Annex S) Damage Assessment (Annex T)

## C. Warning

- 1. Annex C, Warning to EOP.(SCOREP)
- 2. The design objective for warning the population shall be as follows:
  - a. To provide both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10-mile EPZ, within 15 minutes after decision to activate the Prompt Notification System is made.
  - b. (No Public Lands of Barnwell County is within 5 miles of VEGP. There is no resident population within the plume EPZ in Barnwell County.)
  - c. Special arrangements will be made to assure 100% coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure EPZ.
- 3. The County Warning Point is located at the 911 Communications Center, 66 Law Enforcement Court, Allendale, South Carolina 29810.
- 4. The County Warning Point provides 24-hour emergency response.

- 5. Initial warning of a radiological emergency and any changes in emergency classifications (Unusual Livent, Alen, Site Area Emergency, General Emergency) will be provided to the County Warning Point by VEGP directly using the Emergency Notification Network (ENN), with Backup ENN, Southern LINC Radio Telephone and commercial telephone providing a backup. The State and County Warning Points receive this warning simultaneously. These warning points are staffed on a 24-hour basis.
- 6. In the event that an unusual event, alert, site area emergency or an escalating General Emergency occurs at Vogtle Electric Generating Plant, Allendale County will be alerted by the S.C. Emergency Management Division.
- Once Allendale County has been notified of a Site Area Emergency or a General Emergency at the Vogtle Electric Generating Plant (VEGP) and protective actions are determined, the public notification system will be activated.
- 8. The dispatcher at the County Warning Point will follow procedure and notify the Emergency Management Director who then will notify key EOC staff included in the Assignment of Responsibility for RER Planning. The notification will serve to either put key personnel on a standby status, or to mobilize them to activate the emergency response organization.

## D. Notification Communication/Emergency Classification Levels

- 1. Annex C, Warning to EOP.
- 2. VEGP has responsibility for classification of an emergency in accordance with NUREG-0654. State and local Emergency Management officials will review and certify their agreement with VEGP's EALs annually. The following EAL notification procedures will be followed:

## **Emergency Action Levels**

#### Page 1

## CLASS NOTIFICATION OF UNUSUAL EVENT CLASS DESCRIPTION - Unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occur. LICENSEE ACTIONS STATE ACTIONS LOCAL ACTIONS 1) Provide fire, medical, or HDWP notifies EMD and DHEC. 1) Promptly inform Highway security assistance if Department Warning Point 2) EMD verifies county required (HDWP) and affected notification. counties of nature of unusual 2) Escalate response to more condition as soon as 3) DHEC assesses situation with severe class it so notified. discovered. plant and confirms with EMD. 3) Stand by until verbal close 2) Augment on-shift resources. 4) EMD notifies Governor's 3) Assess and respond. Office & OTAG. 4) Escalate to a more severe 5) Escalate response to more class, if appropriate. severe class; if appropriate, 5) Close out with verbal 6) Stand by until verbal summary to off-site closcout. authorities followed by written summary within 24 hours.

#### **Emergency Action Levels**

#### Page 2

#### CLASS ALERT CLASS DESCRIPTION - Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels. LICENSEE ACTIONS STATE ACTIONS LOCAL ACTIONS 1) HDWP notifies EMD and 1) Provide fire, medical or 1) Promptly inform Highway DHEC security assistance on Department Warning Point request. and affected counties of Alert 2) LMD verifies county status. notification. 2) Augment resources and bring EOC(s) to standby status. 2) Augment resources, activate 3) DHEC assesses situation with Consider activation of on-site Technical Support plant and confirms with EOC(8) downwind from Center (TSC) and on site LMD, Recommends response facility. Operational Support Center required. (OSC). Emergency 3) Bring alert and notification Operations Facility (EOF) 4) EMD notifies Governor's systems to standby status. and other key personnel to Office, OTAG, North standby. 4) Activate siren system and Carolina, Georgia and EBS in 10-Mile LPZ if FEMA. 3) Assess and respond. recommended. 5) Governor considers declaring 4) Consider activating the Joint 5) Alert key personnel to a State of Emergency. Information Center. standby status. 6) Alert key emergency 5) Dispatch on site monitoring response personnel and 6) Escalate to more severe class teams and associated communications to stand by if notified. communications. status. 7) Maintain Alert status until 6) Provide periodic plant status verhal closeout or reduction 7) EMD staff activates SEOC. updates to off-site authorities Consider dispatch. or emergency class. (at least every 15 minutes). 8) Dispatch Public Information 7) Provide periodic group to the Joint meteorological assessments Information Center, if to off-site authorities, and activated. dose estumates for actual releases. 8) Escalate to a more severe class, if appropriate.

CLASS DESCRIPTION - Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.				
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS		
Closeout or recommend reduction in emergency class to off site authorities followed by written summary within h hours.	9)Coordinate Activation of sinen system and EBS in 10-Mile EPZ if recommended.  10) Consider precautionary evacuation of schools within 5-Mile EPZ and 10-Mile downwind.  11) Provide assistance requested from counties and facility.  12) Escalate response to more severe class if appropriate.  13) Maintain Alert status until verbal closeout or reduction of emergency.			

Page 4 CLASS

## GENERAL EMERGENCY

CLASS DESCRIPTION - Events are in process or have occurred which involve an actual or imminent substantial core degradation or melting with potential for loss on containment integrity. Release can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

1				-	
	LICENSEE ACTIONS	<u> </u>	STATE ACTIONS	_	LOCAL ACTIONS
<b>\</b>	Promptly inform SECC/FECC and affected counties of General	1)	HDWP notifies EMD and DHEC, DHEC coordinates with EMD and recommends	נו	Activate Reception Centers shelters as needed.
}	Emergency status and reason for emergency. If	{	protective actions.	(2)	Conduct evacuation and/or sheltering as ordered by
	SEOCATEOC not operational, notify Highway	2)	TMD verifies county notification.	\ } {	Gavernor,
	Department (HDWP) Warning Point and affected	3)	DHEC/EMD recommend	3)	Conduct off-site radiological monitoring and
	counties.		areas requiring evacuation and/or sheltering, if required.		decontamination as required.
2)	Recommend protective actions necessary for public		to the Governor.	4)	Broadcast notification information on direction of
	protection.	[ 4) [	EMD obtains Governor's order for evacuation and/or		the County PIO at the JIC.
3)	Augment resources by activating on-site TSC, on-site OSC and near-site EOF.	\ 	sheltering if required.	51	Provide security for evacuated area.
] ] <sub>4)</sub>	Assess and respond.	5)	EMD relays Governor's decision to affected counties.	6)	Request state assistance as needed.
	•	6)	Coordinate activation of		1
5)	Dispatch on-site and off-site inonitoring teams and communications.	] [	public alert system and EBS in 10 Mile EPZ.	7)	Direct protective actions as recommended and deemed appropriate.
6)	Provide a dedicated individual for plant status	7) 	EMD notifies FFMA. North Caroline and Georgia.	8)	In an immediate emergency and SEOC/FEOC is not
   	updates to off-site authorities and periodic press briefings.	8)	EMD coordinates evacuation, sheltering, and radiological monitoring if		operational: (a)Initiate protective actions recommended by plant as
7)	Make senior technical and management staff on-site	{	required.		appropriate: (b) activate the public atert system and EBS
}	available for consultation with NRC and State on a periodic basis.	9)	Provide periodic press updates for public within at least 10-Mile FPZ.		for 10-Mile EPZ: (c) Take actions appropriate at Alert and Site Area Emergency.
{ s)	Provide meteorological and dose estimates to off-site authorities for actual releases via a dedicated individual or	10)	Consider distribution of Potassium Todide tablers to emergency response	9)	Maintain General Emergency status until closeout to reduction of emergency class.

## **CLASS**

## GENERAL EMERGENCY

CLASS DESCRIPTION - Events are in process or have occurred which involve an actual or immlacat substantial core degradation or melting with potential for loss on containment integrity. Release can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
интотated data transmission.	organizations.  11) Coordinate and allocate state	
Provide release and dose     projections based on	support resources.	
available plant condition information and foreseeable contingencies.	12) Request Federal Support as needed.	
10) Close out or recommend reduction of emergency class	13) Provide protective actions in 50-Mile Ingestion Pathway EPZ.	
by briefing or off-site authorities at EOC and by phone followed by written summary within 8 hours.	14) In an immediate emergency and SEOC/FROC is not operational, state forces will rapidly take appropriate actions required at Alert and	
	Site Area Emergency to achieve requisite direction and control.	
	15) Maintain General Emergency status urtil closeout or	!    -
	reduction in emergency class.	
	}	

## CLASS

## SITE AREA EMERGENCY

CLASS DESCRIPTION - Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site houndary.

	LICENSEE ACTIONS		STATE AUTIONS		LOCAL ACTIONS
-	INCERGED ACTIONS	<del> -</del>		<del> -</del> -	EOCAL ACTION
13	Promptly inform SEOC/PPOC and affected counties of Site Area	1)	HDWP notifies EMD and DHEC.	   	Activate EOC and emergency personnel to full status.
	Emergency status and reason for emergency. If SEOC/FEOC not	2)	EMD verifies county notification.	2)	Dispatch representatives to the Joint Information Center.
}	operational, notify SC DPSWP and affected counties.	3)	DHEC assesses situation with plant and confirms with EMD.	3)   	Issue dosimeters to emergency workers.
2)	Augment resources by activating on-site Technical Support Canter and near site	4)	DHEC/EMD recommend protective actions to Governor.	4)	Be prepared to assist with radiological monitoring on request.
3)	Emergency Operations Pacifity (EOF).  Assess and respond.	}     5) 	EMD relays protective action decision to counties.	51	After coordination with SEOC/FFOC, activate public alert system in 10-Mile EPZ. (fixed mobile or electronic
-"	Assess and techniles	6)	Coordinate activation of		tone signal).
41	Dispatch on site and off-site monitoring teams and communications.  Activate Joint Information	{ · · ·	public alert system and EBS in 10-Mile EPZ so residents will turn on radios/televisions, Provide public with periodic updates.	6)	Broadcast notification information on direction of County P10 at the Joint Information Center.
	Center.	}		l	
61	Provide a dedicated individual for plant status	` 7) 	Activate SEOC if not already operational,	7)	Prepare to activate Reception Centers & Shelters as needed.
	updates to off-site authorities and periodic press briefings.	8)	EMD notifies state response forces to send representatives to SEOCALOC.	8)	Establish predetermined Traffic Control Points.
7)	Make senior technical and management statt on-site available for consultation with NRC and State on a periodic basis.	9)	EMD notifies Governor's Office, OTAG, North Carolina, Georgia and FEMA.	9)	Direct protective actions as recommended and deemed appropriate.
R۱	Provide meteorological and dose estimates to off-site authorities for actual release	toı	EMO considers dispatch and activation of FEOC.		Request State assistance as needed.  In an immediate emergency
	via a dedicated individual or automated data transmission	11)	HMU dispatches State liatson to affected county FOC(s).		and SEOC/FEOC are not operational; (a) Initiate

Emergency Action Levels Page 7

## **CLASS**

## SITE AREA EMERGENCY

CLASS DESCRIPTION — Events are in process or lawe occurred which involve an actual or likely major failures of plant functions needed for protection of the public. Any releases not expected to exceed EPA Protective Action Guideline exposure levels except near-site boundary.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
9) Provide release and dose projections based on available plant condition information and foreseeable contingencies.  10) Viscolate to General Emergency Class, if appropriate.  11) Closeout or recommend reduction in emergency class by briefing the off-site authorities at EOF and by phone followed by written summary within 8 hours.	<ol> <li>Dispatch Public Information group to the Joint Information Center. Provide periodic press updates for public within at least 10 Mile EPZ.</li> <li>Place on standby status other emergency personnel (e.g. those required for evacuation and dispatch to near-site duty stations).</li> <li>DHEC/EMD recommends if Potassium Iodide should be distributed to emergency workers.</li> <li>Establish 2-mile road blocks and control access to the area on order.</li> <li>Consider precautionary evacuation of 2. Mile EPZ and sheltering of downwind areas.</li> <li>Consider evacuation of lakes, rivers, and forests.</li> <li>Provide assistance requested by county and facility.</li> <li>Escalate to General Emergency, if appropriate.</li> <li>Maintain Site Area Emergency status until cioseoul or reduction of emergency class.</li> </ol>	protective actions recommended by plant as appropriate; (b) Activate the public alert system and EBS for 10-Mile EPZ; and (c)Take actions appropriate at Alert.  12) Escalate to General Emergency if required.  13) Maintain Site Area Emergency status until closeour or reduction of emergency class.

## E. Public Information

- 1. Annex D. Public Information to EOP.
- 2. Attachment 1, Evacuation Sectors, Routes, Shelters, and Procedures.
- 3. Annex C, Public Information, SCORERP.
- 4. EAS/ETV Procedures, Annex A, to Part 5 of Vogtle Site Specific.

#### F. Public Health and Sanitation

Annex H, Medical Service to EOP and Annex M, Engineering and Public Works to EOP.

#### G. Social Services

- 1. Annex K, Emergency Welfare Service (EWS) and Shelter to EOP.
- 2. Attachment 1, Map, Evacuation Sectors, Routes, Shelter Areas, Shelters, and Procedures.
- 3. On notification that an evacuation of the population of all or a portion of the ten-mile EPZ has been ordered, or is being considered, the Allendale County DSS will provide emergency workers who will assist the Red Cross at the pre-designated shelters. Evacuees will be directed through these shelters to be monitored and registered.
- 4. Appendix 11 to this Annex. List of shelters and capacities.
- 5. See Basic Plan, Attachment 4 for supporting county's plans.

#### H. Fire and Rescue

- 1. Annex F, Fire Service to EOP.
- 2. Annex G. Rescue Service to EOP.

## I. Emergency Medical Service (EMS)

Annex H. Emergency Medical Service (Ambulance) (EMS)

#### J. Law Enforcement

1. Annex E, Law Enforcement to Allendale County EOP.

2. Attachment 1, Map, Traffic Control Points and Routes. South Carolina Highway Patrol will operate state traffic control points on roads leading into EPZ from the county. Staffing of predetermined traffic control points will be assigned to county law enforcement. Allendale County will assist as needed.

## K. Transportation

- 1. Annex L. Transportation to EOP.
- 2. In the event of an evacuation of the populace of the 10-mile EPZ, emergency transportation will be necessary. There are no public or private schools in the 10-mile EPZ. Residents without privately owned vehicles will require transportation.
  - a. There are approximately 31 school buses in the Allendale County attendance area.
  - Ambulances will be dispatched to transport any nonambulatory resident. School buses and available county owned vehicles will also be available.
  - c. Transportation of contaminated victims will be accomplished by designated ambulances of the Allendale County Emergency Medical Service. Protective measures will be taken to prevent the spread of any contamination from the victim. Upon arrival of the medical facility and removal of the victim, both ambulance and attendants will go through a decontamination station.
  - d. Any resident in the 10-EPZ who does not have transportation will call dispatch center for transportation. Trans will be provided by the county trans officer.
  - e. Allendate County will utilize all available school buses and county owned vehicles to transport any residents without transportation. Non-ambulatory residents will be transported by the Allendale Medical Service. Residents without transportation will be transported to their pre-designated shelters.
  - f. The counties adjacent to Allendale County (Aiken, Barnwell, Hampton, and Bamberg) have approximately 150 school buses at their disposal. Once these buses have been used to return their students home, the buses can be made available to Allendale County.

### L. Protective Response

1. The South Carolina Technical RERP provides for protective action guides and other criteria consistent with existing EPA guides. Allendale County provides the mechanism for implementing protective actions such as sheltering and/or evacuation of the county populace in and from sectors recommended by DHEC/ SCEMD and ordered by the Governor of the State.

## 2. Radio Protective Drugs - Emergency Workers:

The State of South Carolina provides for policies and procedures for storing and distributing Radio Protective drugs to all emergency workers including Allendale County.

## 3. Radio Protective Drugs - Local Populace:

The State of South Carolina and Allendale County will not prescribe and issue Radio Protective drugs to the general populace of the county. See S.C. Technical RERP. This decision rests upon the Board of Commissioners of the Department of Health and Environmental Control.

## 4. Protective Sheltering:

In the event of an accident at VEGP resulting in the release of a radioactive plume, it may be necessary for the populace to stay in place at their respective locations. Certain procedures would be taken by the populace as recommended by the facility of DHEC/SCEMD and ordered by the Government.

- a. Stay inside their homes with all windows and doors closed.
- b. All air conditioners, attic fans, etc., should remain nurned off.
- c. Anyone outside should, immediately upon emering the home, remove all clothing and take a thorough shower. Removed clothing should be placed inside a closed container.
- d. Hot gas water heaters should be turned off.

#### 5. Evacuation:

a. The population distribution of the 10-mile EPZ located in Allendale County is as follows:

Sector	Population	Evacuation '	'imes (Minutes)
		Average <u>Weather</u>	Adverse <u>Weather</u>
*II-10	37	155	160
	200 Transients	115	120

- The residents of are located in Barnwell County (sector H-10), but will evacuate through Allendale County.
  - b. All sectors will evacuate to the Allendale Elementary school, Allendale-Fairfax Highway, Allendale, South Carolina.
  - c. The site specific part of the SCORERP provide the maps.
    - Maps of evacuation sectors, traffic routes, shelter areas, assembly areas, and shelters.
    - 2. Population distribution may of permanent and maximum (including transients) persons within sectors around the plant.
    - Evacuation routes will be controlled by the South Carolina Highway Patrol at specific Traffic and Access Control Points.(TACP)
    - 4. Traffic capacities projections on the evacuation routes may be found in Tab A.
    - Special evacuation problems will be identified by Transportation Coordinator. Alternative protective actions that will reduce ionization exposure will be specified by DHEC.
    - 6. Access to the evacuated area will be stringently enforced by local law enforcement, and only predesignated forms of identification will allow entrance to the evacuated area.

7. Evacuation estimates have been computed and will be updated by Vogtle Electric Generating Plant to give local officials time data when evacuation decisions become necessary. Areas for which evacuation estimates are required encompass the entire 10-mile radius.

## M. Radiological Monitoring and Decontamination

#### 1. Ten-Mile EPZ:

- a. The Allendale County Radiological Officer will direct all county radiological monitoring teams, which will monitor the following:
  - (1) Local RER personnel.
  - (2) Local emergency vehicles at decontamination points.
  - (3) Evacuees and their vehicles at shelters.
- b. Monitoring team assignments listed in Appendix 3, use the SOP, Annex S (Radiological Protection) will be utilized to complete the above task. Teams and individual monitors will be assigned by the county Radiological Officer to the locations and tasks required.
- e. Equipment to be utilized by monitoring teams listed in SOP Appendix 4 to Annex S (Radiological Protection).
- d. If radiation is detected, decontamination will occur as outlined in SOP Appendix 9. After decontamination, people and vehicles will be re-monitored.
- e. Allendale County will maintain monitoring records for evacuees and their vehicles. Monitors at the shelters will complete the form below and forward information to the Radiological Officer on a regular basis. If an exposure increase is noted for a specific area, the Radiological Officer will be immediately notified.

#### MONITOR REPORT

- (1) Name of Evacuce
- (2) Address
- (3) Reading
- (4) Time of Reading

	(5)	Clot	hing/M	laterial Involved
	(6)	Prob	dem are	eas/requests
	(7)	Mon	itor Ide	entification
ſ.		edures Paragra		onitoring RER personnel are detailed in N.
g.			-	Officer is responsible for notifying DHEC idiological exposure.
h.		radiolo, EOP.	gical ac	ecident assessment is outlined in Annex T
Inge	stion <b>P</b> a	thway	Monit	oring:
<b>3.</b>				dinate the monitoring and technical D-Mile EPZ.
<b></b>	reque	Under DHEC's supervision, Allendale County may be requested to monitor and to possibly provide soil, crop, and milk samples for analysis.		
C		and the		will give reports to DHEC on a regular orts will be prepared on the forms shown
	(1)	Mon	itoring	Teams:
		(a)	assig	ioactive level reading upon arrival at gned area, half hourly thereafter until inuted.
-		<b>(b)</b>	•	ificant elevation or decrease of cactivity reported immediately.
		(c)	Керс	ort format (Report by line item).
			MO	NITOR REPORT
			(1	Location (Sufficient detail for plotting)
			2)	Reading

C.

2.

3)

Time of Reading \_\_\_\_\_

			4)	Clothing/Food Stuffs	
				Involved	
			5)	Problem Areas/Requests	
			6)	Monitor Identification	
(2)	Dece	ontami	nation Teams:		
	(a)	Rep	ort to DHEC at	assigned area.	
	(b)	Rep	on to completio	n of task.	
	(c)	Rep	ort format (Repo	ort by line item).	
		DEC	CONTAMINAT	TION REPORT	
		1)	Team Identif	ication	
		2)	Area Decont	aminated	
		3)	Time Require	ed for Completion	
		4)	Personnel Ut	ilized (Numbers)	
		5)	Equipment U	tilized (Type & Numbers)	
		6)		ns/Requests	
	d.	See I	ngestion Pathwa	y Procedures, SCOREP	
	e.	Sec S	STRERP.		
3.	Decoi	utamin	ation:		
	a. <sub>.</sub>	Decontamination of the 10-mile HPZ and the 50-mile EPZ will be coordinated by DHEC. Allendale County will be requested to decontaminate local RER personnel, evacuees, and vehicles.			
	<b>b.</b>	Proce	edures for decon-	tamination are outlined in Appendix 9.	
	c.	See T	Decontamination	,SOP.	

- d. Contaminated personnel and equipment will be decontaminated according to Appendix 7, SOP.
- e. Allendale County will maintain exposure records of evacuces. Monitors at the shelters will obtain, record, and report, as a minimum, the information listed below for each contaminated person: Use Form...
  - (1) Name
  - (2) Address
  - (3) Type Instrument Used and Reading Obtained
  - (4) Time of Reading
  - (5) Effectiveness of Decontamination
  - (6) Location and Name of Monitor

#### N. Radiation Exposure Control

- 1. Emergency Workers in Allendale County who have a responsibility which could result in their exposure to radiation from an accident at the Vogtle Electric Generating Plant will be issued dosimeters. Each worker shall be issued two dosimeters: (1) permanent record dosimeter (PRD), and (2) a self reading dosimeter (SRD).
- 2. Priority of issue of dosimeters will be to persons working with:
  - a. Law enforcement
  - b. Fire-fighting
  - c. Rescue and Emergency Medical Services

Dosincters and dosimeter chargers will be permanently assigned to the chiefs of each of the emergency services listed above for subsequent issue to their personnel who are required to perform a service under this plan at time of emergency.

- 3. Additional dosimeters and chargers will be available at the Allendale County Emergency Management Office for further emergency uses.
- 4. Emergency service chiefs or their designated representatives will sign for any equipment issued and will be responsible for its return to the EOC.
- 5. All dosimeters will be issued to emergency personnel from the service chief's office. Before distribution, each worker will check his equipment for functionality and sign a clearance sheet to insure that all equipment can be accounted for at the end of a shift.
- 6. Each emergency/radiation worker who is issued a dosimeter will be responsible for reading and recording his own dose rate as well as for submitting the accumulated dosage to his superior. (See dose record form, Appendix 7.)
- 7. Chiefs of services will compile dosage reports and submit them to the Rudiological Officer on a daily basis before midnight.
- 8. The Radiological Officer will maintain permanent dose file cards for all emergency personnel and he is responsible for having this information available to the Bureau of Radiological Health upon request.
- Each individual will recharge desimeters after his shift dosage has been determined. Re-chargers will be located in the service chief's office.
- 10. Approximately one hour before a shift change, the Radiological Officer or the Emergency Management Director will brief the service chiefs on the dose rates calculated for specific area at that time interval. This briefing will be held in the EOC. Service Chiefs will be instructed to closely monitor personnel who are working in contaminated areas and to arrange personnel rotations to limit accumulated dosages.
  - a. If a dosimeter reads 0.1R, instruct that worker to call in and report.
  - b. If a dosimeter shows a maximum reading of IR, instruct that worker to return to this department for further instructions and decontamination.
- 11. Each service chief will arrange communication checks with his field personnel to determine dose rates on a 24-hour basis for the duration of the accident.
- 12. Exposure control will be law, SCORERP. In the event workers must

incur doses in excess of SCORERP standards, authorization to do so will come from the Chairman. Allendate County Council or his representative. All decisions will be discussed and authorization will be granted only when the exceeding or excess dose is absolutely necessary.

#### O. Medical

- 1. Contaminated victims will be treated at Doctor's Hospital should a radiological accident occur at Vogtle Electric Generating Plant.
- The training of persons providing medical services to contaminated victims is the responsibility of DHEC. See Annex B. Training, SCORERP.
- 3. Transportation of contaminated victims is outlined in Paragraph IV.K., Transportation, in this Annex.

### P. Recovery and Re-entry

- Allendale County will rely on South Carolina Technical RERP and its procedures as carried out by DHEC for relaxing protective measures. Notification to relax protective measures will come from the SEOC
- 2. Allendale County will follow procedures as directed by the State Technical RERP for general recovery plans.

### O. Equipment

- 1. Radiation detection equipment assigned to Allendale County monitoring stations in Appendix 4 to Annex S (Radiological Protection) may be used within its limitations for monitoring purposes.
- 2. See Paragraph IV.N., Radiological Exposure Control, this Annex.
- 3. Allendale County does not have any off-site radiological monitoring equipment to set up near the nuclear facility. In-place monitoring and sampling stations have been established by DHEC as outlined in STRERP.
- 4. DHEC provides monitoring service and has available at the DHEC Central Office the following supplies:
  - a. Radiation monitoring equipment, including personnel dosimeters (PRD's), portable survey meters and air samplers.
  - b. Protective clothing.

- c. Sampling equipment for water, air, milk, vegetation, soil, etc.
- **d.** Bio-assay collecting containers.
- e. Decontamination supplies and equipment.
- f. Up-to-date set of maps showing environs of each nuclear facility are maintained in the Central Office and aboard the Mobile Radiological Laboratory. These maps show the location of each nuclear facility, motoring and sampling locations, hospitals, and landing strips, etc.
- g. See STRERP for further details.
- 5. DHEC also maintains a Mobile Radiological Laboratory (MRL) equipped with emergency response supplies and equipment. The MRL can be dispatched to an accident site to perform field sample analyses, radiological monitoring, and decontamination tasks. The MRL is equipped with radio communications on the state-wide DHEC network and on the South Carolina Emergency Management Division state-wide network.
- 6. The receipt and analysis of all field monitoring data and the coordination of sample media will be handled by DHEC as outlined in STRERP.

### 7. Identification of emergency kits:

- a. Protective Equipment See STRERP.
- b. Communications Equipment See Annex B. Communications, Alfendale EOP, See also Paragraph VI.B., Communications, this Annex.
- c. Radiological Monitoring Equipment See Paragraph IV.Q., Equipment, this Annex. See also Annex S, Radiological Protection, Allendale County EOP. See also STRERP.
- d. Emergency Supplies -- Allendale County has no emergency supplies on hand other than those supplies used by emergency response teams on a daily basis. See Annex N, Supply and Procurement, Allendale County EOP for procedures to procure any emergency supplies from state resources. See Resource Appendix of each Annex EOP for a list of equipment on hand.
- 8. Each emergency service is responsible for operationally checking its equipment quarterly and after each use. Calibration of equipment shall be at intervals recommended by the supplier of equipment.

#### R. Exercise and Drills

Allendale County will participate in Radiological Emergency Response Exercises in conjunction with exercises at the facility. Exercises will be conducted on a frequency and as set forth in FEMA and NRC Rules.

#### 1. Exercises:

a. Allendate County will participate in Radiological Emergency Response Exercises prepared by EMD, DHEC and the VEGP. These exercises will be observed and evaluated by federal and/or state and local official.

#### 2. Drills:

Allendale County will conduct and participate in subsystem drills, in addition to the bi-annual RER exercise. Such drills will be supervised and evaluated by a qualified instructor. Each emergency service organization/component will conduct drills as indicated below:

#### a. Communication Drills

Communications between the county, the Vogtle Electric Generating Plant and the EMD will be tested monthly. Such drills will include the understanding and transmission of emergency messages.

#### b. Medical Emergency Drills

Medical Emergency Drills will be conducted at unannounced frequencies. A drill involving a simulated contaminated individual will be performed biannually.

#### c. Radiological Monitoring Drills

Conducted in coordination with DHEC. See STRERP.

#### d. Health Physics Drills

Conducted by DHEC. See STRERP.

#### 3. Conduct of Exercise:

Exercises and drills will be designed and executed in such a manner to allow free play for decision making and to meet the following objectives:

- a. Drills in Allendale County will consist of the following, with a basic objective of qualification:
  - (1) Notification Communications.
  - (2) Notification Warning Procedures.
  - (3) Shelter Procedures and Sheltering.
  - (4) Emergency Operations Center; Operations, Procedures and Communications.
  - (5) Medical Emergency Response Capability.
  - (6) Rescue Response Capability.
  - (7) Law Enforcement Traffic Control and Security Capability.
  - (8) Fire Response Capability.
- **b.** Evaluation will be provided for every drill. A critique will be made and retraining, if required, will be conducted.
- c. The EMD will be notified of each drill and requested to observe.
- d. Each drill will be planned and prepared to include the following:
  - (1) Date, time period, place and participating county organizations.
  - (2) Simulated events.
  - (3) A time schedule of real, initiating and anticipated events. (Scenario)
  - (4) A narrative summary describing the conduct of the exercise.
  - (5) Description of arrangements for advanced materials to be issued to official observers.

- (6) Evaluating, critiquing, and method of implementing corrective actions.
- e. For RER exercises with the Vogtle Electric Generating Plant or the state, Allendale County is a participant and does not conduct such exercises. See SCORERP, Annex D, Exercise Plan, State RERP for conduct of exercises.

# S. Radiological Emergency Response Training

The Allendale Emergency Vanagement Agency is responsible for training off-site emergency personnel to respond effectively to an accident involving VEGP. Personnel to receive initial and follow-up training are: law enforcement, fire, rescue, emergency medical, shelter managers, and radiological defense personnel.

The annual training program for off-site emergency response personnel shall consist of classroom training, tabletop exercises and governmental conferences. In addition, such emergency service and governmental officials with emergency assignment will participate in an annual radiological emergency response exercise with the facility.

### 1. Allendale County Emergency Management Director:

- a. The County Emergency Management Director will receive initial and follow-up training by the SCEMD. Training will consist of daily responsibilities, radiological defense, governmental conferences, management seminars, workshops, and career development courses. (Reference SCORERP, Annex B.)
- b. The County Emergency Management Director is responsible for the county training program to include responsibilities of county government and specific duties of the emergency services. Assistance will be obtained from the SCEMD. (Reference SCORERP, Annex B.)

#### 2. Accident Assessment:

Accident assessment is a state responsibility. (See STRERP.)

Radiological Monitoring Teams and Radiological Analysis
Personnel:
Radiological Protection Officer and Monitors:

a. Allendale County Emergency Management Director has the overall responsibility of training Radiological Monitors and is responsible for conducting training and refresher courses and his instructors training is from the State Emergency Management Division, REP Program Section. Instructors

take periodic refresher courses. In order to become a total radiological monitor, one must take the standard fundamentals course for Radiological Monitors and Emergency Workers.

A refresher course is given every year, and it must be taken to remain certified. Monitors must also participate in exercises and drills that involve radiological monitoring.

This radiological monitoring is designed for RER, however, the basic principles of the instruction is translatable to FNF accidents for understanding of conditions, nuclear theory, and sheltering. Should low-level monitoring instrumentation become available to the county, previously trained monitors could be easily trained.

- b. Radiological monitoring is offered to the following county and municipal agencies:
  - (1) County Law Enforcement
  - (2) County Volunteer Rescue Service
  - (3) Volunteer Fire Departments
  - (4) County EMS
  - (5) Municipal Fire Departments
  - (6) Municipal Police Departments
  - (7) Local Red Cross Workers

### 4. Police, Security and Fire Fighting Personnel:

Law enforcement and fire fighting personnel will be trained locally with assistance from SCEMD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service SOP. Governmental conferences, tabletop exercises and participation in the annual radiological emergency response exercise with the facility will do this.

#### 5. First Aid and Rescue Personnel:

Rescue Squads and the Emergency Medical Service will be trained locally with assistance from SCEMD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service SOP. This will be done by governmental conferences, tabletop exercises and participation in the annual radiological emergency response exercise with the facility.

## 6. Medical Support Personnel:

Training of medical support personnel is a DHEC responsibility. (Reference SCORERP, Annex B.)

#### 7. Public Information and Instructions:

The Public Information Officer will receive initial training by Allendale County EMD with assistance from SCEMD. Training will include responsibilities, RER Plan, dissemination of information and development of an SOP. Follow-up training will consist of participation in tabletop exercises, governmental conferences and the annual RER exercise.

## T. Coordinating Instructions

- 1. This Radiological Emergency Response Plan will be reviewed/updated annually prior to the anniversary of the Plan by the county office with primary responsibility.
- 2. Supporting RER Standing Operating Procedures will be reviewed/updated by responsible agencies at the time of the RERP update.
- 3. All radiological emergency response personnel, employees or volunteers, must receive radiological emergency response training as outlined in Paragraph IV.S., above.
- 4. All telephone numbers will be updated quarterly by Allendale County Emergency Management Agency.
- 5. Letters of Agreement and Mutual Aid Pacts for RER will be initiated and promulgated.

#### V. ADMINISTRATION AND LOGISTICS

#### A. Administration

- 1. Allendale County EOP.
- 2. South Carolina Operational Radiological Emergency Response Plan.
- 3. South Carolina Technical Radiological Emergency Response Plan.
- 4. Administrative matters not contained in the above will be directed to the EOC.

5. Personnel effectiveness reports to EOC.

#### B. Logistics

- 1. Allendale County EOP.
- 2. South Carolina Operational Radiological Emergency Response Plan.
- 3. South Carolina Technical Radiological Emergency Response Plan.
- 4. Logistical matters not contained above will be directed to the EOC.
- 5. Equipment and transportation effectiveness reports to the EOC.

#### VI. DIRECTION AND CONTROL

#### A. Direction and Control

- 1. The Allendale County FOC is located in the James B. Brant Building Auditorium, 398 Barnwell-Allendale Highway, Allendale, South Carolina and will be made operational immediately upon receipt of an Emergency Action Condition requiring activation.
- 2. The State EOC is located at 1100 Fish Hatchery Road, Columbia, South Carolina.
- 3. The Vogtle Electric Generating Plant Operations Facility (EOF) is located at the Vogtle Electric Generating Plant Training Center.
  - The EOF will be staffed by Southern Nuclear Operating Company Personnel. The Technical Support Center is located near the station control room.
- 4. Adjacent County EOC's are located at:
  - Aiken County Council Building, 736 Richland Avenue, Aiken, S.C.
- 5. Chairman, Allendale County Council will provide county liaison with communications capability to the State SEOC, adjacent affected county EOC's and Georgia Power Company's EOF.
- 6. The Allendale County Council will provide liaison to operate shelters if evacuation is required.
- 7. Chicl's of Services or their designated representatives will be present in the Allendale County EOC to direct and control their service(s) upon direction of council.
- 8. The EOC will provide space and communications for State and federal liaison personnel.

#### B. Communications

1. During an emergency in Allendale County which results in the opening of the Emergency Operations Center, continuous communications with the different agencies that respond is most vital. The following communications will be used:

#### a. County Law Enforcement Radio System

The following frequencies will be utilized to coordinate county & municipal law enforcement personnel.

- (1) The Allendale County Sheriff's Department transmits and receives on 458.250 MHz. This can also transmit and receive on 458.250 MHz which is the police network. In addition, they have the regional frequency to transmit on 458.250 MHz. The City of Allendale and Fairfax transmit receive on 458.250 MHz.
- (2) See Annex B. Communications, Allendale County EOP.

#### b. Fire and Rescue Service

- (1) All Allendale County Fire Departments utilize frequency 154.175 MHz for communications.
- (2) All rescue squads utilize frequency 155,220 MHz for communications.
- (3) See Annex F (Fire Service) Allendale County EOP.
- (4) See Annex G (Rescue Service) Allendale County EOP.

### c. County Emergency Medical Service

The Hospital and Emergency Medical Service (EMS), can communicate with the Sheriffs and all the Rescue Squads via their base station on 155.340 MHz.

## d. SLED Teletype

The SLED teletype is located in the County Sheriff's Dispatch Section at the County Law Enforcement Center. It can be used to send and receive messages to the South Carolina Emergency Management Division and other

#### counties.

- c. Other public and private communication systems, such as telephone companies, electric and gas companies, school bus maintenance shops, etc., having an emergency communications capability, when needed and having a desire to assist.
- 2. Upon establishment of the State SEOC South Carolina Emergency Management Division will provide the Atlendale County EOC temporarily a two-way radio capable of communicating in the South Carolina Emergency Management Division radio system.
- 3. See Annex B, Communications to the Allendale County EOP.
- 4. Annex A 2, Communication to the South Carolina Comprehensive Emergency Management Plan.

#### C. Reports

- 1. South Carolina Emergency Operation Plan, October 1997 as amended.
- Situation reports will be submitted to the Allendale County EOC as necessary and/or as required. These reports will include such information as follows:
  - a. Agencies activated; operations undertaken and personnel/equipment strength.

#### b. Status of evacuation (if undertaken)

- (1) Area and number of population affected.
- (2) Location and number of persons in shelter on an hourly basis to include by age and sex.
- (3) Completion time of evacuation.

#### c. Casualties

- (1) Radiation related and where hospitalized or stored.
- (2) Non-radiation related and where hospitalized/stored.
- (3) Nature and extent of injuries (death) of casualties.
- d. Nature and extent to include time estimate of additional assistance and support required specifically defined as to Who, What, When, Where, and Why.

- e. After Action reports required from each Emergency Response Service to include:
  - (1) Number of personnel involved (total).
  - (2) Hours devoted by personnel (total).
  - (3) Average hours devoted by personnel.
  - (4) Equipment involved and cost estimate for each piece of equipment for operation.
  - (5) Support received from non-county assets.
  - (6) Overall dollar cost for the service for the operation.

# f. Damage Reports

- (1) County property.
- (2) Personal property to include animals and crops.

Allendale County Administrator	Date	
Director, Allendale County Emergency Management	Date	

#### **ATTACHMENTS**

Attachment 1 -Map, Vogtle Electric Generating Plant, 10 Mile EPZ, S.C.

Primary Highways, Sectors, Evacuation Routes, Shelters, Traffic

Control Points, Procedures,

Attachment 2 -Map, Vogtle Electric Generating Plant 50-Mile IPZ.

Attachment 3 -Map, Population Distribution of the Allendale County 10-Mile

EPZ.

Tub A -Traffic Capacities for Evacuation Routes.

APPENDICES

Appendix 1 -County Organization Chart.

Tab Λ -Responsibility Summary Table.

Appendix 2 -Procedures for Alerting and Notifying Residents and Warning

Teams of the 10-Mile EPZ.

Tab A -Warning Message - Nuclear Facility to State/Local Government.

Tab B -General Alert List.

**Tab C** -Vogtle Electric Generating Plant calendar.

Tab D -EMD Form 43, Accident Report

Appendix 3 -Traffic Control Points and Evacuation Routes for the 10-Mile

EPZ.

Appendix 4 -Two-Mile Evacuation and Road Block Plan for Voytle Electric

Generating Plant.

Appendix 5 -Nursing Homes, Industries, and Schools in the 10-Mile EPZ of

Allendale County.

Appendix 6 -SLED SOP.

Appendix 7 - Dose Rate Record.

Appendix 8 -Procedures to Implement the Allendale County RERP.

Appendix 9 -Radiological Decontamination.

Tab A -Decontamination Procedures:

Appendix 10 -Letters of Agreement.

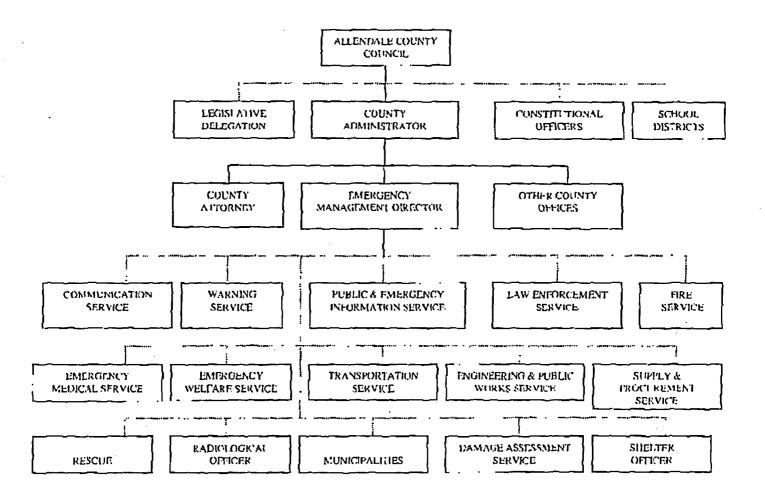
Appendix 11 -Shelters and Capacities.

# EVACUATION ROUTES.

# Traffic Capacities for Evacuation Routes.

Given the low population levels of the EPZ of Allendale County, the load capacities of the evacuation routes are sufficient to handle the expected volume of traffic.

# APPENDIX 1 TO ANNEX Q2, ORGANIZATION CHART.



# APPENDIX 1, TAB A TO ANNEX Q2 – RESPONSIBILITY SUMMARY TABLE

FUNCTION	AGENCY	RESPONSIBILTIY	
		Primary	Support
Command & Control	Allendale County Council Chairman County Administrator Director, Emergency Management Div. Chiefs, County Emergency Services	x	X X X
Warning (Radiological Emergency Response)	Sheriff Emergency Management Division Savanuah River Site Radio & TV Stations S.C. Educational Network State Law Enforcement Div. (SLED) (when requested) Municipalities	X	X X X X X
Notification Communications	Sheriff Director, Emergency Management Div. Utilities Telephone Companies Local Government & Municipalities Chiefs, County Emergency Services	X	X X X X X
Public Information	PIO Officer (County) Director, Emergency Management Div. Allendale County Council Chairman Local Newspapers TV & Radio Serving County Municipalities Utility	X	X X X X X
Accident Assessment (Nuclear Accident)	Dept. of Health & Environmental Control RAP & IRAP (Upon Request) Director, Emergency Management Div.	X	x X
Social Services (EWS)	County Dept. of Social Services School Districts County Red Cross Salvation Army (When Available)	x	X X X

# APPENDIX 1, TAB A TO ANNEX Q2 – RESPONSIBILITY SUMMARY TABLE (CONTINUED)

FUNCTION	AGENCY	RESPONSIBILTIY	
		Primary	Support
Fire Service	Chief, Fire Service Local & Fire Departments S.C. Forestry Commission S.C. Office of Fire Marshal Adjacent Counties (Mutual Agreement)	X	X X X X
Rescue Service	Chief, Rescue Service Local Rescue Squads S.C. Wildlife & Marine Resources S.C. Forestry Commission S.C. Aeronautics Commission S.C. Civil Air Patrol Adjacent Counties (Mutual Agreement)	X	X X X X X
Traffic Control, Security & Law Enforcement	Allendale County Sheriff Municipal Police Forces State Law Enforcement Div. S.C. Wildlife & Marine Resources S.C. Highway Patrol S.C. Army National Guard (If Available)	X	X X X X X
Emergency Medical   Services (EMS)	Chief, County Emergency Medical Serv. County Rescue Service County Ambulance Service Hospitals (Serving EPZ) Adjacent Counties (Mutual Agreement)	x	X X X X
Transportation	County School Bus Maintenance Supervisor Local Trucking Firms S.C. Public Service Comm. S.C. Aeronautics Commission S.C. Adjutant General Adjacent Counties (Mutual Agreement)	X	X X X X
Protective Response	Allendale County Council Chairman County Emergency Welfare Services Sheriff's Office Director, Emergency Management Div. Chiefs, County Emergency Services	X	X X X

# APPENDIX I, TAB A TO ANNEX Q2 – RESPONSIBILITY SUMMARY TABLE (CONTINUED)

FUNCTION	AGENCY	RESPONS Primary	
Radiological Exposure Control	S.C. Dept. of Health & Environmenta Control (DHEC) Director, Emergency Management Div. Allendale County Council Chairman	X	X X
 		}   	
			·
		}	

# APPENDIX 2 TO ANNEX Q2 -PROCEDURES FOR ALERTING AND NOTIFYING RESIDENTS AND WARNING TEAMS OF THE 10-MILE EPZ.

#### A. Purpose

Specify the standard operating procedures for alerting and advising the population of the 10-Mile EPZ.

#### B. Procedures

#### 1. Receipt of Warning:

- a. If an immediate site area or General Emergency occurs at the Vogtle Electric Generating Plant, authorized personnel will notify the Allendale County Central Dispatch Communications Center by telephone, or radio on frequency 458.250 MHz.
- b. The dispatcher on duty will verify that the eatler is authorized to issue emergency messages by consulting the authorization code list.
- e. If the fixed siren system is accidentally sounded, the warning point will immediately notify the radio and television stations servicing the Allendale County area to broadcast sample release No. 11 in Annex D, Public Information.
- d. See Appendices 1 and 2 to Annex C.

#### 2. Dissemination of the Warning:

Upon confirmation of an immediate General Emergency, the dispatcher will immediately notify/advise any one of the following Allendale County officials:

- a. Allendale County Emergency Management Agency
- b. Allendale County Sheriff Department
- c. Allendale County Council Chairman

Each of these officials has the authority to activate the siren alert system.

#### C. Siren Alert System

A fixed siren alert system has been installed in the 10-Mile EPZ (Siren is located in Barnwell County).

### D. Emergency Alerting System (EAS)

EAS must be activated along with the alert siren system. Information advising the population of protective actions will be given out over the EAS. See Annex D. Public Information.

### E. Alternate Method of Notifying the population of the 10-Mile EPZ

- 1. Should problems develop with the siren alert system, warning teams would proceed immediately to pre-assigned areas utilizing mobile sirens, loudspeakers and horns to notify the public of the situation.
- 2. Warning teams consist of the following along with assigned areas of responsibility:

Sector

H-10

Martin/Millett Fire Dept.

#### 3. Notification of Warning Teams:

- a. Rescue pager or telephone.
- b. Fire Departments pager, radio or telephone.
- c. Police Departments pager, radio or telephone.
- d. All units above can be contacted/controlled from Allendale County Central Dispatch Communication Room.

#### F. Warning Messages to be Disseminated Will Consist of One of the Following:

- 1. Attention A radiological accident occurred at the Vogtle Electric Generating Plant at (date/time) that could cause harm to persons in this neighborhood. You are requested to stay inside your homes and business with doors and windows closed. Turn on your radio or TV to receive further information.
- 2. Attention A radiological accident occurred at the Vogtle Electric Generating Plant at (date/time) that could cause harm to persons in this neighborhood. We urge you to leave your homes or businesses in a safe, orderly manner and report to your assigned shelters. Turn on your radio or TV to receive further information.
- 3. Attention The Governor of South Carolina has declared a state of emergency due to an accident at the Vogtle Electric Generating Plant at (date/time).

Your are requested to begin movement to your shelter in accordance with instructions listed in the Vogtle Electric Generating Plant Calendar and

information furnished by radio and TV stations.

# G. Public Information Officer

- 1. The Emergency Management Director/County Manager will direct the PIO to activate the Emergency Public Information System and to issue appropriate messages.
- 2. The widest coverage by Media and EAS will be utilized to covey the public warning and follow-up messages.

# FACILITY TO STATE/LOCAL GOVERNMENT

Insert Green Sheet

Page	1

EMERGENCY NOTIFICATION
1- A THIS IS A DRILL B ACTUAL EMERGENCY INITIAL PROLITIONALIPA NUMBER
3-TRANSMITTAL FIME/DATE
4-AUTHENTICATION of Required)(Number)(Codew.nd)
5-EMERGENCY CLASSIFICATION:
A NOTIFICATION OF UNUSUAL EVENT BE ALERT C SITE AREA EMERGENCY D GENERAL EMPROBNCY
6 A Energency Declaration At: B Termination TIME/DATE
7- EMERGENCY DESCRIPTION/REMARKS:
8-PLANT CONDITION: A IMPROVING B STABLE E DEGRADING
9-REACTOR STATUS: A SHUTDOWN: HIMEDATE:
10-EMERGENCY RELEASEIS):  [A none (Go to item 14)   B   POTENTIAL (Go to item 14)   C   IS OCCURING   D   HAS DECURRED
11 - 1 YPE OF RELEASE: GROUND LEVEL.
AARBORNE: STARTED // STOPPED // / STOPPED // / STOPPED // // STOPPED // // // STOPPED // // // // // // // // // // // // //
B LIQUID: STAKTED: / STOPPED: //  Time(bastern) MM DD YY Time(bastern) MM DD YY
**12—RELEASE MAGNITUDE: CURIES PER SEC. CURIE NORMAL OPERATING LIMITS: BELOW ABOVE A NOBI E CASES
E. PARTICULATES EP OTHER
**13—ESTIMATE OF PROJECTED OFFSITE DOSES: *** NEW **** UNCHANGED
TEDE Thyrold CDE
TEDE Thyrold CDE (main) (men)  SITE BOUNDARY PROJECTION TIME 2 MILES (Eastern)
TEDE Thyrold CDE (mem) (mem) SITE HOUNDARY PROJECTION TIME
SITE HOUNDARY  SITE HOUNDARY  2 MILES 5 MILES 10 MILES 10 MILES WIND DIRECTION (fro.ii)  8*14 - METEOROLOGICAL DATA: A WIND DIRECTION (fro.ii)
SITE HOUNDARY SITE HOUNDARY SITE HOUNDARY MILES SMILES SMI
SITE HOUNDARY  SITE HOUNDARY  2 MILES 2 MILES 5 MILES 10 MILES 10 MILES C STARILITY CLASS 10 PRECIPATION (1976) 15 - RECOMMENDED PROTECTIVE ACTIONS:  NO RECOMMENDED PROTECTIVE ACTIONS
SITE HOUNDARY SITE HOUNDARY SITE HOUNDARY SITE HOUNDARY SMILES SM

**Q2-58** 

# APPENDIX 2, TAB TO ANNEX Q2 - WARNING MESSAGE - NUCLEAR FACILITY TO STATE/LOCAL GOVERNMENT

Insert Green Shoot Page 2

# INSTRUCTIONS MESSAGE RECEIVER

Person receiving this message, record your signature, duty position, agency and time/date of receipt message.

SIGNATURE:	DUTY POSITION:				
AGENCY:	TIME/DATE:				
	(Eastern)	mm dd yy			
	MESSAGE SENDER				
Record the name, title, agency and t	time/date of agencies notified per alert procedur	es.			
NAME:	TTTLE:				
AGENCY:		/			
		mm dd yy			
NAME:					
AGENCY:	TIME/DATE:				
	(Eastern)	mm dd yv			
NAME:	TITLE:				
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AGENCY:	TIME/DATE:	//			
	(Eastern)	mm dd yy			

# APPENDIX 2, TAB II TO ANNEX $Q^2$ – GENERAL ALERT LIST.

EMERGENCY TITLE	TELEPHON BUSINESS	E NUMBERS RESIDENCE
Council Chairman	632-3352	632-3217
County Administrator	584-3438	
EPA Director	584-4081	
Warning Officer/Sheriff	584-2361	
Chief, Law Enforcement	584-2177 632-3222	
Communications Officer	584-2339 584-2361	
Transportation Officer	584-2311 584-4603	
Fire Service Chief	584-3218 584-2333	,
Chief, Rescue Squad Coor.	584-3443	
Chief, Engineering	584-3438	
Radiological Officer	584-2177	
Shelter	584-4081 584-4040	
EWS	584-3956 584-7048/7	049
Damage Assessment Officer	584-2572	
Financial Advisor	584-3876	
Legal Advisor	584-7676	
Supply & Procurement	584-7040	

# APPENDIX 2, TAB B TO ANNEX Q2 – GENERAL ALERT LIST. (CONTINUED)

CITY MAYORS OF MUNICIPALITIES

ALLENDALE 584-4619

<u>CITY</u> <u>MANAGERS OF MUNICIPALITIES</u>

FAIRFAX 632-3111

# APPENIX 2, TAB C TO ANNEX Q2 - VOGTLE ELECTRIC GENERATING PLANT CALENDAR

PLANT BROCHURE

# APPENDIX 2, TAB D TO ANNEX Q2 – EMD FORM 43, ACCIDENT REPORT FORM

# ATTACHMENT 1-A SC EMD ACCIDENT/INCIDENT REPORT

		Initial□
<b>A</b>		Follow-up□
Date:	1 me:	Message #
(min/dd/yy)	Time/Date o	4 10241
Accident/Incident:	Timer Date o	)(
Renoming Persons	<del></del>	Telephone:
requiring recisent	(Name/Title)	
Point-of-Contact:		Telephone:
	(Nama/Titk)	
Location of Acciden		· ——————
Type of Accident/Inc	cident:	. SAR, Fornado, Bouro Threat, Water Supply, Weather,
	le g., Eanhquake, Flood,	SAR, Fornado, Bourb Threat, Water Supply, Weather,
If Hazardous Materia	ais, Type/Quantity:	
Cause or causes, if k		
Casualties: #Dead	#Missing	#Injured
		#Evac#Sheltered
County FOC: Activ		
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# APPENDIX 3 TO ANNEX Q2 – TRAFFIC CONTROL POINTS AND EVACUATION ROUTES FOR THE 10-MILE EPZ.

The following is an evacuation and road block plan to be used when ordered by the proper authorities regarding a nuclear accident at the Vogtle Electric Generating Plant.

Evacuation data was evaluated to identify key intersection locations where potential vehicle conflicts during an evacuation would warrant management or control. The locations identified for traffic control are identified below:

#### Allendale County:

- Route 125 at Route 12 (direct traffic south on Route 125).
- Route 125 at Route 17 (direct traffic south on Route 125).

#### These locations are illustrated in Attachment 1.

These responsibility for traffic control during an evacuation of the South Carolina portion of the VEGP EPZ will be shared by Aiken and Allendale County Emergency Management Law Enforcement Agency personnel, and State as available. Barnwell County Law Enforcement personnel will be available as backup to Allendale personnel if required. Each traffic management location will be manned and/or road blocks will be positioned to direct evacuees out of the EPZ and to restrict unauthorized access in the affected area. Route markers will be placed along the evacuation route at the above critical location to promote more efficient traffic flow out of the EPZ.

APPENDIX 4 TO ANNEX Q2 – TWO-MILE EVACUATION AND ROAD BLOCK PLAN FOR VOGTLE ELECTRIC GENERATING PLANT.

ON FILE AT THE ALLENDALE COUNTY EMERGENCY MANAGEMENT AGENCY.

APPENDIX 5 TO ANNEX Q2 – NURSING HOMES, INDUSTRIES AND SCHOOLS IN THE 10-MILE EPZ OF ALLENDALE COUNTY.

THERE ARE NO SCHOOLS, NURSING HOMES OR INDUSTRIES LOCATED WITHIN ALLENDALE COUNTY'S 10-MILE EPZ OR VEGP.

# APPENDIX 6 TO ANNEX Q2-STATE LAW ENFORCEMENT, SOP.

The security identification that will be used to control egress and ingress in the case of a nuclear emergency is as follows:

Law Enforcement: All bonafide uniforms, including the National Guard uniform, will be honored. Plain clothes officers will be issued a yellow and blue lapel badge with the letters LE clearly visible marked on it as a sequential number by which it is issued. There will be a corresponding placard for the automobile dashboard.

Staff Support: All agencies' personnel involved in support of an accident but are neither law enforcement not plant employees will be issued a green and white lapel badge with a flag on it clearly visible with the letters SS, also to be sequentially numbered by which it

will be issued. There will be a corresponding placard for the automobile dashboard.

Facility Personnel: Each facility will be issued a large block of yellow and black lapel badges that are to be issued to their people by the sequential number. These will also have clearly visible the traditional nuclear emblem. They are to be pre-issued only to the key emergency personnel and to the other employees as they come to work. There will likewise be a corresponding placard for the automobile dash.

News Media: The State of South Carolina issues to media representatives a permanent press pass with photograph. Names are recorded on computer for quick scearity check. There will be temporary press ID's issued at the time of an incident with an expiration date affixed to it for media persons not previously issued one.

Civilians: A pass for evacuees to enter their premises in the evacuated area for the purpose of tending to urgent duties, such as feeding livestock, will be available. It is a white and orange lapel badge and is sequentially numbered. An accompany placard for the automobile dash will be distributed. Both will be issued from the FEOC with a time limitation specified for remaining in the evacuated area.

All of the IDs will be issued by number and they will be audited periodically. A photocopy of all lds will be attached to this section for clarification.

# APPENDIX 7 TO ANNEX Q2 - DOSE RATE RECORD.

# RADIATION EXPOSURE RECORD

NAME	— —— —— —— —	————————————————————————————————————		
AGE	DATE OF BIRTH			
HOME ADDRI	FSS:			
SOCIAL SECU	'RITY NUMBER			
DOSIMETER S	SERIAL NUMBER			
AGENCY/ORC	GANIZATION NAME			
		,		
	INITIAL	FINAL		
DATE	READING	READING	EXPOSURE	
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<del></del>		<del></del> .		
		, <u></u>		
DATE	TOTAL EXPOSURE_			
SIGNATURE				

# APPENDIX 8 TO ANNEX Q2 - PROCEDURES TO IMPLEMENT THE ALLENDALE COUNTY RER PLAN

#### NUREG-0654 Criteria II p:7

- 1. Aiken Regional Hospital Medical Center Operational Procedures.
- 2. Spent Fuel Transportation Plan VFGP.
- 3. Engineering Study for Radio Controlled Outdoor Sircu Alerting System for VEGP Prepared by Federal Signal Corporation.
- 4. Standing Operations Procedures, State Emergency Operations Center, Emergency Management Division, Office of the Adjutant Ciencial.
- 5. Local Government Radio/Signal Operating Instructions, Emergency Management Division, Office of the Adjutant General.
- 6. Duty Officer/Staff Duty Officer Instructional Manual, Emergency Management Division, Office of the Adjutant General.
- 7. Emergency Health Plan for South Carolina, South Carolina Department of Health & Environmental Control.

#### APPENDIX 9 TO ANNEX Q2 - RADIOLOGICAL DECONTAMINATION

#### A. GENERAL

- Radiological decontamination is the reduction or removal of contaminating radiological material from structures, areas, objects or persons. The object is to reduce the contamination to an acceptable level with the least expenditure of labor and materials, and with radiation exposure to decontaminate personnel commensurate with the argency of the task.
- 2. Decontamination procedures will be implemented on the recommendations of DHEC, Department of Health and Environmental Control.

#### B. EXECUTION

- 1. Decontamination points will be established at the following locations and be under direction of the Radiological Officer:
  - n. People: Allendale Hementary School
  - b. Vehicles:

Personal: Allendale Elementary School Emergency Services: Allendale Elementary School and RSC building Hwy, 278 E., Allendale SC

#### C. PROCEDURES

- 1. The method of decontamination will depend upon the type and extent of contamination.
- 2. Personnel and Clothing:

As described in Tab A.

- 3. Decontamination of food and water will be conducted under the technical advice/supervision of DHEC.
- 4. Contaminated areas will be roped off and marked with CAUTION-RADIOACTIVITY.
- 5. Action levels of decontamination will be conducted as outlined in Appendix I-STRERP.

#### D. DISPOSAL

 Contaminated clothing will be placed in sealed drums for decontamination or disposal. Run-off water from washing vehicles and equipment will be disposed of in one of the manners listed below:

- a. Retain the water in holding tanks or pond type storage for treatment and disposal under the tech superintendent of DHEC.
- b. Water with low level contamination may be disposed of in storm sewers, drains, or running water (stream).
- 2. Personnel detailed to perform decontamination will record their dosimeter reading after each task performed.
- 3. A list of commercial facilities in the state capable of washing decontaminated clothing will be made available by the South Carolina Emergency Management Division.

# TAB A TO APPENDIX 9 PAGE 1

# PERSONNEL DECONTAMINATION

METHOD	SURFACE	ACTION	TECHNIQUE
Soup and Water	Skin and hands	Emulsifies and dissolves contaminate.	Wash 2-3 minutes and monitor. Do not wash more than 3-4 times.
Soup und Water	l Hair	Same as Above	Wash several times. If contamination is not lowered to acceptable levels, shave the head and apply skin decontamination methods.
Lava soap, soft brush, and water	Skin and hands	Emulsifies, dissolves, and erodes.	Use light pressure with heavy lather, Wash for 7 minutes. 3 times, Rinse and manitor. Use care not to scratch or erode the skin. Apply landin or hand cream to prevent chapping.
Tide or other detergent (plain)	Sanze as above	Same as above	Make into a paste, Use with additional water with a mild scrubbing action. Use care not to crude the skin.
Mixture of 50% Tide and 50% countries!	Skin and hands	Emulsities, dissolves, and croxles.	Make into a paste. Use with additional water with a audd scrubbing action. Use care not to erode the skin.
5% water solution of a mixture of 30% Tide, 65% Calgon. 5% Carbose (carboxymethyl collulose)	Same as above	Same as above	Use with water, Rub for a minute and rinse.
A preparation of 8% Carbose, 3% Tide, 1% Versene, and 88% water homogenized into a cream.	Same as above	Same as above	Use with additional water. Rub for 1 minute and wipe off. Follow with lanolin or handeream.

# TAB A TO APPENDIX 9 PAGE 2

# PERSONNEL DECONTAMINATION

METHOD	SURFACE	ACTION	TECHNIQUE
Litanium dioxide paste. Prepare paste by mixing precipinated titanium dioxide (a very thick slurry, never permitted to dry) with a small amount of tanolin. If not successful, go on to the next step.	Skin. hands, and extremities. Do not use near face or other openings.	Same as zimve	Work the paste into the affected area for 2 mautes. Rinse and wash with soap and worm water. Monitor.
Mix equal volumes of a saturated solution of potassium permanganale and 0.2 M sulturic acid. (Saturated solution of KmoO4 is 6.4 grams per 1(x) of H2e.) Continue with next step.	extremitics. Do not use	Dissolves contaminant absorbed in the epidermis.	Pour over wer hands, rubbing the surface and using handbrush for not more than 2 minutes. Rinse with water.
Apply a freshly prepared 5% solution of sodium acid sulfite. (solution made by dissolving 5gm of HellSO, crystals in 100 ml distilled water.)	Sance as above	Remove the premanganale stain	Apply in same manner as above: Apply for not more than 2 minutes. The above procedure may be repeated. Apply landin or hand cream when completed.
Flushing.	Fyes, ear, nose, and mouth	Physical removal by tiushing	Roll back the eyelid as far as possible, flush with large amounts of water. If Isotonic irrigants are available, obtain them without delay, Apply to eye continually and then flush with large amounts of water. (Isotonic irrigant (0.9% MaCl solution): 9 grams MaCl in beaker, fill to 1000cc with water.) Can be purchased from drug suppliers, etc.

# TAB A TO APPENDIX 9 PAGE 3

# PERSONNEL DECONTAMINATION

METHOD	SURFACE	ACTION	TECHNIQUE
			Further decontamination should be done under medical supervision
Flushing	Wounds	Physical removal by flushing	Wash wound with large amounts of water and spread edges to stimulate bleeding, if not profuse. If profuse stop bleeding first, clean edges of wound, bandage, and if any contamination remains, it may be removed by normal cleaning includes, as above.
Sweating	Skin of hands and feet	Physical tentoval by sweating	Place hand or from in plastic glove or booty. Tape shut Place near source of heat for 10-15 minutes or until hand or foot is sweating profusely. Remove glove and then wash using standard techniques. Or gloves can be wern for several hours using only body heat.

# AREA AND MATERIAL DECONTAMINATION

METHOD	SURFACE	ACTION	TECHNIQUE
Vacuum cleaning	Dry Surfaces	Removes contaminated dust by suction.	Use conventional vacuum technique with efficient filter.
Water	All nonporous surfaces (metal, painted, plasue, etc.)	Dissolves and erodes	For large surfaces, hose with high-pressure water at an optimum distance of 15 to 20 feet. Spray vertical surfaces at an angle of incidence of 30 to 40; work from top to bottom to avoid recontamination. Work upwind to avoid spray. Determine cleaning rate sible; otherwise, use a rate of 4 square feet per minute.
Water (cant'd)	All surfaces	Dissolves and erodes.	For small surfaces, blot up liquid and handwipe, with water and appropriate commercial detergent, surface.
Steam	Nonporous surfaces (especially painted or oiled surfaces.)	Same as alrave	Work from top to bottom from apwind. Clean surface at a rate of 4 square feet per minutes. The cleaning efficiency of steam will be greatly increased by using detergent.
Petergants	Nonporous surfaces (metal, painted, glass, plastic, etc.)	Emulsifies contaminant and increases wetting power of water and cleaning cificiency of steam.	with a rag moistened with

# TAB A TO APPENDIX 9 PAGE 5

# AREA AND MATERIAL DECONTAMINATION (Continued)

METHOD	SURFACE	ACTION	TECHNIQUE
			Do not allow solution onto surfaces. Mist application is all that is necessary.
Complexing agents	Nonporous surfaces (especially unweathered surfaces: i.e., no rust or calcareous growth).		solution should contain 34 (by weight of agent). Spray surface with solution. Keep surface moist 30 minutes, firsh material off with water. Complexing agents may be used on vertical and overlicad surfaces by adding chemical foom
			(seedium carbonate or aluminum sulfate).
Organic solvents	Nonporous surface (greasy or waxed surfaces, paint or plastic finishes, etc.)	Dissolves organic materials (cil. paint, etc.)	Immerse entire unit in solvent or apply by wiping procedure (see ) Detergents).
Inorganic acids	Metal surfaces (especially with porous deposits; i.e rus! or calcareous growth); circulatory pipe systems.	Dissolves porous deposits.	Use dip-bath procedure for movable items. Acid should be kept at a concentration of 1 to 2 normal (9 to 18 % hydrochloric, 3 to 6% suffure acid). Leave on weathered surfaces for 1 hour. Flush surface with water, scrib with a water-detergent solution, and tinse. Leave in pipe circulatory system 2 to 4 hours; flush with plain water, a water-detergent solution then again with plain water.

# TAB Λ TO APPENDIX 9 PAGE 6

# AREA AND MATERIAL DECONTAMINATION (Continued)

METHOD	SURFACE	ACTION	TECHNIQUE
Acid mixtures: Hydrochlorie. Sulfune. Acetic. Citric acids.	Nonporous stirfaces (especially with porous deposits); circulatory pipe systems.	deposits.	Same as for inorganic acids. A typical mixture consists of 0.1 gal. Hydrochloric acid. 0.2 lb sodium acetate and 1 gal. water solutions.
Caustics: 1.ye (sodium hydroxide) Calcium hydroxide Potassium hydroxide	Painted surface (horizontal)	Softens paint (harsh method)	Allow paint remover solution to remain on surface until paint is softened to the point where it may be washed off with water Remove remaining paint with longhandled scrapers. Typical paint remover solution: 10 gal water. 4 lb. Lye. 6 lb. Boiler compound. 0.75 lb. cornstarch.
Trisodium phosphate	Painted surfaces (vertical, overhead)	Softens paint (mild method)	Apply hor 10% solution by rubbing and wiping procedure (See Defengent.
Abrasion	Nonporous surfaces	Removes surface.	Use conventional procedures, such us sanding, filing and chipping: keep surface damp to avoid dust hazard.
Sandblasting	Nonporous surfaces	Removes surface.	Keep sand wer to lessen spread of contamination. Collect used abrasive or flush away with water.
Vacuum blasting	Porous and nonporous surfaces	Removes surface; tops and controls contaminated waste.	Hold tool flush to surface to prevent escape of contamination.

# APPENDIX 10 TO ANNEX Q2-LETTERS OF AGREEMENT.

ON FILE AT ALLENDALE COUNTY EMERGENCY MANAGEMENT AGENCY.

#### APPENDIX 11 TO B - SHELTERS AND CAPACITIES.

#### I. GENERAL

The shelters listed in this appendix are in compliance with American Red Cross Disaster Service Guidelines and procedures, ARC 3074, dated August 1976.

## H. PURPOSE

The shelters marked with an asterisk is the primary shelter. As a primary shelter they are opened immediately upon notification that an incident has occurred and that sheltering will be required for evacuees. These shelters are identified to accontraodate 100% of evacuating sectors population with secondary shelters opened as the primary shelter population indicates the need to open secondary shelters.

#### III. SHELTER LISTING AND CAPACITIES

Shelter	<u>Capacity</u>
*Allendale Elementary School	675

\*PRIMARY SHELTER

Final Sheet of Enclosure

# **Southern Nuclear Operating Company**

AR-06-1721

**Enclosure 9** 

Annex Q2, Fixed Nuclear Facility

Radiological Emergency Response Plan

To The

Aiken County Emergency Operations Plan
Vogtle Electric Generating Plant

ANNEX Q2, FIXED NUCLEAR FACILITY (FNF) RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP) TO THE AIKEN COUNTY EMERGENCY OPERATIONS PLAN (EOP). VOGTLE ELECTRIC GENERATING PLANT.

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- B. Authority
- C. Reference
- D. Maps
- E. Definitions
- F. Organizations

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- T. Coordinating Instructions

# V. ADMINISTRATION AND LOGISTICS

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- B. Logistics

## VI. DIRECTION AND CONTROL

- A. Direction and Control
- B. Communications
- C. Reports

#### **ATTACHMENTS**

- Map, Vogtle Electric Generating Plant,
   10-Mile EPZ, S.C. Primary Highways, Sectors, Evacuation Routes, Shelters, Traffic Control Points, Procedures.
- 2. Map, Vogtle Electric Generating Plant 50-Mile IPZ.
- 3. Map, Population Distribution of the Aiken County 10-Mile EPZ and 50-Mile IPZ.
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Appendix 10 - Shelters and Capacities.

Appendix 11 - Emergency Action Levels (EAL)

Appendix 12 - Emergency Response/ Notification Telephone List.

ANNEX Q2, FIXED NUCLEAR FACILITY (FNF) RADIOLOGICAL EMERGENCY RESPONSE PLAN (RERP) TO THE AIKEN COUNTY EMERGENCY OPERATIONS PLAN (EOP). VOGTLE ELECTRIC GENERATING PLANT.

#### I. GENERAL

#### A. <u>Purpose</u>

To provide for the Radiological Emergency Response to protect the populace and property of Aiken County from harmful effects of ionizing radiation in the event of a radiological accident at the Vogtle Electric Generating Plant.

# B. <u>Authority</u>

- 1. South Carolina Legislative Act Number 199, Section 21, 1979 which places Emergency Preparedness responsibilities under the Office of the Adjutant General and provides for Emergency Preparedness.
- 2. South Carolina Legislative Act Number 223 of 1967 with subsequent amendments, which assigns State Radiological duties to the Department of Health and Environmental Control (DHEC).
- 3. Aiken County Ordinance 75-3-19, dated April 19, 1975 and amended on January 4, 1984.

#### C. Reference

- 1. South Carolina Emergency Operations Plan, February 1999.
- 2. South Carolina Operational Radiological Emergency Response Plan (SCRERP), October 1997, as amended.
- 3. South Carolina Technical Radiological Emergency Response Plan (SCTRERP), October 1998 (DHEC), as amended.
- 4. Vogtle Electric Generating Plant Site Specific Radiological Emergency Response Plan, Part 5, to the South Carolina Operational Radiological Emergency Response Plan, October 1997.

- 5. NUREG-0654/FEMA REP-1, November 1980.
- 6. NUREG-0610, FNF Emergency Action Levels (EALs), September, 1979.

#### D. Maps

- 1. VEGP, 10-Mile EPZ (Attachment 1)
- 2. VEGP, 50-Mile EPZ (Attachment 2)

# E. <u>Definitions</u>

- 1. <u>Administrative Decision Line (ADL)</u> -- A dedicated telephone line facilitating communications between the Georgia and South Carolina SEOCs, FEOCs and the Plant Vogtle EOF during an emergency. This line will be used for the discussion and coordination of protective action decisions and other coordination issues.
- 2. <u>The County</u> -- Aiken County, South Carolina.
- 3. <u>DHEC/BRH</u> -- South Carolina Department of Health and Environmental Control/Bureau of Radiological Health.
- 4. <u>Emergency Operations Center (EOC)</u> -- A facility with the necessary communications from which essential functions are directed and controlled by county government.

# 5. Emergency Planning Zones (EPZ) of the Off-Site Area

- a. Ten-Mile Plume Exposure Pathway Zone -- An approximate ten-mile radius centered on a Fixed Nuclear Facility having an operational nuclear reactor. This EPZ is divided into two-five-and-ten mile zones, which are further divided into subsectors for area identification. The EPZ represents that area in which, under a worst case nuclear accident, ionizing radiation could spread and from which the population might have to be evacuated. (Attachment 1.)
- b. Fifty-Mile Ingestion Pathway -- A fifty-mile radius

(approximate) centered on an FNF. This EPZ is that area which must be monitored and for which plans made to prevent human ingestion of ionizing radiation from food products such as milk, vegetables, and water that may have been contaminated. Plans must be made also for protection of animals from ingestion of contaminated feed and water. (Attachment 2.)

- 6. <u>Emergency Radiological Assistance Team (ERAT)</u> -- A team of Bureau of Radiological Health personnel trained in radiological accident response.
- 7. <u>Fixed Nuclear Facility (FNF)</u> -- A permanently located nuclear facility which could present a radiological hazard off-site from the facility.
- 8. <u>Forward Emergency Operations Center (FEOC)</u> -- A facility located within the periphery of a disaster area where state government exercises direction and control of forces and resources.
- 9. <u>LGR -- South Carolina Environmental Protection Division</u>
  (EPD) Local Government Radio -- A state-owned radio system that provides command and control functions for state deployed forces. County governments are also members of this network.
- 10. Off-Site -- All land and water areas outside the FNF site boundary and within Aiken County that could be affected by a radiological incident at the Vogtle Electric Generating Plant. Such area is under the operational control of the local jurisdiction affected and for which the jurisdiction is responsible for Radiological Emergency Response Planning.
- 11. On-Site -- All land and water areas within the FNF's site boundary. That area cannot be used for Radiological Emergency Response Planning without authorization from the facility operators.
- 12. <u>Price-Anderson Act</u> -- Federal legislation which establishes an insurance pool over and beyond that available to the nuclear industry through private insurance firms. It would enable those affected by a radiological accident to recover through

- the Federal government certain losses that are not covered by private insurance policies.
- 13. <u>Radiation Protective Actions</u> -- Actions taken to avoid or reduce the effects of ionizing radiation releases due to a radiological incident.
- 14. Radiological Accident -- Any unexpected occurrence of a condition which could or does result in the exposure of the public to any source of ionizing radiation.
- 15. RER -- Radiological Emergency Response.
- 16. State Emergency Operations Center (SEOC) -- A facility with the necessary communication control capabilities from which essentially all disaster functions are directed and controlled by the Governor. The SEOC is located in the basement of the Rutledge Building, 1429 Senate Street, Columbia, South Carolina.
- 17. The State -- The State of South Carolina.
- 18. <u>Prompt Notification System</u> -- An integrated system of mobile sirens and NOAA-activated tone alert radios which blankets the 10-mile EPZ and provides a means for notifying residents and transients of an emergency at Plant Vogtle.
- 19. RERP -- Radiological Emergency Response Plan.
- 20. SRS -- Savannah River Site.
- 21. <u>VEGP</u> -- Vogtle Electric Generating Plant.

# F. Organization

The principal organizations, including utilities, that are part of the overall response organization for emergency planning zones are listed below:

1. Federal:

See the S.C. Operational Emergency Response Plan.

#### 2. State:

See the S.C. Operational Emergency Response Plan.

### 3. County:

- a. The Aiken County Radiological Emergency Response (RER) Organization consists of those agencies/organizations specified in the Aiken County Emergency Operations Plan.
- b. Appendix 1, Aiken County RER organization.

#### 4. Private Sector:

The principal organizations in the private sector that are part of the overall response for emergency planning zones are:

- Georgia Power Company and Southern Nuclear Operating Company.
- b. Southern Bell Telephone Company.
- c. General Telephone Company.
- d. Radio and Television Companies.
- e. Private Hospitals.
- f. The Salvation Army.
- g. The American Red Cross.
- h. Volunteer Organizations.

#### II. SITUATION

#### A. National

The Nuclear Regulatory Commission (NRC), through NUREG-0654, November 1980, has specified criteria state and local governments within the Emergency Planning Zones must meet in order to provide for off-site Radiological Emergency Response to protect the

populace and property vulnerable to the effects of ionizing radiation in the event of a nuclear accident. The Department of Energy (DOE) exercises authority over the Savannah River Plant. The criteria are specific, precise and detailed. It varies from natural and man-made disaster planning as follows:

- 1. The NRC has federal responsibility for RER within the boundaries of the Vogtle Electric Generating Plant, which is specified as "on-site." The state and Aiken County have no responsibility on-site other than that negotiated through written agreement with the facility.
- 2. The Federal Emergency Management Agency (FEMA) has federal agency responsibility for RER "off-site." The state secures federal assistance and support through FEMA and through letters of agreement with other state and federal agencies. Federal support off-site in any case will be requested only by the state.
- 3. The capability to warn the populace in a five-mile EPZ within 15 minutes and those in the ten-mile EPZ within 45 minutes from the time the County officials decide to order prompt notification. (NOTE: No part of Aiken County is located within the five mile EPZ, except portions of SRS, which has emergency action responsibilities for this section.)
- 4. An emergency classification system for nuclear power reactor accidents with attendant facility, state, and local actions to be taken is specified.
- 5. Command, control, and communications capabilities and procedures are precisely stated.
- 6. Public Information requirements are continuous and must be specifically stated in the Plans.
- 7. Specified exercises and drills for Radiological Emergency Responses are required.
- 8. Radiological Emergency Response training for response forces will be detailed in the Plan and given as programmed.
- 9. Periodic review/update of RER Plans is required.

10. Local and state plans <u>must</u> include each aspect of the criteria in NUREG-0654 as referenced for each planning entity for the plan to be considered adequate.

## B. State

The State of South Carolina has four nuclear power generating stations (Robinson, Oconee, V.C. Summer and Catawba) currently in operation and is affected by several in adjacent states.

#### C. Local,

- 1. An area of approximately 6.5 square miles in the southwest section of Aiken County lies within the 10-mile portion of the Vogtle Electric Generating Plant (VEGP) EPZ. The area consists of a privately owned and uninhabited game preserve with controlled seasonal public access. This tract of land is known as the Cowden Plantation and is located on the left descending bank of the Savannah River, south southwest of Jackson, S. C., adjacent to the Savannah River Plant Site (SRS). For planning purposes, this sector is designated Sector G-10 (see Attachment 1, to this Annex). Sector G-10 is approximately 8 miles from VEGP.
- 2. Sector G-10 is bounded on the south and west by the Savannah River; on the southeast by SRS on the northeast by the CSX Railroad Track; and on the north by a gravel surface road leading to Gray's Landing boat ramp on the Savannah River.
- 3. A larger portion of Aiken County also falls within the VEGP EPZ but consists of land under the control of SRS. SRS or it's contractors controls all land, facilities and personnel within its 192,000 acres. Emergency preparedness plans have been prepared by the Department of Energy, Savannah River Operations office for that portion of SRS within the VEGP EPZ.

# 3. Vogtle Electric Generating Plant

- a. The Vogtle Electric Generating Plant is located in Burke County, Georgia, southwest of Aiken (SC) County. (Longitude 81 45' West; Latitude 33, 45' North).
- b. The Vogtle Electric Generating Plant (VEGP) is a twounit pressurized water reactor operated by Southern Nuclear Operating Company for Georgia Power Company. The plant is on a 3,169-acre site located in the eastern portion of Burke County, Georgia, approximately 23 river miles upstream from the intersection of the Savannah River with U.S. Highway 301.
- c. The nuclear fueled reactors are contained within steel-reinforced concrete structures.
- d. The cooling towers at VEGP are used to dissipate the heat into the atmosphere instead of the Savannah River. Water used to cool the plant condensers will be drawn from the Savannah River to the cooling tower basins. Four river water make-up pumps supply water to the cooling tower basins.
- e. Each unit of VEGP is capable of generating 1,160 net megawatts of electricity.

#### D. Supporting Organizations

- 1. South Carolina Department of Health and Environmental Control, Bureau of Radiological Health. (South Carolina Technical Radiological Emergency Response Plan, October 1998, as amended.)
- 2. South Carolina Office of the Adjutant General, Emergency Preparedness Division, which coordinates all state agency support in accordance with the South Carolina Emergency Operation Plan, February 1999, and subsequent Radiological Emergency Response Plans and Site Specific Radiological Emergency Response Plans.
- 3. American Red Cross (ARC):

ARC will manage shelters assisted by the Department of Social Services and will provide food, bedding, and clothing. ARC will register evacuees upon arrival at designated shelters. Emergency Medical Services will receive assistance from ARC in providing medical care to evacuees.

## 4. Salvation Army:

Salvation Army will assist in feeding, housing, and clothing individuals in emergency situations. They will aid in identifying and registering evacuees, as well as provide furniture, bedding, and household needs to disaster victims.

- 5. Aiken County will provide sheltering and Emergency Welfare Service (EWS) for evacuees.
- 6. Aiken County has mutual aid agreements with adjacent counties for emergency support. (See Appendix 9.)

## E. Assumption

A radiological accident will occur at Vogtle Electric Generating Plant in the State of Georgia that could have ionizing radiation effects of varying degree on Aiken County. Emergency response capabilities will be needed at the local level to meet the emergency situations.

#### F. Wind Data

1. Vogtle Electric Generating Plant is located in Burke County, Georgia, southwest of Aiken County. Wind frequency percentages and directions from the Vogtle Electric Generating Plant are as follows:

<u>Direction</u>	Designator	Perc	entage
North North Northeast Northeast	(N) (NNE) (NE)	6.1	5.3 6.9

East Northeast	(ENE)		5.8
East	(E)		4.4
East Southeast	(ESE)	•	4.5
Southeast	(SE)		4.9
South Southeast	(SSE)		4.5
South	(S)		5.8
South Southwest	(SSW)	5.8	
Southwest	(SW)		7.1
West Southwest	(WSW)	9.2	
West	(W)		10.3
West Northwest	(WNW)		8.3
Northwest	(NW)		6,9
North Northwest	(NNW)	4.2	

(Wind percentages were obtained from the Vogtle Electric Generating Plant Final Safety Analysis Report.)

2. As a result, a radiological accident at Vogtle Electric Generating Plant could have an ionizing radiation effect of varying intensities on Aiken County.

# G. Planning Basis

- 1. Any radiological accident in South Carolina or adjacent states presenting an off-site radiological hazard to Aiken County is the initial responsibility of Aiken County.
- 2. Technological radiological emergency response support will be furnished to Aiken County by Vogtle Electric Generating Plant and the South Carolina Bureau of Radiological Health.
- 3. The first three hours from notification of a radiological accident at the Vogtle Electric Generating Plant are critical to the county. The county will be prepared to initiate an immediate Radiological Emergency Response in reaction to the Vogtle Electric Generating Plant and DHEC's assessments and by notification by Emergency Preparedness Division. Such response will be in absence of full state support, except that which may be immediately available within the county. State forces will react in accordance with the State RERP.
- 4. State response and support will be available within three hours of the initiation of an emergency condition. Immediate technological support will be available from DHEC/BRH based on the most expeditious means of transportation to the County from Columbia.

- 5. Aiken County will cease direct contact with the Vogtle Electric Generating Plant upon notification by state that the State Forward Emergency Operations Center is operational. This does not include Aiken County pre-negotiated agreements for support to the facility.
- 6. State resource support will be requested only after exhaustion or overload of county resources or for resources not usually available to Aiken County.
- 7. Municipal emergency response forces will coordinate in support as required.

#### III. MISSION

Aiken County will provide for the protection of the county populace and their property from the effects of ionizing radiation from a radiological accident at the Vogtle Electric Generating Plant through an organized and coordinated Radiological Emergency Response.

#### IV. EXECUTION

#### A. Concept of Operations

- 1. Successful accomplishment of the mission is visualized to include the following requirements for Radiological Emergency Response:
  - a. Capability to warn the populace within the ten-mile EPZ in Aiken County, which consists only of transients, within 45 minutes from the decision to order prompt notification. (NOTE: No part of Aiken County is within the five-mile EPZ.)
  - b. Coordination and control.
  - c. Exhaustive Public Information.
  - d. Communications.
  - e. Training of response forces.
  - f. Exercising and testing.

- g. Integration with other than county agencies.
- h. Capability to selectively evacuate and/or shelter the populace.
- i. Capability to provide for recovery through decontamination.
- j. Periodic updating and rewriting of response plans.
- k. Procurement and maintenance of Radiological Emergency Response Equipment.
- 2. Two distinct aspects of Radiological Emergency Response capability are required based on time limits:

#### a. <u>Immediate Reaction</u>

The county is prepared to immediately initiate the Radiological Emergency Response Plan in the event of a sudden and uncontrollable radiological accident that could affect off-site areas within a very short time frame and before the state could position support or control. In such a situation, the county must react to the facility assessment and immediately provide for such protective actions as are recommended by the facility to include possible evacuation and/or sheltering of the populace. This occurrence has a low probability.

#### b. Escalating Reaction

The county would be provided longer reaction time to assemble forces and to execute the plan in this situation. The radiological accident would intensify over a longer time frame, which would allow state forces to be positioned to assume overall coordination and technical instruction. In such case, the county would be instructed by the state as opposed to the facility for required protective actions.

3. In the event of an immediate action requirement, Aiken

County activates its Radiological Emergency Response right away and carries out protective action instructions issued by authorities from the Vogtle Electric Generating Plant. State government is informed through the State Emergency Operations Center and immediately places the State RERP into action. The county continues operations within its own resources until such time as state support is operational in the area of the accident. The Vogtle Electric Generating Plant will establish an emergency operations facility as part of their RERP.

4. In the event of escalating reaction, time should be available to alert and assemble county and state response forces, inform the public, and prepare for protective actions. The state would, through DHEC/BRH, establish technological coordination with the Emergency Operations Facility (Vogtle Electric Generating Plant Training Center), located in Burke County, Georgia and assess the radiological situation. DHEC/BRH would recommend protective actions to the State Forward Emergency Operations Center, which would direct protective actions to affected areas of the county and would provide for coordination of evacuation, radiological monitoring, decontamination, registration, and sheltering of evacuees.

The state will assist county efforts in monitoring and decontamination of personnel and vehicles from contaminated areas. The county will provide security of evacuated areas and assist in return of the populace to their homes upon clearance of radiological hazards.

5. In either reaction situation, the combined and total efforts of the facility, the county and the state, will be utilized to reduce and neutralize any radiological hazard.

# B. Direction and Control

The direction and control for Aiken County is as follows:

- 1. Chairman, County Council.
- 2. County Administrator.

- 3. Emergency Preparedness Coordinator.
- 4. Support Services:

Emergency Operations Center (Aiken EOP, Sec. IV-C) Communications (ESF-2) Public Information (ESF-5) Law Enforcement (ESF-13) Fire Control (ESF-4) Rescue and Ambulance Services (ESF-8) Medical Service (MS). (ESF-8A) Emergency Medical Service (Ambulance) (ESF-8A) Mental Health (ESF-6) Emergency Welfare Service/Shelter (ESF-6) Transportation (ESF-1) Engineering and Public Works (ESF-3) Supply and Procurement (ESF-7) Evacuation (ESF-13) Hazardous Materials Accidents (ESF-10) Fixed Nuclear Facility (Annex Q2) Radiological Protection (ESF-10) Damage Assessment (ESF-3) Hazard Mitigation (ESF-10)

## C. Warning

- 1. Aiken EOP Sec. V, Warning
- 2. The design objective for warning the population shall be as follows:
  - a. To provide both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10-mile EPZ, within 15 minutes after decision to activate the Prompt Notification System is made.
  - b. To ensure that the initial notification system will assure direct coverage of essentially 100% of the population within 5 miles of the site. (No part of Aiken County is within 5 miles of VEGP. There is no resident population within the plume EPZ in Aiken County.)

- c. Special arrangements will be made to assure 100% coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure EPZ.
- 3. The County Warning Point is located in the Aiken County Dispatch Center, 420 Hampton Avenue, Aiken, SC.
- 4. The County Warning Point provides 24-hour emergency response.
- 5. Initial warning of a radiological emergency and any changes in emergency classifications (Unusual Event, Alert, Site Area Emergency, General Emergency) will be provided to the County Warning Point by VEGP directly using the Emergency Notification Network (ENN), with commercial telephone providing a backup. The State and County Warning Points receive this warning simultaneously. These warning points are staffed on a 24-hour basis.
- 6. In addition to the ENN, each county and the State EPD is equipped with a facsimile machine to receive hard copy transmissions from VEGP. This can be used for hard copy transmission of technical or administrative information.
- 7. Once Aiken County has been notified of a <u>Site Area Emergency</u> or a <u>General Emergency</u> at the Vogtle Electric Generating Plant (VEGP) and protective actions are determined, the public notification system will be activated.
- 8. The dispatcher at the County Warning Point will follow his procedure and notify key EOC staff included in the Assignment of Responsibility for RER Planning (Appendix 2, Tab B). The notification will serve to either put key personnel on a standby status, or to mobilize them to activate the emergency response organization.
- 9. See Aiken EOP Sec. V and Appendix 2, this annex, for procedures for alerting county warning teams and residents of the 10-mile EPZ.
- 10. See ESF-5, Public Information.

# D. <u>Notification Communication/Emergency Classification Levels</u>

- 1. Follow-up contacts between South Carolina EPD and the county will be via commercial telephone with the South Carolina EPD LGR network as a backup system.
- 2. Based on the emergency classification, local government and State Radiological Response Forces will react on a continuous 24-hour basis in accordance with RER plans.
- 3. VEGP has responsibility for classification of an emergency in accordance with NUREG-0654. State and local emergency preparedness officials will review and certify their agreement with VEGP's EALs annually. The following EAL notification procedures will be followed: (See insert after APPENDIX 10)

## E. Public Information

- 1. See section D of Annex A in SCOREP, Part 7, for a description of the Public Education and Information Program in South Carolina. The following discussion contains a description of the transient population and dissemination of pre-emergency information in Aiken County. The transient population in this part of the EPZ is limited to visitors and employees of the Cowden Plantation, as well as any CSX line crew operating in this area.
- 2. Attachment 1, Evacuation Sectors, Routes, Shelters, and Procedures.
- Annex C, Public Information, SCORERP.
- 4. EAS/ETV Procedures, Annex A, to Part 5 of Vogtle Site Specific.

## F. Public Health and Sanitation

Annex H, Medical Service to Aiken County EOP 1999 and Annex M, Engineering and Public Works to Aiken County EOP 1999.

#### G. Social Services

- 1. Annex K, Emergency Welfare Service (EWS) and Shelter to Aiken County EOP.
- 2. Attachment 1, Map, Evacuation Sectors, Routes, Shelter Areas, Shelters, and Procedures.
- 3. On notification that an evacuation of the population of all or a portion of the ten-mile EPZ has been ordered, or is being considered, the Aiken County DSS will provide emergency workers who will assist the Red Cross at the predesignated shelter. Evacuees will be directed through these shelters to be monitored and registered.
- 4. Appendix 11 to this Annex. List of shelters and capacities.
- 5. See Basic Plan, Attachment 4 for supporting county's plans.

#### H. Fire and Rescue

- 1. Annex F, Fire Service to Aiken County EOP.
- 2. Annex G, Rescue and Ambulance Services to Aiken County EOP.
- I. Emergency Medical Service (EMS)

Annex H. Aiken County Emergency Medical Service (EMS)

#### J. Law Enforcement

- 1. Annex E, Law Enforcement to Aiken County EOP 1999.
- 2. Attachment 1, Map, Traffic Control Points and Routes. South Carolina Highway Patrol will operate state traffic control points on roads leading into EPZ from the county. Staffing of predetermined traffic control points will be assigned to county law enforcement. Aiken County will assist as needed.

## K. Transportation

1. Annex L, Transportation to Aiken County EOP 1999.

- 2. In the event of an evacuation of the populace of the 10-mile EPZ, the limited populace within the EPZ is expected to evacuate using available personal vehicles. County resources will be made available, if required, for special cases.
- 3. Transportation of contaminated victims will be accomplished by designated emergency medical service vehicles of the Aiken County Emergency Medical Service. Protective measures will be taken to prevent the spread of any contamination from the victims. Upon arrival at a designated medical facility and removal of the victims, both the vehicle and attendants will go through decontamination procedures.

## L. <u>Protective Response</u>

- The South Carolina Technical RERP provides for protective action guides and other criteria consistent with existing EPA guides. Aiken County provides the mechanism for implementing protective actions such as sheltering and/or evacuation of the county populace in and from sectors recommended by DHEC/BRH and ordered by the Governor of the State.
- 2. Radiological Protective Drugs Emergency Workers:

The State of South Carolina provides for policies and procedures for storing and distributing Radio Protective drugs to <u>all</u> emergency workers including Aiken County. See S.C. Technical RERP.

3. Radiological Protective Drugs - Local Populace:

The State of South Carolina and Aiken County will not prescribe and issue Radio Protective drugs to the general populace of the county. See S.C. Technical RERP. This decision rests upon the Board of Commissioners of the Department of Health and Environmental Control.

## 4. Protective Sheltering:

In the event of an accident at Vogtle Electric Generating Plant resulting in the release of a radioactive plume, it may be necessary for the populace to stay in place at their respective locations. Certain procedures would be taken by the populace as recommended by DHEC/BRH:

- a. Stay inside their homes with all windows and doors closed.
- b. All air conditioners, attic fans, etc., should remain turned off.
- c. Anyone outside should, immediately upon entering the home, remove all clothing and take a thorough shower. Removed clothing should be placed inside a closed container.
- d. Hot water heaters should be turned off.

#### 5. Evacuation:

a. The population distribution of the 10-mile EPZ located in Aiken County is as follows:

SectorPo	<u>pulation</u> <u> </u>	<u>Evacuation Times (M</u>	<u>inutes)</u>
		Average	Adverse
		<u>Weather</u>	Weather
G-10	0 Residents		
	200 Transient	s* 155	160

- b. Aiken County will evacuate to shelters in Aiken County that are more than 15 miles from VEGP. (See Attachment 3.)
- c. Site specific issues include:
  - (1) Access to the evacuated area will be stringently enforced by local law enforcement, and only predesignated forms of identification will allow entrance to the evacuated area (see Appendix 4 to this Annex).
  - (2) Evacuation estimates have been computed to give local officials time data when evacuation decisions become necessary.

\* Sector G-10 is estimated to have a potential of 200 transients. Sector G-10 encompasses portions of Aiken County that is in the VEGP EPZ but outside the Savannah River Site.

## M. Radiological Monitoring and Decontamination

#### 1. Ten-Mile EPZ:

- a. Under DHEC's supervision, the Aiken County Radiological Officer will direct all county radiological monitoring teams, which will monitor the following:
  - (1) Local RER personnel.
  - (2) Local emergency vehicles at decontamination points.
  - (3) Evacuees and their vehicles at shelters.
- b. Monitoring team assignments listed in Appendix 3, Annex S (Radiological Protection) will be utilized to complete the above task. Teams and individual monitors will be assigned by the county Radiological Officer to the locations and tasks required.
- c. Equipment to be utilized by monitoring teams listed in Appendix 4 to Annex 5 (Radiological Protection) Aiken County EOP 1999.
- d. If radiation is detected, decontamination will occur as outlined in Appendix 9. After decontamination, people and vehicles will be remonitored.
- e. Aiken County will maintain monitoring records for evacuees and their vehicles. Monitors at the shelters will complete the form below and forward information to the Radiological Officer on a regular basis. If an exposure increase is noted for a specific area, the Radiological Officer will be immediately notified.

## MONITOR REPORT

- (1) Name of Evacuee
- (2) Address
- (3) Reading
- (4) Time of Reading
- (5) Clothing/Material Involved
- (6) Problem areas/requests
- (7) Monitor Identification
- f. Procedures for monitoring RER personnel are detailed in Paragraph IV.N.
- g. The Radiological Officer is responsible for notifying DHEC of any significant radiological exposure.
- h. Non-radiological accident assessment is outlined in Annex T to the EOP.
- 2. Ingestion Pathway Monitoring:
  - a. DHEC will coordinate the monitoring and technical assessment of the 50-Mile EPZ.
  - b. Under DHEC's supervision, Aiken County maybe requested to monitor and to possibly provide soil, crop, and milk samples for analysis.
  - c. Monitoring teams will give reports to DHEC on a regular basis, and these reports will be prepared on the forms shown below:
    - (1) Monitoring Teams:
      - (a) Radioactive level reading upon arrival at assigned area, half hourly thereafter until terminated.

	(b)	Significant elevation or decrease of radioactivity reported immediately.		
	<b>©</b>	Repo	ort format (Report by line item).	
		MON	ITOR REPORT	
		1)	Location (Sufficient detail for plotting)	
		2)	Reading	
		3)	Time of Reading	
		4)	Clothing/Food Stuffs	
,			Involved	
		5)	Problem Areas/Requests	
		6)	Monitor Identification	
(2)	Deco	ntamir	nation Teams:	
	(a)	Repo	ort to DHEC/BRH at assigned area.	
	(b)	Repo	ort to completion of task.	
	(C)	Repo	ort format (Report by line item).	
		DECO	ONTAMINATION REPORT	
		1)	Team Identification	
		2)	Area Decontaminated	
		3)	Time Required for Completion	

4)	Personnel	Utilized 	(Numbe	ers)
5)	Equipment Numbers) _			&
6)	Problem Ar	eas/Reque	ctc	

- d. See Ingestion Pathway Procedures, South Carolina Operational Radiological Emergency Response Plan (SCORERP).
- e. See South Carolina Technical Radiological Emergency Response Plan (SCTRERP).

#### 3. Decontamination:

- a. Decontamination of the 10-mile EPZ and the 50-mile EPZ will be coordinated by DHEC. Aiken County will be requested to decontaminate local RER personnel, evacuees, and vehicles under DHEC's guidance.
- b. Procedures for decontamination are outlined in Appendix 9.
- c. See Decontamination, (SCORERP).
- d. Contaminated personnel and equipment will be decontaminated according to Appendix 7, SCTRERP.
- e. Aiken County will maintain exposure records of evacuees. Monitors at the shelters will obtain, record, and report, as a minimum, the information listed below for each contaminated person:
  - (1) Name
  - (2) Address
  - (3) Type Instrument Used and Reading Obtained
  - (4) Time of Reading

- (5) Effectiveness of Decontamination
- (6) Location and Name of Monitor

## N. Radiation Exposure Control

- 1. <u>Emergency workers</u> (individuals whose emergency job is inside the EPZ) and Radiation Workers (individuals whose emergency job is outside the EPZ) in Aiken County who have a responsibility which could result in their exposure to radiation from an accident at the Vogtle Electric Generating Plant will be issued dosimeters. Emergency workers or emergency worker teams, both inside and outside the 10-mile EPZ, will be issued one permanent record dosimeter TLD and one direct reading dosimeter.
- 2. Priority of issue of dosimeters will be to persons working with:
  - a. Law enforcement
  - b. Firefighting
  - c. Rescue and Emergency Medical Services
- 3. Additional dosimeters and chargers are available at the Aiken County Emergency Preparedness Office for further emergency uses.
- 4. Emergency service chiefs or their designated representatives will sign for any equipment issued and will be responsible for its return to the EOC.
- 5. All dosimeters will be issued to emergency personnel from the Radiological Defense Officer or team supervisor. Before distribution, each worker will check his equipment for function ability and sign a clearance sheet to insure that all equipment can be accounted for at the end of a shift.
- Each emergency/radiation worker who is issued a dosimeter will be responsible for reading and recording his own dose rate as well as for submitting the accumulated dosage to his

- superior. (See dose record form, Appendix 7.)
- 7. Team Supervisor will compile dosage reports and submit them to the Radiological Officer on a daily basis before midnight.
- 8. The Radiological Officer will maintain permanent dose file cards for all emergency personnel and he is responsible for having this information available to the Bureau of Radiological Health upon request.
- 9. Dosimeters will be recharged by each individual after his shift dosage has been determined.
- 10. Approximately one hour before a shift change, the Radiological Officer or the Emergency Preparedness Coordinator will brief the team supervisor on the dose rates calculated for specific area at that time interval. This briefing will be held in the EOC. Team supervisor will be instructed to closely monitor personnel who are working in contaminated areas and to arrange personnel rotations to limit accumulated dosages.
  - a. If a dosimeter reads 0.1R, instruct the worker to notify the EOC.
  - b. If a dosimeter shows a maximum reading of 1R, instruct that worker to notify the EOC and proceed to the Emergency Worker Decon area.
- 11. Each team supervisor will arrange communication checks with his field personnel to determine dose rates on a 24-hour basis for the duration of the accident.
- 12. Exposure control will be regulated by guidelines from South Carolina Technical RERP. In the event workers must incur doses in excess of EPA established standards, authorization to do so will come from the Chairman, Aiken County Council or his representative. All decisions will be discussed and authorization will be granted only when the exceeding or excess doses is absolutely necessary.

#### O. Medical

- 1. Contaminated victims will be treated at Aiken Regional Medical Center, S.C., or at Doctor's Hospital should a radiological accident occur at Vogtle Electric Generating Plant. See Annex C, Medical and Public Health, to Part 5. Vogtle Site Specific to SCORERP.
- 2. The training of persons providing medical services to contaminated victims is the responsibility of DHEC. See Annex B, Training, SCORERP.
- 3. Transportation of contaminated victims is outlined in Paragraph IV.K, Transportation, in this Annex.

## P. Recovery and Re-entry

- 1. Aiken County will rely on South Carolina Technical RERP and its procedures as carried out by DHEC for relaxing protective measures. Notification to relax protective measures will come from the State Forward EOC to Aiken County's EOC.
- 2. Aiken County will follow procedures as directed by the State Technical RERP for general recovery plans.

## Q. Equipment

- 1. Radiation detection equipment assigned to Aiken County monitoring stations in Appendix 4 to Annex S (Radiological Protection) may be used within its limitations for monitoring purposes, under the guidelines of BRH.
- 2. See Paragraph IV.N., Radiological Exposure Control, this Annex.
- 3. Alken County does not have any off-site radiological monitoring equipment to set up near the nuclear facility. Inplace monitoring and sampling stations have been established by DHEC/BRH as outlined in SCTRERP.
- 4. DHEC/BRH provides monitoring service and has available at the DHEC Central Office the following supplies:
  - a. Radiation monitoring equipment, including personnel dosimeters (TLD's), portable survey meters and air

samplers.

- b. Protective clothing.
- c. Sampling equipment for water, air, milk, vegetation, soil, etc.
- d. Bio-assay collecting containers.
- e. Decontamination supplies and equipment.
- f. Up-to-date set of maps showing environs of each nuclear facility are maintained in the Central Office and aboard the Mobile Radiological Laboratory (MRL). These maps show the location of each nuclear facility, motoring and sampling locations, hospitals, and landing strips, etc.
- g. See SCTRERP for further details.
- 5. DHEC/BRH also maintains a Mobile Radiological Laboratory (MRL) equipped with emergency response supplies and equipment. The MRL can be dispatched to an accident site to perform field sample analyses, radiological monitoring, and decontamination tasks. The MRL is equipped with radio communications on the statewide DHEC network and on the South Carolina Emergency Preparedness Division statewide network.
- 6. The receipt and analysis of all field monitoring data and the coordination of sample media will be handled by DHEC/BRH as outlined in SCTRERP.
- 7. Identification of emergency kits:
  - a. Protective Equipment See SCTRERP.
  - b. Communications Equipment See Annex B, Communications, Aiken EOP. See also Paragraph VI.B., Communications, this Annex.
  - c. Radiological Monitoring Equipment See Paragraph IV.Q., Equipment, this Annex. See also Annex S,

Radiological Protection, Aiken County EOP. See also SCTRERP.

- d. Emergency Supplies --- Aiken County has no emergency supplies on hand other than those supplies used by emergency response teams on a daily basis. See Annex N, Supply and Procurement, Aiken County EOP for procedures to procure any emergency supplies from state resources. See Resource Appendix of each Annex EOP for a list of equipment on hand.
- 8. Each emergency service is responsible for operationally checking its equipment at least once each calendar quarter and after each use. Calibration of equipment shall be at intervals recommended by the supplier of equipment.

## R. Exercise and Drills

Aiken County will participate in Radiological Emergency Response Exercises in conjunction with exercises at the facility. Exercises will be conducted on a frequency and as set forth in FEMA and NRC Rules.

#### 1. Exercises:

- a. Aiken County will participate in Radiological Emergency Response Exercises prepared by EPD, DHEC and the Vogtle Electric Generating Plant. These exercises will be observed and evaluated by federal and/or state and local officials.
- b. Exercises will be conducted under varying weather conditions. Once every six years an exercise must commence between 1800 and 2400 and between 2400 and 0600.

## 2. Drills:

Aiken County will conduct and participate in subsystem drills, in addition to the annual RER exercise. Such drills will be supervised and evaluated by a qualified instructor. Each emergency service organization/component will conduct drills as indicated below:

## a. Communication Drills

Communications between the county, the Vogtle Electric Generating Plant and the EPD will be tested monthly. Such drills will include the understanding and transmission of emergency messages.

## b. Medical Emergency Drills

Medical Emergency Drills will be conducted at unannounced frequencies, no less than two per year. A drill involving a simulated contaminated individual will be performed at least once a year.

c. Radiological Monitoring Drills
Conducted in coordination with DHEC/BRH. See
SCTRERP.

## d. Health Physics Drills

Conducted in coordination with DHEC/BRH. See STRERP.

#### 3. Conduct of Exercise:

Exercises and drills will be designed and executed in such a manner to allow free play for decision making and to meet the following objectives: NOTE: (Aiken County is not responsible for designing and conducting RER <u>exercises</u>. This responsibility rests with the facility and the state. Aiken County will provide for organizational drills).

- a. Drills in Aiken County will consist of the following, with a basic objective of qualification:
  - (1) Notification Communications.
  - (2) Notification and Warning Procedures.
  - (3) Shelter Procedures and Sheltering.
  - (4) Emergency Operations Center; Operations,

Procedures and Communications.

- (5) Medical Emergency Response Capability.
- (6) Rescue and Ambulance Response Capability.
- (7) Law Enforcement Traffic Control and Security Capability.
- (8) Fire Response Capability.
- b. Evaluation will be provided for every drill. A critique will be made and retraining, if required, will be conducted.
- c. The EPD will be notified of each drill and requested to observe.
- d. Each drill will be planned and prepared to include the following:
  - (1) Date, time period, place and participating county organizations.
  - (2) Simulated events.
  - (3) A time schedule of real, initiating and anticipated events. (Scenario)
  - (4) A narrative summary describing the conduct of the exercise.
  - (5) Description of arrangements for advanced materials to be issued to official observers.
  - (6) Evaluating, critiquing, and method of implementing corrective actions.
- e. For RER exercises with the Vogtle Electric Generating Plant or the state, Aiken County is a participant and does not conduct such exercises. See SCORERP, Annex D. Exercise Plan, State RERP for conduct of exercises.

## S. Radiological Emergency Response Training

The Aiken County Emergency Preparedness Division is responsible for training off-site emergency personnel to respond effectively to an accident involving Vogtle Electric Generating Plant. Personnel to receive initial and follow-up training are: law enforcement, fire, rescue, emergency medical, shelter managers, and radiological defense personnel.

The annual training program for off-site emergency response personnel shall consist of classroom training; tabletop exercises and governmental conferences. In addition, such emergency service and governmental officials with emergency assignment will participate in an annual radiological emergency response exercise with the facility.

- 1. Aiken County Emergency Preparedness Coordinator:
  - a. The County Emergency Preparedness Coordinator will receive initial and follow-up training by the SCEPD. Training will consist of daily responsibilities, radiological defense, governmental conferences, management seminars, workshops, and career development courses. (Reference SCORERP, Annex B.)
  - b. The County Emergency Preparedness Coordinator is responsible for the county training program to include responsibilities of county government and specific duties of the emergency services. Assistance will be obtained from the SCEPD. (Reference SCORERP, Annex B.)

## 2. Accident Assessment:

Accident assessment is a state responsibility. (See SCTRERP.)

3. Radiological Monitoring Teams and Radiological Analysis Personnel:

Radiological Protection Officer and Monitors:

a. Aiken County Emergency Preparedness Coordinator has the overall responsibility of training Radiological

Monitors. The county has a Radiological Officer who is responsible for conducting training and refresher courses and his instructors training is from the State Emergency Preparedness Division, Radiological Section. Instructors take periodic refresher courses. In order to become a local radiological monitor, one must take the standard 12-hour course and make a passing grade on the final exam.

A refresher course is given every year, and it must be taken to remain certified. Monitors must also participate in exercises and drills that involve radiological monitoring.

This radiological monitoring is designed for RER, however, the basic principles of the instruction is translatable to FNF accidents for understanding of conditions, nuclear theory, and sheltering. Should low-level monitoring instrumentation become available to the county, previously trained monitors could be easily trained.

- b. Radiological monitoring is offered to the following county and municipal agencies:
  - (1) County Law Enforcement
  - (2) County Volunteer Rescue Service
  - (3) Volunteer Fire Departments
  - (4) County EMS
  - (5) Municipal Fire Departments
  - (6) Municipal Police Departments
  - (7) Local Red Cross Workers
- 4. Police, Security and Fire Fighting Personnel:

Law enforcement and fire fighting personnel will be trained locally with assistance from SCEPD and applicable state

agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service SOP. This will be done by governmental conferences, tabletop exercises and participation in the annual radiological emergency response exercise with the facility.

## 5. First Aid and Rescue Personnel:

Rescue Squads and the Emergency Medical Service will be trained locally with assistance from SCEPD and applicable state agencies. Annually, these personnel will receive training to cover responsibilities, notification and alert procedures, sector assignments and familiarization with their service 50P. This will be done by governmental conferences, tabletop exercises and participation in the annual radiological emergency response exercise with the facility.

## 6. Medical Support Personnel:

Training of medical support personnel is a DHEC responsibility. (Reference SCORERP, Annex B.)

## 7. Public Information and Instructions:

The Public Information Officer will receive initial training by Aiken County EPD with assistance from SCEPD. Training will include responsibilities, RER Plan, dissemination of information and development of an SOP. Follow-up training will consist of participation in tabletop exercises, governmental conferences and the annual RER exercise.

## T. Coordinating Instructions

- 1. This Radiological Emergency Response Plan will be reviewed/updated annually prior to the anniversary of the Plan.
- 2. Supporting RER Standing Operating Procedures will be reviewed/updated by responsible agencies at the time of the RERP update.
- 3. Population risk factors for radioactive exposures in all categories are as shown in the South Carolina Peacetime

- Radiological Emergency Response Plan. Any changes to such criteria will be directed by DHEC/BRH.
- 4. All radiological emergency response personnel, employees or volunteers, must receive radiological emergency response training as outlined in Paragraph IV.S., above.
- 5. All telephone numbers will be updated quarterly by Aiken County Emergency Preparedness Division.
- 6. Letters of Agreement and Mutual Aid Pacts for RER will be initiated and promulgated.

## V. ADMINISTRATION AND LOGISTICS

## A. Administration

- 1. Aiken County EOP.
- 2. South Carolina Operational Radiological Emergency Response Plan, October 1997.
- 3. South Carolina Technical Radiological Emergency Response Plan, October 1998.
- 4. Administrative matters not contained in the above will be directed to the EOC.
- 5. Personnel effectiveness reports to EOC.

#### B. Logistics

- 1. Aiken County EOP.
- 2. South Carolina Operational Radiological Emergency Response Plan, October 1997.
- 3. South Carolina Technical Radiological Emergency Response Plan, October 1998.
- 4. Logistical matters not contained above will be directed to the EOC.

5. Equipment and transportation effectiveness reports to the EOC.

#### VI. DIRECTION AND CONTROL

## A. <u>Direction and Control</u>

- 1. The Aiken County EOC is located in the County Council Building, at 736 Richland Avenue, West, Aiken, SC and will be made operational immediately upon receipt of an Emergency Action Condition requiring activation.
- 2. The State FEOC is located is the state control headquarters and will be located at:
  - a. Primary -- National Guard Armory Graniteville, S.C.
  - b. Alternate -- National Guard Armory Highway 3 Barnwell, S.C.
- 3. The State EOC is located in the basement of the Rutledge Building, 1429 Senate Street, Columbia, and S. C.
- 4. The Vogtle Electric Generating Plant Operations Facility (EOF) is located at the Vogtle Electric Generating Plant Training Center. The EOF will be staffed by Southern Nuclear Operating Company personnel. The Technical Support Center is located near the station control room.
- 5. Adjacent County EOC's are located at:
  - a. Augusta/Richmond County Emergency Management,
    - b. Barnwell County EOC, 57 Wall Street, Barnwell, S.C.
    - c. Edgefield County Administration Building,
    - d. Allendale County EOC James Brandt Building, Allendale
- 6. Chairman, Alken County Council will provide county liaison with communications capability to the State FEOC, adjacent affected county EOC's and Georgia Power Company's EOF.

- 7. The Aiken County Council will provide liaison to operate shelters if evacuation is required.
- 8. Chiefs of Services or their designated representatives will be present in the Aiken County EOC to direct and control their service(s) upon direction of council.
- 9. The EOC will provide space and communications for State and federal liaison personnel.
- 10. The Aiken Municipal Airport, capable of supporting General Aviation aircraft, is located off U.S. Route I, seven miles north of Aiken, S.C. (Lat 33 38'57"N; Long 81 41'03"W). The 5,000-foot primary runway, 3800-foot secondary runway and Helipad are paved. There is 24-hour radio coverage. Aiken Municipal Airport has storage capacities of 10,000 gallons of AVGAS and 12,000 gallons of jet fuel. The fixed Base Operator (FBO) is Aiken Aviation, Inc.

The alternate is Bush Field in Augusta, Georgia. Bush Field is a commercial airport, 27 miles southeast of Aiken Municipal Airport, and is capable of accommodating larger commercial jet aircraft.

#### B. Communications

1. During an emergency in Aiken County which results in the opening of the Emergency Operations Center, continuous communications with the different agencies that respond is most vital. The following communications will be used:

## a. County Law Enforcement Radio System

The following frequencies will be utilized to coordinate county municipal law enforcement personnel.

(1) The Aiken County Sheriff's Department transmits on 453.550 MHz and receives on 458.550 MHz.

They can also transmit and receive on 453.550 MHz which is the police network. The City of

Aiken transmits on 453.650 Mhz and receives on 458.650 MHz. The city of North Augusta transmits on 453.750 and receives on 458.750. The small towns of New Ellenton, Jackson, and Wagener transmit and receive on the Sheriff's frequency.

(2) See ESF-2, Communications, Aiken County EOP.

## b. <u>Fire and Rescue Service</u>

- (1) All Aiken County Fire Departments utilize frequency 46.06 MHz for communications.
- (2) All rescue squads utilize frequency and 155.400 and 155.220 MHz for communications.
- (3) See ESF-4 (Fire Service) Aiken County EOP.
- (4) See ESF-8 (Rescue and Ambulance Services)
  Aiken County EOP.

## c. County Emergency Medical Service

The Hospital and Emergency Medical Service (EMS), can communicate with the Sheriffs and all the Rescue Squads via their base station on 155.400 MHz.

## d. State Law Enforcement Division (SLED) Teletype

The SLED teletype is located in the County Sheriff's Dispatch Section at the County Law Enforcement Center. It can be used to send and receive messages to the South Carolina Emergency Preparedness Division and other counties.

e. Other public and private communication systems, such as telephone companies, electric and gas companies, school bus maintenance shops, etc., having an emergency communications capability, when needed and having a desire to assist.

- 2. See ESF-2, Communications to the Aiken County EOP.
- 3. See Aiken EOP, Sec. IV-C, Communication to the South Carolina Comprehensive Emergency Preparedness Plan.

## C. Reports

- 1. Aiken County South Carolina Emergency Operations Plan, Annex C-3, October 1997 as amended.
- 2. Civil Defense Operational Reporting System (CEDORS) will be in accordance with CPG2 10/7 Local Government Operational Situation Reporting Procedures.
- 3. Situation reports will be submitted to the Aiken County EOC as necessary and/or as required. These reports will include such information as follows:
  - a. Agencies activated, operations undertaken and personnel/equipment strength.
  - b. Status of evacuation (if undertaken)
    - (1) Area and number of population affected.
    - (2) Location and number of persons in shelter on an hourly basis to include by age and sex.
    - (3) Completion time of evacuation.

## c. Casualties

- (1) Radiation related and where hospitalized/stored.
- (2) Non-radiation related and where hospitalized/stored.
- (3) Nature and extent of injuries (death) of casualties.
- d. Nature and extent to include time estimate of

		tional assistance and support required specifically ned as to Who, What, When, Where, and Why.
e.		Action reports required from each Emergency onse Service to include:
	(1)	Number of personnel involved (total).
	(2)	Hours devoted by personnel (total).
	(3)	Average hours devoted by personnel.
	(4)	Equipment involved and cost estimate for each piece of equipment for operation.
	(5)	Support received from non-county assets.
(6)	Over	all dollar cost for the service for the operation.
f.	<u>Dama</u>	age Reports
	(1)	County property.
	(2)	Personal property to include animals and crops.
siken County Administra	tor	Date
Coordinator, Aiken Coun Emergency Preparedness		Date

#### **ATTACHMENTS**

Attachment 1 - Map, Vogtle Electric Generating Plant, 10-Mile IPZ, S.C. Primary Highways, Sectors, Evacuation Routes, Shelters, Traffic Control Points, Procedures.

Attachment 2 - Map, Vogtle Electric Generating Plant 50-Mile EPZ.

Attachment 3 - Map, Population Distribution of the Aiken County 10-Mile and 50-Mile EPZ's.

Tab A - Traffic Capacities for Evacuation Routes.

## **APPENDICES**

Appendix 1 - County Organization Chart.

Tab A - Responsibility Summary Table.

Appendix 2 - Procedures for Alerting and Notifying Residents and Warning Teams of the 10-Mile EPZ.

Tab A - Emergency Notification Message Form.

Tab B - Plant Vogtle Emergency Information Calendar.

Tab C - EPD-43 Accident/Incident Report Form.

Appendix 3 - Traffic Control Procedures.

Appendix 4 - Nursing Homes, Industries, and Schools in the 10-Mile EPZ of Aiken County.

Appendix 5 - State Law Enforcement Division (SLED) SOP.

Appendix 6 - Dose Rate Record.

Appendix 7 - Procedures to Implement the Aiken County RERP.

Appendix 8 - Radiological Decontamination.

Tab A - Decontamination Procedures.

Appendix 9 - Letters of Agreement.

Appendix10 - Shelters and Capacities.

Appendix 11- Emergency Action Levels.

Appendix 12- Emergency Notification/Response Telephone List

# ATTACHMENT 1 TO ANNEX Q2

Map, Vogtle Electric Generating Plant, 10-Mile EPZ, S.C. Primary Highways, Sectors, Evacuation Routes, Shelters, Traffic Control Points, Procedures.

ATTACHMENT 2 TO ANNEX Q2,

Map, Vogtle Electric Generating Plant, 50-Mile IPZ.

# ATTACHMENT 3 TO ANNEX Q2.

Map, Population Distribution of the Aiken County 10-Mile and 50-Mile IPZ.

ATTACHMENT 3, TAB A TO ANNEX Q2 - TRAFFIC CAPACITIES FOR EVACUATION ROUTES.

Traffic Capacities for Evacuation Routes.

		Number <sup>1</sup>		Roadway <sup>2</sup> Distance To Cruise Capac.		
C	Dondung Costion	of	Dayomont		tion Speed	
County	Roadway Section	Lanes	Pavement	ODSTITUT	tion speed	(VDII)
Aiken	Route 2035 (Brown Road), east of Route 5	2	Dirt	6 ft.	25mph	1288
	Route 5, between Route 2035 and Route 63	2	Paved	6 ft.	35mph	1400
	Route 63,between Route 5 and Route 57	2	Paved	6 ft.	35mph	1400
	Route 57, between Route 63 and Route 278	2	Paved	6 ft.	35mph	1400
	Route 278, between Route 57 and Route 302	2	Paved	6 ft.	35mph	1400
	Route 302	2	Paved	6 ft.	35mph	1512
Aiken Ro	oute 493, South of Route 125	2	Paved	6 ft.	35mph	1400
Aiken Ro	oute 125	2	Paved	6 ft.	35mph	1624

<sup>&</sup>lt;sup>1</sup> In both directions.

<sup>&</sup>lt;sup>2</sup> Capacity is defined in vehicles per hour, for both directions of travel.

APPENDIX 1 TO ANNEX Q2, ORGANIZATION CHART.

# APPENDIX 1, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE.

<u>FUNCTION</u>	AGENCY	RESPONSIBI Primary Su	
Command & Control	Aiken County Council Chairman County Administrator	x	X
	Director, Emergency Pre- paredness Division Chiefs, County Emergency		X
	Services		X
Warning (Radiological	Aiken County Sheriff (Transient)	X	
Emergency Response	Aiken County Sheriff (Transient)		X
	Aiken County Sheriff (Residents)		X
	Aiken County Sheriff (Residents)		X
	Emergency Preparedness Div.		X
	Radio & TV Stations		X
	S.C. Educational Network		X
	State Law Enforcement Div.		Х
	(SLED) (When requested)		
	Municipalities		X
Notification Communications	Sheriff Director, Emergency Prepardness	X	
	Division Utilities		X
	Telephone Companies Local Government and		X
	Municipalities Chiefs, County Emergency		X
	Services		X
Public Information	PIO Officer (County) Director, Emergency Pre-	X	
Miorition	paredness Division Aiken County Council		X
	Chairman		×
	Local Newspapers		X

# APPENDIX 1, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE (CONTINUED)

FUNCTION	AGENCY	RESPONSIBIL Primary Sup	
	TV & Radio Serving County Municipalities Utility+9		X X X
Accident Assessment (Nuclear Accident)	Dept. of Health & Environ- mental Control RAP & IRAP (Upon Request) Director, Emergency Preparedness Division	X	x x
Social Services (EWS)	County Dept. of Social Services School Districts County Red Cross Salvation Army (When	X	X X
Fire Service	Available)  Chief, Fire Service Local & Fire Departments S.C. Forestry Commission S.C. Office of Fire Marshal Adjacent Counties (Mutual Agreement)	. <b>X</b>	X X X
Rescue Service	Chief, Rescue Service Local Rescue Squads S.C. Wildlife & Marine Resources S.C. Forestry Commission S.C. Aeronautics Commission S.C. Civil Air Patrol Adjacent Counties (Mutual Agreement)	X	X X X X X
Traffic Control,	Aiken County Sheriff (Transients)	х	

# APPENDIX 1, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE (CONTINUED)

<u>FUNCTION</u>	AGENCY	RESPONSIBILITE Primary Suppo	
Security & Law Enforce-	Aiken County Sheriff (Transients)	3	X
ment	Aiken County Sheriff (Residents)	;	X
	Municipal Police Forces	;	X
	State Law Enforcement Div. S.C. Wildlife & Marine		X
	Resources		X
	S.C. Highway Patrol		X
	S.C. Army National Guard (If Available)	,	X
Emergency Medical	Chief, County Emergency Medical Services	X	
Services	County Rescue Service		K
(EMS)	County Ambulance Service		K
(who)	Hospitals (Serving EPZ)		X
	Adjacent Counties (Mutual		
	Agreement)	>	X
Transpor- tation	County School Bus Main- tenance Supervisor	X	
tation	Local Trucking Firms		X
	S.C. Public Service Comm.	>	K
	S.C. Aeronautics Commission	>	X
	S.C. Adjutant General	)	K
	Adjacent Counties (Mutual Agreement)	,	K
Protective	Aiken County Council		
Response	Chairman	X	
	County Emergency Welfare		,
	Services		<b>⟨</b> ⟨
	Sheriff's Office	,	`

# APPENDIX 1, TAB A TO ANNEX Q2 - RESPONSIBILITY SUMMARY TABLE (CONTINUED)

FUNCTION	AGENCY	RESPONSIBILITY Primary Support
	Director, Emergency Pre- paredness Division Chiefs, County Emergency	x
	Services	x
Radiological Exposure	S.C. Dept. of Health & Environmental Control (DHEC)	X
Control	Director, Emergency Pre- paredness Division Aiken County Council Chairman	x x
Corrective Actions and Plan Changes	Director, Emergency Prepared- ness Agency Chiefs, County Emergency Service	x x

APPENDIX 2 TO ANNEX Q2 - PROCEDURES FOR ALERTING AND NOTIFYING RESIDENTS AND WARNING TEAMS OF THE 10-MILE EPZ.

## I. GENERAL

## Purpose

To describe procedures, organization, and facilities used to alert and notify the populace in the Plume Exposure (10-mile) EPZ in the event of a radiological emergency at Vogtle Electric Generating Plant.

#### II. EXECUTION

## A. General

#### 1. Alert

Tone alert radios will be used to ALERT both the residents and transient population in the VEGP 10-mile EPZ.

## 2. Notification

The resident populace will be initially notified through the NOAA tone-alert radio and through mobile sound equipment for the transient population. Follow-up public information will be made by the respective states over the Emergency Alert System (EAS). Savannah River Site (SRS) will notify workers and members of the public within their boundaries, including persons traveling through SRS on the public highway and hunters.

## B. Concept of Operations

#### 1. Alerting

- State agencies and local governments are notified of radiological emergencies as specified in Annex A, SCORERP.
- b. In the event there is an <u>immediate</u> declaration of Site Area Emergency or General Emergency by VEGP and the SEOC/FEOC is not operational, the decision to

sound the signals and to issue emergency instructions to the public will be made and executed by county authorities based on recommendations by VEGP officials.

- c. Once the SEOC/FEOC is operational, the decision to sound alerting signals will be made by the Executive Group of the State Emergency Organization (SEO).
- d. NOAA tone-alert system will be activated by the Georgia Emergency Management Agency (GEMA) in coordination with the South Carolina FEOC/SEOC. Alerting of persons boating or fishing on the Savannah River will be accomplished by the Georgia Department of Natural Resources, Game and Fish Division, and Burke County EMA in coordination with the South Carolina Department of Natural Resources.

#### Notification

- a. The primary means of notification is the NOAA tonealert radio system. It will be utilized to provide the initial notification of the public. The transient population will be primarily notified by mobile sound equipment.
- b. The EAS will be utilized as the primary means for follow-up public information. Follow-up emergency action messages will be formulated and coordinated by the respective state EOCs. The message(s) will be relayed by the State PIO Organization at the Emergency News Center (ENC).

## C. State Procedures

1. Upon declaration of an emergency at the VEGP, the plant notifies GEMA, the S.C. Emergency Preparedness Warning Point (SCEPD), SRS, and all counties over the dedicated Emergency Notification Network (ENN), (SEOC/FEOC, if operational). Commercial telephone will be used as backup means of notification. Recommendations will be made by VEGP to the appropriate state(s) for their respective portions of the EPZ.

- 2. SCEPD and GEMA emergency response officials will coordinate protective actions and the content of NOAA messages over the Administrative Decision Line (ADL).
- 3. If Georgia and South Carolina SEOCs are operational, protective actions will be coordinated.
- 4. The Georgia EMA, upon coordination and agreement of the NOAA message with South Carolina, activates the NOAA message from the Columbia Weather Service, via the transmitter located at VEGP using existing GEMA/NOAA procedures. The combined message is thereby sent to all NOAA radios in the EPZ (both states) giving initial protective actions for all local planning zones and instructs all to turn to an EAS radio and/or television station.
- 5. An initial EAS message will have been coordinated between officials of Georgia and South Carolina during the same coordination concerning the NOAA message. The EAS message will be transmitted to the respective states' Public Information personnel at the Emergency News Center for transmission over the EAS network(s) in their respective state(s). (See Appendices 1 and 2, EAS Operational Areas.)
- 6. Subsequent changes of recommended protective actions will be made using the above procedures.

#### D. Public Information

Emergency Public Information will be issued by the South Carolina spokesperson from the Emergency News Center located in the Burke County Office Park on Georgia Highway 80/56 in Waynesboro, Georgia, in coordination with the State of South Carolina, SRS, respective counties and the Georgia Power Company.

#### E. County Procedures

#### 1. Receipt of Warning

a. If an emergency is declared at the Vogtle Electric Generating Plant, authorized VEGP personnel will notify the Aiken County Communications Center Warning Point simultaneously with state and other county warning points by Emergency Notification Network (ENN) phones, or commercial telephone. Verification of the call will be established to insure authenticity.

- In the event the Prompt Notification System is accidentally activated, corrective procedures will be followed.
- c. See Aiken EOP, Sec V.

#### 2. Dissemination of the Warning

Upon confirmation of an immediate General Emergency, the dispatcher will immediately notify/advise any one of the following Aiken County officials:

Aiken County Emergency Preparedness Coordinator Emergency Preparedness Division

**Aiken County Sheriff** 

Aiken County Council Chairman

Aiken County Administrator

Each of these officials has the authority to request activation of the Prompt Notification System and the EAS message system.

- 3. In cases where immediate response is required to protect the populace, one of the above listed Aiken County officials will direct activation of the Emergency Alerting System and issuance of appropriate messages.
- 4. If the radiological situation allows orderly activation of the SEOC/FEOC, EAS activation will be made after consultation between Georgia Emergency Management Agency and S.C. Emergency Preparedness Division regarding protective actions.

# F. Methods of Notifying the Population of the 10-Mile EPZ

1. Aiken County has no resident population within the VEGP plume EPZ. The population here consists only of transients. If the decision is made to activate the prompt notification system, the tone alert radios located in Aiken County will be audible in the Aiken County portion of the VEGP EPZ and constitutes the initial means of prompt notification. In addition, the Aiken County Sheriff's Office will dispatch warning teams using vehicles equipped with sirens, bullhorns, loudspeakers, or other public address systems to warn transient population within that portion of Aiken County that falls within the VEGP plume EPZ. Those warning teams will proceed to and drive through that part of the plume EPZ disseminating appropriate warning messages. Those warning teams will provide notification within 45-minutes to any transients in that part of the plume EPZ who were not warned by the initial notification.

In addition to providing additional warning to the Aiken County portion of the VEGP plume EPZ, the Aiken warning teams will also provide initial notification to transients in the Aiken County portion of the VEGP EPZ.

2. Warning teams consist of the following along with assigned areas of responsibility:

Sheriff's Office - Sector G-10 in Aiken County including Cowden Plantation.

Other police, fire and rescue units are available to augment above resources if necessary.

- 3. Notification of Warning Teams
  - a. Rescue -- radio, pager or telephone.
  - b. Fire Departments -- radio or telephone.
  - c. Police Departments --- radio or telephone.
  - d. All units above can be contacted/controlled from the Aiken County Communications Center.

- 4. Warning Messages to be disseminated will consist of one of the following:
  - a. Attention -- A radiological accident occurred at the Vogtle Electric Generating Plant at (date/time) that could cause harm to persons in this neighborhood. You are requested to stay inside your homes and businesses with doors and windows closed. Turn on your radio or TV to receive further information.
  - b. Attention -- A radiological accident occurred at the Vogtle Electric Generating Plant at (date/time) that could cause harm to persons in this neighborhood. We urge you to leave your homes or businesses in a safe, orderly manner and report to your assigned shelters. Turn on your radio or TV to receive further information.
  - c. Attention -- The Governor of South Carolina has declared a state of emergency due to an accident at the Vogtle Electric Generating Plant at (date/time). You are requested to begin movement to your shelter in accordance with instructions listed in the Vogtle Electric Generating Plant brochure and information furnished by radio and TV stations.

# G. <u>Emergency Alert System (EAS)</u>

EAS will be activated along with the prompt notification system. Information advising the population of protective actions will be given out over the EAS via standard messages in place at the EAS stations. (See Appendix 3, Annex C, SCORERP)

The widest coverage by the EAS will be utilized to convey the public warning and follow-up messages.

H. Alert and Notification Communications Directory (Tab E).

APPENDIX 2, TAB A TO ANNEX Q2 - EMERGENCY NOTIFICATION MESSAGE FORM (ENMF)

(INSERT ENMF)

APPENDIX 2, TAB C TO ANNEX Q2 - PLANT VOGTLE EMERGENCY INFORMATION CALENDAR

(INSERT CALENDAR)

APPENDIX 2 TO ANNEX Q2 - EPD-43 ACCIDENT/INCIDENT REPORT FORM.

(INSERT EPD-43)

APPENDIX 2 TO ANNEX Q2 - EPD ACCIDENT/INCIDENT REPORT FORM - (CONTINUED)

#### APPENDIX 3 TO ANNEX Q2 - TRAFFIC CONTROL PROCEDURES.

The following is an evacuation and roadblock plan to be used when ordered by proper authorities regarding a nuclear accident at the Vogtle Electric Generating Plant.

Evacuation data was evaluated to identify key intersection locations where potential vehicle conflicts during an evacuation would warrant management or control. The locations identified for traffic control are identified below:

#### Aiken County:

- o Route 2035 (Brown Road) at Route 5 (direct traffic north on Route 5; restrict vehicles from traveling south on Route 2035).
- o Route 5 at Route 299 (direct traffic north on Route 5).
- o Route 5 at Route 63 (direct traffic west on Route 63).
- o Route 63 at Route 125 (allow traffic to flow on Route 63).
- o Route 63 at Route 57 (direct traffic north on Route 57).

#### Barnwell County:

o Route 125 at Route 493 (direct traffic south on Route 125).

#### Allendale County:

- o Route 125 at Route 12 (direct traffic south on Route 125).
- o Route 125 at Route 17 (direct traffic south on Route 125).

These locations are illustrated in Attachment 3.

The responsibility for traffic control during an evacuation of the South Carolina portion of the VEGP EPZ will be shared by Aiken and Allendale County emergency management, law enforcement agency personnel, and State as available. Barnwell County law enforcement personnel will be available as backup to Allendale personnel if required. Each traffic management location will be manned and/or roadblocks will be positioned to direct evacuees out of the EPZ and to restrict unauthorized access in the

affected area. Route markers will be placed along the evacuation route at the above critical location to promote more efficient traffic flow out of the EPZ.

The stationing of traffic controllers at these Traffic Management Locations would not be expected to significantly reduce the time required to evacuate the South Carolina portion of the EPZ, since the time estimates are most influenced by the various preparations and mobilization times. However, controllers at these key locations would reduce the number of vehicle conflicts and promote movement through the area. Also the traffic controllers will instill confidence in evacuees by directing evacuating traffic in the most efficient manner possible, and by being available to respond to unpredictable or changing events.

APPENDIX 5 TO ANNEX Q2 - NURSING HOMES, INDUSTRIES AND SCHOOLS IN THE 10-MILE EPZ OF AIKEN COUNTY.

There are no schools, hospitals, nursing homes, or industries located in the Aiken County portion of the Vogtle Electric Generating Plant EPZ.

APPENDIX 6 TO ANNEX Q2 - STATE LAW ENFORCEMENT DIVISION (SLED), SOP.

The security identification that will be used to control egress and ingress in the case of a nuclear emergency is as follows:

#### **PUBLIC SAFETY**

All bona fide uniforms of public safety agencies will be honored. This includes but is not limited to the uniforms of Police, Fire and Emergency Medical Personnel. Personnel of public safety agencies and/or National Guard who are not in uniform will display appropriate agency identification or obtain an Approved Identification Pass from the SLED representative at the SEOC or FEOC.

#### **STAFF SUPPORT**

All personnel of agencies and organizations supporting governmental response to a nuclear emergency will be issued Approved Identification Passes.

#### **NEWS MEDIA**

Members of the media should display official identification from their employing or sponsoring organization. Generally, the media will be directed to a near site media center and not to the Forward Emergency Operating Center.

#### **CIVILIANS**

A pass is available for evacuees who may be authorized re-entry to an evacuated area in the event of urgent duties.

# APPENDIX 7 TO ANNEX Q2- DOSE RATE RECORD.

# RADIATION EXPOSURE RECORD

NAME			
AGE			
SOCIAL SECUR	ITY MMBER		
DOSIMETER SE	RIAL NUMBER		
	·		
DATE	INITIAL READING	FINAL READING	EXPOSURE
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	To	OTAL EXPOSURE _	·•
SIGNATURE			

APPENDIX 8 TO ANNEX Q2 - PROCEDURES TO IMPLEMENT THE AIKEN COUNTY RER PLAN.

#### NUREG-0654 Criteria II P:7

- 1. <u>Aiken Regional Medical Centers Operational Procedures.</u>
- 2. <u>Standing Operations Procedures</u>, State Emergency Operations Center, Emergency Preparedness Division, Office of the Adjutant General.
- 3. <u>Local Government Radio/Signal Operating Instructions</u>, Emergency Preparedness Division, Office of the Adjutant General.
- 4. <u>Duty Officer/Staff Duty Officer Instructional Manual</u>, Emergency Preparedness Division, Office of the Adjutant General.
- 5. <u>Standard Operating Procedures, EMS Division</u>, South Carolina Department of Health & Environmental Control.
- 6. <u>Chief Elected Official</u>, Implementing Procedures.
- 7. <u>Emergency Preparedness Agency</u>, Implementing Procedures.
- 8. <u>Aiken County Sheriff's Office</u>. Implementing Procedures.
- 9. <u>Rescue Squad/Ambulance</u>, Implementing Procedures.
- 10. Shelter Manager, Implementing Procedures.
- 11. <u>County Communications Center</u>, Implementing Procedures.

# APPENDIX TO ANNEX Q2 - RADIOLOGICAL DECONTAMINATION

#### A. General

- 1. Radiological decontamination is the reduction or removal of contaminating radiological material from structures, areas, objects or persons. The object is to reduce the contamination to an acceptable level with the least expenditure of labor and materials, and with radiation exposure to decontaminate personnel commensurate with the urgency of the task.
- 2. Decontamination procedures will be implemented on the recommendations of DHEC, Bureau of Radiological Health.

#### B. Execution

- 1. Decontamination points will be established at the following locations and be under direction of the Radiological Officer:
  - a. Shelters

South Aiken High School

Kennedy Middle School

b. <u>Decontamination Points</u>:

South Aiken High School

Redcliffe Elementary School

#### C. Procedures

- 1. The method of decontamination will depend upon the type and extent of contamination.
- 2. Personnel and Clothing:

As described in Tab A.

3. Decontamination of food and water will be conducted under the technical advice/supervision of DHEC/BRH.

- 4. Contaminated areas will be roped off and marked with <u>CAUTION-RADIOACTIVITY</u> signs.
- 5. Action levels for decontamination will be conducted as outlined in Appendix I STRERP.

# TAB A TO APPENDIX 8

# APPENDIX 9 TO ANNEX Q2- LETTERS OF AGREEMENTS

Letters of agreements are on file in Aiken County Emergency Preparedness Office.

APPENDIX 10 TO ANNEX Q2 - DESIGNATED SHELTERS IN AIKEN COUNTY FOR EVACUEES FROM AIKEN COUNTY, S.C.

#### I. GENERAL

The shelters listed in this appendix are in compliance with American Red Cross Disaster Services Guidelines and Procedures, ARC 3074, dated August 1976.

#### II. PURPOSE

The shelter marked with an asterisk below is the primary shelter. As primary shelter, it is opened immediately upon notification that an incident has occurred and that sheltering will be required for evacuees. The alternate shelter will be opened as needed. These shelters will accommodate 100% of the population.

## III. Shelter Listing with phone number is indicated below:

COUNTY	NAME/ADDRESS	CAPACITY
AIKEN	South Aiken High School Pine Log Road Aiken, S.C.	1200
AIKEN	*Kennedy Middle School Pine Log Road Aiken, S.C.	1200

<sup>\*</sup> Alternate Shelter

# APPENDIX 11 TO ANNEX Q2 EMERGENCY ACTION LEVELS Page 1

#### CLASS NOTIFICATION OF UNUSUAL EVENTS

CLASS DESCRIPTION Unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring off-site response of monitoring are expected unless further degradation of safety systems occur.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
Promptly inform SCDPS     Warning Point and affected     counties for nature of     unusual conditions as soon as	SC DPSWP notifies EDP and DHEC.  2) EPD verifies county	Provide fire. medical, or security assistance if required.
discovered.	notification.	2) Escalate response to more severe class if so notified.
2) Augment on-shift	3) DHEC assesses situation	
resources.	with plant and confirms with EPD.	3) Stand by until verbal close out.
3) Assess and respond.		
	4) EPD notifies Governor's	
4) Escalate to a more severe class, if appropriate.	Office & OTAG.	
	5) Escalate response to more	·
5) Close out with verbal summary to off-site	severe class; if appropriate.	
authorities followed by written summary within 24 hours.	6) Stand by until verbal closeout.	

Emergency Action Levels Page 2

## CLASS

#### **ALERT**

CLASS DESCRIPTION Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any release expected to be limited to small fractions of the EPA Protective Actions Guidelines exposure levels.

The state of the s			
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS	
Promptly inform SCDPS     Warning Point and affected counties of Alert status	1) SC DPSWP notifies EPD and DHEC.	Provide fire, medial, or security assistance on request.	
2) Augment resources, activate on-site Technical Support Center (TSC) and on-site Operational Support Center (OSC). Emergency Operations Facility (EOF) and other key personnel to standby.  3) Assess and respond.	2) EPD verifies county notification.  3) DHEC assess situation with plant and confirms with EPD.  Recommends response required.	2) Augment resource and bring EOC(s) to standby status. Consider activation of EOC(s) downwind from facility.  3) Bring alert and notification systems to standby status.  4) Activate siren system and EBS in 10-mile EPZ if recommended.	
4) Consider activating the Joint Information Center.  5) Dispatch on-site monitoring teams and associated communications.  6) Provide periodic plant status update to off-site authorities (at least every 60 minutes)	4) EPD notifies Governor's Office, OTAG, North Carolina, Georgia and FEMA.  5) Governor considers declaring a State of Emergency.  6) Alert key emergency response personnel and communications to standby status.	<ul> <li>5) Alert key personnel to standby status.</li> <li>6) Escalate to more severe class if notified.</li> <li>7) Maintain Alert status until verbal closeout or reduction or emergency class.</li> </ul>	
7) Provide periodic meteorological assessments to off-site authorities and close estimates for actual releases.  8) Escalate to a more sever s class, if appropriate	<ul> <li>7) EPD staff activates SEOC.</li> <li>Consider dispatch and activation of FEOC.</li> <li>8) Dispatch Public Information group to the Joint Information Center, if activated.</li> </ul>		

# **Emergency Action Level**

# CLASS GENERAL EMERGENCY

CLASS DESCRIPTION Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss on containment integrity. Release can be reasonably expected to exceed EPA Protective Action Guideline exposure levels off-site for more than the immediate site area.

LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS
1) Make senior technical and management staff on-site available for consolation with NRC and State on a periodic basis.  2) Provide meteorological and dose estimates to off-site authorities for actual releases via a dedicated individual or automated data transmission.  3) Provide release and dose projections based on available plan condition information and foreseeable contingencies.  4) Close out or recommend reduction of emergency class by briefing of off-site authorities at EOC and by phone followed by written summary within 8 hours.	1) EPO coordinates evacuation, sheltering, and radiological monitoring if required.  2) Provide periodic press updates for public within at least 10-mile EPZ.  3) Consider distribution of Potassium lodide tablets to emergency response organization.  4) Coordinate and allocate state support resource.  5) Request Federal support as needed.  6) Provide protective actions in 50-mile Ingestion Pathway EPZ.  7) In an immediate emergency and DEOC/FEOC is not operational, state forces will rapidly take appropriate actions required at Alert and Site Area Emergency to active requisite directions and control.  8) Maintain General Emergency status until closeout or reduction in emergency class.	1) In an immediate emergency and SEOC/FEOC is not operational: a) Initiate protective actions recommended by plant as appropriate: b) Activate the public alert system and ERS for 10-mile EPZ:(c) Take actions appropriate at Alert and Site Area Emergency.  2) Maintain General Emergency status until closeout or reduction of emergency class.

# **Emergency Action Levels**

CLASS	ALERT		
ρο plant.	ON Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the Any release expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.		
LICENSEE ACTIONS	STATE ACTIONS	LOCAL ACTIONS	
9) Close out or recommend reduction in emergency class to off-site authorities followed by written summary within 8 hours.	9) Coordinate activation of siren systems and EBS in 10-mile EPZ if recommended.  10) Consider precautionary evacuation of schools within the 5-mile EPZ and 10-mile downwind. Consider notification of 50-mile EPZ counties.  11) Consider precautionary evacuation of schools within 5-mile EPZ and 10-mile downwind.  12) Provide any assistance requested from counties and facility.  13) Escalate response to more severe from counties and facility.  14) Maintain Alert status until verbal closeout or reduction of emergency class.		

Final Sheet of Enclosure

# **Southern Nuclear Operating Company**

AR-06-1721

Enclosure 10

**Evacuation Time Estimates** 

For The

**Vogtle Electric Generating Plant** 

April 2006

# Evacuation Time Estimates for the Vogtle Electric Generating Plant





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# Prepared By

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Baton Rouge, LA 70809

# **Prepared For**

Southern Nuclear Operating Company (SNC) 40 Inverness Center Parkway Birmingham, AL 35242

# **Prepared Under**

Contract Number / Purchase Order Number: SN060013

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# **Executive Summary**

In order to ensure the safety of the public living in the vicinity of nuclear power plants in the nation, the U.S. Nuclear Regulatory Commission (NRC) requires the plants to update their evacuation times estimates (ETEs) within the 10-mile radius emergency planning zone (EPZ) as local conditions change (e.g., change in the type of effectiveness of public notification system).

Southern Nuclear Operating Company (SNC) contracted IEM to estimate ETEs for the projected 2006 and 2010 populations within the 10-mile emergency planning zone (EPZ) surrounding Vogtle Electric Generating Plant (VEGP). This document describes the methods used to obtain population data and to estimate the ETEs. It reports the estimated population figures, evacuation road network information, and ETEs.

The total permanent resident populations within the 10-mile EPZ for VEGP are estimated to be 3,017 for 2006 and 3,224 for 2010. This population is broken down by protective action zone (PAZ) and by sector and ring within the report. There is not a major change in the permanent population figures because the power station is located in a densely-wooded rural area, and no significant change in the land-use pattern is expected around the plant in the next four years. Transient population consists of workers employed within the area and recreational sportsmen on the Savannah River. Special facilities populations are composed of students, teachers, and other employees at the Lord's House of Praise Christian School and employees of the VEGP.

IEM used PTV Vision VISUM, a computer simulation model, to perform the ETE analyses. In order to represent the most realistic emergencies, ETEs have been prepared for several temporal, seasonal, and weather conditions. Evacuations for the nine geographic evacuation areas were modeled individually in each of three seasonal scenarios: Winter Weekday, Winter Weeknight, and Fall Weekend. The winter weekday and weeknight scenarios also represent summer weekday and weeknight scenarios because the population remain the same. The fall weekend scenarios are the same as the other weekends except for areas on and around the Savannah River, which include an increased population due to recreational sportsmen.

All these scenarios were considered under both fair and adverse weather conditions. ETEs for 2006 fair weather conditions ranged from 1 hour and 25 minutes to 1 hour and 45 minutes. ETEs for 2006 adverse weather conditions ranged from 1 hour 40 minutes to 1 hour 55 minutes. ETEs for 2010 fair weather conditions ranged from 1 hour 45 minutes to 1 hour 55 minutes. ETEs for 2010 adverse weather conditions ranged from 2 hours 5 minutes to 2 hours 45 minutes.

In conclusion, based on the data gathered and the results of the evacuation study conducted, IEM believes that the existing evacuation strategy is functional for

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both 2006 and 2010 conditions, given the lack of severe congestion or very high ETEs.

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# 1.0 Introduction

The Vogtle Electric Generating Plant (VEGP) is a two-unit pressurized water reactor operated by Southern Nuclear Operating Company (SNC). In order to ensure the safety of the public living in the vicinity of the power plant, the U.S. Nuclear Regulatory Commission (NRC) requires nuclear power plants in the nation to conduct evacuation studies for the population within the 10-mile radius emergency planning zone (EPZ) at regular intervals. The population evacuation study fulfills regulatory requirements outlined in the NRC's and Federal Emergency Management Agency's (FEMA) Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (NUREG-0654), Appendix 4.

SNC contracted IEM, Inc. to perform a population evacuation study for the 10-mile radius EPZ surrounding VEGP. This document presents the results of this study. It describes the assumptions and methodologies used by IEM to obtain population and evacuation network data and to perform evacuation time estimates (ETE) analyses. ETEs in this evacuation study incorporate the projected population numbers of years 2006 and 2010. The 2010 population numbers also include the projected construction workforce for the projected site expansion. This document reports the updated population figures, evacuation road network information, and ETEs.

The study is consistent with the requirements specified in Appendix 4 of NUREG-0654. If and wherever appropriate, the study uses guidance contained in NUREG/CR-6863 and NUREG/CR-6864, Volume 1.<sup>2,3</sup> The study is intended to provide information for State, local, and VEGP emergency management personnel to effectively plan for an event at the plant.

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<sup>&</sup>lt;sup>1</sup> NRC and FEMA. Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. NUREG-0654, FEMA-REP-1. November 1980. Online: http://www.nrc.gov.edgesuite.net/reading-rm/doc-collections/nuregs/staff/sr0654/sr0654r1.pdf (last accessed March 20, 2006).

<sup>&</sup>lt;sup>2</sup> NRC. Development of Evacuation Time Estimate Studies for Nuclear Power Plants. NUREG/CR-6863. January 2005. Online: http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6863/cr6863.pdf (last accessed March 20, 2006).

<sup>&</sup>lt;sup>3</sup> NRC. Identification and Analysis of Factors Affecting Emergency Evacuations Emergency Evacuations, Volume 1. NUREG/CR-6864. January 2005. Online: http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6864/v1/cr6864v1.pdf (last accessed March 20, 2006).

## 1.1. Site Location

VEGP is located on the southwestern bank of the Savannah River in Burke County, Georgia. The plant is approximately 15 miles east-northeast of the City of Waynesboro. The small town of Girard is approximately seven miles south of the plant. The closest population center is the town of Sardis, which is approximately 12 miles south of the plant. Figure 1 shows location of the VEGP site.

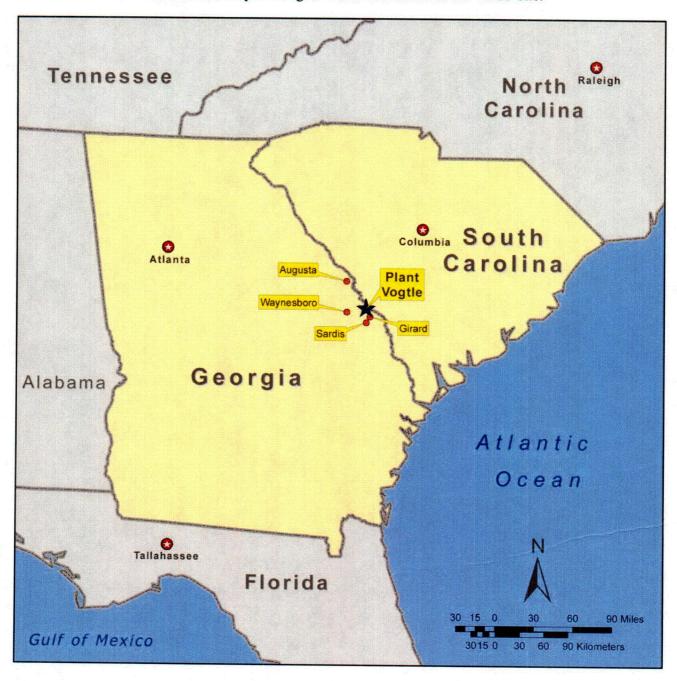


Figure 1: Vogtle Electric Generating Plant Site Location

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## 1.2. Emergency Planning Zone

The plume exposure pathway EPZ includes the majority of the 10-mile geographic area surrounding VEGP. The VEGP EPZ covers areas in both Georgia and South Carolina. The land within the plume exposure pathway is divided almost equally by the Savannah River. The EPZ covers portions of the counties of Burke and Richmond, Georgia, and Barnwell, Allendale, and Aiken, South Carolina. Burke County has the largest resident population within the EPZ. This population is small and dispersed.

The major portion of the EPZ in South Carolina is within the United States Department of Energy's (DOE) Savannah River Site (SRS). DOE's Savannah River Operations Office (DOE-SR), pursuant to a memorandum of agreement between Georgia Power Company (GPC), as assigned to SNC, will be responsible for all emergency response actions on the SRS whenever an emergency occurs at VEGP<sup>4</sup>. For this reason, a portion of the VEGP EPZ located in Barnwell County in South Carolina contained by the DOE-SR facility is not included in the study.

The areas in South Carolina that are not Federally-owned or controlled are along the Savannah River lowlands in Aiken, Allendale, and Barnwell counties. The segment in Aiken County, approximately 8–10 miles north-northwest of VEGP, is part of the Cowden Plantation, which has no resident population. The segments in Barnwell and Allendale counties, approximately 9–10 miles east-southeast of VEGP, are largely comprised of portions of the Creek Plantation, a horse farm. Within the South Carolina portion of the EPZ, the only housing is located within the Creek Plantation in Barnwell County, where there are only a limited number of permanent residences.

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<sup>&</sup>lt;sup>4</sup> A copy of the memorandum of agreement is provided in Appendix A. It can also be found in Appendix 5 of the VEGP emergency plan.

#### Evacuation Time Estimates for the Vogtle Electric Generating Plant

NUREG-0654 recommends that the EPZ be subdivided into evacuation areas, for performing the evacuation time estimate analyses (see Table 1).<sup>5</sup>

**Table 1: Evacuation Areas for ETE Analysis** 

	transferren i noon arma arma karan uusuu maal
Radius	Area
Approximately 2 miles	Four 90° sectors
Approximately 5 miles	Four 90° sectors
Approximately 10 miles (EPZ)	Four 90° sectors
Approximately 10 miles (EPZ)	Entire EPZ

Based on the geography and political boundaries in the EPZ, one 0-2 mile area, two 0-5 mile areas, and four 0-10 mile areas are defined for the VEGP EPZ. For evacuation and emergency response planning purposes, these areas have been further divided into 13 protective action zones (PAZ). The PAZ descriptions were obtained and verified from Appendix 4 of the VEGP Emergency Plan, the 2006 public outreach calendar, and the State of Georgia Radiological Emergency Plan: Appendix D—Burke County Plan. The zones were selected based on existing political boundaries and prominent physical features—either natural (e.g., rivers and lakes) or man-made (e.g., roads)—to enhance direction and coordination of the public in the affected area.

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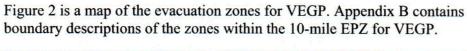
<sup>&</sup>lt;sup>5</sup> NUREG-0654. p. 4-4.

<sup>&</sup>lt;sup>6</sup> Protective Action Zone is also referred to as "Zone" in this document.

<sup>&</sup>lt;sup>7</sup> VEGP. VEGP Emergency Plan, 46-49.

<sup>&</sup>lt;sup>8</sup> Plant Vogtle Emergency Information Calendar 2006.

<sup>&</sup>lt;sup>9</sup> Georgia Emergency Management Agency. State of Georgia Radiological Emergency Plan: Appendix D—Burke County Plan, Georgia Annex D and Burke RERP..46–47. May 2005.



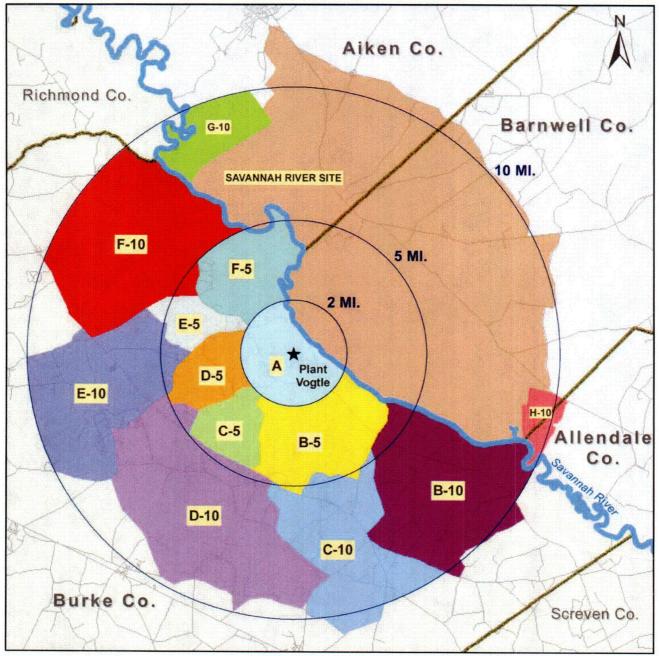


Figure 2: VEGP EPZ Boundary and Protective Action Zones

IEM, Inc. 2006

The relationship between the evacuation areas and evacuation zones is summarized in Table 2.

**Table 2: Summary of Evacuation Areas and Protective Action Zones** 

Evacuation Area	Protective Action Zones
0-2 Miles	Α
0-5 Miles, 90° S	A, B-5, and C-5
0-5 Miles, 90° NW	A, D-5, E-5, and F-5
0-5 Miles, (except SRS)	A, B-5, C-5, D-5, E-5, and F-5
0-10 Miles, 90° S	A, B-5, C-5, B-10, C-10, and D-10
0-10 Miles, 90° NW	A, D-5, E-5, F-5, E-10, and F-10
0-10 Miles, 90° N	G-10
0-10 Miles, 90° E	H-10
0-10 Miles, Full EPZ	All 13 evacuation zones

# 2.0 Assumptions and Methodology

# 2.1. General Assumptions

The general assumptions made to model the population evacuation study are outlined below:

- The ETEs include the times associated with warning diffusion, public mobilization, and travel time out of the EPZ.
- Following initial notification, all persons within the EPZ will evacuate. Evacuation of the EPZ will be considered complete after all evacuating vehicles are outside the EPZ.
- Existing lane utilization patterns will prevail during the course of the evacuation. There will be traffic control points in the network to allow efficient flow of traffic towards the reception centers.
- Reception centers are modeled as defined in the 2006 public outreach calendar<sup>10</sup>.
- All households having more than one vehicle will use only use one automobile. This is consistent with empirical data, which indicates that family members, where possible, prefer to evacuate as a unit.<sup>11</sup>

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<sup>&</sup>lt;sup>10</sup> Plant Vogtle Emergency Information Calendar 2006.

<sup>11</sup> R.W. Perry, M.K. Lindell, M.R. Greene. Evacuation Planning in Emergency Management. 1981.

- Non-auto-owning households will evacuate with neighbors, friends, and relatives, or they will be evacuated through coordinated efforts by State and county emergency management officials. This is also consistent with the 2006 public outreach calendar.
- To model the population evacuation during adverse weather conditions, the speed limits are reduced by 40%, and the road capacities are reduced by 25%. This is consistent with research that concludes that during the adverse weather conditions, drivers may reduce their velocity by nearly 40%, which can result in a 25-30% reduction in capacity. Weather-related capacity reductions of 20-25% are generally used in current evacuation studies for bad weather roadway conditions. 13

# 2.2. Methodology

IEM used PTV Vision VISUM, a computer simulation model, to perform the ETEs for the VEGP site. 14 PTV Vision is the leading software suite for transportation planning and operations analyses used in more than 70 countries. Detailed information on the evacuation time analysis methodology using VISUM is provided in Section 5.2. PTV Vision quality assurance and industry acceptance information is provided in Appendix D.

## 2.3. Sources of Data

The most up-to-date data sources were reviewed and analyzed to prepare appropriate input data for running the traffic simulation and providing the best ETEs. These data sources are explained below:

- Population estimates were based on data obtained from Synergos
   Technologies, contact with individual facilities, and discussions with the SNC
   emergency planning staff.
- The peak estimated employment level at VEGP reflects office or operations personnel, as well as 2010 projections for construction workforce in that scenario.
- Roadway geometric data were obtained from PTV. PTV data is based on high-quality, regularly updated, NAVTEQ street network data. NAVTEQ networks are detailed, including neighborhood streets in every community in North America. This data was validated by IEM during a "ground truthing" field trip in February 2006.

<sup>&</sup>lt;sup>12</sup> National Research Council, Committee on Weather Research for Surface Transportation. Where the Weather Meets the Road: A Research Agenda for Improving Road Weather Services; Transportation Research Board (TRB), Board on Atmospheric Services. 2004.

<sup>&</sup>lt;sup>13</sup> Urbanik, T. E. and J. D. Jamison, State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants (NUREG/CR-4831; PNL-7776). Richland, WA: Pacific Northwest Laboratory, 1992. Page 5. <sup>14</sup> PTV Vision can be found online at http://www.ptvamerica.com.

- Roadway and intersection approach capacities were calculated using the concepts and procedures defined in the Highway Capacity Manual<sup>15</sup>.
- Warning diffusion and mobilization times were based on the data presented in Evaluating Protective Actions for Chemical Agent Emergencies. <sup>16</sup> This data was collected during evacuations executed in response to large-scale chemical spills, and it explicitly incorporates the time required for communication of the warning (warning diffusion) and the time required for an individual to respond to the warning (mobilization). The data collected in this meta-study were based on transient, permanent, and special populations. Section 5.1.1 of this report provides more information on warning diffusion and mobilization time assumptions.
- Vehicle occupancy rates for the different population categories were derived based on average household size and discussions with the SNC emergency planning staff. Section 3.0 provides more information on population and vehicle demand assumptions.

## 2.4. Scenarios Modeled

Winter Weeknight

Fall Weekend

As per NUREG-0654 guidelines, ETEs have been prepared for several temporal, seasonal, and weather conditions. Based on the discussion with the SNC emergency planning staff, estimates have been prepared for winter weekday fair and adverse weather conditions, winter weeknight fair and adverse weather conditions, and fall weekend fair and adverse weather conditions. Fair weather refers to conditions where roads are clear and dry and visibility is not impaired. Adverse weather refers to conditions where road capacities are reduced by 25% and speed limits are reduced by 40%. Evacuation conditions are modeled for the populations of the years 2006 and 2010. The 2010 population estimates also include the construction workforce for the planned two new units. Table 3 presents the snapshot of the ETE scenarios that were modeled for the study.

2006 2010

Fair Weather Adverse Weather Fair Weather Adverse Weather
Winter Weekday Winter Weekday Winter Weekday Winter Weekday

Winter Weeknight

Fall Weekend

Table 3: ETE Scenarios Modeled

Winter Weeknight

Fall Weekend

Winter Weeknight

Fall Weekend

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<sup>&</sup>lt;sup>15</sup> Transportation Research Board, National Research Council. *Highway Capacity Manual*. Washington, D.C. 2000.

<sup>&</sup>lt;sup>16</sup> Rogers, G. O., et al., Evaluating Protective Actions for Chemical Agent Emergencies (ORNL-6615). Oak Ridge, TN: Oak Ridge National Laboratory, 1990.

<sup>&</sup>lt;sup>17</sup> The construction work force population figures are based on the projected construction plan for the two new units provided by the SNC emergency planning staff.

The various population components for different scenarios are summarized below:

- Winter Weekday: This situation represents a typical weekday period when the VEGP workforce is at a full, daytime level. Assumptions on the population levels for this condition include the following:
  - Permanent residents within the EPZ will evacuate from their place of residence.
  - The VEGP site employment is at an estimated peak daytime level.
  - For the 2010 scenarios only, one-fourth of the construction workforce is deployed at the VEGP site. Out of rest of the construction workers, the temporary construction workers are located within the 10-mile EPZ at a temporary housing site, and the permanent construction workers are located outside the 10-mile EPZ.
  - School is in session.
- Winter Weeknight: This situation reflects a typical nighttime period when the workforce is at a nighttime level. Assumptions on the population levels for this condition include the following:
  - Permanent residents within the EPZ will evacuate from their place of residence.
  - The VEGP site is staffed at an estimated peak nighttime level.
  - For the 2010 scenarios only, one-fourth of the construction workforce is deployed at the VEGP site. Out of rest of the construction workers, the temporary construction workers are located within the 10-mile EPZ at a temporary housing site, and the permanent construction workers are located outside the 10-mile EPZ.
- Fall Weekend: The fall weekend situation represents a daytime period when recreational activities are at peak levels. This condition would most likely occur during any weekend day during the hunting season (i.e., September 15 through January 6), when there would be a large number of hunters and fishermen at various points along the Savannah River. Assumptions on the population levels for this condition include the following:
  - Permanent residents within the EPZ will evacuate from their place of residence.
  - The VEGP site is at an estimated peak weekend level.
  - For the 2010 scenarios only, one-fourth of the construction workforce is deployed at the VEGP site. Out of rest of the construction workers, the temporary construction workers are located within the 10-mile EPZ at a temporary housing site, and the permanent construction workers are located outside the 10-mile EPZ.
  - Recreational activities are at a peak estimated level.

# 3.0 Population and Vehicle Demand Estimation

IEM identified three population categories within the EPZ surrounding VEGP, as specified in the NUREG-0654 guidelines. These populations include the permanent resident population, the transient population, and the special facility population. Because the VEGP power station is located in a densely-wooded area, there are no special facility populations within the 10-mile EPZ other than a private school (The Lord's House of Praise Christian School). The majority of the population consists of permanent residents and a varying number of recreational visitors mainly located on or around the Savannah River.

IEM derived the 2006 population estimates, as well as business location data, from 2005 fourth-quarter population estimates obtained from Synergos Technologies, Inc. <sup>18</sup> These population estimates formed the basis for determining the evacuee demand used in the analyses for any given evacuation scenario. Local school data were obtained from commercially available geographic information system (GIS) data and through contact with individual facilities. The recreational visitors' population figures were based on the discussion with the SNC emergency planning staff. The populations from these sources were assigned to each zone.

SNC also asked IEM to provide population projections for the year 2010. Synergos Technologies provided general estimates for 2010 population projections. The same calculations and assumptions used in calculating 2006 population figures were applied to derive the 2010 population figures. This ensures consistency in comparing ETEs for 2006 and 2010 populations for the area considered.

#### 3.1. Permanent Residents

IEM obtained permanent resident population data from the Synergos Technologies January 2006 data release. IEM used GIS software to process the geographic data and associated population counts for census blocks in each of the counties surrounding the VEGP. IEM then aggregated these populations over each zone to generate a permanent resident population count, which is comprised of the nighttime population.

To calculate population by each zone and radial sector, census block population was aggregated within each of the sectors. Since boundaries of the sectors do not follow census block boundaries, many of the blocks had to be divided into subareas based on sector boundaries. To do this, IEM overlaid the census blocks with the EPZ zones and 10-mile radius sectors. The blocks were then split into sub-

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<sup>&</sup>lt;sup>18</sup> Synergos Technologies, Inc. http://www.synergos-tech.com.

areas and allocated the block population to the sub-areas based on an area ratio method. The populations of the block sub-areas within the sector boundaries were then aggregated for each radius sector.

The area ratio method assigns each sub-area a portion of the block population based on the ratio of the area of each block part to the area of the entire block. For example, if a particular sub-area contains one-fourth the area of the total block area, the sub-area receives one-fourth of the block's total population. Figure 3 illustrates this principle, in which one-fourth of the total area is located in the sub-area and it includes one-fourth of the population. The area ratio method assumes that the population within the block is evenly distributed, a reasonable assumption in most cases.

The populations of the block sub-areas within the sector boundaries were then aggregated for each sector. This method was also used in the few instances in which the PAZ boundaries did not follow block boundaries, making it necessary to split blocks along a particular zone boundary.

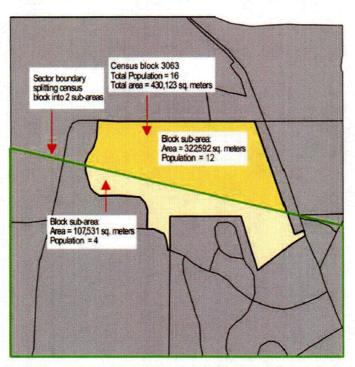


Figure 3: An Example of the Area Ratio Method Applied to a Census Block Divided into Sub-Areas

The permanent resident population is divided into auto-owning versus non-auto-owning populations.

#### 3.1.1. Auto-Owning Population

It was assumed that one vehicle would evacuate from each permanent resident household. This assumption is consistent with the research indicating the

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tendency of evacuees to evacuate, where possible, as a family unit.<sup>19</sup> The population projections and estimates indicate that 92% of the households within the EPZ have at least one vehicle-per-household. The data also indicates an average household size of 2.75 persons for the VEGP EPZ.

#### 3.1.2. Non-Auto-Owning Population

The population projections and estimates indicate that 8% of the households within the EPZ do not own a vehicle. It is assumed that privately-owned vehicles of friends and/or relatives will be available to evacuate this population component (this is also recommended in the 2006 public outreach calendar). This assumption is used since it provides the most realistic representation of evacuation traffic generated from the non-auto-owning households, which would account for vehicles within the network following internal routes to collect non-auto-owning passengers.

For an estimate of the vehicle demand associated with the permanent population (auto-owning and non-auto-owning), IEM used a vehicle occupancy rate of 3.0. This is based on the assumptions stated above that a family will evacuate in a vehicle and non-auto-owning households will evacuate with neighbors, friends, and relatives—or they will be evacuated through coordinated efforts by State and county emergency management officials.

Table 4 shows the distribution of the 2006 and 2010 total permanent resident population by sector and ring, while Figure 4 and Figure 5 present the same data graphically. Table 5 shows the distribution of the permanent resident population by zone, and Figure 6 and Figure 7 present this data graphically.

<sup>20</sup> Plant Vogtle Emergency Information Calendar 2006. p 6.

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<sup>&</sup>lt;sup>19</sup> R.W. Perry, M.K. Lindell, M.R. Greene. Evacuation Planning in Emergency Management. 1981.

Table 4: 2006 and 2010 Permanent Resident Population Distribution by Sector and Ring

Sector <sup>21</sup>	Ring <sup>22</sup> _	Permanent Resident Population	
		2006	2010
N	2	3	3
N	5	18	16
N	10	3	0
NNW	2	13	14
NNW	5	47	46
NNW	10	13	14
NW	2	17	17
NW	5	122	193
NW	10	160	169
WNW	2	16	17
WNW	5	147	160
WNW	10	172	180
W	2	6	6
W	5	72	75
W	10	408	456
wsw	2	3	3
wsw	5	82	85
WSW	10	500	560
sw	2	2	2
SW	5	7	7
SW	10	121	125
ssw	2	0	0
SSW	5	6	6
SSW	10	57	59
S	2	0	0

<sup>&</sup>lt;sup>21</sup> There are a total of 12 sectors, each measured 22.5°. Sectors of 22.5° are designated by compass direction going outward from the plant on the centerline of the sector (e.g., the sector from 348.75° to 11.25° is designated "N" for north). The remaining 11 sectors are designated NNW, NW, WNW, W, WSW, SW, SSW, S, etc.

SSW, S, etc.

22 Rings are defined as the area between two circles of radius 0 and 2 miles, 2 and 5 miles, and 5 and 10 miles.

Sector <sup>21</sup>	Ring <sup>22</sup> _	Permanent Resident Population		
		2006	2010	
S	5	25	25	
S	10	253	253	
SSE	2	0	0	
SSE	5	17	17	
SSE	10	485	478	
SE	2	0	0	
SE	5	22	22	
SE	10	184	180	
ESE	2	0	0	
SE	5	5	5	
ESE	10	31	31	

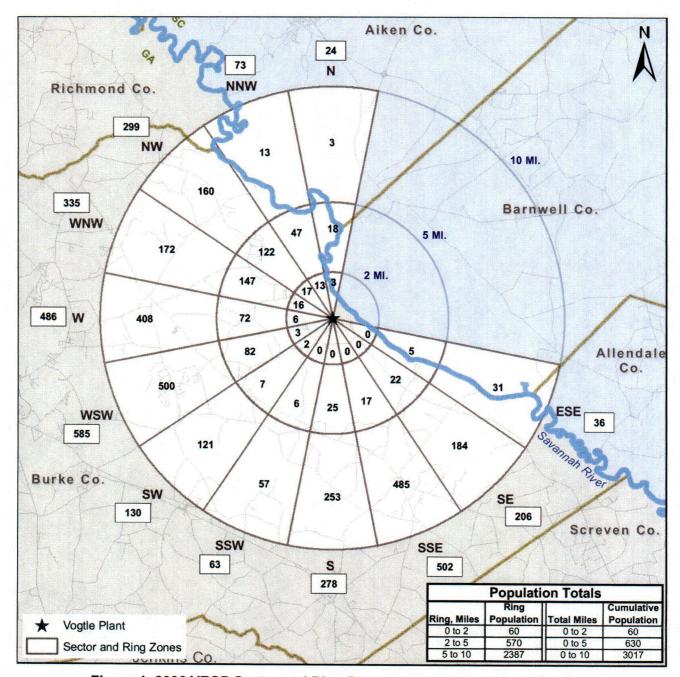


Figure 4: 2006 VEGP Sector and Ring Permanent Resident Population Map

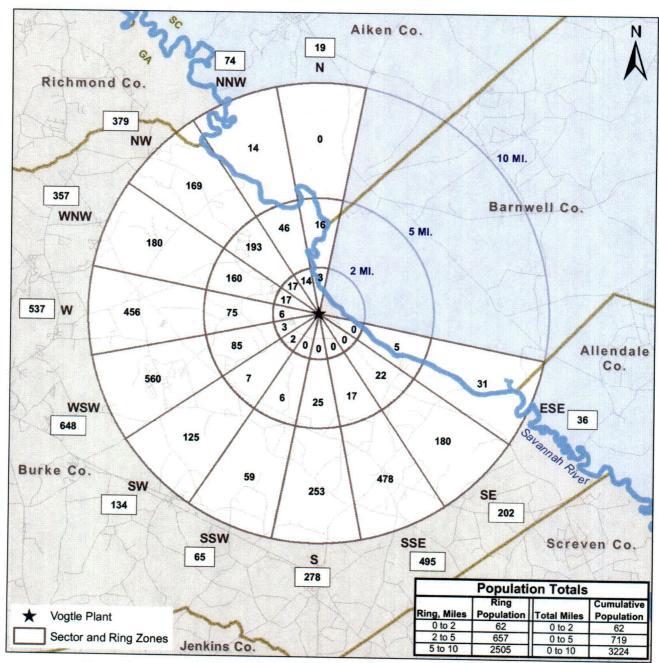


Figure 5: 2010 VEGP Sector and Ring Permanent Resident Population Map

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Table 5: 2006 and 2010 Permanent Resident Population Distribution by Zones

Zone	Permanent Resident Populati	
	2006	2010
Α	60	62
B-5	65	65
B-10	277	273
C-5	5	5
C-10	565	558
D-5	111	115
D-10	610	631
E-5	157	164
E-10	582	678
F-5	221	293
F-10	344	360
G-10	0	0
H-10	20	20

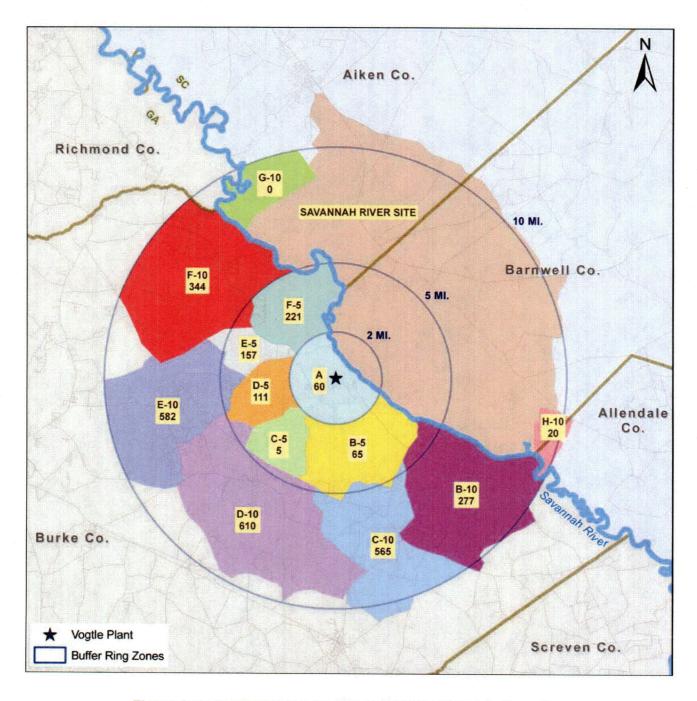


Figure 6: 2006 VEGP Zone Permanent Resident Populations Map

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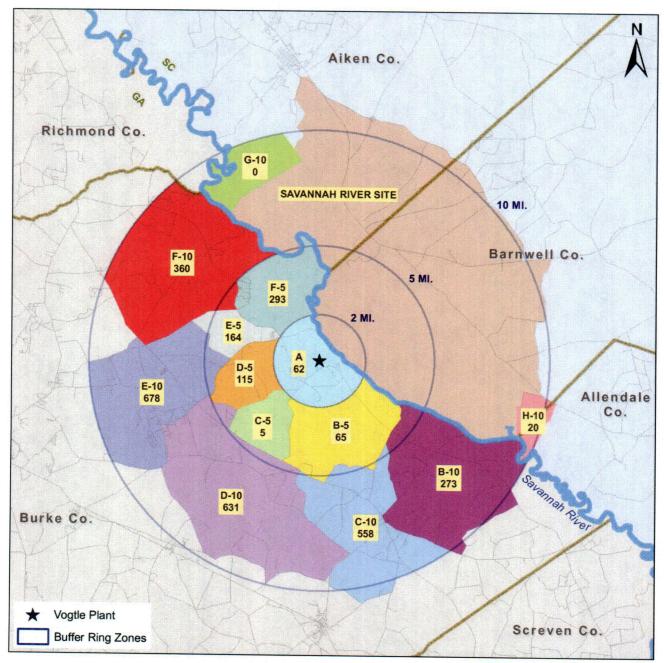


Figure 7: 2010 VEGP Zone Permanent Resident Populations Map

# 3.2. Transient Populations

The transient population for the VEGP EPZ area is derived from a combination of daytime populations, recreation populations, and employment data. These populations were combined with other contributors, such as the percentage of the population that is of working-age, to daytime population estimations and assigned to loading points in a manner similar to the permanent resident populations. The daytime populations incorporate employment and workforce information, such as county working-age population and unemployment statistics.

The recreational population shown for the VEGP area considers the use of private land and wildlife management areas by hunters and fisherman along the Savannah River. Through conversations with the SNC emergency planning staff, IEM was able to estimate recreational population approximates within the EPZ. There are three public boat landings in the VEGP EPZ. Two are in Burke County, Georgia—the Vogtle boat landing in zone B-5 and Brigham's Landing in zone B-10. The third boat landing is in Aiken County, South Carolina—Grays Landing located in zone G-10. It is estimated that there will be 200 hunters/fishermen in zones G-10 and H-10 during the hunting season.

A vehicle occupancy rate of 1.0 was used to estimate the number of vehicles to be evacuated by the transient population.

Table 6 shows the distribution of the 2006 and 2010 transient population by sector and ring, while Figure 8 and Figure 9 present the same data graphically. Table 7 shows the distribution of the permanent resident population by zone, and Figure 10 and Figure 11 present this data graphically. There is no change between the 2006 and 2010 transient population figures, except for the sectors NW and WSW between 5 to 10-mile radius rings. This is because the power station is located in a densely-wooded rural area and no significant change in the land-use pattern is expected around the plant in next four years.

Table 6: 2006 and 2010 Transient Population Distribution by Sector and Ring

Sector Rin	Ring	Transient	Populatio
		2006	2010
N	2	0	0
N	5	3	3
N	10	24	24
NNW	2	2	2
NNW	5	8	8
NNW	10	153	153
NW	2	2	2

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Sector	Ring	Transient	sient Population		
		2006	2010		
NW	5	8	8		
NW	10	51	52		
WNW	2	1	1		
WNW	5	9	9		
WNW	10	28	28		
W	2	1	1		
W	5	7	7		
W	10	21	21		
wsw	2	1	1		
wsw	5	7	7		
WSW	10	82	83		
SW	2	1	1		
SW	5	2	2		
SW	10	12	12		
ssw	2	1	1		
SSW	5	2	2		
SSW	10	9	9		
S	2	1	1		
S	5	1	1		
S	10	9	9		
SSE	2	1	1		
SSE	5	3	3		
SSE	10	6	6		
SE	2	0	0		
SE	5	43	43		
SE	10	13	13		
ESE	2	0	0		
ESE	5	16	16		
ESE	10	223	223		

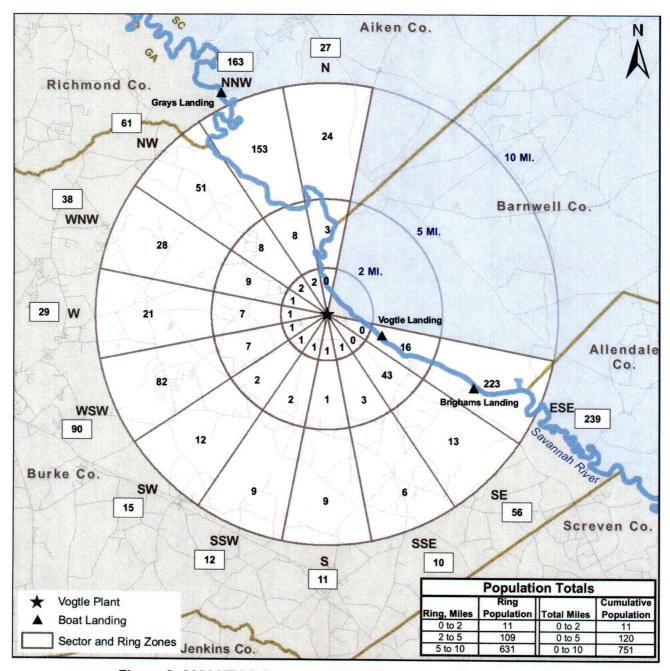


Figure 8: 2006 VEGP Sector and Ring Transient Populations Map

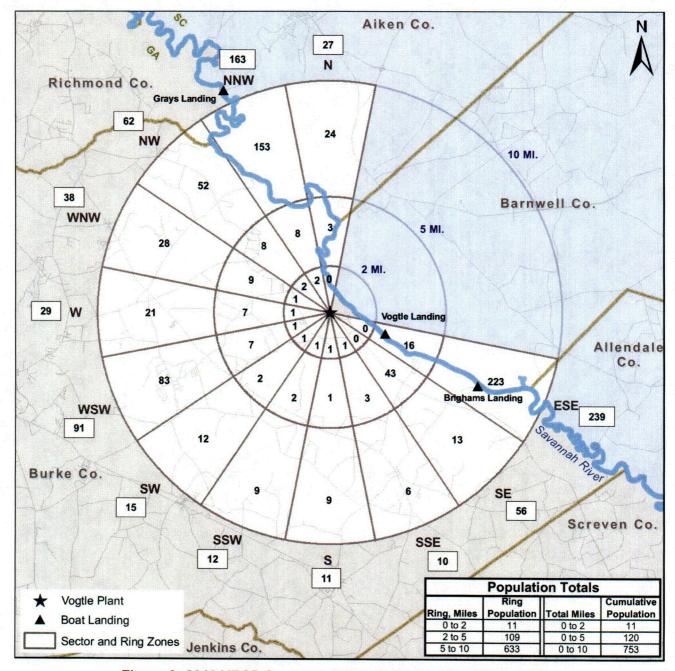


Figure 9: 2010 VEGP Sector and Ring Transient Populations Map

Table 7: 2006 and 2010 Transient Population Distribution by Zones

Zone	Transient	Population
	2006	2010
Α	11	11
B-5	56	56
B-10	44	44
C-5	3	3
C-10	12	12
D-5	9	9
D-10	32	32
E-5	10	10
E-10	95	96
F-5	21	21
F-10	58	59
G-10	200	200
H-10	200	200

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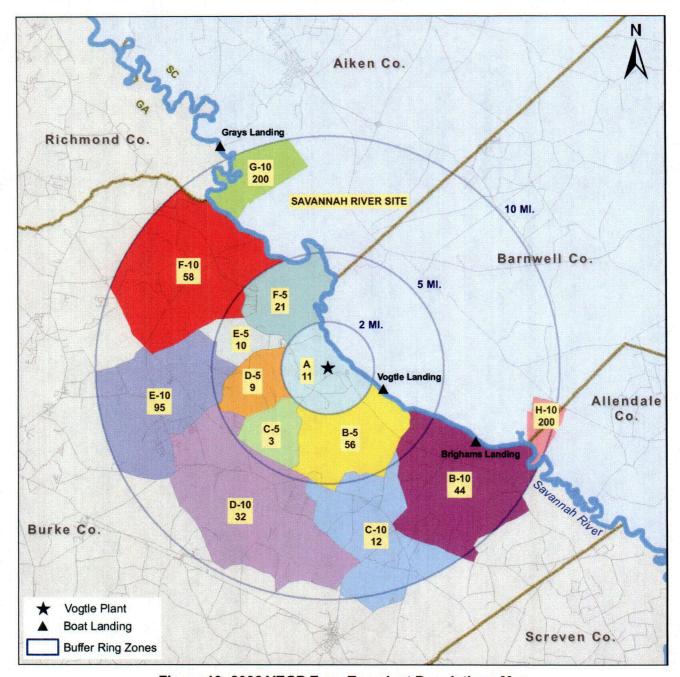


Figure 10: 2006 VEGP Zone Transient Populations Map

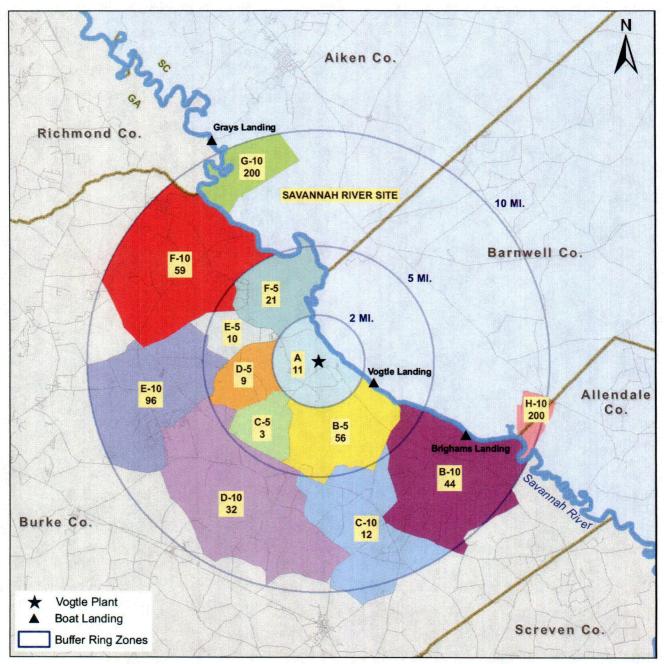


Figure 11: 2010 VEGP Zone Transient Populations Map

# 3.3. Special Facility and Other Special Consideration Populations

There are two facilities with in the VEGP EPZ that are classified as special facility (i.e., employers, schools, or other facilities with more than 50 employees or residents). The special facilities include the Vogtle Electric Generator Plant and

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the Lord's House of Praise Christian School. Although there are only two large facilities, the modeled population for the ETE estimates were not limited to these large facilities only. It included employment from all businesses for which IEM had relevant information.

For the 2010 VEGP workplace estimates, IEM worked closely with the SNC emergency planners to get workforce and construction workers estimates. By 2010, the SNC emergency planning staff estimates that 3,045 construction workers will be onsite. The construction workforce is divided up into four crews. Two crews are assumed to work four shifts of 10 hours, and the remaining two crews are assumed to work three shifts of 12 hours. Therefore, only one-fourth of the construction workers are assumed to be deployed at any time at the VEGP site. Table 8 shows the special facility population within the EPZ.

The construction workforce is divided into two categories: permanent and temporary. The permanent construction workers would stay for a period of two years or longer and would bring families. The temporary construction workers would stay for less than two years and would not bring family. The permanent construction workers are assumed to be housed outside the VEGP EPZ, and the temporary construction workers are assumed to be housed inside the VEGP EPZ at a temporary housing location. SNC emergency planners estimate that a total of 94 temporary workers would be living at the temporary housing location in 2010. Figure 12 shows the distribution of special facility and temporary construction workers around VEGP in 2010.

A vehicle occupancy rate of 1.5 was used to estimate the number of vehicles to be evacuated by the VEGP onsite population, as was discussed with the SNC emergency planning staff. It was based on the assumption that one to two persons will use one vehicle. Therefore, an average value of 1.5 persons per vehicle is a reasonable assumption.

The population of Lord's House of Praise Christian School consists of approximately 50 students and 20 teachers and staff. After consultation with SNC emergency planners, the students were assumed to evacuate via two buses, with the remaining school population departing in their own cars (occupancy rate of 1.0).

Table 8: 2006 and 2010 Special Facility Population

Facility Name	Address	Zone	County	Special Facility Population	
				2006	2010
VEGP	PO Box 1600, Waynesboro, GA 30830	Α	Burke	805	1,566
Lords House of Praise Christian School	162 Daybreak Road Waynesboro, GA 30830	E-10	Burke	70	70

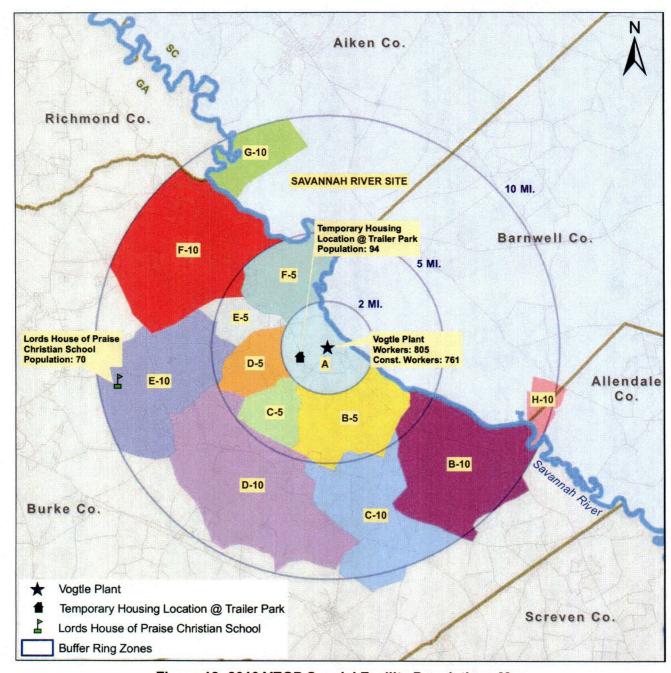


Figure 12: 2010 VEGP Special Facility Populations Map

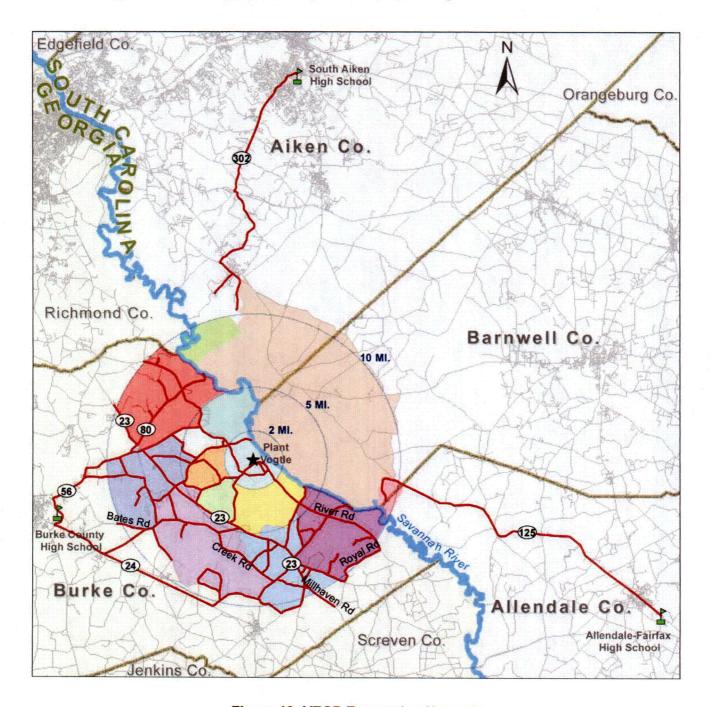
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# 4.0 The Evacuation Roadway Network

The evacuation routes were modeled based on the information provided in the 2006 VEGP Public Outreach Calendar. Additional information regarding the evacuation routes was obtained from Section 4, Appendix 6 of the VEGP Emergency Plan. The maps and descriptions in both documents were also used as the basis of network verification activity by IEM.

The public outreach calendar included a detailed description of the evacuation routes for each zone within the 10-mile radius. It provided descriptive information on recommended protective actions and the names and locations of reception centers for each zone. The map in the calendar clearly marked the evacuation routes and the direction of evacuation. The relocation centers are located well beyond the 10-mile EPZ.

IEM personnel drove along the designated evacuation routes in the direction of an evacuation, as marked on the public outreach calendar, to ensure complete and accurate information about the physical state of the roads. Any differences between information indicated in the calendar, NAVTEQ data, and existing field conditions were noted and, where necessary, were incorporated into the analyses. The differences that were noted are described later in this section. Figure 13 shows the entire evacuation network.



**Figure 13: VEGP Evacuation Network** 

# 4.1. Network Definition

IEM performed a complete review of the evacuation roadway network. The evacuation network was developed using published evacuation routes and GIS road network data representing roads available from NAVTEQ and the U.S.

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Census Bureau (USCB).<sup>23,24</sup> The high accuracy NAVTEQ street network GIS data, obtained for the PTV Vision simulation software, was used for field validation purposes and to build the digital evacuation network database. The USCB data is included in the Census Bureau's Topologically Integrated Geographic Encoding and Reference (TIGER) files, and was used to supplement the NAVTEQ data where required.<sup>25</sup> To ensure the accuracy of this data, the entire evacuation network, including those roads outside the 10-mile EPZ leading to the reception centers, was verified by traveling each route in the network in the direction of evacuation and collecting detailed information regarding the properties of each road section using a Global Positioning System (GPS)-enabled device. The GPS allowed locating—with a high degree of precision—any sections that had changed in channelization, curvature, speed limits, or other necessary network information.

The specific network attributes that were collected during the field trip included number of lanes, speed, turns, traffic controls, pavement type and width, shoulder width, and any other information required to model the traffic capacity of each link in the network.

# 4.2. Evacuation Route Descriptions

The evacuation network modeled for the ETE analyses covers Burke County in Georgia and Aiken, Barnwell, and Allendale Counties in South Carolina. The evacuation routes were originally developed to permit a general radial travel pattern away from the plant toward the designated reception center. Figure 14 shows the designated reception centers, and Table 9 provides the street address and evacuation route number information (as mentioned in the 2006 public outreach calendar) for the individual reception renters.

**Table 9: Reception Centers** 

Reception Center	Address	<b>Evacuation Routes</b>
Burke County High School	1057 Perimeter Road Waynesboro, GA 30830	1, 2, 3, 4
South Aiken High School	232 E Pine Log Rd Aiken, SC 29803	5
Allendale-Fairfax High School	3581 Allendale-Fairfax Highway Fairfax, SC 29827	6

<sup>24</sup> US Census Bureau. Online: http://www.census.gov.

<sup>&</sup>lt;sup>23</sup> PTV America, Inc. "NAVTEQ Data for PTV VISION." Online: http://www.ptvamerica.com/navteq\_tiles/index.html (last accessed March 31, 2006).

<sup>&</sup>lt;sup>25</sup> U.S. Census Bureau. "TIGER<sup>®</sup>, TIGER/Line<sup>®</sup> and TIGER-Related Products." Online: http://www.census.gov/geo/www/tiger/index.html (last accessed March 21, 2006).

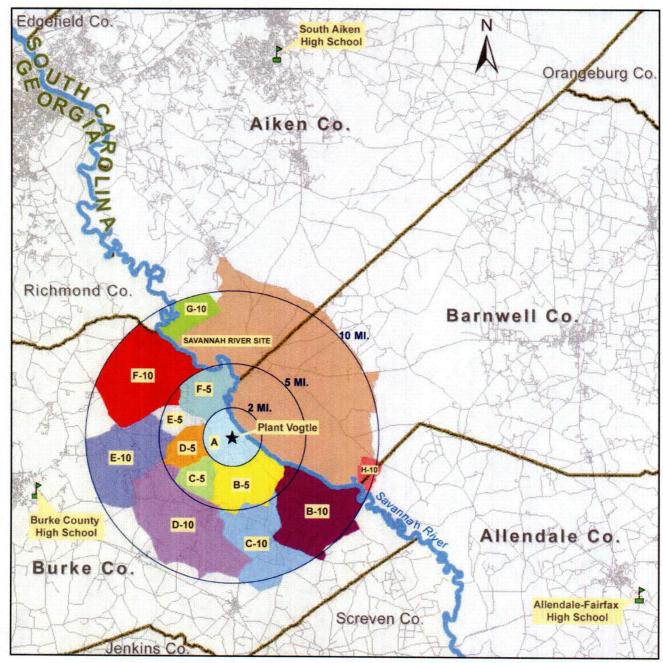


Figure 14: VEGP EPZ Boundary, Evacuation Zones, and Reception Centers

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The evacuation route network is composed of three kinds of roads: highways, major arterial (roads connecting to highways), and minor arterial or connector roads (residential roads connecting to major arterial roads). Examples of highways are Georgia State Highways 23 and 80. Examples of major arterials are Ben Hatcher Road and Thompson Bridge Road. Examples of connector roads are Claxton-Lively Road and Thomas Road. The connector roads, although not part of the evacuation routes as described in the VEGP calendar, actually load the evacuee population (in cars) onto the evacuation routes composed of highways, major, and minor arterial roads. Following is a description of the evacuation routes as taken from the calendar (also see Figure 15, Figure 16, and Figure 17):

#### **Evacuation Route 1**

 Ben Hatcher Road to Shell Bluff Spur to Georgia Highway 80 to Georgia Highway 56 to Perimeter Rd. to Burke County High School.

#### **Evacuation Route 2**

 Hancock Landing Road to Botsford Church Road to Seven Oaks Road to Cates Mead Road to Highway 56 to Perimeter Rd. to Burke County High School.

#### **Evacuation Route 3**

 Ebenezer Church Road to Highway 23 to Thompson Bridge Road to Georgia Highway 24 to Perimeter Rd. to Burke County High School.

#### **Evacuation Route 4**

- Brigham's Landing Road to Georgia Highway 23 to Tom Bargeron Road to Georgia Highway 24 to Perimeter Rd. to Burke County High School.
- Royal Road to Stoney Bluff Road to Georgia Highway 23 to Tom Bargeron Road to Georgia Highway 24 to Perimeter Rd. to Burke County High School.

#### Evacuation Route 5 (Zone G-10, Cowden Plantation)

West on County Road 5 to County Road 63 north to County Road 57 west to U.S. Highway 278 north to South Carolina Highway 302 north to South Aiken High School.

#### Evacuation Route 6 (Zone H-10, Creek Plantation)

South on South Carolina Highway 125 to U.S. Highway 278 to Allendale-Fairfax High School.

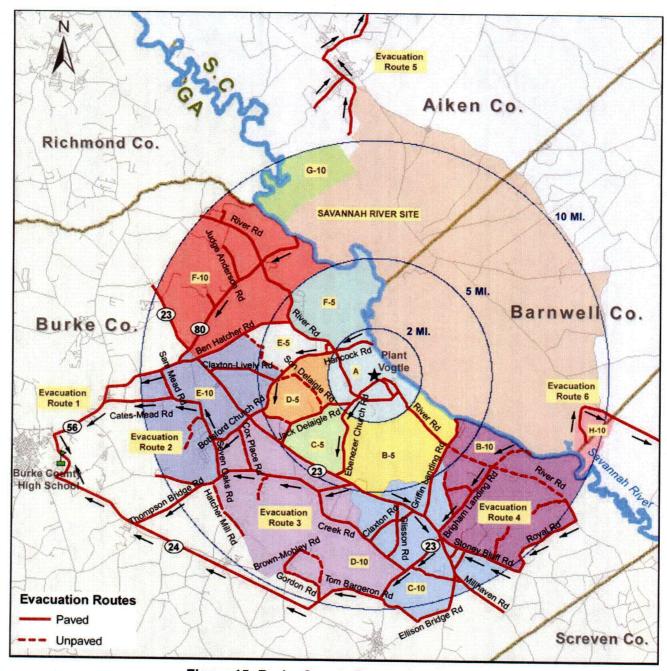


Figure 15: Burke County Evacuation Routes

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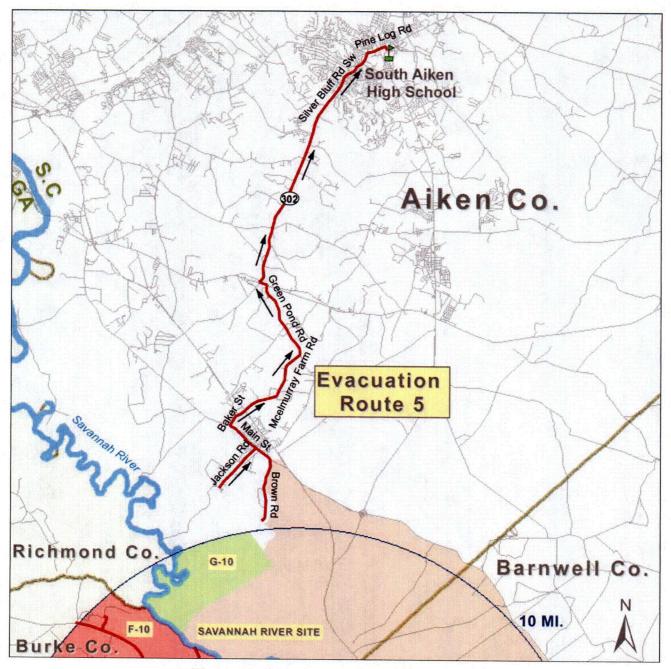


Figure 16: Aiken County Evacuation Route

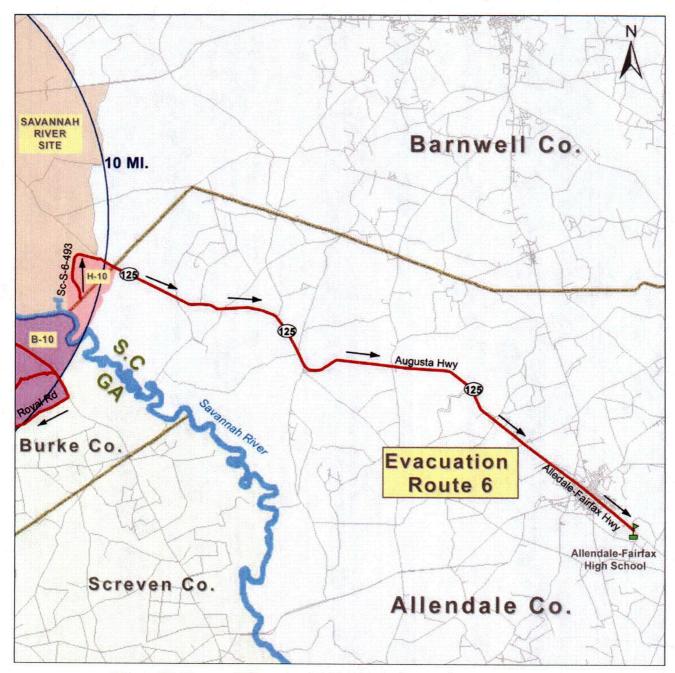


Figure 17: Barnwell County and Allendale County Evacuation Route

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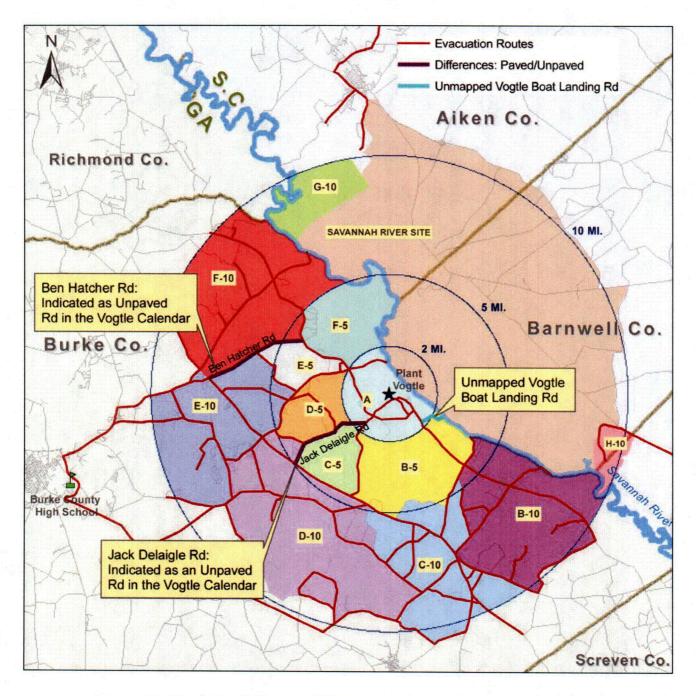


Figure 18: Evacuation Network: Differences between Documented and Field Validated Information

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# 5.0 Evacuation Time Estimate Methodology

ETEs are developed using VISUM, one of the core components of the PTV Vision software suite. VISUM is used to estimate evacuation times for different scenarios (e.g., day vs. night or fair vs. adverse weather) for user-defined spatial networks. Information provided by VISUM includes evacuation or clearance times, operational characteristics (e.g., average evacuation speed, average distance traveled), points of congestion, and other data necessary to evaluate evacuation plans.

The evacuation network was defined based on the information provided in 2006 public outreach calendar. IEM subject matter experts drove the designated routes to ensure complete and accurate information about the state of the roads and to evaluate the appropriate selection of routes given the current conditions onsite.

Population (number of cars) loaded onto the network is based on the data and methods described above in the Section 3.0. Loading times for the evacuation network are described below. Additional details about the methodology are included in the following sections.

# 5.1. Assumptions

Key assumptions that have a substantial impact on the results of the analysis are detailed in the following sections. Any assumptions associated with the development of population estimates are included in Section 3.0.

## 5.1.1. Loading of the Evacuation Network

The timing of network loading<sup>27</sup> is derived from data presented in *Evaluating Protective Actions for Chemical Agent Emergencies*.<sup>28</sup> This data was collected during evacuations executed in response to large-scale chemical spills and explicitly incorporates the time required for communication of the warning (warning diffusion) and the time required for an individual to respond to the warning (mobilization). The data collected in this meta-study was based on transient, permanent, and special populations and is therefore appropriate to use as "general" warning diffusion and public mobilization curves for all three population types.

The underlying assumption regarding the applicability of Rogers' mobilization curves in the ETE study is that public perception of radiological emergencies differs from the actual characteristic of such an event. The familiarity of the hazard and the social assessment of the risks associated with the hazards are among the underlying forces that guide the decision-making process in an

<sup>&</sup>lt;sup>27</sup> Loading is defined as the appearance of evacuating vehicles on the roads.

<sup>&</sup>lt;sup>28</sup> Rogers, G. O., et al., Evaluating Protective Actions for Chemical Agent Emergencies (ORNL-6615), Oak Ridge, TN: Oak Ridge National Laboratory, 1990.

evacuation scenario. People are more likely to respond to calls for evacuation when the assessment of threat in the community is high and dangers to life and property are recognized. The reality may be different. The alarm associated with social response in a radiological emergency makes the use of Rogers' mobilization curves prudent for the ETE study.

It should also be noted that these curves were developed from the empirical data collected from real-life evacuations in response to actual events. No similar study developed specifically for radiological events is readily available. Therefore, the widely accepted Rogers' mobilization curves were used for this study. The implications of assuming public behavior in absence of real data are unknown. Actual data taken from a somewhat similar real-life scenario and similar public response is more applicable than some manufactured assumptions about how people will behave.

The specific timing used for warning diffusion is detailed in Figure 19. Since the distribution of times depends on the warning system employed, the alert and notification (A&N) systems around the site were evaluated based on the description in the emergency plans. The warning diffusion time distribution was chosen based on the availability of sirens, tone alert radios (TAR), and the emergency alert system (EAS) in the EPZ. Any deviations from this assumption will impact the evacuation times. For example, any loss of the capability of the A&N components will potentially increase the evacuation times. For example, Figure 19 shows that if only sirens and EAS are used, the evacuation times will be longer since it takes comparatively longer time for warning to diffuse.

The mobilization curve (Figure 20) is combined with the warning diffusion curve to form a composite loading curve that reflects the actual time distribution of cars loaded on the network. It is important to note that the starting point for this curve is the time at which public notification begins—not the start time of a hypothetical event.

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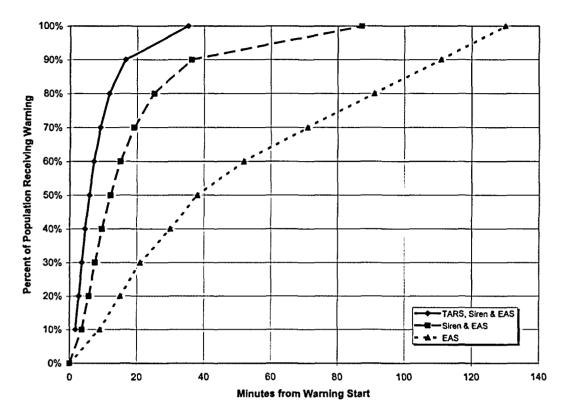


Figure 19: Warning Diffusion for Selected Notification Systems<sup>29</sup>

<sup>29</sup> Ibid.

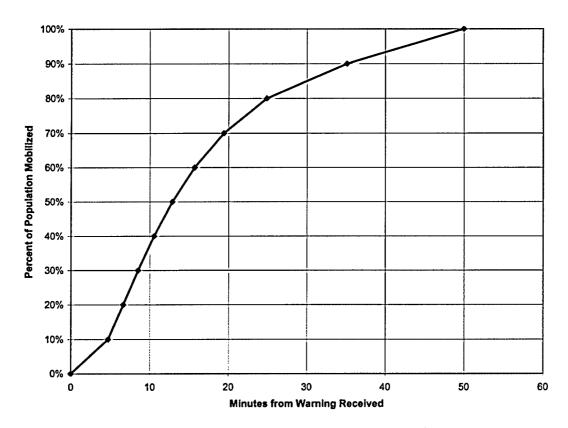


Figure 20: Population Mobilization Times<sup>30</sup>

Because the evacuation of students from Lord's House of Praise Christian School would require the arrival of buses from Burke County Emergency Management, their loading times were modeled differently. Conversations with the SNC emergency planners estimated that a total of 40 minutes would be necessary for the buses to arrive and be loaded, so the buses were assumed to depart at this time. Teachers and other staff were also assumed to depart at this time, as their presence would be necessary at the school for as long as students remained there. The school is located near the edge of the EPZ and has a small population; therefore, it would not have a significant impact on the ETEs.

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<sup>30</sup> Ibid.

## 5.2. Evacuation Simulation

Evacuations were simulated using the population and vehicle demand data, evacuation network data, and loading distribution data discussed in the previous sections. VISUM was used to simulate evacuations. Figure 21 describes the framework of the analysis and three of its main features: the demand model, the network model, and the impact model.

#### **Demand Model**

Contains demand data:

- Permanent (auto and non-auto owning), transient, and special populations
- Vehicle Occupancy Rates (VORs)
- Origin, destination, and number of vehicles by each zone
- Temporal distribution of demand

## Network Model

Contains supply data:

- Transport systems
- Traffic zones
- Nodes
- Links
- Speed limits
- Capacities





## **Impact Model**

Contains methods to determine impacts:

User Model: traffic assignment, impedance functions



## Results

- Listing and statistics: calculated attributes of network objects and routes
- Indicator matrices: evacuation time estimates

Figure 21: ETEs Analysis Framework using VISUM

## 5.2.1. The Demand Model

The demand model contains the travel demand data. The total number of vehicles originating from a zone is calculated by dividing a population with its expected vehicle occupancy rate. The total number of vehicles originating from a zone is then distributed to different time intervals based on the loading distribution curve for the zone. The loading distribution curve for the zone depends on the warning system available for that zone. The travel demand is described by an origin-destination (OD) matrix. The OD matrix refers to a time interval and the total number of vehicles departing in that time interval.

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## 5.2.2. The Network Model

The network model describes the relevant supply data of an evacuation network. The supply data consists of traffic zones, nodes, links, speed limits, and capacities. Traffic zones describe areas with particular boundaries based on demography, topography, land characteristics, access routes, and local jurisdictions. They are origin and destination of trips within the evacuation network. Nodes define positions of intersections in the evacuation network. Links connect nodes and, therefore, describe the road infrastructure. Every network object is described by its attributes (e.g., speed limits and capacities for the links). Travel times of vehicles depend on the speed permitted on the links used and the capacity of the links used. The capacity of a transportation facility is the maximum hourly rate at which vehicles can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions. The capacity calculations in the analysis are based on the Transportation Research Board's Highway Capacity Manual<sup>31</sup>.

## 5.2.3. The Impact Model

The impact model takes its input data from the demand model and the network model. VISUM provides different impact models to analyze and evaluate the evacuation network. A user model simulates the behavior of travelers. It calculates traffic volumes and service indicators, such as travel time. VISUM provides six traffic assignment procedures. Five procedures are static assignment procedures with no explicit time modeling, and the sixth procedures uses a time-dynamic model of the traffic flow. The dynamic stochastic assignment procedure was used for analyzing evacuation times. This procedure accounts for the inherent variability of travelers by not requiring them to take the optimal route but one of several of the shortest paths available to them. It also models how traffic flows change over the course of time and how the results affect the decisions of subsequent travelers entering the roadway network. This time-dynamic functionality allows for loading of the network via distributions, as when using a range of mobilization times.

The ETE is measured by noting when the last car passes the boundary of the EPZ. VISUM displays the calculated results in graphic and tabular forms and allows graphical analysis of results. In this way, for example, routes per OD pair, traffic flow, and isochrones can be displayed and analyzed.

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<sup>&</sup>lt;sup>31</sup> Transportation Research Board, National Research Council. *Highway Capacity Manual*. Washington, D.C. 2000.

## 6.0 Analysis of Evacuation Times

In accordance with guidelines in NUREG-0654, Rev. 1, the EPZ has been divided into 13 PAZs, which were then grouped into nine evacuation areas used to perform ETEs: one comprising 2-mile radius, two within the five-mile radius, the entire five-mile radius, four within the ten-mile radius, and the entire ten-mile EPZ. The PAZs and evacuation areas were defined in the Vogtle Emergency Plan and described in Section 1.0 of this document.

Evacuees inside the 10-mile EPZ are broken down into three segments: permanent residents, transients, and special facilities. The transient population consists of workers employed within the area and recreational sportsmen located near one of the boat ramps on the Savannah River. The population in special facilities is composed of students, teachers, and other employees at the Lord's House of Praise Christian School and employees of VEGP. In the 2010 scenario, construction employees are included among the VEGP employees. The population of the EPZ is described in more detail in Section 3.0

The South Carolina portion of the EPZ is covered almost entirely by the Savannah River Site, so only two of the PAZs, G-10 and H-10, are located on this side of the river. The population within G-10, which is covered by Cowden Plantation, is assumed to consist solely of sportsmen. PAZ H-10, which consists primarily of Creek Plantation, has a similar number of sportsmen, and has a small permanent population.

Five roads within the evacuation network cross the EPZ boundary: Georgia Highway 80, Cates Mead Road, Thompson Bridge Road, Tom Bargeron Road, and South Carolina Highway 125. Evacuees in PAZ G-10 are considered to exit the evacuation network via private roads within Cowden Plantation. All other vehicles exited the EPZ on one of these five roads.

## 6.1. Summary of ETE Results

Evacuations for the nine geographic evacuation areas were modeled individually in each of three seasonal scenarios: Winter Weekday, Winter Weeknight, and Fall Weekend. Sportsmen were considered to be at their peak in the Fall Weekend scenario and zero in the other cases. These scenarios were considered under both normal and adverse weather conditions. In the latter case, the speed limits and capacities of the evacuation routes were reduced by 40% and 25%, respectively. Each PAZ had been assigned a set of evacuation routes by VEGP planners, and these route restrictions were reflected in the models. Additionally, each of these 54 cases was modeled for 2006 and 2010. By the latter year, plant expansion was expected to have started, so construction workers were added to the model.

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The evacuation time estimate results are displayed in Table 11. Evacuation times listed include warning diffusion, public mobilization, and travel time out of the EPZ. It is important to note that the evacuation time is the time from the moment at which public notification begins—not the start time of a hypothetical event. The seasonal scenarios are abbreviated, with "Day" representing Winter Weekday, "Night" corresponding to Winter Weeknight, and "Weekend" meaning Fall Weekend. No estimates were prepared for the 10-mile 90° N evacuation area in the Winter Weekday and Weeknight scenarios, as it had no population to evacuate in those cases.

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Table 11: ETEs in Minutes

		2006				2010							
			Fair We	ather	A	dverse \	<b>N</b> eather		Fair We	ather	A	dverse V	Veather
Evacuation Area	PAZs Impacted	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend	Day	Night	Weekend
0–2 Miles	A	100	85	85	115	100	100	115	105	105	160	125	125
0-5 Miles, 90 S	A, B-5, C-5	100	85	90	115	100	105	115	105	105	160	125	125
0-5 Miles, 90 NW	A, D-5, E-5, F-5	105	90	90	115	105	115	115	105	105	160	125	125
0-5 Miles	A, B-5, C-5, D-5, E-5, F-5	105	100	100	115	105	115	115	105	105	160	125	125
0-10 Miles, 90 S	A, B-5, C-5, B-10, C-10, D-10	105	100	100	115	115	115	115	105	105	160	125	125
0-10 Miles, 90 NW	A, D-5, E-5, F-5, E-10, F-10	105	100	100	115	115	115	115	105	105	160	125	125
0-10 Miles, 90 N	G-10	**	**	75	**	**	80	**	**	75	**	**	80
0-10 Miles, 90 E	H-10	40	40	80	40	40	80	40	40	80	40	40	80
0-10 Miles	All 13 Evacuation Zones	105	100	100	115	115	115	115	105	105	165	125	125

#### Note:

<sup>1: \*\*:</sup> No estimates were prepared for G-10 in the Winter Weekday and Weeknight scenarios, as it had no population to evacuate in those cases.

<sup>2.</sup> The scenarios are each considered individually; if combinations of the geographic evacuation areas are to be evacuated together, the larger of the two numbers should be used as the evacuation time. For example, if PAZs A (2-mile scenario) and H-10 (10-mile 90° E scenario) were to be evacuated on a normal 2006 winter weekday, the ETE would be the greater of the two ETEs or 100 minutes.

## 6.2. Discussion of Scenario Results

## 6.2.1. Evacuation Area 1: 0-2 Miles

#### Year 2006

For 2006, this evacuation area contains small populations of residents and non-plant employees, but most of its evacuees are employees of VEGP. For winter weekdays, the Vogtle workforce is assumed to be at its maximum level. This results in the largest number of evacuees of the three seasonal scenarios, and, therefore, the longest evacuation time of 100 minutes in fair weather. In adverse weather conditions, where speed limits and capacities are reduced, the evacuation times increase by 15% to 115 minutes. In the Winter Weeknight and Fall Weekend scenarios, the Vogtle workforce is at a minimum, and residents are expected to be at home. The smaller number of evacuees is reflected in the shorter evacuation times (85 minutes in fair weather and 100 minutes in adverse weather conditions) compared to the Winter Weekday scenario. Congestion is not sufficient to cause traffic "jamming" in any of these cases, where speeds of travel drop sharply and road throughput is reduced to stop-and-go traffic.

#### Year 2010

In the 2010 simulations, large numbers of construction workers are expected to be working at the plant in all seasons and times of day. This additional population causes traffic congestion and queuing in the evacuation network for a limited time period. The effect on the evacuation time estimates is mild, for the most part. In normal weather, evacuation times increase by 5–25% from those in 2006 (from 85–100 minutes in 2006 to 105–115 minutes in 2010). Also, in the weeknight and weekend adverse weather scenarios, 2010 ETEs were found to be 20% greater than the corresponding 2006 values.

However, the congestion and queuing are increased when adverse weather conditions are applied to the Winter Weekday scenario when the Vogtle workforce is at its peak. In this case, evacuations are expected to take nearly 40% longer in 2010 (160 minutes) than in 2006 (115 minutes). The queuing is maximum on the VEGP evacuation route, with Ebenezer Church Road and Thompson Bridge Road each exhibiting volumes exceeding their capacities.

## 6.2.2. Evacuation Area 2: 0-5 Miles 90° S

In this scenario, PAZs B-5 and C-5 evacuate in addition to the population within the two-mile radius. These two zones add small residential and employment populations, as well as the sportsmen using the Vogtle Boat Ramp south of the plant.

The ETEs for this scenario (for both 2006 and 2010) are very similar to those for the 2-mile radius. This is because the people within the two-mile radius compose a large portion of the total population and have the farthest distance to travel to

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exit the EPZ. As a result, they typically take the longest to reach the boundary, making their movement the limiting factor in any evacuation. As an example, consider the 2006 normal weekday evacuation times for different PAZs within the 0-5 mile 90° S evacuation area:

PAZ	Time to Exit EPZ			
A (2-mile radius)	100			
B-5	70			
C-5	35			

Evacuees originating in zones B-5 and C-5, which were not a part of the two-mile evacuation area, reach the EPZ boundary in significantly less time than those within the two-mile radius. However, because zone A requires the same time to evacuate, the total ETE remains the same.

This phenomenon is a general feature of the ETEs in that year, weather, and season tend to have more effect on the evacuation times than the geographic region being evacuated. The exceptions to this trend are the two evacuation areas that do not include the two-mile radius, 10-mile 90° E and 10-mile 90° N.

An additional and related result of the sparse population in the area is that congestion does not occur on roads outside of the Vogtle evacuation route.

## 6.2.3. Evacuation Area 3: 0-5 Miles 90° NW

This evacuation area is made up of the two-mile radius and D-5, E-5, and F-5, the three PAZs inside the five-mile radius to the north and west of the plant. Worker and residential population in these PAZs total approximately 200 in the Winter Weekday scenario and nearly 500 in the Winter Weeknight and Fall Weekend scenarios. As with the 0-5 Miles 90° S evacuation area, this extra population has less distance to travel than evacuees from VEGP and therefore have little effect on the ETEs compared to the 2-Miles evacuation area.

## 6.2.4. Evacuation Area 4: 0-5 Miles (except Savannah River Site)

All of the population inside the five-mile radius is contained in this evacuation area, making it a combination of the 0-5 Miles 90° S and 0-5 Miles 90° NW areas. As a result, the ETE results are similar to those for these two evacuation areas.

## 6.2.5. Evacuation Area 5: 0-10 Miles 90° S

This evacuation area consists of the 0-5 Miles 90° S evacuation area and three additional PAZs, B-10, C-10, and D-10. These PAZs contribute roughly 200 evacuating vehicles from residents and employees in the Winter Weekday scenario and approximately 500 vehicles in the Winter Weeknight and Fall

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Weekend scenarios. Zone B-10 also contains a small population of sportsmen in the weekend scenario. As with other scenarios, however, these vehicles exit the EPZ before the last of the evacuees from PAZ A, so they have little effect on the ETEs.

## 6.2.6. Evacuation Area 6: 0-10 Miles 90° NW

This evacuation area consists of the 0-5 Miles 90° NW evacuation area and two additional PAZs, E-10 and F-10. These PAZs contribute roughly 300 evacuating vehicles from residents and employees in the Weekday, Weeknight, and Weekend scenarios. As with other scenarios, however, these vehicles exit the EPZ before the last of the evacuees from PAZ A, so they have little effect on the ETEs.

Also, Lord's House of Praise Christian School, the only special facility in the EPZ other than VEGP, is located in PAZ E-10 in this evacuation area. Its students are assumed to evacuate via two buses, with the teachers and other employees traveling via car. The school is located just inside the 10-mile boundary, so its evacuees reached the EPZ boundary before some of those from other areas, which had no impact on the ETEs.

## 6.2.7. Evacuation Area 7: 0-10 Miles 90° N

This evacuation area consists of one PAZ, G-10. This zone is covered entirely by Cowden Plantation and contains neither public road nor inhabited buildings. Evacuees are assumed to travel the short distance to the 10-mile boundary via private routes within the plantation. It has no population in the Winter Weekday and Weeknight scenarios, but it has a significant population of sportsmen in the Fall Weekend scenario. With little expectation for growth, the number of sportsmen is kept the same for the 2006 and 2010 scenarios, resulting in identical ETEs (75 minutes in normal weather and 80 minutes in bad weather) for the two years. The ETEs only increase by five minutes under adverse weather conditions, as the reduced speed limits and capacities have only minor effects given the small distance traveled to exit the EPZ.

## 6.2.8. Evacuation Area 8: 0-10 Miles 90° E

Only one PAZ, H-10, is included in this evacuation area. This zone bridges Barnwell and Allendale counties near the 10-mile radius in South Carolina and is covered largely by Creek Plantation. It has a small residential population and, in the Fall Weekend scenario, a somewhat larger population of sportsmen. The close proximity of evacuees to the EPZ boundary means that evacuation times for this zone are comprised largely of notification and mobilization time and very little travel time, resulting in the short ETEs for this evacuation area. Weekend results are somewhat higher due to the additional sportsmen in this scenario, while the effects of adverse weather conditions are muted by the short distance of travel. Even though all evacuees from this zone use the same road, South Carolina Highway 125, congestion is not an issue in any scenarios due to the small number of evacuees.

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## 6.2.9. Evacuation Area 9: 0-10 Miles (whole EPZ)

This scenario requires evacuation of the entire population within the EPZ. In a more densely-populated area, this might have resulted in congestion and higher evacuation times than in the smaller evacuation areas. The population around VEGP, however, is small enough that the additional evacuees do not cause a significant slowing of vehicles on the road network. Congestion in the 2010 scenario is almost identical to that found for evacuation of the 0–2 Miles area.

## 6.2.10. Wind from 20°-55° Subset (VEGP South Route Evacuation)

The VEGP Document 91403-C<sup>32</sup>, which details how an evacuation of the plant is to be carried out, documents two scenarios in which Vogtle employees are to evacuate via different routes. The West Route, which is modeled in all of the scenarios discussed above, is to be used if the wind is blowing in the 325° range between 55°-20°. The alternative South Route is only to be implemented if the wind blows from within the remaining 35° range from 20° to 55°. The latter case is discussed in this section.

The effects of evacuating Plant Vogtle via the South Route were investigated by testing a representative case, Winter Weekday 0–10 Miles 90° S, in each combination of year and weather condition. This scenario was chosen because it represented the largest population of evacuees among scenarios where the wind could blow from between 20° and 55°. These results were then compared to those found for evacuation via the West Route. The ETEs for these scenarios can be found in Table 12.

Table 12: South Route ETE vs. West Route ETE

Scenario	ETE with South Route Evacuation	ETE with West Route Evacuation		
2006, Normal Weather	105	105		
2006, Adverse Weather	120	115		
2010, Normal Weather	130	115		
2010, Adverse Weather	220	160		

Altering the evacuation route for the plant employees increases evacuation times by 0-60 minutes. The change has little effect on the ETEs for the 2006 scenarios, as the South Route has sufficient capacity to handle the number of evacuees, which allows them to reach the boundary in the same amount of time.

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<sup>32</sup> VEGP Site Dismissal, 12/15/2004.

This change for the 2010 scenarios (with the additional construction workers), proves enough to overload the route, creating more congestion than in the West Route scenarios and increasing the ETEs. The additional queuing stems from the South Route, including an unpaved three-mile section of River Road. The capacity on this section is lower than at any point along the West Route and creates queuing responsible for increasing the total travel times.

## 7.0 Supplemental Analysis

The analyses related to confirmation of evacuation and potential mitigating measures to effectively manage the traffic flow were performed and are provide in the following sections.

## 7.1. Confirmation of Evacuation

The confirmation of evacuation process determines if the evacuation has been completed. The time required for confirmation of evacuation is dependent upon the method employed. The most time-consuming method typically employed is to use ground vehicles. The time required involves the driving time for each route selected. Given the lack of congestion evident around VEGP in 2006, the evacuation confirmation process in this case would not need to wait for the bulk of the evacuation to complete. This indicates that the confirmation could be completed concurrently with the evacuation. Substantial congestion was, however, observed in 2010 scenarios, so confirmation in this case is recommended to be conducted after the evacuation had completed.

Informing people to leave some standard signs on their doors or windows when they leave their houses would help the authorities in the confirmation of evacuation. Presence of Traffic Control Points (TCPs) and Access Control Points (ACPs) at strategic locations within the evacuation network could provide real-time feedback regarding the progress of the evacuation process. All evacuees are recommended to sign in at the designated county reception centers as they arrive. This procedure helps the authorities to account for the population within the designated county. This can be accounted as one of the means of confirmation of evacuation, only under the assumption that all the evacuees would actually report to the reception centers and nowhere else. Telephoning people at their homes could also be considered as a possible means of ensuring completion of evacuation.

As noted in the VEGP Emergency Plan and Burke County Radiological Emergency Response Plan (RERP), "Evacuation confirmation will be accomplished by the Burke County Sheriffs Department and supporting law enforcement agency personnel that will traverse roadways throughout the affected area to ensure that the residential population has evacuated their homes. Personnel from Burke County EMA and Georgia Department of Natural Resources, Law Enforcement section, will move along the Savannah River and tributaries in boats to ensure that hunters and fishermen have evacuated the area. Additional

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assistance is available from other state agencies, i.e., Georgia Forestry Commission and Department of Transportation."

The actual time associated with the confirmation process would depend on both the number of personnel and the amount of equipment available. These resources may change significantly under various emergency conditions.

## 7.2. Evacuation Traffic Management Locations and Other Potential Mitigating Measures

In order to efficiently promote smooth movement of traffic flow during an evacuation, several TCPs locations were developed and are listed in the Burke County RERP, Aiken County RERP, Allendale County RERP, and Barnwell County RERP. These TCPs are listed in Table 13 and Table 14 and shown in graphically Figure 22. The responsibility of supervising traffic controls during an evacuation will be shared between the State's and counties' emergency management and law enforcement agency personnel, as available. Each TCP will be manned and/or road blocks will be established to direct evacuees out of the EPZ and to deny access into the affected area. Also, route markers will be placed along the evacuation routes at critical intersections and road block locations to promote more efficient traffic flow out from the EPZ.

Table 13: Georgia Traffic Control Points for the VEGP EPZ

∟ocation No.	Description
1	Georgia Highway 56 SP (River Road) at McBean Club Road
2	Georgia Highway 23 at Spring Branch Church Road
3	Georgia Highway 80 at Georgia Highway 23
4	Georgia Highway 23 at Hancock Landing Road
5	Botsford Church Road at Seven Oaks Road
6	Sam Mead Road at Seven Oaks Road
7	Georgia Highway 80 at Shell Bluff Spur
8	Georgia Highway 56 at Georgia Highway 80
9	Georgia Highway 56 at Cates Mead Road
10	Georgia Highway 56 at Perimeter Road
11	Entrance to Reception Center, Perimeter Road
12	Georgia Highway 24 at Perimeter Road
13	Thompson Bridge Road at Hatchers Mill Road
14	Georgia Highway 24 at Tom Bargeron Road
15	Georgia Highway 23 at Johnson Road
16	Ellison Bridge Road at Johnson Road

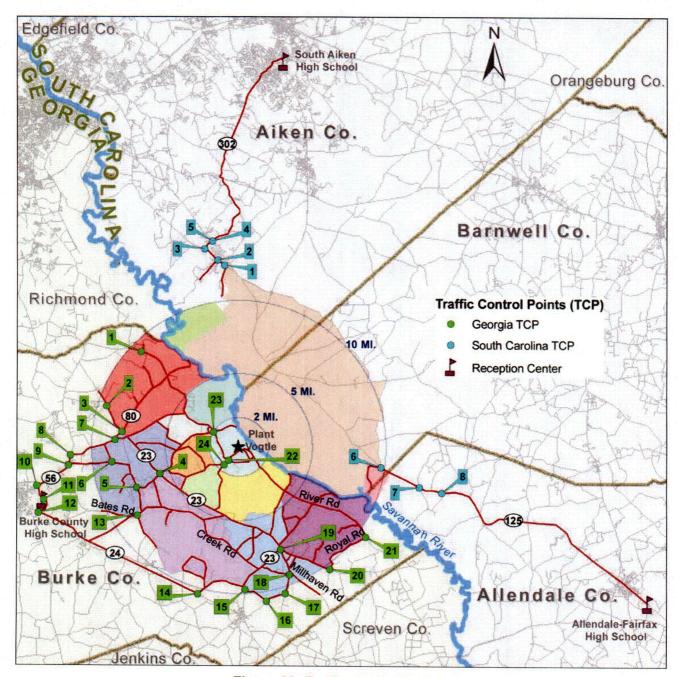
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Location No.	Description
17	Ellison Bridge Road at Murray Hill Road
18	Millhaven Road, 1 mile south of Givens Church Road
19	Millhaven Road, Stony Bluff Road, Georgia Highway 23 Intersection in Girard
20	Stony Bluff Road at Intersection at Oak Grove Church
21	Royal Road at River Road
22	VEGP Main Access Road at River Road
23	River Road at Hancock Landing Road
24	Jack Delaigle Road at Ebenezer Church Road

Table 14: South Carolina Traffic Control Points for the VEGP EPZ

County	Location No.	Description
Aiken County	1	Route 437 (Browns Road) at Route 5 (direct traffice north on Route 5: restrict vehicles from traveling south on Route 437)
	2	Route 5 at Route 299 (direct traffice north on Route 5)
	3	Route 5 at Route 63 (direct traffic west on Route 63)
	4	Route 63 at Route 125 (allow traffic to flow on Route 63)
	5	Route 63 at Route 57 (direct traffic north on Route 57)
Barnwell County	6	Route 125 at Route 493 (direct traffic south on Route 125)
Allendale County	7	Route 125 at Route 12 (direct traffic south on Route 125)
	8	Route 125 at Route 17 (direct traffic south on Route 125)

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**Figure 22: Traffic Control Points** 

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## 8.0 Conclusion

Travel time is primarily affected by the conditions on the evacuation network, including any areas prone to congestion during times of large volume. As no areas of congestion were identified for the 2006 scenarios, improvement in this area is not necessary at this time. In 2010 scenarios, a large number of workers at the plant for the construction of new reactor units is expected to cause traffic congestion for a limited time period during the evacuation. In conclusion, based on the data gathered and the results of the evacuation study conducted, IEM believes that the existing evacuation strategy is functional for both 2006 and 2010 conditions, given the lack of severe congestion or very high ETEs.

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## Appendix A: MOA between DOE-SR and VEGP

The following pages contain Appendix 5, "Memorandum of Agreement with Department of Energy—Savannah River," of the Vogtle Electric Generating Plant Emergency Plan.

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# Department of Energy Savannah River Operations Office P.O. Box A Aiken, South Carolina 29802 • APR 1 2 1999

CONTRIBUTE TO BE SEEN OF THE SECOND S

Mr. J. B. Beasley, Jr. Vice President - Nuclear Vogtle Project Southern Nuclear Operating Company Birmingham, Alabama 35201

Dear Mr. Beasley:

SUBJECT: Vogtle Electric Generating Plant (VEGP) Memorandum of Agreement (MOA)

Enclosed is your copy of the executed MOA between the Department of Energy Savannah River Operations Office and the Southern Nuclear Operating Company (SNC) for planning and responding to emergencies originating at the Vogtle Electric Generating Plant (VEGP) and the Savannah River Site (SRS).

We appreciate the continued support of SNC and the staff at VEGP in promoting effective emergency preparedness and response activities for our respective facilities. Our staffs are working together to identify more effective ways that we can communicate with the states and demonstrate that we are hearing and addressing their concerns. In the near future I intend to submit to you a revised MOA which includes provisions for notifying the states and/or each other upon the impending release of tritiated water. Our goal would be to assure that government entities with interests in downstream Savannah River water quality will not be surprised by intentional releases of tritium in the water, and there will be no need for SRS to demonstrate when tritium detected in the water is not from SRS facilities. Again, I thank you for your support,

Please contact me or Len Sjostrom of my staff at (803) 725-5562, if you have any questions.

Sincerely.

Greg Rudy Manager

VF-99-0033

Enclosure: Memorandum of Agreement

cc w/encl: Lawrence E. Mayo, SNC Menill Maddox, SNC

# MEMORANDUM OF AGREEMENT BETWEEN UNITED STATES DEPARTMENT OF ENERGY SAVANNAH RIVER OPERATIONS OFFICE AND SOUTHERN NUCLEAR OPERATING COMPANY

## I. PURPOSE

This Memorandum of Agreement (MOA) is between the United States Department of Energy Savannah River Operations Office (DOE-SR) and the Southern Nuclear Operating Company (SNC) and provides for planning and responding to emergencies originating at the Vogtle Electric Generating Plant (VEGP), and the Savannah River Site (SRS).

## II. RESPONSIBILITIES

DOE-SR is the responsible authority for SRS and as such, is responsible for the protection of all persons and for the direction and control of all emergency response actions on SRS for emergencies occurring at or affecting SRS, including emergencies originating at VEGP.

SNC is responsible for the protection of all persons and for the direction and control of all emergency response actions on the VEGP site for emergencies occurring at or affecting VEGP, including emergencies originating at SRS.

#### III. AGREEMENT

SNC and DOE-SR agree as follows:

## A. In the event an emergency is declared at VEGP:

#### 1. SNC will:

- a. notify the Savannah River Site Operations Center through the Emergency Notification Network within 15 minutes of an emergency declaration;
- b. utilize the Emergency Notification form to provide information concerning the emergency, including meteorological and radiological data and any protective action recommendations;
- c. provide periodic follow-up information to DOE-SR in accordance with the VEGP emergency plan;
- d. dispatch a technical liaison to the SRS Emergency Operations Center if requested by SRS.

## 2. DOE-SR will:

- a. provide for the prompt notification of all persons on SRS within VEGP's plume exposure pathway Emergency Planning Zone;
- assess the radiological hazard on SRS and decide upon and implement any
  protective actions necessary to protect the health and safety of affected
  persons on SRS, including access control;
- perform radiological monitoring on SRS as requested by SNC or the State
  of South Carolina and provide monitoring results to SNC and to the States
  of South Carolina and Georgia;
- d. provide resources and support as identified in the Federal Radiological Emergency Response Plan (FRERP) to address ingestion pathway concerns;
- e. provide meteorological data to SNC, as requested; and
- f. advise SNC and the States of South Carolina and Georgia of public information activities concerning the SRS to the maximum extent possible, and provide a spokesperson to the VEGP Emergency News Center when significant media/public interest in SRS activities is anticipated.
- g. as the Regional Coordinating Office for DOE Region 3, respond to requests for radiological assistance from SNC, the Nuclear Regulatory Commission (NRC), or the States of South Carolina or Georgia in the event of an incident involving the actual or potential release of radiological materials. This assistance will be provided under the Radiological Assistance Program (RAP) and will be limited to technical advice and resources for monitoring and assessment actions essential for the control of the immediate hazards to health and safety. DOE radiological assistance will be terminated when it is no longer needed or the necessary assistance is available from State, local, or commercial services.
- h. as the Regional Coordinating Office for DOE Region 3, advise SNC, the NRC, or the States of South Carolina or Georgia of additional DOE Emergency Response assets available to assist in the response.

## B. In the event an emergency is declared at SRS:

#### 1. DOE-SR will:

- a. notify VEGP personnel through the Emergency Notification Network within
   15 minutes of an emergency declaration;
- b. utilize the Emergency Notification form to provide information concerning the emergency, including meteorological and radiological data and any protective action recommendations:

- c. dispatch a technical liaison to the VEGP Emergency Operations Facility, as requested by SNC;
- d. provide periodic follow-up information to SNC in accordance with the SRS emergency plan;
- e. provide resources and support as identified in the FRERP to address ingestion pathway concerns.

## 2. SNC will:

- a. provide for the prompt notification of all persons on the VEGP site within the SRS plume exposure pathway Emergency Planning Zone;
- assess the radiological hazard on the VEGP site, and decide upon and implement any protective actions necessary to protect the health and safety of affected persons on the VEGP site;
- c. perform radiological monitoring as requested by DOE-SR or the States of Georgia and South Carolina and provide results to DOE-SR and to the States of Georgia and South Carolina; and
- d. provide meteorological data to DOE-SR, as requested.

## C. The parties will also:

- provide a twenty-four hour point of contact at VEGP and SRS for notification purposes;
- 2. maintain effective lines of communication during an emergency;
- 3. participate in each other's emergency response exercises as requested and agreed upon.

## IV. TERMS OF AGREEMENT

- A. This MOA shall become effective upon the latter date of signature of the parties.
- B. This MOA supersedes a previous MOA dated January 3, 1986, between the United States Department of Energy Savannah River Operations Office and the Georgia Power Company, as assigned.
- C. This MOA may be amended by mutual consent of the parties concerned or terminated by either party upon giving at least thirty (30) days written notice to the other party.

Greg Rudy Manager Savannah River Operations Office United States Department of Energy	4/12/59 Date
J. B. Beasley, Jr.  Southern Nuclear Operating Company Vice President - Nuclear Vogtle Project	12/11/98 Date
Nothing Follows—	

## Appendix B: Geographical Boundaries of Evacuation Zones

Evacuation Zones	Geographical Boundaries				
A	Northeast—Savannah River				
	Southeast, South/Southwest and West Northwest—2-mile area				
B-5	North—2-mile area				
	West—Ebenezer Church Road				
	Southwest—GA Highway 23				
	South—Chance Road				
	Southeast—Griffin's Landing Road				
	Northeast—Savannah River				
B-10	Northwest—Griffin's Landing Road				
	West—Dixon Road and City of Girard eastern boundary				
	Southwest—Stony Bluff Road				
	Southeast—Royal Road and then 10-mile area				
	Northeast—Savannah River				
C-5	Northwest—Jack Delaigle Road				
	Southwest—GA Highway 23				
	East—Ebenezer Church Road				
C-10	North—Chance Road and GA Highway 23				
	West—Brier Creek Road, Buck Road, and GA Highway 23				
	South—Johnson Road, Ellison Bridge Road, Murray Hill Road, and the 10-mile area				
	Southeast—Stony Bluff Road				
	East—City of Girard eastern boundary and Dixon Road				
D-5	North—Hancock Landing Road				
	West—Hancock Landing Road and Thomas Road				
	Southwest—Hatchers Mill Road and Thompson Bridge Road				
	South—Gordon Road and Tom Bargeron Road				
	East—GA Highway 23, Brier Creek Road, and Buck Road				
E-5	North—Ben Hatcher Road				
	East—River Road				
	South—Hancock Landing Road				
	West—Nathaniel Howard Road				

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Evacuation Zones	Geographical Boundaries				
E-10	Northeast—Nathaniel Howard Road ————————————————————————————————————				
	North—GA Highway 80, GA Highway 23, and Ben Hatcher Road				
	West—10-mile area and Bates Road				
	South—Thompson Bridge, Seven Oaks Road, and Botsford Church Road				
	East—Hancock Landing Road				
F-5	North—Savannah River				
	East—Savannah River				
	West—5-mile radius and River Road				
	South—2-mile area				
F-10	Northeast—Savannah River				
	West—10-mile radius and GA Highway 23				
	South—Ben Hatcher Road				
	East—River Road and the 5-mile area				
G-10	North—Gray's Landing on the Savannah River to the CSX track and Cowden Plantation Road				
	East—SRS boundary and the CSX line				
	South—Savanna River and the SRS boundary				
	West—Savannah River				
	Northeast—CSX track				
H-10	North—the SRS boundary and S125 extending into Allendale County's northern boundary				
	East—Creek Plantation Road				
	South—Savannah River				
	West—SRS boundary				

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## Appendix C: Evacuation Network Links (Detailed Information)

Road Name	Number of Links	Length (miles)	Number of Lanes	Speed Limit	Type
Academy Ave/Brigham Landing Rd	2	0.72	1	35	Evacuation
Alledale-Fairfax Hwy	21	2.04	1	55	Evacuation
Augusta Hwy	25	8.32	1	55	Evacuation
Baker St	4	0.76	1	30	Evacuation
Bates Rd	3	1.98	1	35	Connector
Ben Hatcher Rd	9	4.36	. 1	45	Evacuation
Bottsford Church Rd	8	1.32	1	45	Evacuation
Bottsford Church Rd/Hancock Landing Rd	2	0.65	1	45	Evacuation
Brigham Landing Rd	8	5.04	1	35	Evacuation
Brown Rd	5	2.23	1	45	Evacuation
Brown-Mobley Rd	5	3.93	1	35	Connector
Burke County High Sc	1	0.03	1	20	Evacuation
CCRd	1	0.18	1	45	Evacuation
Cates-Mead Rd	11	3.82	1	45	Evacuation
Cates-Mead Rd/Cates Head Rd	1	0.34	1	45	Evacuation
Claxton Rd	6	1.98	1	45	Connector
Claxton-Lively Rd	11	3.83	1	45	Connector
Clayton Rd/Claxton Rd	1	0.38	1	45	Connector
Cox Place Rd	1	1.89	1	25	Connector
Creek Rd	13	5.39	1	45	Evacuation

Road Name	Number of Links	Length (miles)	Number of Lanes	Speed Limit	Туре
Earl Dixon Rd	2	2.04	1	25	Connector
Ebenezer Church Rd	2	3.80	1	45	Evacuation
Ellison Bridge Rd	3	1.42	1	45	Connector
GA Highway 23	38	19.05	1	55	Connector
GA Highway 24	32	12.19	2	55	Evacuation
GA Highway 56	22	3.29	2	55	Evacuation
GA Highway 80	14	8.94	1	55	Evacuation
Givens Church Rd	6	2.30	1	45	Connector
Glisson Rd	3	2.53	1	25	Connector
Godbee Rd	1	0.62	1	25	Connector
Gordon Rd	4	1.60	1	25	Connector
Green Pond Rd	8	2.76	1	50	Evacuation
Griffin Landing Rd	11	4.60	1	45	Connector
Griffin Rd	2	1.77	1	25	Connector
Hancock Landing Rd	6	2.10	1	45	Evacuation
Hancock Rd	14	4.62	1	45	Evacuation
Hatcher Mill Rd	3	2.10	1	25	Connector
Hatchers Mill Rd	1	0.54	1	25	Connector
JCT SC 125/Atomic & Baker/McElMurray	1	0.01	1	30	Evacuation
Jack Delaigle Rd	6	2.88	1	40	Evacuation
Jackson Rd	5	1.02	1	45	Evacuation
Jackson St	4	0.85	1	45	Evacuation

Road Name	Number of Links	Length (miles)	Number of Lanes	Speed Limit	Type
Johnson Rd	4	1.71	1	45	Connector
Judge Anderson Rd	1	1.67	1	35	Connector
Long Rd	5	0.96	1	45	Connector
Main St	18	2.69	1	55	Evacuation
Mcbean Club Rd	1	0.58	1	35	Connector
Mcelmurray Farm Rd	7	2.90	1	45	Evacuation
Milhouse Rd	1	0.33	1	45	Evacuation
Millhaven Rd	9	4.27	1	45	Connector
Murray Hill Rd	2	1.60	1	45	Connector
Nathaniel Howard Rd	3	2.70	1	25	Connector
No Name (connected to Thompson Bridge)*	1	1.21	1	25	Connector
Perimeter Rd	9	2.38	2	55	Evacuation
Pine Log Rd	7	0.66	2	35	Evacuation
River Rd	36	23.11	1	55	Connector
Riverside Dr	2	0.52	1	25	Connector
Royal Rd	4	5.46	1	25	Connector
S Aiken Blvd	1	0.13	1	20	Evacuation
SC Highway 125	16	11.52	1	55	Evacuation
SC Highway 302	28	7.11	1	55	Evacuation
Sam Mead Rd	3	1.31	1	35	Connector

<sup>\*</sup> This particular road has no name, and is located in zone D-10.

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Road Name	Number of Links	Length (miles)	Number of Lanes	Speed Limit	Туре
Sc-S-6-493	2	2.43	1	40	Evacuation
Seven Oaks Rd	1	0.24	1	45	Connector
Seven Oaks-Shell Bluff Rd	13	3.11	1	45	Connector
Shell Bluff Landing Rd	5	2.21	1	45	Evacuation
Shell Bluff Spur Rd	3	0.84	1	45	Evacuation
Silver Bluff Rd Sw	16	1.33	1	35	Evacuation
Silver Bluff Rd Sw/Pine Log Rd	4	0.50	1	35	Evacuation
Son Delaigle Rd	1	2.01	1	25	Connector
Stoney Bluff Rd	10	3.64	1	45	Evacuation
Sweet Water Rd	1	0.58	1	45	Connector
Thankful Church Rd	4	1.82	1	25	Connector
Thomas Rd	2	1.45	1	25	Evacuation
Thompson Bridge Rd	12	10.16	1	45	Evacuation
Tom Bargeron Rd	10	3.61	1	45	Connector
Vine Rd	1	1.23	1	25	Connector
Vogtle Main Plant Access Rd	3	1.30	3	35	Connector
Vogtle Plant Rd	4	0.97	1	45	Evacuation
Vogtle Visitor Center Access Rd	1	0.83	2	35	Connector
Williston Rd	1	0.28	1	55	Evacuation

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# Appendix D: PTV Vision Quality Assurance and Industry Acceptance Information

IEM, Inc. 2006 Page D-1

March 28, 2006

traffic mobility logistics.

PTV America, Inc. 1300 N Market Street, Suite 603 Wilmington, DE 19801-1809

Phone: 302-654-4384 Fax: 302-691-4740 www.ptvamerica.com

Akhil Chauhan Transportation Analyst/Modeler IEM, Inc. 8555 United Plaza Blvd. Baton Rouge, LA 70809

RE: PTV Vision® Quality Assurance and Industry Acceptance

Dear Mr. Chauhan:

Per your request, I am providing the following information concerning quality assurance and industry acceptance of the PTV Vision traffic simulation and transportation planning software.

PTV AG has performed extensive research and development of the PTV Vision software since 1992. The basis of the VISSIM simulation model is the car-following and lane-changing models developed at the University of Karlsruhe, Germany since 1974. The first commercial release of VISSIM was in 1993. The VISSIM simulation model components have been validated by PTV for accuracy and performance based on field data in Germany and the United States.

A comprehensive quality assurance procedure is conducted before each service pack and major software release by PTV, ensuring consistency of the results within acceptable stochastic variation. A summary of changes/improvements/fixes for each service pack are provided in the release\_notes\_...\_e.txt file included with any service pack.

There are over 430 users of the VISSIM simulation software in North America and over 800 users worldwide. There are over 200 users of the VISUM planning software in North America and over 600 user worldwide. In total, there are over 850 VISSIM licenses and over 350 VISUM licenses within North America. PTV Vision is accepted and used by over 90 academic agencies in the United States and Canada, 18 State Department of Transportation agencies in United States, 3 Provincial Transport Ministries in Canada, and the Federal Highway Administration.

## The following public agencies are currently using VISSIM:

- · Arkansas State Highway Dept,
- CALTRANS.
- · Colorado DOT.
- Florida DOT,
- Idaho DOT,
- Kansas DOT,
- Louisiana DOT,
- Michigan DOT,
- Missouri DOT,
- Nevada DOT,
- New Mexico DOT,
- NYSDOT.
- Ohio DOT,
- · Oregon DOT,
- South Carolina DOT,
- UDOT,
- Washington DOT

## The following public agencies are currently using VISUM:

- AGFTC, Fort Edward NY
- BMPO, Bend OR
- BMTS, Binghamton NY
- CAMPO, Corvallis OR
- CDTC, Albany NY
- El Paso MPO, El Paso TX
- Farmington MPO, Farmington NM
- KMPO, Coeur D'Alene ID
- Las Cruces MPO, Las Cruces NM
- LCOG, Eugene OR
- METRO, Portland OR
- MWVCOG, Salem OR
- NOCTC, Goshen NY
- PPACG, Colorado Springs CO
- RATS, Rockford IL
- Santa Fe MPO, Santa Fe NM
- Skagit COG, Mount Vernon WA
- Southwest WA RTC, Vancouver WA
- SRTC, Spokane WA
- WVTC, Wenatchee, WA
- YVCOG, Yakima WA



PTV America, Inc. 1300 N Market Street, Suite 603 Wilmington, DE 19801-1809

Phone: 302-654-4384 Fax: 302-691-4740 www.ptvamerica.com If you have any questions about the PTV Vision software, feel free to contact me at 302-654-4384.

Sincerely yours,

Kiel Ova, P.E., PTOE Project Manager traffic mobility logistics.

PTV America, Inc. 1300 N Market Street, Suite 603 Wilmington, DE 19801-1809

Phone: 302-654-4384 Fax: 302-691-4740 www.ptvamerica.com Final Sheet of Enclosure

## **Southern Nuclear Operating Company**

AR-06-1721

## **Enclosure 11**

Vogtle Electric Generating Plant Emergency Plan
Letters Of Agreement With Local Agencies

## Burke County

## Emergency Management Agency



277 Highway 24 South Waynesboro, Georgia 30830 TEL: (706) 554-6651 FAX: (706) 554-4660

E-Mail: burkeema2@burke.net

Dedicated To The Protection Of Life And Property Rusty Sanders - Chief

April 2,2004

Mr. W. F. (Skip) Kitchens General Manager Vogtle Electric Generating Plant 7821 River Road Waynesboro, Georgia 30830

Dear Mr. Kitchens:

This letter serves to confirm that Burke County Emergency Management Agency, the undersigned, confirms their responsibility to respond to all calls involving fire, rescue, sickness or injury, including casualties arising from radiation accident at the Vogtle Electric Generating Plant (VEGP).

As part of this agreement, we understand that Southern Company is financially responsible for any modification of the present ambulance service equipment that may be required of the Nuclear Regulatory Commission or other expenses required for the treatment of patients exposed to radioactive material. This is to include special training of ambulance service personnel and for special equipment that may be required.

Written procedures prepared by Radiation Management Consultants (RMC) (or by some other consultant) detailing actions to be taken for the care of these patients have been implemented. It is understood our personnel will receive personal instruction regarding this plan of action and will participate in periodic drills with respect to this plan of action.

Burke County Emergency Management accepts the responsibility to receive, monitor and decontaminate VEGP personnel, once dismissed from the site. The Burke County emergency plan and procedures have established reception centers to receive members of the general public as well as personnel dismissed from VEGP. Burke County has sufficiently trained personnel to staff the reception centers and operate the portal monitors which are designed for persons and vehicles. Burke County EMA also agrees that the monitoring equipment will be made available as needed to support drills, exercises, and/or actual events not only for Vogtle Electric Generating Plant but for any of the plants operated by Southern Nuclear.



## Burke County

## Emergency Management Agency



277 Highway 24 South Waynesboro, Georgia 30830 TEL: (706) 554-6651 FAX: (706) 554-4660

E-Mail: burkeema2@burke.net

Dedicated To The Protection Of Life And Property Rusty Sanders - Chief



Burke County Emergency Management personnel will also participate in on-site training offered by Plant Vogtle/Southern Company and in periodic fire and rescue drills and exercise when needed.

This letter supercedes any letters written before the above date concerning these matters. Please be assured of our cooperation.

Respectfully Yours,

Quattral and the Jesse E. (Rusty) Sanders

Burke County EMA Director



February 15, 2005

Mr. Lawrence Mayo
Emergency Preparedness Coordinator
Vogtle Electric Generating Plant
P.O. Box 1600
Waynesboro, Georgia 30830

Dear Mr. Mayo,

WJBF-TV stands ready to alert viewers about any emergency that could threaten life and property. Should an incident occur at Plant Vogtle prompting notice to plant workers or the public-at-large, please immediately relay that information to us so that we may disseminate it in the best interest of the public. As you coordinate with other emergency responders and authorities, please ask that they do the same. WJBF-TV is a member of the Emergency Alert System and would broadcast any EAS messages related to such an incident.

The station can respond quickly and be on the air in short order after you notify a key contact person. Please find attached a list of contact information for station personnel charged with initiating emergency coverage. The list is organized in order of importance. Please start at the top and work your way down until you get an affirmed response. Could you please send a like list of your contact personnel so that we can have it in case of emergency.

Please be assured of our earnest intent to work with you to get the word out as quickly as possible should the need arise.

Sincerely

Gene Kirkconnell

Vice President/General Manager

Cc: WJBF-TV Department Heads



November 3, 2005

Mr. Lawrence Mayo
Emergency Preparedness Coordinator
Vogtle Electric Generating Plant
Post Office Box 1600
Waynesboro, GA 30803

Dear Mr. Mayo:

In the event of a serious emergency at Plant Vogtle, WRDW-TV is willing to broadcast emergency information and instructions provided by authorities of local or state emergency management or other civilian authorities. WRDW-TV is a member of the Emergency Broadcasting System and would broadcast any EBS message related to any such emergency.

WRDW-TV is on the air 24 hours a day. However, should we be off air for some reason when such an emergency occurs, it is estimated we can be ready to broadcast within about 30 minutes after one of the key persons is notified. These key persons may be reached through the following phone numbers:

John Ray, President/General Manager 706/650-1335

Edward Elser, Chief Engineer 706/399-0247

Estelle Parsley, News Director 706/651-0115

Please be assured of the cooperation of this station.

John Ray

President/General Manager

JLR:jmt



February 13, 2004

Mr. Lawrence E. Mayo Emergency Preparedness Coordinator Vogtle Electric Generating Plant P.O. Box 1600 Waynesboro, GA 30830

Dear Mr. Mayo:

In the event of a serious emergency at Plant Vogtle, WAGT Television, Inc., is willing to broadcast emergency information and instructions provided by authorities of local or State Emergency Management or other civilian authorities. WAGT is a member of the Emergency Broadcasting System and would broadcast any EBS message related to any such emergency.

This station is willing and able to go on the air on short notice should such an emergency occur when we are off the air. It is estimated that this situation can be ready to broadcast within 30-45 minutes after one of the key persons is notified.

For your files, the direct telephone number to the newsroom is (706) 826-0001. You can reach the newsroom via e-mail at news@wagt.com or Greg Schieferstein, News Director at gregs@wagt.com.

Please be assured on the cooperation of this station.

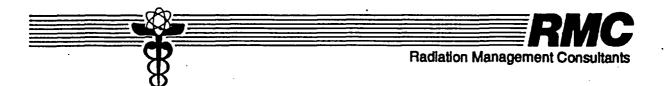
Sinchrely,

John Mann

President/General Manager

Greg Schieferstein, News Director CC:

Don Mathews, Operations Manager



February 15, 2005

Lawrence E. Mayo
Emergency Preparedness Coordinator
Southern Nuclear Operating Company
Vogtle Electric Generating Plant
P. O. Box 1600
Waynesboro, GA 30830

SENT VIA FAX: 706-724-0654

RE: Emergency Medical Assistance Program for 2005

Dear Mr. Mayo:

This confirms an agreement between Radiation Management Consultants (RMC) and Southern Nuclear Operating Company wherein RMC agrees to furnish certain services to Vogtle Electric Generating Plant. These services comprise a program that is identified by RMC as an Emergency Medical Assistance Program (EMAP). This agreement remains in effect from January 1, 2005 through December 31, 2005. The EMAP program contains the following provisions:

- 1. Twenty-four hour per day availability of expert medical consultation on the evaluation of radiation injuries.
- 2. Twenty-four hour per day availability of RMC's Radiation Emergency Medical Team (REM-Team) comprised of physicians, Certified Health Physicists and a technician with portable instrumentation to travel to your location and assist hospital personnel, attending physicians and/or plant personnel in the initial evaluation of radiation injuries.
- 3. Availablity of and assistance with transfer of patients to Definitive Care Centers established and maintained at Loyola University Medical Center, Chicago, IL (or any other qualified medical center, at the client's discretion) for the treatment of radiation injuries.
- 4. Twenty-four hour per day availability of RMC's dose assessment capabilities including:
  - A. Access to a bioassay laboratory for urine, fecal, sputum and tissue analysis.
  - B. Mobile Whole Body Counting facilities
  - C. Experienced Certified Health Physicists and Physician Team for evaluation of radiation exposures.

February 15, 2005 Southern Nuclear Operating Company Vogtle Electric Generating Plant Page #2

- 5. Annual training for the plant personnel in the handling and treatment of injured/contaminated patient(s).
- 6. Annual training for EMS personnel in the rescue and transport of injured/contaminated patient(s).
- 7. Annual training for hospital personnel in the handling, treatment and evaluation of injured/contaminated patient(s).
- 8. Annual radiation emergency medical drill to include preparation of accident scenarios. A drill observer will be provided, who will furnish drill evaluation reports related to observations made at the plant, ambulance and hospital.
- 9. Annual inventories of support hospital radiation emergency medical supplies and equipment.
- 10. Performance of an annual telephone number verification as well as a review of the hospital procedural manual; revise and distribute changes to the manual under controlled document distribution system.
- 11. Accident Response: Consultation and laboratory services under RMC's employment and control are at no extra charge, except for travel, lodging and meals.
- 12. Preparation of incident/accident reports for NRC and other regulatory bodies at no additional charge.
- 13. Legal and medical appearances as required and requested by Southern Nuclear Operating Company/Vogtle Plant personnel.

RADIATION MANAGEMENT CONSULTANTS, INC.

Roger E. Linnemann, MD

President

October 21, 2005

Alayre Dan Leng Dun

651-2041

Please review the attached letter of agreement. If the letter is correct, please sign and date in the space provided below. If you feel the letter needs updating please phone June McBride (706) 826-3945 let us know that this is being done.

All correspondence and/or questions should be directed to Lawrence Mayo, Emergency Preparedness Coordinator, (706) 826-3356. Your continued support of our Emergency Preparedness program is greatly appreciated.

June J. McBride

Administration Assistant for Emergency Preparedness Coordinator

JJMC/jjmc

The attached current letter of agreement with the Vogtle Electric Generating Plant is correct and needs no updating.

Signed

Fax To: June J. McBride

Administration Assistant for

**Emergency Preparedness Coordinator** 

**Vogtle Electric Generating Plant** 

706-724-0654 - Fax #



3651 Wheeler Road Augusta, Georgia 30909 (706) 851-3232

www.doctors-hospital.net -

December 30, 2003



Mr. Lawrence E. Mayo
Emergency Preparedness Coordinator
Vogtle Electric Generating Plant
P. O. Box 1600
Waynesboro, GA 30830

Dear Mr. Mayo:

The purpose of this letter is to reconfirm that Doctors Hospital would accept the radiologically contaminated injured patients arising from incidents or emergencies at Plant Vogtle. We realize that Georgia Power Company or Southern Nuclear Operating Company would be financially responsible for any modifications to our facility that may be required by the Nuclear Regulatory Commission, or others, for the treatment of patients exposed to radioactive materials. This may also include special training of hospital personnel, as may be required, and also the cost of any special equipment, as may be required.

It is my understanding that your organization has shared with our staff written procedures prepared by Radiation Management Corporation, which would detail the actions that would be necessary to take care of these patients. Our personnel are available to receive instructions from Radiation Management Corporation regarding your proposed plan of action. We would also be willing to participate in periodic drills with respect to your plan of action.

Please feel free to contact me at 706-651-2451 concerning any questions that you may have."

Sincerely.

Terry J. Gonn

President/CEO

Copy: J. B. Beasley, Jr., General Manager

Martha Garner, R.N., Director of Emergency Department

Dell Oliver, Chief Nursing Officer

Mark Newton, M.D., Medical Director of Emergency Department

Ted Newton, R.N., Hospital Safety Officer

Enclosure

TJF/ds

# Joseph M. Still Burn Centers, Onc. & William J. Welsh. MD, Plastic & Reconstruction Surgery, D.C./dba Augusta Cosmetic Surgery

Joseph M. (Mil), Jr., M.D. F.A.C.S. President

Juna L. Colon-Santini, M.D. F.A.A.P. • General Pediatrica

S.M.A. Zaliced Masser, M.D. M.B.B.S. Platic Surgery

Hermann K. Orlin, M.D. P.A.C.S. Plastic Surgery

Robert F. Mullim, M.D. Burn Surgery

William J. Welch, M.D. Plants Surgery

Charles A. Gertler PA-C Physician Assistant

Horatta Creft-Collatae PA-C Physician Assistant

Johnna W. Buffin PA-C Physician Assistant

panice M. Samples PA-C Physician Assistant

Ponsa Graham RNCS, FNP Nurve Practitioner

Jocalyn S. Hills RNCS, FNP Nurse Practitioner February 22, 2005

Mr. Lawrence Mayo
Emergency Preparedness Coordinator
Southern Nuclear Operating Company, Inc.
Vogtle Electric Generating Plant
P. O. Box 1600
Waynesboro, GA 30830

Dear Mr. Mayo:

This letter serves to confirm that I, the undersigned, agree to treat and assume responsibility for the medical supervision of radioactive contaminated patients from the Vogile Electric Generating Plant (VEGP) either on the Vogile site or at Doctors Hospital provided, in my judgement, no other urgent medical duties preclude my availability.

As part of this agreement, I understand that Southern Nuclear Operating Company, Inc., will provide or pay for the following:

- 1. Provide for facilities to treat emergency patients through a separate agreement with Doctors Hospital.
- 2. Provide special equipment required for detection and control of radioactive contamination.
- 3. Provide annual training in the hospital of about two hours of duration, which will cover the basics of radioactive contamination control and basic radiation protection. This training is presently performed by Radiation Management consultants (RMC) in accordance with a separate agreement with Southern Nuclear Operating Company, Inc.
- 4. RMC will also be available to the undersigned for consultation and will dispatch a Radiation Emergency Medical Team to assist in the management of the patients when requested through Southern Nuclear Operating Company, Inc.

P.O. Box 3725 - Augusta, Georgia 30914-3725 Phone (706) 863-9595 - FAX (706) 868-8375

STILL BURN CTRS INC

PAGE 03/04

Ø 003

12/15/2005 TRU 14:36 FAX 17067240654 02/25/2005 13:30 FAX 7068688375

VEGP EP UTTICE STILL BURN CENTERS INC

**2**003

Mr. Lawrence Mayo February 14, 2001 Page Two

- 5. Pay for the physician's time for participation in drills.
- 6. Pay the tuition and travel cost biennially for one physician from Joseph M. Still Burn Centers, Inc. to attend the annual training seminar sponsored by RMC. Any other physician may attend at his/her own expense.

Sincerely,

Robert F. Mullins, M. D.

RFM/mkl

## LETTER OF AGREEMENT WITH VOGTLE ELECTRIC GENERATING PLANT

BURKE MEDICAL CENTER confirms acceptance of casualties arising from radiation accidents at Vogtle Electric Generating Plant.

Southern Nuclear Operating Company has provided space, equipment and fixtures in the hospital required by the Nuclear Regulatory Commission, or others, for the treatment of patients exposed to radioactive materials. Hospital personnel have been trained as required.

Written procedures, prepared by Radiation Management Corporation, detailing actions to be taken for the care of these patients are in place. Hospital personnel have received training from RMC regarding this plan of action and participates in periodic drills with respect to the plan of action.

12/14/

Administrator

Burke Medical Center

Date

Lawrence Mayo

**Emergency Preparedness** 

Vogtle Electric Generating Plant



PEDIATRICS
SHELLEY A. GRIFFIN, M.D., F.A.A.P.

FAMILY MEDICINE
JOSEPH L. JACKSON, M.D., F.A.A.F.P.
JOSEPH L. JACKSON, JR., M.D.

FAMILY MEDICINE / OBSTETRICS
FRANK L. CARTER, JR., M.D.
JOHNNY F. CHRISTIAN, M.D.

INTERNAL MEDICINE GASTROENTEROLOGY HARVEY J. SANDERS, JR., M.D.

PHYSICIAN ASSISTANTS

Andrea B. Doak, PA-C Robin Shellito, PA-C

NURSE PRACTITIONERS Angie Powell, APRN, BC SHELLEY MALLARD, APRN, BC

PRACTICE ADMINISTRATOR
JAMES B. TURNER

February 16, 2005

Mr. Lawrence Mayo Emergency Preparedness Coordinator Southern Nuclear Operating Co., Inc. Vogtle Electric Generating Plant P. O. Box 1600 Waynesboro, GA. 30830

Dear Mr. Mayo,

This letter serves to confirm that we, the undersigned, agree to treat and assume responsibility for the medical supervision of radioactive contaminated patients from the Vogtle Electric Generating Plant (VEGP) either on the Vogtle Site or at the Burke Medical Center provided, in our judgment, no other urgent medical duties preclude our availability.

As part of this agreement, we understand that Georgia Power Company will provide or pay for the following:

- 1) Provide for the facilities to treat emergency patients through a separate Agreement with Burke Medical Center.
- 2) Provide special equipment required for detection and control of radioactive contamination.
- 3) Provide annual training in the hospital of about two hours' duration, which will cover the basics of radioactive contamination control and basic radiation protection. This training is presently performed by Radiation Management Consultants (RMC) in accordance with a separate agreement by Georgia Power Company.

4) RMC will also be available to the undersigned for consultation and will dispatch a Radiation Emergency Medical Team to assist in the management of the patients when requested through Georgia Power Company.

5) Pay for the physician's time for participation in drills.

6) Pay for tuition and travel cost biannually for one physician from Medical Specialist, Inc. to attend the annual training seminar sponsored by RMC. Any other physician may attend at his own expense.

Sincerely,

Joseph L. Jackson, Sr., M.D., F.A.A.F.P.

Frank L. Carter, Jr., M.D.

Joseph L. Jackson, Jr., M.D.

F. Christian M.D.

Office Locations

Medical Specialists, Inc. 305 Jones Avenue Waynesboro, GA 30830 (706) 554-5147 or (706) 554-7226

MEDICAL ASSOCIATES 810 CEMETERY ROAD SARDIS, GA 30456 (478) 569-9600

North Jefferson Medical Center 406 East Broad Street Wrens, GA 30833 (706) 547-7008



Westinghouse Electric Company Nuclear Services P.O. Box 355 Pittsburgh, Pennsylvania 15230-0355 USA

GP-17860 December 13, 2005

Mr. D. E. Grissette Vice President, Nuclear Vogtle Project Southern Nuclear Operating Company, Inc. P. O. Box 1295 Birmingham, Alabama 35201

## SOUTHERN NUCLEAR OPERATING COMPANY VOGTLE ELECTRIC GENERATING PLANT UNITS 1 AND 2 Revision to Westinghouse Emergency Response Plan

#### Dear Mr. Grissette:

Westinghouse is committed to Plant Vogtle to provide technical support services during a nuclear plant emergency. The Westinghouse Emergency Response Plan exists primarily for instances following an abnormal occurrence involving a nuclear plant that releases or hs the potential of releasing above normal amounts of radioactivity.

Westinghouse emergency assistance is available on a 24 hour per day, seven day per week basis. In the event of a request from Southern Nuclear / Plant Vogtle personnel, Westinghouse will activate all appropriate features of our Emergency Response Plan to support your needs.

In the event of a site emergency, the following Westinghouse personnel may be contacted:

Primary Contact: Ron Cowman (706) 826-4176

1<sup>st</sup> Alternate: Ed Arnold (412) 374-3365

2<sup>nd</sup> Alternate: Lee Stern (412) 374-6528

The most recent version of the Westinghouse Response Plan roster is attached for your information. It contains after hours / alternate numbers for contacting the above three individuals as well as additional key Westinghouse personnel. Entries marked with an asterisk (\*) indicate a change from the previous issue of the roster.

GP-17860 December 13, 2005

Should you have any questions or require additional information, please feel free to contact me at (412) 374-3365.

Sincerely,

WESTINGHOUSE ELECTRIC COMPANY

Ecald

E. C. Arnold, Manager Southern Nuclear Projects

/jag

cc: R. H. Parker (SNC Document Mgmt.)\*

J. G. Aufdenkampe\*

R. S. Cowman\*

T. E. Tynan\*

N. J. Stringfellow\*

S. C. Swanson\*

P. D. Rushton\*

J. J. McBride\*

J. L. Tain\*

<sup>\*</sup> w/att.

Mr. Grissette

GP-17860 December 13, 2005

bcc: E. C. Arnold East 5-6
L. Stern East 5-6
Vogtle Letter Files East 5-6



December 22, 2003

Mr. W. F. Kitchens
General Manager
Southern Nuclear Operating Company
Vogtle Electric Generating Plant
7821 River Road
P. O. Box 1600
Waynesboro, GA 30830



Subject:

Vogtle Blectric Generating Plant Units 1 & 2

Bechtel Job 23162

Emergency Preparedness Program

Bechtel File X7BD78-02-1 Letter No.: BV-GP-03-00007

Dear Mr. Kitchens:

This letter is intended to confirm our understanding as to the manner in which Bechtel is prepared to support your Emergency Preparedness Program at Vogtle Electric Generating Plant.

The current agreement that is in place and applicable for such support is:

Agreement for Engineering and Technical Service between Southern Nuclear Operating Company, Inc. (SNC) and Bechtel Power Corporation, Contract C-90-000221, Amendment 3, dated August 20, 1996, SNC Blanket Purchase Order Number B9193-0000.

In event of any emergency at the Vogtle Blectric Generating Plant, any requested support involving services to be performed by Bechtel would be furnished under the above referenced Agreement.

Should any questions arise, please contact me at (301) 228-6049.

Very truly yours.

J. P. Love

NOPS Project Manager

JEL/dfs

Mr. J. G. Aufdenkampe BV-GP-03-00007 Page 2

cc: Southern Nuclear Operating Company

D. H. Jones (copy of letter) (Birmingham)

J. B. Pappas (copy of letter) (Birmingham)

L. E. Mayo (copy of letter) (Vogtle Site)

J. A. Gasser (copy of letter) (Birmingham)

J. E. Garlington (copy of letter) (Birmingham)

Bechtel Power Corporation

J.E. Love (copy of letter)

L. L. Rowe (copy of letter)

#### McBride, June J.

From:

Patrick, John (Augusta) [JohnmPatrick@clearchannel.com]

Sent:

Friday, February 17, 2006 4:11 PM

To:

McBride, June J.

Subject:

FW: 2005 Letter of Agreement

Attachments:

EAS Policies and Procedures for C C.doc



EAS Policies and Procedures fo...

June,

Please see the attached document. Especially Page 2.

That is what we commit to do.....

We're getting closer

John

John Patrick

Community Relations/NTR Manager Clear Channel Radio/CSRA 2743 Perimeter Parkway

Building 100 Suite 300

Augusta, Ga 30909

----Original Message-----

From: Welsh, Earl

Sent: Thursday, February 16, 2006 16:56

To: Patrick, John (Augusta)

Subject: RE: 2005 Letter of Agreement

John

See attached Doc

----Original Message-----From: Patrick, John (Augusta)

#### Emergency Alert System Policies and Procedures for Clear Channel Augusta Georgia

### All Clear Channel operators are required to log all EAS activity and verify normal operation of EAS equipment daily.

WBBQ FM and WIBL FM are the Local Primary 1 (LP1), and Local Primary 2 (LP2), respectively for the Augusta, Georgia area. Listed below are the sources that WBBQ and WIBL monitor for EAS activations, the counties covered, and the EAS event types that are immediately relayed without operator intervention.

#### **WBBO / WIBL Monitor Sources:**

1	WQZY FM	Georgia Main
2	EmNet Satellite	Georgia Secondary
3	WCOS FM	South Carolina Main
4	WLJK FM	South Carolina Secondary
5	NOAA Wrens Ga.	Georgia and South Carolina
6	Alternate Redundancy	WBBQ and WIBL monitor each other
7	Dial In Phone	This input is switched automatically.

#### **Counties Covered in Georgia:**

Burke, Columbia, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Warren.

#### Counties Covered in South Carolina:

Aiken, Allendale, Barnwell, Edgefield, McCormick.

#### Event Types Relayed immediately without operator intervention:

Administrative Message, High Wind Warning, Severe Thunderstorm Warning, Blizzard Warning, Civil Emergency Message, Emergency Action Notification, Hurricane Warning, Emergency Action Termination, Tornado Warning, Immediate Evacuation, Flash Flood Warning, National Periodic Test, Winter Storm Warning, Flood Warning, Required Monthly Test, Required Weekly Test, Child Abduction Emergency, Civil Danger Warning, Earthquake Warning, Fire Warning, Hazardous Materials Warning, Law Enforcement Warning, Local Area Emergency, National Information Center, Nuclear Power Plant Warning, Radiological Hazard Warning, Shelter in Place Warning, Tropical Storm Warning.

#### Local Activation:

Local activations by officials are accomplished through EAS equipment connected through phone lines. This type of activation is **immediately** relayed **without operator intervention**.

WBBQ FM and WIBL FM employees do not, under any circumstances, manually activate EAS from our studios, even if supported by e-mails, vocal request, or faxes.

Manual studio activation of the EAS can only be achieved by a request from officials who are present at our studio site with proper photo identifications. The official must be at the studios at the time of the request. The official will be asked to fill out a request form and will be expected to voice the audio portion of the activation. Activation will take place only after approval by the Clear Channel General Manager, Director of Operation, or Director of Engineering.

WEKL, WKSP, WPCH, WPRW, and WSGF immediately relay without operator intervention any activation from WBBQ or WIBL.

Page 2 of 2

P. 2

### AGREEMENT FOR THE OPERATION OF A NOAA WEATHER RADIO TRANSMITTER BY A COOPERATOR

This agreement is entered into between the United States of America, Department of Commerce, National Oceanic and Atmospheric Administration. National Weather Service, hereinafter referred to as "NWS", and Georgia Power Company, hereinafter referred to as the "Cooperator".

#### WITNESSETH:

WHEREAS, Cooperator operates a nuclear power plant, known as the Vogtle Electric Generating Plant, bereinafter referred to as VEGE, and is required by law to fulfill the requirements in Title 10 of the Code of Federal Regulations, Section 50.47(b) (5) and Appendix E, Section IV.D.3 to Part 50, to provide a system for prompt notification to the public; and

WHERPAS, NWS operates a continuous meteorological and hydrological information and warning radio system, known as NOAA Weather Radio (NWR), which can provide a means for Cooperator to satisfy said emergency notification requirements; and

WHEREAS, Cooperator and NWS desire to provide for the installation and operation of a NWR transmitter in the VEGP area and to provide for said emergency notification means.

NOW, THEREFORE, in consideration of the benefits of this agreement to each party, the parties agree as follows:

- 1. Cooperator shall provide all information required for the radio frequency license application and operate the transmitter strictly in accordance with the license.
- 2. All costs associated with the VEGP NWR transmitter, with the exception of cost for energy provided by NWS under Section 13 below, will be borne by Cooperator. This includes, but is not limited to, costs for:
  - a) purchase of equipment
  - b) installation
  - c) operation, including power .
  - d) maintenance
  - e) communications links from the NWS to the transmitter, and
  - f) removal or replacement of equipment.

- specified by NWS. Cooperator is solely responsible for all aspects of equipment installation, including any necessary permits. However, connection to the NWR control console shall be under the direction of a NWS electronic technician and in accordance with the best modern practice. The design of any device used by Cooperator or his agent to connect to the NWS control console, as well as its final construction, must be inspected and approved by NWS before the connection is made. The cooperator's equipment will be designed such that it will be matched, balanced and isolated from NWS's control console-to-transmitter communications link.
- 4. Cooperator will use qualified and licensed radio technicians for all transmitter maintenance. Cooperator will use its best efforts in maintaining the transmitter to ensure that outages are kept to a minimum, that breakdowns and malfunctions are quickly acted upon, and that equipment performs routinely within the technical specifications of said equipment and terms of the license.
- 5. Cooperator will monitor the broadcast and will notify the Columbia, South Carolina NWS office Whenever the transmitter goes off the air and also when it again becomes operational.
- 6. Cooperator will perform an immediate technical check-out of the transmitter when such check-out is requested by NWS as a result of any Radio Frequency Interference problem.
- 7. NWS will be allowed to check periodically the effect of Cooperator equipment on NWS equipment.
- 8. NWS will maintain control over all broadcast content with the exception of messages issued in connection with an emergency at the VEGP facility.
- 9. All messages broadcast in connection with a VEGP emergency will be received through the Georgia Emergency Management Agency (GEMA) or through the South Carolina Emergency Management Division (SCEMD) as described in Appendix A to this Agreement.
- 10. Cooperator will hold and save the United States Government, its officers, agents, and employees harmless from liability of any nature of any kind, including costs and expenses for or on account of any or all suits or damages of any charter whatsoever resulting from injuries or damages sustained by any person or persons or property by virtue of parformance of this Agreement.

- 11. Cooperator will hold NWS free of any liability for loss or damage to Cooperator property installed to carry out this Agreement.
- 12. NWS will obtain the radio frequency license for the transmitter. The license will remain the property of NWS.
- 13. NWS will, if necessary, furnish electrical energy required for the equipment at the console site, if this can be done easily within existing electrical service.
- 14. NWS will, if necessary, allow Cooperator to install, at Cooperator's expense, special electrical circuits for its equipment at the console site provided the circuit design and related installation are first approved by NWS in writing.
- 15. NWS personnel will exercise reasonable care to protect property of Cooperator.
- 16. NWS will activate the notification system with the alert signal and broadcast messages relating to a VEGP emergency when requested by authorized officials in accordance with Appendix A.
- 17. NWS will provide standard NWS programming over the .
  transmitters (including the use of the Warning alarm) as required by NWS directives.
- 18. NWS will maintain the recorder console in compliance with NWS directives so as to minimize downtime.
- 19. NWS will participate in a yearly drill to test the use of the NWS equipment as a public notification system.
- 20. NWS and Cooperator will coordinate and jointly issue a public announcement describing the service to be provided as a result of this Agreement. If the service is terminated for any reason, the parties will also coordinate a public statement explaining the reason(s) for termination.
- 21. The provisions of the Agreement shall be carried out by the parties with no compensation due either party.
- 22. This agreement may be amended, modified, or terminated at any time by mutual consent of the parties hereto. It may be terminated by either party upon giving at least 60 days prior written notice, although to the extent possible, recognizing the importance of this project, the parties hereto will strive to give one year's notice of intention to terminate.

8-08-1997 2:44PM

FROM WSFO\_CAE 8038228188

P. 6 Ø 006

6-09-1996 4:14PM

FROM WSFO\_CAE 8038228188

P. 5

IN WITNESS WHERETO, the parties hereto have executed this Agreement effective as of the latest date written below:

Dean P. Gulezian

Director

NWS Bastern Region

Vice President Project Vogtle

Southern Nuclear Operating

· Company

لايا 1007 P. 6

#### APPENDIX A

STATE OF GEORGIA/STATE OF SOUTH CAROLINA

AGREEMENT FOR ACTIVATION AND USE OF NOAA WEATHER RADIO IN RESPONSE TO AN EMERGENCY AT GEORGIA POWER'S

ALVIN W. VOGILE ELECTRIC GENERATING PLANT

THIS AGREEMENT is entered into among the Georgia Emergency Management Agency, hereinafter referred to as GEMA, the South Carolina Emergency Management Division, hereinafter referred to as SCEMD, and the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, hereinafter referred to as the NMS.

THIS AGREEMENT is fully part of the "Agreement for the Operation of a NOAA Weather Radio Transmitter by a Cooperator". hereafter referred to as the Basic Agreement, and is referenced in the Basic Agreement as Appendix A.

THIS AGREEMENT covers the responsibilities and operational considerations among GEMA, SCEMD and the NWS relative to the use of the NOAA Weather Radio (NWR) to alert persons living in the proximity of the Vogtle Electric Generating Plant, hereinafter referred to as VEGP, in the event of an emergency condition at the plant. This Agreement fulfills, in part, the requirements set forth by NUREG-0654/PEMA-REP-1, Revision 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, and Appendix 3 thereto.

12008 P. 7

#### RESPONSIBILITIES

#### A. THE NWS AGREES

- 1. To promptly activate the NWR and broadcast messages relating to the VEGP emergency when requested by GEMA; the messages which may be broadcast include but are not limited to prescripted emergency messages.
- .2. That all prescripted emergency messages held in the possession of NWS be given reasonable protection from misuse or accidental broadcast.

#### B. GEMA AGREES

- 1. To provide jointly with the South Carolina Emergency Management Division (SCEMD), a "Standing Operating Procedure" defining procedures for the activation of the NWR, verification of authenticity and the emergency messages for broadcast over NWR.
- 2. To make requests over NAWAS or, as backup, commercial telephone for activation of the NWR.
- 3. To coordinate impending activation of the NWR with SCEMD and, if requested, will include protective actions instructions for South Carolina residents potentially affected.

#### C. SCEMD AGREES

- 1. To defer to GEMA for activation of NWR.
- 2. To coordinate with GEMA impending activation of the NWR, and if appropriate, include protective action instructions for South Carolina residents potentially affected.
- 3. To provide jointly with GEMA an SOP defining procedures for activation of the NWR, and if appropriate, provide information needed to complete the wording of scripts as they pertain to South Carolina.

<u>PUBLICITY</u> - The mutual role of GEMA, SCEMD and the NWS will be recognized in all press releases, public presentation or other public information/education activities carried out in regard to promoting the services provided for in the Basic Agreement.

Ø 009 P. 8

#### AMENDMENTS AND TERMINATION

This Agreement may be amended at any time by mutual consent of GEMA, SCEMD and the NWS. This Agreement may be terminated in accordance with the provisions of the Basic Agreement.

IN WITNESS WHEREOF GEMA, SCEMD and the NWS have executed this Agreement effective as of the latest date written below.

For the Georgia Emergency Management Agency

Mike G. Sherberger

Director

For the South Carolina Bmergency Management Division

Ron Osborne

Director

For the United States of America Department of Commerce National Oceanic and Atmospheric Administration National Weather Service .

Director, NWS Eastern Region

113/03

#### GOLD - RADIO BROADCASTING, MC.

PA BOX ACE - HWY, 125 N.W. . ALLENDALE, SOUTH CAROLINA 20010

RADIO STATICIES: YDOG - AM 1000-FM

TEL BOLEMASON

Pab. 10, 1993

Mr. W. B. Shipman Seneral Manager Youtle Blectric Generating Plant P 0 Box 1600 Waymesboro, Ca. 30830

Dear Mr. Shipman:

In the event of a serious suggesty at Plant Vogtle , WDOS A M & P H are willing to broadcast emergency information and instructions provided by authorities of local or state emergency management or other civilien authorities. Whoc is a member of the Emergency Broadcasting System and would broadcast any The nessage related to any such emergency.

This station is willing and able to go on the air on short notice should such an emergency occur when we are off the air. It is estimated that this staton can be ready to broadcast within fifteen minutes after one of the key persons(listed below) is notified.

- 1. Carl Gooding ... Gen .. Mgr. and Chief Rug. (803) # Carlo 384-3847
- 2. January Chrys Chryster 301 384 3069

Sincerely. A.Cerl Cooding Pres. and G H

LUTU BURNETE IR GALTONG ADOLU BURNETE,

Ø 002/002

**(2)** DO2

CHE THE



December 11, 2002

LAWRENCE E. Mayo Emergency Preparedoras Coordinator Vogelo Electric Generating Plant P.O. Bex 1600 Waynesboro, GA 30830

Re: Emergency Proparedness Letter of Agreement

Dear Mr. Mayo:

In response to your request for an updated "Verification/Letter of Agreement" please accept this letter as our official notification that in the event of a serious emergency at Plant Vogile, WKXC-FM/KICKS 99 will broadcast any energency information and instructions.

All information and/or instructions must be provided to WKXC by official authorities of local/state Emergency Management or other official civilian authorities.

WKXC is a member of the Emergency Alert System and will broadcust any EAS message related to any such emergency.

We are in a position to go on the air is mediately should such an emergency occur, 24 hours a day, seven days a week.

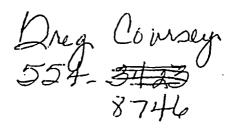
If you have any further questions or comments please sail me at (803) 279-2099.

Slocerply

T. Gentry Program Director, 9

CXC/KICKS 99

#### October 21, 2005



Please review the attached letter of agreement. If the letter is correct, please sign and date in the space provided below. If you feel the letter needs updating please phone June McBride (706) 826-3945 let us know that this is being done.

All correspondence and/or questions should be directed to Lawrence Mayo, Emergency Preparedness Coordinator, (706) 826-3356. Your continued support of our Emergency Preparedness program is greatly appreciated.

June J. McBride

Administration Assistant for Emergency Preparedness Coordinator

JJMC/jjmc

The attached current letter of agreement with the Vogtle Electric Generating Plant is correct and

needs no updating.

Signe

Fax To: June J. McBride

Administration Assistant for

**Emergency Preparedness Coordinator** 

Vogtle Electric Generating Plant

706-724-0654

### Burke County Sheriff's Office



Gregory T. Coursey Shertd

FAX 706-554-3

25 Highway 24 South • P.O. Box 702 • Waynesbore, Georgia 30430 • Telephone 704-644-2133

JUNE 24, 1994

MR. J. B. BEASLEY, JE.
GENERAL MANAGER
VOGTLE ELECTRIC GENERATING PLANT
P.O. BOX 1600
WAYNESBORO, GEORGIA 30830

DEAR MR. BEASLEY:

I HAVE BEEN FULLY BRIEFED CONCERNING THE SUPPORT DESIRED FROM MY AGENCY IN THE EVENT OF A SECURITY OF RADIOLOGICAL EMERGENCY CONDITION AT PLANT VOGILE.

IT IS AGREED THAT IN THE EVENT OF A SECURITY EMERGENCY, THE BURKE COUNTY SHERIFF'S OFFICE WILL PROVIDE ABSISTANCE TO YOU IN FIVE (5) TO FIFTEEN (15) MINUTES INITIALLY AND ADDITIONAL RESPONSE IN THIRTY (30) MINUTES WHEN REQUESTED BY THE GENERAL MANAGER, THE MUCLEAR SECURITY MANAGER OR THEIR DESIGNATED REPRESENTATIVES. THE ASSISTANCE PROVIDED MOULD BE:

- 1. TRAFFIC CONTROL ON ACCESS ROADS TO THE PLANT:
- 2. BACKUP COMMUNICATIONS, IF NECESSARY;
- 3. SUPPORT FOR ELIMINATION OF INTERNAL OR EXTERNAL THREATS:
- 4. PROTECTIVE ACTION TO THE PUBLIC AS REQUESTED.

IN THE EVENT OF A RADIOLOGICAL EMERGENCY, SUPPORT WILL BE PROVIDED AS REQUESTED THROUGH THE BURKE COUNTY EMERGENCY MANAGEMENT AGENCY (EMA).

YOURS FOR BETTER LAW ENFORCEMENT,

GREGOR T. COURSEY, SHERIF

BURKE COUNTY, GRONGIA

GTC/nb



institute of Nuclear Power Operations Suite 100 700 Galleria Parkway, SE Atlanta, GA 30339-5957 770-644-8000 FAX 770-644-8549

September 30, 2005

#### Dear Ladies and Gentlemen:

This letter certifies that the plant emergency assistance agreement between INPO and its member utilities remains in effect. In the event of an emergency at your utility, INPO will assist you in acquiring the help of other organizations in the industry, as described in Section 1 of the *Emergency Resources Manual*, INPO 03-001. If requested, INPO will provide the following assistance:

- Facilitate technical information flow from the affected utility to the nuclear industry.
- Locate replacement equipment and personnel with technical expertise.
- Obtain technical information and industry experience regarding plant component and systems.
- Provide an INPO liaison to facilitate interface.

This agreement will remain in effect until terminated in writing. Should you have questions, please call me at (770) 644-8304 or e-mail mossdj@inpo.org.

Sincerely,

David J. Mosš

Manager

Radiological Protection & Emergency Preparedness

DJM:ncs

02/08/2005 TED 13:10 FAI 17067240654

EOF #2

B. I'mmar Murray, M.B.

WARY F ACTICE

211 at 578227 WINNESTON, GA 20130 (704) 5542176 BAI (704) 5546407 December 29, 1997

gr. J. B. Besslay beneral Manager Yogile Electric Generating Flumb P. O. Box 1600 Mayneshoro, Ch. 30830

bear Mr. Beasley:

This letter serves to confirm that I, the undersigned, agree to treat and assume responsibility for the medical supervision of redirective contembrated patients from the Vogile Electric Generating Plant (VEGP) wither on the Vegele Electric Generating Plant (VEGP) wither Oleve (VEGP) wither Ole

As part of this egreement, I understand that Southern Hucleur Coursting, Inc., will provide or pay for the following:

- a. Provide for facilities to treat emergency potients through a separate agreement with the Durke County Rospital.
- b. Provide special equipment required for detection and control of redirective contamination.
- c. Provide moral training in the hospital of shoot 2 hours duration, which will cover the busine of redirective contemination control and busine radiation protection. This training is presently perfused by Redistion Hospansk Consultants (NEC) in accordance with a separate agreement with Scuthern Modeser Operating, Noc.
- d. NC will also be available to the undersigned for consultation and will dispatch a Rediction Emergency Redical Team to shelet in the assugament of the patients when requested through Bouthern Reviews Operating, Inc.
- e. Pay for the physicism's time for participation in drills.
- Pay the tuition and travel costs biancially for the training senter approved by PK.

sinceraly,

B. Litter Muckey, 10



WFXG-TV

3030 Weshington Rd. P.O. Box 304540 Augusta, GA 30917 (707) 650-5400 FAX (708) 650-8411

2/16/05

September 25, 1996

Laurence E. Mayo

Mr. J.-N. Roberts
Emergency Preparations Coordinator
Vogale Electric Generating Plant
7821 River Road
Post Office Box 1600
Waynesborn, GA. 30830

Dear Mr. Roberts:

In the event of a surious emergency at Plant Vogele, WPXG-TV is willing to broadcast emergency information and instructions provided by authorities of local or State Emergency Management or other civilian authorities. WPXG is a member of the Emergency Broadcasting System and would broadcast any EB\$ message related to any such emergency.

This station is willing and able to go on the air on short notice should such an emergency occur when we are off the air. It is estimated that this simution can be ready to broadcast within 30 - 45 minutes after one of the key persons are notified.

Please be assured of the cooperation of this station.

Siscerely,

Walned Reco

MR/Ic

## AGREEMENT BETWEEN GEORGIA POWER COMPANY AND AIKEN COUNTY, SOUTH CAROLINA

#### WITNESSETH:

WHEREAS, Company has constructed, is the owner of, is the licensed operator of, and is currently operating, for the purpose of generating electric current, Units 1 and 2 of the Vogtle Electric Generating Plant, federally licensed nuclear facilities located in Burke County, Georgia and

WHEREAS, advance planning is necessary to assure that the health and safety of the public will be protected in the unlikely event of a radiological emergency associated with the operation of said nuclear plant; and

WHEREAS, Company has developed a Vogtle Electric Generating Plant Emergency Plan so that in the unlikely event of an emergency, appropriate federal, state and local government officials are notified and appropriate monitoring and onsite measures are taken to protect the public; and

WHEREAS, County is responsible for the health, safety, security and welfare of its citizens; and

WHEREAS, local governments have the responsibility to develop and maintain effective response capability to support emergency actions; and

WHEREAS, County has the overall responsibility for emergency preparedness and local response in County concerning an incident at Vogtle Electric Generating Plant; and

WHEREAS, County is responsible for coordinating and for submitting to the South Carolina Emergency Preparedness Division ("SCEPD") changes to the Radiological Emergency Plan ("REP") for County and for annually certifying REP currentness to SCEPD; and

WHEREAS, the Federal Emergency Management Agency ("FEMA") has been designated by the President to take the lead in offsite radiological emergency planning and response and to review and assess state and local plans for adequacy; and

WHEREAS, the Nuclear Regulatory Commission ("NRC") will review the FEMA findings and determinations on the adequacy and capability of implementation of state and local plans and make decisions with regard to the overall (onsite and offsite) state of emergency preparedness; and

WHEREAS, NRC has adopted a regulation requiring that REPs meeting the FEMA-NRC criteria of NUREG-0654/FEMA REP-1 be implemented and maintained; and

WHEREAS, County has prepared a REP for radiological emergencies associated with the operation of Vogtle Electric Generating Plant; and

WHEREAS, maintaining the Vogtle Electric Generating Plant REP in accordance with the FEMA-NRC criteria and participating in exercises as required by NRC and FEMA regulations requires resources and results in costs (hereinafter referred to as "incremental costs") above and beyond those which would be required and incurred by County solely to meet its statutory duties to protect public health and safety; and

WHEREAS, Company, in order properly to fulfill its statutorily mandated duty to make adequate electric service available for the people of the State of Georgia and to provide for the continued operation of Vogtle Electric Generating Plant, and solely to achieve this goal, has previously provided County with some of the funds necessary to meet the incremental cost of implementing a REP which sufficiently complies with the applicable regulations and related guidelines of the NRC so as to avoid an ordered shutdown of these units; and

WHEREAS, the State and local governments have completed development and implementation of a REP but must continue to maintain the REP current and periodically participate in REP exercises and drills to sufficiently comply with the applicable regulations and guidelines related thereto, for FEMA and the NRC; and

WHEREAS, Company has agreed to pay to County the funds specified herein which shall constitute Company's total responsibility for the incremental cost incurred by County in performing the obligations hereunder; and

WHEREAS, the Department of Energy, Savannah River Site utilizes County Emergency Preparedness resources and provides the County with some REP related funding; and

WHEREAS, the parties desire to terminate REP funding provided under the Agreement Between Georgia Power Company and Aiken County and South Carolina Emergency Preparedness Division dated as of 1986, and to substitute funding under this new Agreement which shall provide sufficient funds for meeting the incremental costs associated with maintaining the REP for the Vogtle Electric Generating Plant to comply sufficiently with applicable regulations and related guidelines of FEMA and the NRC;

NOW, THEREFORE, in consideration of the foregoing premises and mutual covenants hereinafter set forth, the parties agree as follows:

1. <u>IERM</u>. This Agreement shall be for a term of four (4) Contract Years from July 1, 1993 and thereafter shall automatically renew for successive terms of one (1) Contract Year unless terminated by either party by giving written notice to the other party at least thirty (30) days prior to the then-current term. Each Contract Year shall commence on July 1 and shall end on June 30 of the succeeding year.

#### 2. RESPONSIBILITIES OF COUNTY.

- 2.1 County shall maintain, coordinating with SCEPD and appropriate agencies and political subdivisions, County REPs (offsite contingency plans) for the Vogtle Electric Generating Plant in accordance with criteria established by FEMA and the NRC. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including staffing, planning, coordination with local government, administration, equipment maintenance and replacement and logistical support.
- 2.2 Each County agency shall participate as required by NRC and FEMA regulations in annual Vogtle Electric Generating Plant Emergency exercises sufficiently to maintain FEMA approval of the county and state Vogtle Electric Generating Plant site specific REP. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including staffing, planning, coordination with local governments, administration, and logistical support.
- 2.3. County shall utilize the funds provided by Company to meet the incremental costs described in Exhibit A hereto. Provided, however, that none of the funds provided by Company to County hereunder may be utilized to pay all or any part of the salary of an elected official that do not relate to REP activities.
- 2.4. (a) If, during any Contract Year that this Agreement is in effect, County determines that it is necessary to request one-time additional funding for non-recurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment which will be used to support REP maintenance activities and REP emergency operations, County shall submit to Company a written request for such funds.
  - (b) Each such written request shall clearly and in detail (1) describe the purpose for which the requested funds will be used, (2) state the amount of funds requested, (3) state the total cost of the project to be undertaken or the equipment to be purchased, (4) describe the reason such undertaking or equipment is necessary for maintaining REP activities and REP emergency operations, (5) other sources and amounts of funds, if any, and (6) state its time table for committing its own funds if any.
  - (c) To enable Company to thoroughly evaluate such written request, County shall furnish to the Company such additional substantiating documentation and information concerning the use of the requested funds as Company may request.
  - (d) All funds provided to County under Section 2.4 shall be used strictly for the purposes stated in the request for funds

- submitted pursuant to Section 2.4.(a) above and in Section 2.3. Any such funds furnished by Company which are not expended by County for such purposes shall be promptly refunded to Company.
- (e) Company reserves the right to set forth special terms and conditions in connection with its provision of funds under Section 2.4.
- 2.5 The funds provided to County under this Agreement are intended to augment emergency preparedness activities and are not a substitute for current or past County budget expenses allocated for local emergency preparedness agencies. These funds shall not affect present or future County budget requirements normally allocated for local emergency preparedness activities.
- 2.6 Notwithstanding anything to the contrary contained herein, the parties hereto acknowledge that County cannot bind future County Council budgets in future budget years.

#### 3. RESPONSIBILITIES OF COMPANY.

- 3.1 For the first Contract Year this Agreement is in effect, Company shall place on deposit with County the total amount reflected in Exhibit A attached hereto and made a part hereof, such deposit to be made in four (4) equal quarterly payments. Each quarter of the second and subsequent Contract Years of this Agreement, Company shall place on deposit with County an amount equal to one-fourth of: (1) the previous Contract Year's deposit for salary, adjusted by a percentage equal to twelve (12) month Bureau of Labor Statistics Consumer Price Index for all urban consumers; plus (2) the total amount of items other than salary specified on Exhibit A. Such monies shall be transferred to the budget of County solely for use in REP activities as specified in Exhibit A. Acceptance of such monies constitutes County's ratification of this Agreement. Unexpended monies shall accrue in each Exhibit A category from Contract Year to Contract Year.
- 3.2 Upon receiving all necessary information from County concerning a request for supplemental funds for nonrecurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment, Company shall within a reasonable time evaluate and submit to County a written response to such request.

#### 4. <u>USE OF EQUIPMENT</u>

4.1 Any equipment purchased with supplemental funds furnished hereunder shall be used in support of REP maintenance activities and REP emergency operations. Upon request, Company, in its sole discretion, may approve in writing the use by County of such equipment for purposes other than REP support provided that County ensures that such use does not interfere with the timely availability of the equipment for REP support and does not expose the equipment to unusual or excessive wear and tear. County agrees

to promptly report and replace or repair at no expense to Company any such equipment that is damaged or lost during, or as the result of, such other use.

- 4.2 County shall be responsible for maintaining any equipment purchased with funds furnished hereunder in good working order at all times.
- 4.3 In the event this Agreement is terminated for any reason, County shall, with respect to any equipment purchased hereunder that has a remaining useful life at the time of termination, continue to use such equipment in support of REP maintenance activities and REP emergency operations and comply with the provisions of Paragraphs 4.1 and 4.2 above for the remaining useful life of such equipment.

# 5. DISCLAIMER

Company makes no warranties or representations whatsoever, either express or implied, to County or to any third party as to the condition, safety, reliability or adaptability of any equipment to be purchased in part with funds provided under this Agreement, for use in County's emergency management activities, as Company's participation in each project is limited solely to the contribution of funds hereunder. The parties agree that Company shall have no control over, or authority, responsibility or liability for, the procurement, use or operation of any such equipment.

# 6. RELATIONSHIP OF PARTIES

No person performing services under this Agreement (other than a person directly employed by Company) shall be considered as an agent or employee of Company unless specifically designated by Company in writing as an agent. Company assumes no liability to County, or agency thereof, or to any third party for damages to property, both real and personal, or personal injury (including death) which might arise out of or be in any way connected with any act or omission on the part of any person not directly employed by Company or designated by Company in writing as an agent in connection with service performed under this Agreement. In no event shall this Agreement be construed to confer any benefits or rights or any parties other than any affiliate of this Company that owns or operates the Vogtle Electric Generating Plant.

# 7. RECORDS.

County agrees to receive and manage, in accordance with generally accepted accounting procedures, the funds advanced by Company under this Agreement. A separate funding account, in county accounting records, shall be maintained for the receipt and disbursement of such funds.

# 8. ASSIGNMENT.

Company shall have the right to assign this Agreement to any affiliate or subsidiary of Company upon written notice to County.

# 9. AUDIT RIGHTS.

Company (or its designated representatives) shall have the right to examine and audit all books, records, vouchers, and accounts of County that pertain to the receipt, disbursement, and use of the sums advanced pursuant to this Agreement. Any such examination or audits shall be conducted during regular business hours and, to the extent possible, with reasonable advance notice.

# 10. TERMINATION AND MODIFICATION.

10.1 Company may terminate this Agreement upon written notice to County in the event: (1) of a change in the applicable federal, state or local laws or regulations which authorizes or provides for alternative funding for the purposes set forth herein; (2) Vogtle Electric Generating Plant ceases operation or (3) the direct supervision of County's emergency management agency is transferred or delegated from the Aiken County Council to another agency. In the event of termination under this Section 10, County shall refund to Company within sixty (60) days of such termination all of the funds furnished hereunder which are unexpended and unobligated as of the date the notice of termination was given by Company.

10.2 In the event of significant change in FEMA or NRC REP requirements, County and Company shall review the impact of any such change upon this Agreement and shall mutually determine, on the basis of such review, what course of action, if any, the parties shall take with respect to this Agreement. In the event of a drastic and sudden increase in the inflation rate or in any of the non-salary categories listed on Exhibit A, which change would, if Exhibit A were not revised, cause financial hardship to County, Company and County agree to review Exhibit A and, if they are in agreement that modifications are warranted, to make appropriate modifications thereto. Notwithstanding any other provision hereof, nothing in this Agreement shall require Company to enter into a modification of the Agreement or Exhibit A unless Company, in its sole discretion, elects to do so.

# 11. ADMINISTRATION OF THIS AGREEMENT.

In all matters relating to this Agreement, Company's Vice President or his designee shall act for Company, and the Chairman, Aiken County Council or his designee shall act for County.

# 12. WAIVER OF BREACH.

The waiver by Company of a breach of any provision of this Agreement by County shall not operate or be construed as a waiver of any other or subsequent breach by County.

#### 13. ENTIRE AGREEMENT.

This instrument contains the entire Agreement and understanding between the parties and there are no oral understandings, terms or conditions not herein recited. No party has relied upon any representation, either expressed or implied, not contained in this Agreement. All prior understandings, terms and conditions relating to requests by County for funding relating to the maintenance of REPs are deemed to be merged in this instrument, and the same may not be changed or supplemented orally.

#### 14. GOVERNING LAW.

This Agreement shall be construed and enforced in accordance with the Laws of the State of South Carolina.

#### 15. SEVERABILITY.

The unenforceability or invalidity of any particular provision of this Agreement shall not affect its other provision, and to the extent necessary to give such other provisions effect, they shall be deemed severable.

#### 16. JURISDICTION.

The principal place of business for the purpose of this Contract is South Carolina and any litigation arising from the Contract shall be proper only in a Court of competent jurisdiction in Aiken County, South Carolina.

#### 17. SOVEREIGN IMMUNITY.

Aiken County specifically claims sovereign immunity from claims, suits, or causes of action, to the extent allowed by law, and this immunity is part of any agreement or contract with Aiken County.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized representatives of the date first above written.

GEORGIA POWER COMPANY

Vice President - Núclear Vogtle Project

is: Mary Jo Carrell

AIKEN COUNTY, SOUTH CAROLINA

euse? Chairman, Aiken County

Council

APPROVED AS TO FORM AND CONTENT BELL AND SURASKY, PA

7

NIMEN COUNTY ATTORNEY

# AGREEMENT BETWEEN GEORGIA POWER COMPANY AND ALLENDALE COUNTY, SOUTH CAROLINA

THIS AGREEMENT, made and entered into as of the <u>24</u> day of <u>June</u>, 1993, by and between Georgia Power Company ("Company"), a Georgia corporation having its principal place of business in Atlanta, Georgia, and Allendale County, South Carolina ("County").

# WITNESSETH:

WHEREAS, Company has constructed, is the owner of, is the licensed operator of, and is currently operating, for the purpose of generating electric current, Units 1 and 2 of the Vogtle Electric Generating Plant, federally licensed nuclear facilities located in Burke County, Georgia and

WHEREAS, advance planning is necessary to assure that the health and safety of the public will be protected in the unlikely event of a radiological emergency associated with the operation of said nuclear plant; and

WHEREAS, Company has developed a Vogtle Electric Generating Plant Emergency Plan so that in the unlikely event of an emergency, appropriate federal, state and local government officials are notified and appropriate monitoring and onsite measures are taken to protect the public; and

WHEREAS, County is responsible for the health, safety, security and welfare of its citizens; and

WHEREAS, local governments have the responsibility to develop and maintain effective response capability to support emergency actions; and

WHEREAS, County has the overall responsibility for emergency preparedness and local response in County concerning an incident at Vogtle Electric Generating Plant; and

WHEREAS, County is responsible for coordinating and for submitting to the South Carolina Emergency Preparedness Division ("SCEPD") changes to the Radiological Emergency Plan ("REP") for County and for annually certifying REP currentness to SCEPD; and

WHEREAS, the Federal Emergency Management Agency ("FEMA") has been designated by the President to take the lead in offsite radiological emergency planning and response and to review and assess state and local plans for adequacy; and

WHEREAS, the Nuclear Regulatory Commission ("NRC") will review the FEMA findings and determinations on the adequacy and capability of implementation of state and local plans and make decisions with regard to the overall (onsite and offsite) state of emergency preparedness; and

WHEREAS, NRC has adopted a regulation requiring that REPs meeting the FEMA-

WHEREAS, NRC has adopted a regulation requiring that REPs meeting the FEMA-NRC criteria of NUREG-0654/FEMA REP-1 be implemented and maintained; and

WHEREAS, County has prepared a REP for radiological emergencies associated with the operation of Vogtle Electric Generating Plant; and

WHEREAS, maintaining the Vogtle Electric Generating Plant REP in accordance with the FEMA-NRC criteria and participating in exercises as required by NRC and FEMA regulations requires resources and results in costs (hereinafter referred to as "incremental costs") above and beyond those which would be required and incurred by County solely to meet its statutory duties to protect public health and safety; and

WHEREAS, Company, in order properly to fulfill its statutorily mandated duty to make adequate electric service available for the people of the State of Georgia and to provide for the continued operation of Vogtle Electric Generating Plant, and solely to achieve this goal, has previously provided County with some of the funds necessary to meet the incremental cost of implementing a REP which sufficiently complies with the applicable regulations and related guidelines of the NRC so as to avoid an ordered shutdown of these units; and

WHEREAS, the State and local governments have completed development and implementation of a REP but must continue to maintain the REP current and periodically participate in REP exercises and drills to sufficiently comply with the applicable regulations and guidelines related thereto, for FEMA and the NRC; and

WHEREAS, Company has agreed to pay to County the funds specified herein which shall constitute Company's total responsibility for the incremental cost incurred by County in performing the obligations hereunder; and

WHEREAS, the Department of Energy, Savannah River Site utilizes County Emergency Preparedness resources and provides the County with some REP related funding; and

WHEREAS, the parties desire to terminate REP funding provided under the Agreement Between Georgia Power Company and Allendale County and South Carolina Emergency Preparedness Division, dated as of July 8, 1986, and to substitute funding under this new Agreement which shall provide sufficient funds for meeting the incremental costs associated with maintaining the REP for the Vogtle Electric Generating Plant to comply sufficiently with applicable regulations and related guidelines of FEMA and the NRC;

NOW, THEREFORE, in consideration of the foregoing premises and mutual covenants hereinafter set forth, the parties agree as follows:

1. <u>TERM</u>. This Agreement shall be for a term of four (4) Contract Years from July 1, 1993 and thereafter shall automatically renew for successive terms of one (1) Contract Year unless terminated by either party by giving written notice to the other party at least thirty (30) days prior to the then-current term. Each Contract Year shall commence on July 1 and shall end on June 30 of the succeeding year.

# 2. RESPONSIBILITIES OF COUNTY.

- 2.1 County shall maintain, coordinating with SCEPD and appropriate agencies and political subdivisions, County REPs (offsite contingency plans) for the Vogtle Electric Generating Plant in accordance with criteria established by FEMA and the NRC. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including staffing, planning, coordination with local government, administration, equipment maintenance and replacement and logistical support.
- 2.2 Each County agency shall participate as required by NRC and FEMA regulations in annual Vogtle Electric Generating Plant Emergency exercises sufficiently to maintain FEMA approval of the county and state Vogtle Electric Generating Plant site specific REP. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including staffing, planning, coordination with local governments, administration, and logistical support.
- 2.3. County shall utilize the funds provided by Company to meet the incremental costs described in Exhibit A hereto. Provided, however, that none of the funds provided by Company to County hereunder may be utilized to pay all or any part of the salary of an elected official that do not relate to REP activities.
- 2.4. (a) If, during any Contract Year that this Agreement is in effect, County determines that it is necessary to request one-time additional funding for non-recurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment which will be used to support REP maintenance activities and REP emergency operations, County shall submit to Company a written request for such funds.
  - (b) Each such written request shall clearly and in detail (1) describe the purpose for which the requested funds will be used, (2) state the amount of funds requested, (3) state the total cost of the project to be undertaken or the equipment to be purchased, (4) describe the reason such undertaking or equipment is necessary for maintaining REP activities and REP emergency operations, (5) other sources and amounts of funds, if any, and (6) state its time table for committing its own funds if any.
  - (c) To enable Company to thoroughly evaluate such written request, County shall furnish to the Company such additional substantiating documentation and information concerning the use of the requested funds as Company may request.
  - (d) All funds provided to County under Section 2.4 shall be used strictly for the purposes stated in the request for funds submitted pursuant to Section 2.4.(a) above and in Section 2.3. Any such funds furnished by Company which are not

- expended by County for such purposes shall be promptly refunded to Company.
- (e) Company reserves the right to set forth special terms and conditions in connection with its provision of funds under Section 2.4.
- 2.5 The funds provided to County under this Agreement are intended to augment emergency preparedness activities and are not a substitute for current or past County budget expenses allocated for local emergency preparedness agencies. These funds shall not affect present or future County budget requirements normally allocated for local emergency preparedness activities.

# 3. RESPONSIBILITIES OF COMPANY.

- 3.1 For the first Contract Year this Agreement is in effect, Company shall place on deposit with County the total amount reflected in Exhibit A attached hereto and made a part hereof, such deposit to be made in four (4) equal quarterly payments. Each quarter of the second and subsequent Contract Years of this Agreement, Company shall place on deposit with County an amount equal to one-fourth of: (1) the previous Contract Year's deposit for salary, adjusted by a percentage equal to twelve (12) month Bureau of Labor Statistics Consumer Price Index for all urban consumers; plus (2) the total amount of items other than salary specified on Exhibit A. Such monies shall be transferred to the budget of County solely for use in REP activities as specified in Exhibit A. Acceptance of such monies constitutes County's ratification of this Agreement. Unexpended monies shall accrue in each Exhibit A category from Contract Year to Contract Year.
- 3.2 Upon receiving all necessary information from County concerning a request for supplemental funds for nonrecurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment, Company shall within a reasonable time evaluate and submit to County a written response to such request.

# 4. USE OF EQUIPMENT

4.1 Any equipment purchased with supplemental funds furnished hereunder shall be used in support of REP maintenance activities and REP emergency operations. Upon request, Company, in its sole discretion, may approve in writing the use by County of such equipment for purposes other than REP support provided that County ensures that such use does not interfere with the timely availability of the equipment for REP support and does not expose the equipment to unusual or excessive wear and tear. County agrees to promptly report and replace or repair at no expense to Company any such equipment that is damaged or lost during, or as the result of, such other use.

- 4.2 County shall be responsible for maintaining any equipment purchased with funds furnished hereunder in good working order at all times.
- 4.3 In the event this Agreement is terminated for any reason, County shall, with respect to any equipment purchased hereunder that has a remaining useful life at the time of termination, continue to use such equipment in support of REP maintenance activities and REP emergency operations and comply with the provisions of Paragraphs 4.1 and 4.2 above for the remaining useful life of such equipment.

# 5. DISCLAIMER

Company makes no warranties or representations whatsoever, either express or implied, to County or to any third party as to the condition, safety, reliability or adaptability of any equipment to be purchased in part with funds provided under this Agreement, for use in County's emergency management activities, as Company's participation in each project is limited solely to the contribution of funds hereunder. The parties agree that Company shall have no control over, or authority, responsibility or liability for, the procurement, use or operation of any such equipment.

# 6. RELATIONSHIP OF PARTIES

No person performing services under this Agreement (other than a person directly employed by Company) shall be considered as an agent or employee of Company unless specifically designated by Company in writing as an agent. Company assumes no liability to County, or agency thereof, or to any third party for damages to property, both real and personal, or personal injury (including death) which might arise out of or be in any way connected with any act or omission on the part of any person not directly employed by Company or designated by Company in writing as an agent in connection with service performed under this Agreement. In no event shall this Agreement be construed to confer any benefits or rights or any parties other than any affiliate of this Company that owns or operates the Vogtle Electric Generating Plant.

# 7. RECORDS.

County agrees to receive and manage, in accordance with generally accepted accounting procedures, the funds advanced by Company under this Agreement. A separate funding account, in county accounting records, shall be maintained for the receipt and disbursement of such funds.

# 8. ASSIGNMENT.

Company shall have the right to assign this Agreement to any affiliate or subsidiary of Company upon written notice to County.

# 9. AUDIT RIGHTS.

Company (or its designated representatives) shall have the right to examine and audit all books, records, vouchers, and accounts of County that pertain to the receipt, disbursement, and use of the sums advanced pursuant to this Agreement. Any such examination or audits shall be conducted during regular business hours and, to the extent possible, with reasonable advance notice.

# 10. TERMINATION AND MODIFICATION.

10.1 Company may terminate this Agreement upon written notice to County in the event: (1) of a change in the applicable federal, state or local laws or regulations which authorizes or provides for alternative funding for the purposes set forth herein; (2) Vogtle Electric Generating Plant ceases operation or (3) the direct supervision of County's emergency management agency is transferred or delegated from the Allendale County Council to another agency. In the event of termination under this Section 10, County shall refund to Company within sixty (60) days of such termination all of the funds furnished hereunder which are unexpended and unobligated as of the date the notice of termination was given by Company.

10.2 In the event of significant change in FEMA or NRC REP requirements, County and Company shall review the impact of any such change upon this Agreement and shall mutually determine, on the basis of such review, what course of action, if any, the parties shall take with respect to this Agreement. In the event of a drastic and sudden increase in the inflation rate or in any of the non-salary categories listed on Exhibit A, which change would, if Exhibit A were not revised, cause financial hardship to County, Company and County agree to review Exhibit A and, if they are in agreement that modifications are warranted, to make appropriate modifications thereto. Notwithstanding any other provision hereof, nothing in this Agreement shall require Company to enter into a modification of the Agreement or Exhibit A unless Company, in its sole discretion, elects to do so.

# 11. ADMINISTRATION OF THIS AGREEMENT.

In all matters relating to this Agreement, Company's Vice President or his designee shall act for Company, and the Chairman, Allendale County Council or his designee shall act for County.

# 12. WAIVER OF BREACH.

The waiver by Company of a breach of any provision of this Agreement by County shall not operate or be construed as a waiver of any other or subsequent breach by County.

#### 13. ENTIRE AGREEMENT.

This instrument contains the entire Agreement and understanding between the parties and there are no oral understandings, terms or conditions not herein recited. No party has relied upon any representation, either expressed or implied, not contained in this Agreement. All prior understandings, terms and conditions relating to requests by County for funding relating to the maintenance of REPs are deemed to be merged in this instrument, and the same may not be changed or supplemented orally.

#### 14. GOVERNING LAW.

This Agreement shall be construed and enforced in accordance with the Laws of the State of South Carolina.

#### 15. SEVERABILITY.

The unenforceability or invalidity of any particular provision of this Agreement shall not affect its other provision, and to the extent necessary to give such other provisions effect, they shall be deemed severable.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized representatives of the date first above written.

GEORGIA POWER COMPANY

ALLENDALE COUNTY, SOUTH CAROLINA

Vice President - Nuglear

Vogtle Project

# AGREEMENT BETWEEN SOUTHERN NUCLEAR OPERATING COMPANY, INC. AND BARNWELL COUNTY, SOUTH CAROLINA

THIS AGREEMENT, made and entered into as of the 10th day of JUNE, 1999, by and between Southern Nuclear Operating Company, Inc. ("Company"), a Delaware Corporation having its principal place of business in Birmingham, Alabama, and Barnwell County, South Carolina ("County").

# WITNESSETH:

WHEREAS, Georgia Power Company has constructed for the purpose of generating electric current, and is the owner of, Units 1 and 2 of the Vogtle Electric Generating Plant, federally licensed nuclear facilities located in Burke County, Georgia; and

WHEREAS, Company is the exclusive licensed operator of and is currently operating Vogtle Electric Generating Plant; and

WHEREAS, advance planning is necessary to assure that the health and safety of the public will be protected in the unlikely event of a radiological emergency associated with the operation of said nuclear plant; and

WHEREAS, Company has developed a Vogtle Electric Generating Plant Emergency Plan so that in the unlikely event of a radiological emergency, appropriate federal, state and local government officials are notified and appropriate monitoring and onsite measures are taken to protect the public; and

WHEREAS, County is responsible for the health, safety, security and welfare of its citizens; and

WHEREAS, local governments have the responsibility to develop and maintain effective response capability to support emergency actions; and

WHEREAS, County has the overall responsibility for emergency preparedness and local response in County concerning an incident at Vogtle Electric Generating Plant; and

WHEREAS, County is responsible for coordinating and for submitting to the South Carolina Emergency Preparedness Division ("SCEPD") changes to the Radiological Emergency Plan ("REP") for County and for annually certifying REP currentness to GEMA; and

WHEREAS, the Federal Emergency Management Agency ("FEMA") has been designated by the President to take the lead in offsite radiological emergency planning and response and to review and assess state and local plans for adequacy; and

WHEREAS, the Nuclear Regulatory Commission ("NRC") will review the FEMA findings and determinations on the adequacy and capability of implementation of state and local plans and make decisions with regard to the overall (onsite and offsite) state of emergency preparedness; and

WHEREAS, NRC has adopted a regulation requiring that REPs meeting the FEMA-NRC criteria of NUREG-0654/FEMA REP-1 be implemented and maintained; and

WHEREAS, County has prepared a REP for radiological emergencies associated with the operation of Vogtle Electric Generating Plant; and

WHEREAS, maintaining the Vogtle Electric Generating Plant REP in accordance with the FEMA-NRC criteria and participating in exercises as required by NRC and FEMA regulations requires resources which results in costs (hereinafter referred to as "incremental costs") above and beyond those which would be required and incurred by County solely to meet its statutory duties to protect public health and safety; and

WHEREAS, Georgia Power Company, in order properly to fulfill its statutorily mandated duty to make adequate electric service available for the people of the State of Georgia and to provide for the continued operation of Vogtle Electric Generating Plant, and solely to achieve this goal, has previously provided County with some of the funds necessary to meet the incremental cost of implementing a REP which sufficiently complies with the applicable regulations and related guidelines of the NRC so as to avoid an ordered shutdown of these units; and

WHEREAS, the State and local governments have completed development and implementation of a REP but must continue to maintain the REP current and periodically participate in REP exercises and drills to sufficiently comply with the applicable regulations and guidelines related thereto, for FEMA and the NRC; and

WHEREAS, Company recognizes that County now utilizes the services of a full time Director of Emergency Services and supporting staff, and

WHEREAS, Company has agreed to pay to County the funds specified herein which shall constitute Company's total responsibility for the incremental costs incurred by County in performing the obligations hereunder; and

WHEREAS, the Department of Energy, Savannah River Site, utilizes County Emergency Preparedness resources and provides the County with some REP related funding; and

WHEREAS, the parties desire to terminate the Agreement Between Georgia Power Company, and Barnwell County, South Carolina, dated as of June 28, 1993, as assigned to Southern Nuclear, and to substitute this new superseding Agreement which shall provide sufficient funds for meeting the incremental costs associated with maintaining the REP for the Vogtle Electric Generating Plant to comply sufficiently with applicable regulations and related guidelines of FEMA and the NRC;

NOW, THEREFORE, in consideration of the foregoing premises and mutual covenants hereinafter set forth, the parties agree as follows:

# 1. TERM

This Agreement shall be for a term of four (4) Contract Years from July 1, 1999 and thereafter shall automatically renew for successive terms of one (1) Contract Year unless terminated by either party by giving written notice to the other party at least thirty (30) days prior to the then-current term. Each Contract Year shall commence on July 1 and shall end on June 30 of the succeeding year. In the event of cancellation, County shall refund to the Company all unobligated and unexpended funds at the end of the then-current term.

# 2. RESPONSIBILITIES OF COUNTY

- 2.1 County shall maintain, coordinating with SCEPD and appropriate agencies and political subdivisions, County REPs (offsite contingency plans) for the Vogtle Electric Generating Plant in accordance with criteria established by FEMA and the NRC. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including without limitation, staffing, planning, coordination with local governments, administration, and logistical support.
- 2.2 Each County agency shall participate as required by NRC and FEMA regulations in annual Vogtle Electric Generating Plant emergency exercises sufficiently to maintain FEMA approval of the county and state Vogtle Electric Generating Plant site specific REP. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including without limitation, staffing, planning, coordination with local governments, administration, and logistical support.
- 2.3 County shall utilize the funds provided by Company to meet the incremental costs described in Exhibit A hereto. Unexpended monies shall accrue in each Exhibit A category from Contract Year to Contract Year. None of the funds provided by Company to County hereunder may be utilized to pay all or any part of the salary of an elected official.
- 2.4 (a) If, during any Contract Year that this Agreement is in effect, County determines that it is necessary to request one-time additional funding for non-recurring exceptional needs necessary for REP program maintenance or for the purchase of additional equipment which will be used to suppost REP maintenance activities and REP emergency operations, County shall submit to Company a written request for such funds.
  - (b) Each such written request shall clearly and in detail (1) describe the purpose for which the requested funds will be used, (2) state the amount of funds that will be used, (3) state the total cost of the equipment to be purchased, (4) describe the reason such undertaking or equipment is necessary for maintaining REP activities and REP emergency operations, (5) state the source and amount of any other funds to be used for the equipment, and (6) state County's timetable for committing its own funding, if any.
  - (c) To enable Company to thoroughly evaluate such written request, County shall furnish to the Company such additional substantiating documentation and information concerning the use of the requested funds as Company may request.
  - (d) All funds provided to County under Section 2.4 shall be used strictly for the purposes stated in the request for funds submitted pursuant to Section 2.4.(a) above and in Section 2.3. Any such funds furnished by Company which are not expended by County for such purposes shall be promptly refunded to Company.
  - (e) Company reserves the right to set forth special terms and conditions in connection with its provision of funds under Section 2.4.

- 2.5 The funds provided to County under this Agreement are intended to augment emergency preparedness activities and are not a substitute for current or past budget expenses allocated for local emergency preparedness agencies. These funds shall not affect present or future budget requirements normally allocated for local emergency preparedness activities.
- 2.6 All unexpended and unobligated funds previously provided under the Agreement Between Southern Nuclear Operating Company, Inc., and Barnwell County, South Carolina, dated as of June 28, 1993, as assigned to Southern Nuclear, shall be refunded by County to the Company.

# 3. RESPONSIBILITIES OF COMPANY

- 3.1 For the first Contract Year this Agreement is in effect, Company shall place on deposit with County the total amount reflected in Exhibit A attached hereto and made a part hereof, such deposit to be made in four (4) equal quarterly payments. Such monies shall be transferred to the budget of County solely for use in REP activities as specified in Exhibit A. Acceptance of such monies constitutes County's ratification of this Agreement. Unexpended monies shall accrue in each Exhibit A category from Contract Year to Contract Year.
- 3.2 Upon receiving all necessary information from County concerning a request for supplemental funds for nonrecurring exceptional needs necessary for REP program maintenance or for the purchase of additional equipment, Company shall within a reasonable time evaluate and submit to County a written response to such request.

# 4. USE OF EQUIPMENT

- Any equipment purchased with supplemental funds furnished hereunder shall be used in support of REP maintenance activities and REP emergency operations. Upon request, Company in its sole discretion, may approve in writing the use by County of such equipment for purposes other than REP support provided that County ensures that such use does not interfere with the timely availability of the equipment for REP support and does not expose the equipment to unusual or excessive wear and tear. County agrees to promptly report and replace or repair at no expense to Company any such equipment that is damaged or lost during, or as the result of, such other use.
- 4.2 County shall be responsible for maintaining any equipment purchased with funds furnished hereunder in good working order at all times.
- 4.3 In the event this Agreement is terminated for any reason, County shall, with respect to any equipment purchased hereunder that has a remaining useful life at the time of termination, continue to use such equipment in support of REP maintenance activities and REP emergency operations and comply with the provisions of Paragraphs 4.1 and 4.2 above for the remaining useful life of such equipment.

# 5. DISCLAIMER

Company makes no warranties or representations whatsoever, either express or implied, to County or to any third party as to the condition, safety, reliability or adaptability of any equipment to be purchased in whole or in part with funds provided under this Agreement, for use in County's emergency management activities, as Company's participation in each project is limited solely to the contribution of funds

hereunder. The parties agree that Company shall have no control over, or authority, responsibility, or liability for, the procurement, use or operation of any such equipment.

# 6. RELATIONSHIP OF PARTIES

No person performing services under this Agreement (other than a person directly employed by Company) shall be considered as an agent or employee of Company unless specifically designated by Company in writing as an agent. Company assumes no liability to County, or agency thereof, or to any third party for damages to property, both real and personal, or personal injury (including death) which might arise out of or be in any way connected with any act or omission on the part of any person not directly employed by Company or designated by Company in writing as an agent in connection with service performed under this Agreement. In no event shall this Agreement be construed to confer any benefits or rights or any parties other than any affiliate of this Company that owns or operates the Vogtle Electric Generating Plant.

# 7. RECORDS

County agrees to receive and manage, in accordance with generally accepted accounting procedures, the funds advanced by Company under this Agreement. A separate funding account, in county accounting records, shall be maintained for the receipt and disbursement of such funds.

# 8. ASSIGNMENT

Company shall have the right to assign this Agreement to any affiliate or subsidiary of Company upon written notice to County.

# 9. AUDIT RIGHTS

Company (or its designated representatives) shall have the right to examine and audit all books, records, vouchers, and accounts of County that pertain to the receipt, disbursement, and use of the sums advanced pursuant to this Agreement. Any such examination or audits shall be conducted during regular business hours and, to the extent possible, with reasonable advance notice.

## 10. TERMINATION AND MODIFICATION

- 10.1 Company may terminate this Agreement upon written notice to County in the event: (1) of a change in the applicable federal, state or local laws or regulations which authorizes or provides for alternative funding for the purposes set forth herein; (2) Vogtle Electric Generating Plant ceases operation or (3) the direct supervision of County's emergency management agency is transferred or delegated from the Barnwell County Council to another agency. In the event of termination under this Section 10., County shall refund to Company within sixty (60) days of such termination all of the funds furnished hereunder which are unexpended and unobligated as of the date the notice of termination was given by Company.
- 10.2 In the event of significant change in FEMA or NRC REP requirements, County and Company shall review the impact of any such change upon this Agreement and shall mutually determine, on the basis of such review, what course of action, if any, the parties shall take with respect to this Agreement. In the event of a drastic and sudden increase in the inflation rate or in any of the non-salary categories

listed on Exhibit A, which change would, if Exhibit A were not revised, cause financial hardship to County, Company and County agree to review Exhibit A and, if they are in agreement that modifications are warranted, to make appropriate modifications thereto. Notwithstanding any other provision hereof, nothing in this Agreement shall require Company to enter into a modification of the Agreement or Exhibit A unless Company, in its sole discretion, elects to do so.

## 11. ADMINISTRATION OF THIS AGREEMENT

In all matters relating to this Agreement, Company's Vice President or his designee shall act for Company, and the Chairman, Barnwell County Council or his designee shall act for County.

# 12. WAIVER OF BREACH

The waiver by Company of a breach of any provision of this Agreement by County shall not operate or be construed as a waiver of any other or subsequent breach by County.

## 13. ENTIRE AGREEMENT

This instrument contains the entire Agreement and understanding between the parties and there are no oral understandings, terms or conditions not herein recited. No party has relied upon any representation, either expressed or implied, not contained in this Agreement. All prior understandings, terms and conditions relating to requests by County for funding relating to the maintenance of REPs are deemed to be merged in this instrument, and the same may not be changed or supplemented orally.

## 14. GOVERNING LAW

This Agreement shall be construed and enforced in accordance with the laws of the State of South Carolina.

# 15. SEVERABILITY

The unenforceability or invalidity of any particular provision of this Agreement shall not affect its other provision, and to the extent necessary to give such other provisions effect, they shall be deemed severable.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized representatives of the date first above written.

SOUTHERN NUCLEAR OPERATING COMPANY

Witness

By: Vice President - Nuckar

BARNWELL COUNTY, SOUTH CAROLINA

Verger R. askley

Chairman, Barnwell County Council

# AGREENENT BETWEEN GEORGIA POWER COMPANY AND BURKE COUNTY. GEORGIA

THIS AGREEMENT, made and entered into as of the 24 day of MARCH
1993, by and between Georgia Power Company ("Company"), a Georgia corporation having its principal place of business in Atlanta, Georgia, and Burke County, Georgia ("County").

# WITNESSETH:

WHEREAS, Company has constructed, is the owner of, is the licensed operator of, and is currently operating, for the purpose of generating electric current. Units 1 and 2 of the Vogtle Electric Generating Plant, federally licensed nuclear facilities located in Burke County, Georgia and

WHEREAS, advance planning is necessary to assure that the health and safety of the public will be protected in the unlikely event of a radiological emergency associated with the operation of said nuclear plant; and

WHEREAS, Company has developed a Vogtle Electric Generating Plant Emergency Plan so that in the unlikely event of an emergency, appropriate federal, state and local government officials are notified and appropriate monitoring and onsite measures are taken to protect the public; and

WHEREAS, County is responsible for the health, safety, security and welfare of its citizens; and

WHEREAS, local governments have the responsibility to develop and maintain effective response capability to support emergency actions; and

WHEREAS, County has the overall responsibility for emergency preparedness and local response in County concerning an incident at Vogtle Electric Generating Plant; and

WHEREAS, County is responsible for coordinating and for submitting to Georgia Emergency Management Agency ("GEMA") changes to the Radiological Emergency Plan ("REP") for County and for annually certifying REP currentness to GEMA: and

WHEREAS, the Federal Emergency Management Agency ("FEMA") has been designated by the President to take the lead in offsite radiological emergency planning and response and to review and assess state and local plans for adequacy; and

WHEREAS, the Nuclear Regulatory Commission ("NRC") will review the FEMA findings and determinations on the adequacy and capability of implementation of state and local plans and make decisions with regard to the overall (onsite and offsite) state of emergency preparedness; and

WHEREAS, NRC has adopted a regulation requiring that REPs meeting the FEMA-NRC criteria of NUREG-0654/FEMA REP-1 be implemented and maintained; and

WHEREAS, County has prepared a REP for radiological emergencies associated with the operation of Vogtle Electric Generating Plant; and

WHEREAS, maintaining the Vogtle Electric Generating Plant REP in accordance with the FEMA-NRC criteria and participating in exercises as required by NRC and FEMA regulations requires resources and results in costs (hereinafter referred to as "incremental costs") above and beyond those which would be required and incurred by County solely to meet its statutory duties to protect public health and safety; and

WHEREAS, Company, in order properly to fulfill its statutorily mandated duty to make adequate electric service available for the people of the State of Georgia and to provide for the continued operation of Vogtle Electric Generating Plant, and solely to achieve this goal, has previously provided County with some of the funds necessary to meet the incremental cost of implementing a REP which sufficiently complies with the applicable regulations and related guidelines of the NRC so as to avoid an ordered shutdown of these units; and

WHEREAS, the State and local governments have completed development and implementation of a REP but must continue to maintain the REP current and periodically participate in REP exercises and drills to sufficiently comply with the applicable regulations and guidelines related thereto, for FEMA and the NRC; and

WHEREAS, Company has agreed to pay to County the funds specified herein which shall constitute Company's total responsibility for the incremental cost incurred by County in performing the obligations hereunder; and

WHEREAS, the Department of Energy, Savannah River Site utilizes County Emergency Preparedness resources and provides the County with some REP related funding; and

WHEREAS, the parties desire to terminate REP funding provided under the Agreement Between Georgia Power Company and County dated as of August 12, 1986, as amended, and to substitute funding under this new Agreement which shall provide sufficient funds for meeting the incremental costs associated with maintaining the REP for the Vogtle Electric Generating Plant to comply sufficiently with applicable regulations and related guidelines of FEMA and the NRC;

NOW, THEREFORE, in consideration of the foregoing premises and mutual covenants hereinafter set forth, the parties agree as follows:

1. <u>TERM</u>. This Agreement shall be for a term of four (4) Contract Years from July 1, 1993 and thereafter shall automatically renew for successive terms of one (1) Contract Year unless terminated by either party by giving written notice to the other party at least thirty (30) days prior to the then-current term. Each Contract Year shall commence on July 1 and shall end on June 30 of the succeeding year.

# 2. RESPONSIBILITIES OF COUNTY.

- 2.1 County shall maintain, coordinating with GEMA and appropriate agencies and political subdivisions, County REPs (offsite contingency plans) for the Vogtle Electric Generating Plant in accordance with criteria established by FEMA and the NRC. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including staffing, planning, coordination with local government, administration, equipment maintenance and replacement and logistical support.
- 2.2 Each County agency shall participate as required by NRC and FEMA regulations in annual Vogtle Electric Generating Plant Emergency exercises sufficiently to maintain FEMA approval of the county and state Vogtle Electric Generating Plant site specific REP. In performing this task, County shall be responsible for assuring the performance of all necessary related County activities, including staffing, planning, coordination with local governments, administration, and logistical support.
- 2.3. County shall utilize the funds provided by Company to meet the incremental costs described in Exhibit A hereto. Provided, however, that none of the funds provided by Company to County hereunder may be utilized to pay all or any part of the salary of an elected official that do not relate to REP activities.
- 2.4. (a) If, during any Contract Year that this Agreement is in effect, County determines that it is necessary to request one-time additional funding for non-recurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment which will be used to support REP maintenance activities and REP emergency operations, County shall submit to Company a written request for such funds.
  - (b) Each such written request shall clearly and in detail (1) describe the purpose for which the requested funds will be used, (2) state the amount of funds requested, (3) state the total cost of the project to be undertaken or the equipment to be purchased, (4) describe the reason such undertaking or equipment is necessary for maintaining REP activities and REP emergency operations, (5) other sources and amounts of funds, if any, and (6) state its time table for committing its own funds if any.
  - (c) To enable Company to thoroughly evaluate such written request, County shall furnish to the Company such additional substantiating documentation and information concerning the use of the requested funds as Company may request.
  - (d) All funds provided to County under Section 2.4 shall be used strictly for the purposes stated in the request for funds

submitted pursuant to Section 2.4.(a) above and in Section 2.3. Any such funds furnished by Company which are not expended by County for such purposes shall be promptly refunded to Company.

- (e) Company reserves the right to set forth special terms and conditions in connection with its provision of funds under Section 2.4.
- 2.5 The funds provided to County under this Agreement are intended to augment emergency preparedness activities and are not a substitute for current or past County budget expenses allocated for local emergency preparedness agencies. These funds shall not affect present or future County budget requirements normally allocated for local emergency preparedness activities.

# 3. RESPONSIBILITIES OF COMPANY.

- 3.1 For the first Contract Year this Agreement is in effect, Company shall place on deposit with County the total amount reflected in Exhibit A attached hereto and made a part hereof, such deposit to be made in four (4) equal quarterly payments. Each quarter of the second and subsequent Contract Years of this Agreement, Company shall place on deposit with County an amount equal to one-fourth of: (1) the previous Contract Year's deposit for salary, adjusted by a percentage equal to twelve (12) month Bureau of Labor Statistics Consumer Price Index for all urban consumers; plus (2) the total amount of items other than salary specified on Exhibit A. Such monies shall be transferred to the budget of County solely for use in REP activities as specified in Exhibit A. Acceptance of such monies constitutes County's ratification of this Agreement. Unexpended monies shall accrue in each Exhibit A category from Contract Year to Contract Year.
- 3.2 Upon receiving all necessary information from County concerning a request for supplemental funds for nonrecurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment, Company shall within a reasonable time evaluate and submit to County a written response to such request.

# 4. USE OF EQUIPMENT

4.1 Any equipment purchased with supplemental funds furnished hereunder shall be used in support of REP maintenance activities and REP emergency operations. Upon request, Company, in its sole discretion, may approve in writing the use by County of such equipment for purposes other than REP support provided that County ensures that such use does not interfere with the timely availability of the equipment for REP support and does not expose the equipment to unusual or excessive wear and tear. County agrees to promptly report and replace or repair at no expense to Company any such equipment that is damaged or lost during, or as the result of, such other use.

- 4.2 County shall be responsible for maintaining any equipment purchased with funds furnished hereunder in good working order at all times.
- 4.3 In the event this Agreement is terminated for any reason, County shall, with respect to any equipment purchased hereunder that has a remaining useful life at the time of termination, continue to use such equipment in support of REP maintenance activities and REP emergency operations and comply with the provisions of Paragraphs 4.1 and 4.2 above for the remaining useful life of such equipment.

# 5. DISCLAIMER

Company makes no warranties or representations whatsoever, either express or implied, to County or to any third party as to the condition, safety, reliability or adaptability of any equipment to be purchased in part with funds provided under this Agreement, for use in County's emergency management activities, as Company's participation in each project is limited solely to the contribution of funds hereunder. The parties agree that Company shall have no control over, or authority, responsibility or liability for, the procurement, use or operation of any such equipment.

# 6. RELATIONSHIP OF PARTIES

No person performing services under this Agreement (other than a person directly employed by Company) shall be considered as an agent or employee of Company unless specifically designated by Company in writing as an agent. Company assumes no liability to County, or agency thereof, or to any third party for damages to property, both real and personal, or personal injury (including death) which might arise out of or be in any way connected with any act or omission on the part of any person not directly employed by Company or designated by Company in writing as an agent in connection with service performed under this Agreement. In no event shall this Agreement be construed to confer any benefits or rights or any parties other than any affiliate of this Company that owns or operates the Vogtle Electric Generating Plant.

# 7. RECORDS.

County agrees to receive and manage, in accordance with generally accepted accounting procedures, the funds advanced by Company under this Agreement. A separate funding account, in county accounting records, shall be maintained for the receipt and disbursement of such funds.

# 8. ASSIGNMENT.

Company shall have the right to assign this Agreement to any affiliate or subsidiary of Company upon written notice to County.

# 9. <u>AUDIT RIGHTS</u>.

Company (or its designated representatives) shall have the right to

examine and audit all books, records, vouchers, and accounts of County that pertain to the receipt, disbursement, and use of the sums advanced pursuant to this Agreement. Any such examination or audits shall be conducted during regular business hours and, to the extent possible, with reasonable advance notice.

# 10. TERMINATION AND MODIFICATION.

10.1 Company may terminate this Agreement upon written notice to County in the event: (1) of a change in the applicable federal, state or local laws or regulations which authorizes or provides for alternative funding for the purposes set forth herein; (2) Vogtle Electric Generating Plant ceases operation or (3) the direct supervision of County's emergency management agency is transferred or delegated from the Burke County Commission to another agency or individual. In the event of termination under this Section 10, County shall refund to Company within sixty (60) days of such termination all of the funds furnished hereunder which are unexpended and unobligated as of the date the notice of termination was given by Company.

10.2 In the event of significant change in FEMA or NRC REP requirements, County and Company shall review the impact of any such change upon this Agreement and shall mutually determine, on the basis of such review, what course of action, if any, the parties shall take with respect to this Agreement. In the event of a drastic and sudden increase in the inflation rate or in any of the non-salary categories listed on Exhibit A, which change would, if Exhibit A were not revised, cause financial hardship to County, Company and County agree to review Exhibit A and, if they are in agreement that modifications are warranted, to make appropriate modifications thereto. Notwithstanding any other provision hereof, nothing in this Agreement shall require Company to enter into a modification of the Agreement or Exhibit A unless Company, in its sole discretion, elects to do so.

# 11. ADMINISTRATION OF THIS AGREEMENT.

In all matters relating to this Agreement, Company's Vice President or his designee shall act for Company, and the Chairman, Burke County Commission or his designee shall act for County.

# 12. WAIVER OF BREACH.

The waiver by Company of a breach of any provision of this Agreement by County shall not operate or be construed as a waiver of any other or subsequent breach by County.

# 13. ENTIRE AGREEMENT.

This instrument contains the entire Agreement and understanding between the parties and there are no oral understandings, terms or conditions not herein recited. No party has relied upon any representation, either expressed or implied, not contained in this Agreement. All prior understandings, terms and conditions relating to requests by County for funding relating to the maintenance of REPs are deemed to be merged in this instrument, and the same may not be changed or supplemented orally.

# 14. GOVERNING LAW.

This Agreement shall be construed and enforced in accordance with the Laws of the State of Georgia.

# 15. <u>SEVERABILITY</u>.

The unenforceability or invalidity of any particular provision of this Agreement shall not affect its other provision, and to the extent necessary to give such other provisions effect, they shall be deemed severable.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized representatives of the date first above written.

GEORGIA POWER COMPANY

BURKE COUNTY, GEORGIA

By: C.K. Vice President - Nuclear Vogtle Project

Witness: Mary M. Bertley

By: Clay Softer County Commission

Witness

# GRANT AGREEMENT BETWEEN GEORGIA POWER COMPANY AND GEORGIA EMERGENCY MANAGEMENT AGENCY

THIS AGREEMENT, effective the day of J., 1996, by and between Georgia Power Company, a Georgia corporation having its principal place of business in Atlanta, Georgia (the "Company"), and the Georgia Emergency Management Agency ("GEMA"), supersedes the prior agreement between Georgia Power Company and GEMA dated May 29, 1984 and effective June 1, 1984 (the "Prior Agreement").

# WITNESSETH:

WHEREAS, the Company has constructed, for the purpose of generating electric current, the Edwin I. Hatch Nuclear Plant ("Plant Hatch"), a federally licensed nuclear facility located in Appling County, Georgia, and Vogtle Electric Generating Plant ("Plant Vogtle"), a federally licensed facility located in Burke County, Georgia; and

WHEREAS, the Company has implemented radiological emergency plans ("REPs") to assure that, in the unlikely event of a radiological emergency associated with the operation of Plants Hatch or Vogtle appropriate federal, state and local government officials are notified and appropriate monitoring and on-site measures are taken to protect the public; and

WHEREAS, the State of Georgia is responsible for the health, safety, security and welfare of its citizens and has by law mandated the development of emergency response plans and capabilities at each level of government for dealing with natural or man-made disasters, including, but not limited to, radiological emergencies associated with the operation of fixed nuclear facilities; and

WHEREAS, GEMA, in coordination with other State agencies, has developed the Georgia Radiological Emergency Response Plan, and is required to maintain the currency of that plan; and

WHEREAS, the Federal Emergency Management Agency ("FEMA") has been designated by the President of the United States to take the lead in off-site radiological emergency planning and response, and to review and assess State and local emergency plans for adequacy; and

WHEREAS, the NRC will review the FEMA findings and determinations on the adequacy and capability of implementation of state and local plans, and make decisions with regard to overall on-site and off-site state of emergency preparedness; and

WHEREAS, the NRC has adopted a regulation requiring that REPs meeting the FEMA-NRC criteria of NUREG-0654/FEMA-REP-1 be implemented and maintained; and

WHEREAS, the NRC and FEMA have established certain planning standards and require certain demonstrations of emergency planning capability in the form of written plans and periodic drills and exercises; and

WHEREAS, the Company, in order to fulfill properly the statutorily mandated duty to make adequate electric service available for the people of the State of Georgia through the continued operation of Plants Hatch and Vogtle, and solely to achieve this goal, has previously provided the State of Georgia with some of the funds necessary to meet the costs of maintaining a REP which sufficiently complies with the applicable regulations and relevant guidelines of the NRC and FEMA so as to avoid an ordered shutdown of these essential units; and

WHEREAS, Southern Nuclear Operating Company ("SNC") has implemented a REP for the Plant Farley emergency planning zone a portion of which is located in the State of Georgia, and also contributes some of the funds to GEMA necessary to meet the cost of maintaining a REP, and

WHEREAS, the U.S. Department of Energy ("DOE") has implemented a REP for the portion of the Savannah River Site ("SRS") emergency planning zone located within the State of Georgia, and also contributes funds to GEMA necessary to meet the costs of maintaining a REP; and

WHEREAS, GEMA and the Company have agreed that the Company shall be required to provide only the funding delineated in this Agreement as its share of the total funds required to maintain the State of Georgia REP; and

WHEREAS, DOE funding is contingent upon annual renewal of the GEMA-DOE Agreement through Georgia Fiscal Year 1997; and

WHEREAS, GEMA is designated by executive order as the State Emergency Coordinating Agency and the Governor of the State of Georgia, by letter dated September 21, 1984, has delegated to the Director of GEMA the authority to enter into this Agreement and accept the following offer of funds for emergency management in those areas of the State of Georgia affected by the operation of private nuclear power plants; and

WHEREAS, in order to assure the continued operation of Plants Hatch and Vogtle, the Company entered into the Prior Agreement for the purpose of providing GEMA with the funds necessary to meet the cost of maintaining the State of Georgia REP, and the Company and GEMA agree that this Agreement shall supersede the Prior Agreement;

NOW, THEREFORE, in consideration of the foregoing premises and subject to the terms and conditions set forth hereinafter, the parties agree as follows:

# A. OBLIGATIONS OF THE PARTIES

- 1. GEMA will continue to update, modify and develop the Georgia REP as necessary to provide direct support and resources required to accomplish fixed nuclear facility emergency planning with respect to Plants Hatch and Vogtle. Such continuing work by GEMA will include developing and conducting periodic exercises and drills designed to evaluate emergency response capabilities and to develop and maintain individual skills as required by and consistent with applicable state and federal guidelines and regulations.
- 2. The Company will provide some of the funding to defray expenses which are incurred by the State government for activities, training, facilities and equipment associated with maintenance of the Georgia REP for Plants Hatch and Vogtle, that comply with FEMA-NRC requirements and guidelines and which are specifically approved by the Company. Such funding shall be calculated on a yearly basis beginning July 1, 1996. A condition of receiving funding shall be that on or before April 1 of each year, GEMA shall submit to the Company any proposed adjustments, together with an appropriate itemization of each such adjustment, to the base funding level established in Exhibit 1, attached hereto ("Base Level Funding"), to reflect:
  - (a) Changes in personnel salary costs, across-the-board or merit, for personnel whose salaries are funded, fully or in part under this Agreement; provided, however, that this adjustment shall only recognize such changes in the same proportion that each such person's salary is already funded under this Agreement;
  - (b) Additional costs to be incurred during the fiscal year (July 1 through June 30) following the date of renewal, which costs are associated with participation by GEMA at the Company's request in Plants Hatch and Vogtle emergency exercises.

The proposed adjustments under (a) and (b) shall be reviewed by the Company and either accepted or rejected by June 1 of each year, with the obligation to fund such adjustments to be expressly subject to and conditioned upon the Company's approval thereof. Except as otherwise provided in this Agreement, unexpended funds for any itemized expense which arise from payments by the Company shall be refunded to the Company.

- 3. In the event DOE ceases providing to the State of Georgia funding for the costs of maintaining a REP, and the State of Georgia ceases all REP activities conducted in support of SRS, REP funding will revert to "without SRS" as identified in Exhibit 2, subject to adjustments as delineated in Paragraph 2 for prior contract years; provided, however, that no Company funds or resources will be used to benefit SRS REP planning or activities.
- 4. The Director of GEMA shall receive funds advanced for exercise and practice exercise costs ("exercise funds"), as provided by the Company. Within ninety (90) days following the completion of exercises conducted after execution of this Agreement, the Direct of GEMA shall

provide to the Company, in such detail as the Company may require, a statement of expenditures (itemized to indicate transportation, per diem, meal and supplies expenses) and return any unexpended and unobligated funds to the Company. Transportation, per diem, meal and supplies costs will be based on actual charges to GEMA accounts for the conducting of exercises and associated practice exercises.

- 5. The Company shall advance one-fourth of the base funding to GEMA not less than thirty (30) days prior to the beginning of each quarter of the fiscal year. Funding for emergency exercise costs shall be advanced on a schedule to be mutually established by GEMA and the Company.
- 6. GEMA shall be responsible for entering into the appropriate agreements with, and for distribution of the funds provided by the Company for, other State agencies, and shall be responsible for the appropriate accounting for such amounts.
- 7. The funding provided under this Agreement is for the purpose of providing financial support to GEMA and other State of Georgia agencies in order that they may carry out their responsibilities under this Agreement, including:
  - (a) Providing radiological emergency response planning, training, development and maintenance of the REP and related procedures for Plants Hatch and Vogtle, which affect or impact upon Georgia counties;
  - (b) Participating, as required, in the implementation of radiological emergency response exercises and drills;
  - (c) Providing assistance to Georgia counties in the planning, training, development and maintenance of county radiological emergency response plans and procedures for Plants Hatch and Vogtle which has an effect or impact upon Georgia counties;
  - (d) Complying with applicable NRC-FEMA regulations and guidelines.
- 8. (a) If, during any fiscal year that this Agreement is in effect, GEMA determines that it is necessary to request one-time additional funding for non-recurring exceptional needs necessary for REP program maintenance or for the purchase of replacement equipment which will be used to support REP maintenance activities and REP emergency operations, GEMA shall submit to Company a written request for such funds.
- (b) Each such written request shall clearly and in detail (1) describe the purpose for which the requested funds will be used, (2) state the amount of funds requested, (3) state the total cost of the project to be undertaken or the equipment to be purchased, (4) describe the reason such undertaking or equipment is necessary for maintaining REP activities and REP emergency operations, and (5) state GEMA's timetable for committing its own or other funding, if any.

- (c) To enable the Company to thoroughly evaluate such written request, GEMA shall furnish to the Company such substantiating documentation and information concerning the use of the requested funds as the Company may request.
- (d) All funds provided to GEMA under Paragraph 8. shall be used strictly for the purposes stated in the request for funds submitted pursuant to Paragraph 8.(b) above. Any such funds furnished by the Company which are not expended by GEMA for such purposes shall be promptly refunded to the Company.
- 9. GEMA agrees to receive and manage, in accordance with generally accepted accounting principles, the funds advanced by the Company under this Agreement. All auditing by GEMA shall be done in accordance with generally accepted auditing standards, and accordingly will include such tests of the accounting records and such other auditing procedures as are considered necessary or appropriate. The Company will have the right to review these records and audits and reserves the right to conduct its own audit at its own expense, except that nothing herein shall apply to confidential information or records of GEMA.
- 10. This agreement shall not obligate GEMA to expend any sum for the purposes set forth herein in excess of the total funding made available by the Company under this Agreement and by DOE and Southern Nuclear Operating Company under separate agreements.
- 11. The Prior Agreement is hereby terminated effective as of the effective date of this Agreement.
- All funds provided to GEMA shall be used strictly for the purposes stated herein. Any equipment purchased with funds furnished under the Prior Agreement shall be used in support of REP maintenance activities and REP emergency operations. GEMA shall be responsible for maintaining such equipment in good working order at all times. GEMA may use such equipment for purposes other than REP support provided that such use does not interfere with the timely availability of the equipment for REP support and does not expose the equipment to unusual or excessive wear and tear. GEMA agrees to promptly replace or repair at no expense to the Company, any such equipment that is damaged or lost during, or as the result of, such other use.
- 13. GEMA and the Company shall cooperatively establish dates and objectives for Plants Hatch and Vogtle emergency exercises and cooperatively develop emergency exercise scenarios for the Plants Hatch and Vogtle exercises.
- 14. Should there be major revisions in applicable NRC or FEMA regulations or guidelines, GEMA and the Company shall review the effects of the changes and the need to amend or supplement this Agreement as a result of such changes.

# **B. TERM OF AGREEMENT**

- 1. This Agreement shall be effective for a period of one (1) year commencing on the effective date hereof, and will thereafter be renewed automatically from year-to-year thereafter; provided, however, that either party may terminate the Agreement by notifying the other party in writing at least ninety (90) days in advance of the end of the then-current term of the Agreement.
- 2. The Company may terminate this Agreement in the event of a change in law or regulation implementing alternative funding of for the purposes set forth herein. In the event of such termination, GEMA shall refund to the Company within sixty (60) days of such termination all funds which were unexpended and unobligated as of the date notice of termination was given.

# C. ADMINISTRATION OF AGREEMENT

In all matters relating to this Agreement, the Company's Executive Vice President - Nuclear Operations or his designee shall act for the Company and the Director of GEMA or his designee shall act for GEMA.

# D. THIRD PARTIES

Notwithstanding any provision of this Agreement which may be interpreted to the contrary, this Agreement shall not be interpreted to confer any benefit or rights on any third parties.

# E. RELATIONSHIP OF PARTIES

No person performing services under this Agreement other than an actual employee of the Company shall be considered as an agent or employee of the Company, unless specifically designated in writing. The Company assumes no liability whatsoever to GEMA or to any third party for damages to property, either real or both, or personal injuries (including death) which might arise out of or be in any way connected with any act or omission on the part of GEMA or such party. No person performing services under this Agreement other than an actual employee of GEMA shall be considered as an agent or employee of GEMA. GEMA assumes no liability whatsoever to the Company or to any third party for damages to property, either real or personal or both, or personal injuries (including death) which might arise out of or be in any way connected with any act or omission on the part of the Company or such party. Neither does GEMA by this Agreement waive in any manner its sovereign immunity or rights under the Eleventh Amendment of the United States Constitution as an agency of the State of Georgia.

# F. SEVERABILITY

The unenforceability or invalidity of any particular provision of this Agreement shall not affect its other provisions and, to the extent necessary to give such other provisions effect, the particular provision shall be deemed severable.

# G. ENTIRE AGREEMENT

This instrument contains the entire agreement and understanding between the parties and there are no oral understanding, terms, or conditions not herein recited. Neither party has relied upon any representation, either express or implied, not otherwise contained in this Agreement. All prior understandings, terms, or conditions are deemed to be merged in this instrument and the same may not be changed or supplemented orally.

# H. ASSIGNMENT

Neither party shall assign any of its obligations hereunder without the prior written consent of the other. Provided, however, that upon written notice to the other parties to this Agreement, the Company may assign its rights and obligations hereunder to any affiliate of the Company which becomes authorized by the NRC to operate Plants Hatch and Vogtle. Alternatively, the Company may by written notice to the other parties hereto designate such affiliate as its agent to administer and perform this Agreement on behalf of the Company.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized representatives as of the date stated above.

GEORGIA EMERGENCY MANAGEMENT AGENCY

\_\_\_\_\_

Director

**GEORGIA POWER COMPANY** 

Bu WI S Hard

Executive Vice President - Nuclear Operations

# GRANT AGREEMENT BETWEEN

# DUKE ENERGY CORPORATION, SOUTHERN NUCLEAR OPERATING COMPANY, INC., PROGRESS ENERGY CAROLINAS, INC., SOUTH CAROLINA ELECTRIC AND GAS COMPANY, AND THE SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION FOR RADIOLOGICAL EMERGENCY PREPAREDNESS FUNDING

THIS AGREEMENT, effective the 1st day of July 2003, by and among Duke Energy Corporation, a North Carolina corporation having its principal place of business in Charlotte, North Carolina, ("Duke"); Southern Nuclear Operating Company, Inc., a Delaware corporation having its principal place of business in Birmingham, Alabama ("SNC"); Progress Energy Carolinas, Inc., with its principal place of business in Raleigh, North Carolina, ("Progress"); South Carolina Electric and Gas Company, a South Carolina corporation having its principal place of business in Columbia, South Carolina, ("SCE&G") and the South Carolina Emergency Management Division, ("SCEMD"), supersedes the prior Agreement entitled "Grant Agreement Between Duke Power Company, Georgia Power Company, Carolina Power & Light Company, (now doing business as Progress Energy Carolinas, Inc.), South Carolina Electric and Gas Company, and The South Carolina Emergency Preparedness Division, dated July 1, 1996, (the "Prior Agreement").

## WITNESSETH:

WHEREAS, Duke Energy Corporation has constructed, for the purpose of generating electric current, Units 1, 2, and 3 of the Oconee Nuclear Site and Units 1 and 2 of the Catawba Nuclear Site, both of which are federally licensed nuclear facilities located in Oconee County, South Carolina and York County, South Carolina, respectively; and

WHEREAS, Georgia Power Company has constructed, for the purpose of generating electric current, Units 1 and 2 of the Vogtle Electric Generating Plant, a federally licensed nuclear facility located in Burke County, Georgia; and

WHEREAS, in 1997, SNC became the exclusive licensed operator of Vogtle Electric Generating Plant, and the Prior Agreement was subsequently assigned from Georgia Power Company to Southern Nuclear Operating Company; and

WHEREAS, Carolina Power & Light Company, (now doing business as Progress Energy Carolinas, Inc.), has constructed, for the purpose of generating electric current, Robinson Nuclear Plant, a federally licensed nuclear facility located in Darlington County, South Carolina; and

WHEREAS, South Carolina Electric and Gas Company has constructed, for the purpose of generating electric current, Unit 1 of the V. C. Summer Nuclear Station, a federally licensed nuclear facility located in Fairfield County, South Carolina; and

WHEREAS, SNC, Duke, Progress, and SCE&G, (hereinafter collectively referred to as the "Utilities"), have implemented radiological emergency plans ("REPs") to assure that, in the unlikely event of a radiological emergency associated with the operation of Plants Vogtle, Oconee, Catawba, Robinson, and V. C. Summer, appropriate federal, state and local government officials are notified and appropriate monitoring and on-site measures are taken to protect the public; and

WHEREAS, the State of South Carolina is responsible for the health, safety, security, and welfare of its citizens and has by law mandated the development of emergency response plans and capabilities at each level of government for dealing with natural or man-made disasters, including, but not limited to, radiological emergencies associated with the operation of fixed nuclear facilities; and

WHEREAS, SCEMD, in coordination with the Federal Emergency Management Agency ("FEMA") and other State agencies, has developed the South Carolina Operational Radiological Emergency Response Plan (SCORERP) and is required to maintain the currency of that plan; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has been designated by the President as the lead Federal agency for off-site radiological emergency planning and response and to review and assess State and local emergency plans for adequacy; and

WHEREAS, the Nuclear Regulatory Commission (NRC) will review the FEMA findings and determinations on the adequacy and capability of implementation of state and local plans and make decisions with regard to the overall on-site and off-site state of emergency preparedness; and

WHEREAS, the NRC has adopted a regulation requiring that REPs meeting the FEMA-NRC criteria of NUREG-0654/FEMA-REP-1 be implemented and maintained; and

WHEREAS, the NRC and FEMA have established certain planning standards and require certain demonstrations of emergency planning capability in the form of written plans and periodic drills and exercises; and

WHEREAS, the Utilities, in order to properly fulfill their statutorily mandated duty to make adequate electric service available for the people of the States of Georgia and South Carolina through the continued operation of Plants Vogtle, Oconee, Catawba, Robinson, and V. C. Summer, and to achieve this goal of continued operation, have previously provided the State of South Carolina with some of the funds necessary to meet the costs of maintaining a REP which complies with the applicable regulations and relevant guidelines of the NRC and FEMA so as to avoid an ordered shutdown of these essential units; and

WHEREAS, SCEMD is designated by law within the Office of the Adjutant General as the State emergency coordinating agency, and the Adjutant General has delegated to the Director of SCEMD the authority to enter into this Agreement and accept the following funding assistance for emergency management in those areas of the State of South Carolina affected by the operation of privately owned nuclear power plants;

NOW, THEREFORE, in consideration of the foregoing premises and subject to the terms and conditions set forth hereinafter, the parties agree as follows:

# A. OBLIGATIONS OF THE PARTIES

- 1. SCEMD will continue to update, modify, and develop the SCORERP as necessary and provide direct support and resources required to accomplish fixed nuclear facility emergency planning with respect to Plants Vogtle, Oconee, Catawba, Robinson, and V. C. Summer.
- 2. The funding provided under this Agreement is for the purpose of providing financial support to SCEMD and other State of South Carolina agencies ("State agencies") in order that they may carry out their overall emergency planning responsibilities under this agreement, including:
- (a) Providing radiological emergency response planning, development, and maintenance of the REP and related procedures for Plants Vogtle, Oconee, Catawba, Robinson, and V. C. Summer, whose emergency planning zones have an effect or impact upon the State of South Carolina;
- (b) Participating, as required, in the implementation of radiological emergency response exercises and drills;
- (c) Providing assistance to South Carolina counties in the planning, training, development, and maintenance of county radiological emergency response plans and procedures for Plants Vogtle, Oconee, Catawba, Robinson, and V. C. Summer, whose emergency planning zones impact upon South Carolina counties;
  - (d) Complying with applicable NRC and FEMA regulations and guidelines.
- 3. This Agreement shall not obligate SCEMD to expend any sum for the purposes set forth herein in excess of the total funding made available by the Utilities under this Agreement.
- 4. SCEMD agrees to receive and manage, in accordance with generally accepted accounting principles, the funds advanced by the Utilities under this Agreement.
- 5. All funds provided by the Utilities to SCEMD shall be used and applied strictly to the funding categories stated herein on Exhibit A. At the end of the then-current SCEMD fiscal year, any surplus funds remaining from each Exhibit A category shall be applied to second and subsequent SCEMD utility assessments equal to the percentages stated in paragraph 13, with the exception of the Thermoluminescent Dosimeter (TLD) assessment which shall be applied specific to each site.
- 6. SCEMD shall have the flexibility to move up to ten percent (10%) of funds allocated to one particular Base Level REP Funding category to another Base Level REP Funding category during the fiscal year without prior approval of the Utilities.

- 7. Any equipment purchased under the Prior Agreement shall be used in support of REP maintenance activities and REP emergency operations. SCEMD shall be responsible for maintaining such equipment in good working order at all times. SCEMD may use such equipment for purposes other than REP support, provided that such use does not interfere with the timely availability of the equipment for REP support and does not expose the equipment to unusual or excessive wear and tear. SCEMD agrees to promptly replace or repair, at no expense to the Utilities, any such equipment that is damaged or lost during, or as the result of, such other use.
- 8. SCEMD shall be responsible for entering into the appropriate agreements with, and for distribution of the funds provided by the Utilities for, other State agencies, and shall be responsible for the appropriate accounting for such funding amounts.
- 9. A state-authorized audit shall be conducted in accordance with generally accepted auditing standards and accordingly will include such tests of the accounting records and such other auditing procedures as are considered necessary or appropriate.
- 10. The Utilities shall each have the right to review these records and audits, and to conduct no more than one joint independent audit annually at their own expense, except that nothing herein shall apply to confidential information or records of SCEMD.
- 11. A condition of receiving funding shall be that on or before April 1 of each year, SCEMD shall submit to the Utilities any proposed adjustments, together with an appropriate itemization of each adjustment, including equipment requests and requests for non-recurring, one-time exceptional needs, to the funding levels established in Exhibit A, attached hereto, (Base Level REP Funding) to reflect:
- (a) Changes in labor costs, across the board or merit, for personnel whose salaries are funded, fully or in part, under this Agreement; provided, however, that this adjustment shall only recognize such changes in the same proportion that each person's salary is already funded under this Agreement.
- (b) The proposed adjustments under section 11 shall be reviewed by the Utilities, and either accepted or rejected by June 1 of each year, with the obligation to fund such adjustments, including equipment requests, expressly subject to and conditioned upon the Utilities' collective approval thereof.
- 12. Funding for SCEMD Fiscal Year 2005 and each subsequent fiscal year that this Agreement is in effect shall be calculated by modifying the Exhibit A base level REP funding categories except Labor and Fringe Benefits/Insurance for inflation using the 12-month January Consumer Price Index, All Items (CPI), to include the adjustments proposed by SCEMD and approved by the Utilities as provided in Paragraph 11 above.

13. The Utilities agree that each company will annually pay the following percentage of the Base Level REP Funding amount shown on Exhibit A, to include any adjustments and/or one-time requests as stated in paragraph 11 above:

Duke	40%
SNC	20%
Progress	20%
SCE&G	20%

#### B. TERM OF AGREEMENT

This Agreement shall be effective for a period of four (4) years commencing July 1, 2003, and will thereafter be renewed automatically from year-to-year; provided, however, that any party may terminate the Agreement by notifying the other parties in writing at least ninety (90) days in advance of the end of the then-current term of the Agreement.

#### C. ADMINISTRATION OF AGREEMENT

In all matters relating to this Agreement, Duke Energy Corporation's Executive Vice President or his designee shall act for Duke, Southern Nuclear Operating Company's Vice President or his designee shall act for SNC, South Carolina Electric and Gas Company's Vice President or his designee shall act for SCE&G, Progress Energy Carolinas Vice President or his designee shall act for Progress, and the Director of the South Carolina Emergency Management Division shall act for the SCEMD.

#### D. THIRD PARTIES

Notwithstanding any provision of this Agreement which may be interpreted to the contrary, this Agreement shall not be interpreted to confer any benefit or rights on any third parties other than any third party having an ownership interest in Vogtle Electric Generating Plant, Oconee Nuclear Site, Catawba Nuclear Site, Robinson Nuclear Plant, or V. C. Summer Nuclear Station.

#### E. RELATIONSHIP OF PARTIES

1. The parties hereto recognize and agree that the obligations of the Utilities hereunder are limited to the funding contemplated by this Agreement, that the Utilities have no dominion or control over SCEMD in the performance of its emergency planning responsibilities, and that the maximum responsibility of each Utility under this Agreement is limited to its proportionate share of funding set forth in Exhibit A, as such Exhibit may be adjusted during the term of this Agreement. No employee of a party to this Agreement shall be considered or deemed to be an agent or employee of any other party for any purpose whatsoever. This Agreement shall not be considered or deemed to create a joint venture, partnership, agency or enterprise between any of the parties, it being recognized and agreed by the parties that each party is an independent contractor with respect to the other parties.

2. The Utilities assume no liability whatsoever to SCEMD or to any State agency or to any third party for damages to property, real or personal, or personal injury (including death) arising out of or in any way connected with the grant of funds to SCEMD hereunder or the performance of emergency planning responsibilities by SCEMD or any State agency, or any act or omission of SCEMD, any State agency, or any third party. SCEMD assumes no liability whatsoever to the Utilities or any third party for damages to property, real or personal, or personal injury (including death) arising out of or in any way connected with any act or omission of any of the Utilities or any third party. Neither does SCEMD by this Agreement waive in any manner its sovereign immunity or rights under the Eleventh Amendment of the United States Constitution as an agency of the State of South Carolina.

#### F. ASSIGNMENT

SNC, Duke, Progress, and SCE&G each shall have the right to assign this Agreement to its affiliate or subsidiary upon written notice to SCEMD and the other parties.

#### G. SEVERABILITY

The unenforceability or invalidity of any particular provision of this Agreement shall not affect its other provisions and, to the extent necessary to give such other provisions effect, the particular provision shall be deemed severable.

#### H. ENTIRE AGREEMENT

This instrument contains the entire agreement and understanding between the parties, and there are no oral understandings, terms, or conditions not herein recited. Neither party has relied upon any representation, either express or implied, not otherwise contained in this Agreement. All prior understandings, terms, or conditions are deemed to be merged in this instrument and the same may not be changed or supplemented orally.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized representatives as of the date stated above.

SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION

Director	
By: Vice President l- Nuclear, Vogtle Project	IC
By: Secutive Vice President - Nuclear Generation	
By: Senior Vice President - Nuclear Operations	¥
PROGRESS ENERGY CAROLINAS, INC.	

# FILE COPY

D.04.04

#### ASSIGNMENT OF EMERGENCY PLANNING AGREEMENTS

THIS ASSIGNMENT OF EMERGENCY PLANNING AGREEMENTS (the "Assignment") is made and entered into this the day of \_\_\_\_\_\_\_\_, 1997, by and between Georgia Power Company, a Georgia corporation ("Georgia Power"), and Southern Nuclear Operating Company, Inc., a Delaware corporation ("Southern Nuclear").

#### WITNESSETH:

WHEREAS, Georgia Power is currently operating, for and on behalf of those owning Units One and Two of the Vogtle Electric Generating Plant, a nuclear generating facility licensed to operate by the Nuclear Regulatory Commission (the "NRC"), located in Burke County, Georgia; and

WHEREAS, advance planning is necessary to assure that the health and safety of the public will be protected in the unlikely event of a radiological emergency associated with the operation of Vogtle Electric Generating Plant; and

WHEREAS, Georgia Power has developed a Vogtle Electric Generating Plant Emergency Plan to assure that, in the event of an emergency, appropriate federal, state and local government officials are notified and appropriate monitoring and on-site measure are taken to protect the public; and

WHEREAS, on September 18, 1992, Georgia Power applied to the NRC for amendments to its operating licenses for Vogtle Electric Generating Plant, requesting that Southern Nuclear be authorized as the exclusive licensed operator of Vogtle Electric Generating Plant; and

WHEREAS, as the exclusive operating licensee of Vogtle Electric Generating Plant, Southern Nuclear will be responsible and will have the authority for all functions necessary to fulfill the emergency planning requirements of the operating licenses; and

WHEREAS, Georgia Power now desires to assign its rights and delegate its obligations under certain emergency planning agreements to Southern Nuclear as its agent.

NOW, THEREFORE, FOR AND IN CONSIDERATION of the premises, the mutual covenants and promises herein contained, and other good and valuable consideration, the parties hereto hereby agree as follows:

- I. <u>Effective Date</u>. The "Effective Date" for the purposes of this Assignment shall be the date that Southern Nuclear becomes the exclusive licensed operator of Vogtle Electric Generating Plant, currently scheduled for January 11, 1997.
- II. <u>Assignment and Delegation</u>. Upon the Effective Date, Georgia Power hereby assigns all of its right, title and interest in and to the following agreements, as amended, and delegates all of its obligations under those agreements, as amended, to Southern Nuclear. This Assignment includes the grant to Southern Nuclear of full power and authority to prosecute or withdraw in its own name any suit or proceedings at law or in equity regarding the agreements. The agreements assigned pursuant hereto are:

- 1. Grant Agreement between Georgia Power Company and Georgia Emergency Management Agency, effective July 1, 1996;
- 2. Memorandum of Understanding among The South Carolina Emergency Preparedness Division, and the South Carolina Department of Health and Environmental Control, and Georgia Power Company, dated February 5, 1986;
- 3. Agreement between Georgia Power Company and Burke County, Georgia, dated March 24, 1993;
- 4. Agreement between Georgia Power Company, and Barnwell County, South Carolina, dated June 28, 1993;
- 5. Agreement between Georgia Power Company, and Allendale County, South Carolina, dated June 24, 1993;
- 6. Agreement between Georgia Power Company, and Aiken County, South Carolina, dated August 6, 1993;
- 7. Grant Agreement Between Duke Power Company, Georgia Power Company, and Carolina Power and Light Company, and South Carolina Electric and Gas Company, and The South Carolina Emergency Preparedness Division, dated July 1, 1996;
- 8. Letter Agreement from Burke County Emergency Management Agency to Vogtle Electric Generating Plant, dated February 8, 1993;
- 9. Letter Agreement from Burke County Sheriff's Department to Vogtle Electric Generating Plant, dated June 24, 1994;
- 10. Letter Agreement from WBRO Radio Station to Vogtle Electric Generating Plant, dated January 19, 1995;
- 11. Letter Agreement from WYFA Radio Station to Vogtle Electric Generating Plant, dated December 14, 1994;
- 12. Letter Agreement from WJBF Television Station to Vogtle Electric Generating Plant, dated February 5, 1993;
- 13. Letter Agreement from WRDW Television Station to Vogtle Electric Generating Plant, dated November 17, 1993;
- 14. Letter Agreement from WAGT Television Station to Vogtle Electric Generating Plant, dated February 4, 1993;
- 15. Letter Agreement from Augusta Regional Medical Center to Vogtle Electric Generating Plant, dated November 16, 1993;
- 16. Letter Agreement from Joseph M. Still, Jr., M.D. to Vogtle Electric Generating Plant, dated April 25, 1995;

- 17. Letter Agreement from Burke County Hospital to Georgia Power Company, dated February 8, 1993;
- 18. Letter Agreement from Medical Specialists, Inc., Shelley A. Griffin, M.D., Joseph L. Jackson, M.D., and Harvey J. Sanders, M.D. to Vogtle Electric Generating Plant, dated December 21, 1994:
- 19. Letter Agreement from Westinghouse Electric Corporation to Georgia Power, dated February 22, 1993;
- 20. Letter Agreement from Bechtel Power Corporation to Vogtle Electric Generating Plant, dated November 12, 1992;
- 21. Letter Agreement from WBBQ Radio Station to Vogtle Electric Generating Plant, dated December 12, 1994;
- 22. Letter Agreement from WGUS-AM and WEKL-FM to Vogtle Electric Generating Plant, dated May 9, 1995;
- 23. Letter Agreement from WBAW Radio Station to Vogtle Electric Generating Plant, dated March 1, 1993;
- 24. Agreement between Georgia Power Company and the U.S. Department of Commerce for the Operation of a NOAA Weather Radio Transmitter by a Cooperator, with Appendix A, effective January 9, 1995;
- 25. Letter Agreement from WDOG Radio Station to Vogtle Electric Generating Plant, dated February 10, 1993;
- 26. Letter Agreement from WKXC Radio Station to Vogtle Electric Generating Plant, dated February 4, 1993;
- 27. Letter Agreement from Frank L. Carter, M.D., to Vogtle Electric Generating Plant, dated December 26, 1994;
- 28. Letter Agreement from Radiation Management Consultants, to Vogtle Electric Generating Plant, dated January 11, 1994;
- 29. Letter Agreement from B. Lamar Murray, M.D., to Vogtle Electric Generating Plant, dated December 16, 1994;
- 30. Memorandum of Agreement between United States Department of Energy Savannah River Operations Office and Georgia Power Company, effective January 1, 1986, confirmed July 28, 1993:
- 31. Letter Agreement from Institute of Nuclear Power Operations to Georgia Power, dated April 26, 1995;

- III. Acceptance by Southern Nuclear. Upon the Effective Date, Southern Nuclear agrees to and does accept the assignment and delegation of the agreements referenced herein. Southern Nuclear agrees to keep, perform and fulfill the terms, conditions, covenants, agreements and obligations required to be kept, performed and fulfilled by Georgia Power under such agreements.
- IV. <u>General</u>. This Assignment shall be binding and inure to the benefit of the parties hereto and their respective successors and assigns. This Assignment shall be interpreted in accordance with the laws and decisions of the State of Georgia.

IN WITNESS WHEREOF, Georgia Power and Southern Nuclear have caused their duly authorized representatives to execute this Assignment as of the day and year first above written, to be effective as of the Effective Date.

GEORGIA POWER COMPANY

F. D. Williams, Senior Vice President

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

I D Woodard Evacutive Vice Bracident

This Purchase Order replaces previously issued Purchase Order Number: SN010086

Southern Nuclear Operating Company, Inc. Post Office Box 1295

Birmingham, Alabama 35201

D.M. Varner

(PHONE:

Supply Chain General Manager

**INTERNAL** 



Vendor Nbr PO Type 124685

Order Number

SN040082

IMPORTANT: Please show this number on all packages, invoices, bills of lading. or any other references to this Order.

**Business ID** 

124685

BILLING AND MARKING INSTRUCTIONS:

Mail Invoice to:

SOUTHERN NUCLEAR OPERATING CO.

ACCOUNTING DEPARTMENT

P.O. BOX 1295

BIRMINGHAM, AL 35201

Date

07-01-2004

IMPORTANT SALES TAX INFORMATION:

**Expiration Date** 

State of ALABAMA...4% Shelby County.....1% City of Hoover....3%

FILE COPY



Seller: FRAMATOME ANP, INC

MS CHERYL M WARREN

8048323742)

3315 OLD FOREST ROAD

PO BOX 10935

LYNCHBURG, VA 24506-0935

Project Name

Ship To: Southern Nuclear Operating Company

Merrill Maddox P. O Box 1295 205-992-6399

Birmingham, AL 35201 Purchase Order: SN040082

Merrill Maddox

12-31-2007

Effective Date

ATTN: CHERYL WARREN PHONE: 434-832-3742 FAX: 434-832-3703 OR

CHARLIE MAYER PHONE: 434-832-4065 FAX: 434-832-3660

THIS ORDER IS A BLANKET PURCHASE ORDER FOR OFF-SITE SERVICES.

THIS BPO WILL BE ADMINISTERED BY SOUTHERN NUCLEAR OPERATING COMPANY (SNC) FARLEY-PLANT SUPPORT EMERGENCY PLANNING COORDINATORS. TELEPHONE AUTHORIZATIONS SHALL BE MADE BY THE FOLLOWING AUTHORIZED SNC PERSONNEL:

06-25-2004

MERRILL MADDOX PHONE: 205-992-6399 OR

WALT LEE PHONE: 205-992-5627

PSP1G \*\*\* TERM OF PURCHASE ORDER \*\*\*

THIS ORDER SHALL BE EFFECTIVE FOR THE PERIOD JUNE 25, 2004 THROUGH EITHER DECEMBER 31, 2007 OR THE DATE OF TERMINATION BY PURCHASER (WHETHER FOR BREACH OR FOR PURCHASER'S CONVENIENCE, AT ITS SOLE DISCRETION), WHICHEVER OCCURS FIRST.

905 TERMS AND CONDITIONS

THIS PURCHASE ORDER SHALL BE GOVERNED BY THE MASTER AGREEMENT BETWEEN SOUTHERN NUCLEAR OPERATING COMPANY AND FRAMATOME ANP, NUMBER JPC-0007, AS AMENDED REFERENCED HERETO AND MADE A PART HEREOF.

By accepting and filling this order or any part thereof, the seller agrees to be bound by the terms and conditions contained herein.

PLEASE ADDRESS QUESTIONS OR OTHER INFORMATION CONCERNING THIS ORDER TO THE ATTENTION OF **BETTY MIDDLEBROOKS** (205)992-6406

#### (continued)

INTERNAL

Seller's Name FRAMATOME ANP, INC

Purchase Order Number	Date	Vendor Nbr
SN040082	07-01-2004	124685

Page Number 2

#### PRICING:

Pricing will be based on time and material basis to locate and subsequently coordinate the analysis of highly radioactive liquid and/or gaseous samples as requested in the event of a severe accident event. All schedules and deliverables will be provided on a Best-Effort basis at the time of performance. Support could include such activities as locating a laboratory to perform analysis and coordinating shipments with reporting of sample results.

969 \*\*\* NOT TO EXCEED \*\*\*

NOTE TO CONTRACTOR: THE UNIT PRICE OF LINE ITEM ONE IS A NOT-TO-EXCEED AMOUNT ONLY AND SHOULD NOT BE CONSTRUED AS A FIRM PRICE EXPENDITURE COMMITMENT BY THE PURCHASER. TOTAL EXPENDITURE FOR LINE ITEM ONE SHALL NOT EXCEED THE UNIT PRICE SHOWN WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF THE PURCHASER VIA CHANGE ORDER.

EXPENDITURES ON THIS PURCHASE ORDER SHALL NOT EXCEED \$1500.00.

<u>Item</u>	Commodity Number	Request Number	Quantity	Unit of Measure	Unit Price	Discount	Extended Price
001		4SNR0404768:001	1	EA	\$1,500.000		\$1,500.00

Description:

AREVA/FRAMATOME, ANP, INC. to provide support to Southern Nuclear (Farley, Hatch and Vogtle) contingency plans for coordinating the capability for off-site laboratory over-check analysis of highly radioactive gas and liquid samples. AREVA/Framatome, ANP, Inc. will provide Southern Nuclear (Purchaser) technical support on a time and material basis to locate and subsequently coordinate the analysis of highly radioactive liquid and/or gaseous samples as requested in the event of a severe accident event. All schedules and deliverables will be provided on a Best-Effort basis at the time of performance. Support could include such activities as locating a laboratory to perform analysis and coordinating shipments with reporting of sample results.

Date Required:

06-30-2004

Date Promised:

12-31-2007

Payment Terms: NET 30 DAYS

Manufacturer:

FOB Terms:

DESTFA

Part Number: Procurement Level:

Expediting Code:

Vendor Part Number: Ship Via BEST WAY

Ship From: LYNCHBURG, VA

Carrier: None

Account Numbers:

PRCN | Ferc | Sub | CT | Loc | Act | RRCN | EWO | Percent

00230 524 00000 EEF 08250 ND20000 00230 000000 33.00% 00330 000000 34.00% 00330 524 00000 EEF 08220 ND20000 00430 524 00000 EEF 00793 ND20000 00430 000000 33.00%

#### (continued)

**INTERNAL** 

Seller's Name
FRAMATOME ANP, INC

 Purchase Order Number
 Date
 Vendor Nbr

 SN040082
 07-01-2004
 124685

Page Number 3

ITEM(S) CLASSIFIED AS AUGMENTED QUALITY

"OFF-SITE SERVICE" POST ACCIDENT SAMPLE ANALYSIS

OR PURCHASE

THIS PURCHASE ORDER REQUIRES QUALITY RELATED ITEMS AND SPECIFIC DOCUMENTATION. ALL SPECIFIED DOCUMENTATION MUST ACCOMPANY THE SHIPPED ITEMS UNLESS OTHERWISE SPECIFIED HEREIN. FINAL INVOICES WILL NOT BE PROCESSED FOR PAYMENT UNTIL ALL DOCUMENTATION HAS BEEN RECEIVED BY THE PURCHASER.

\*\*\* DOCUMENTATION REQUIREMENTS: \*\*\*

WITH EACH SHIPMENT, VENDOR SHALL PROVIDE:

FOR ALL ITEMS: SAMPLE ANALYSIS RESULTS

FOR ALL ITEMS: CERTIFICATE OF CONFORMANCE CERTIFYING COMPLIANCE TO THE SPECIFICATIONS AND REQUIREMENTS OF THE PURCHASE ORDER (WITH DATE, TITLE AND SIGNATURE) ATTESTED TO BY THE PERSON WHO IS RESPONSIBLE FOR THIS QUALITY ASSURANCE FUNCTION AND WHOSE FUNCTION AND POSITION ARE DESCRIBED IN THE SUPPLIERS QUALITY ASSURANCE PROGRAM.

\*\*\* APPLICABLE OUALITY ASSURANCE PROGRAM \*\*\*

THE FOLLOWING QUALITY ASSURANCE PROGRAM HAS BEEN REVIEWED AND ACCEPTED BY PURCHASER AND IS APPLICABLE TO THIS PURCHASE ORDER. IF THE ITEMS OR SERVICES OF THIS PURCHASE ORDER ARE TO BE PROVIDED UNDER A PROGRAM OR REVISION DIFFERENT FROM THE ONE(S) LISTED BELOW, THE SUPPLIER SHALL SUBMIT TO THE PURCHASER'S MANAGER - CORPORATE QUALITY SERVICES SUCH OTHER PROGRAM(S) OR REVISION(S) FOR REVIEW AND ACCEPTANCE PRIOR TO PERFORMING ANY ACTIVITIES OR PROVIDING ANY MATERIALS UNDER THIS PURCHASE ORDER. ALL SUBSEQUENT REVISIONS TO THE SUPPLIER'S QUALITY ASSURANCE PROGRAM(S) MUST BE SUBMITTED TO THE PURCHASER FOR REVIEW AND ACCEPTANCE UNTIL ALL ITEMS OF THE PURCHASE ORDER HAVE BEEN SHIPPED OR UNTIL THE SERVICE HAS BEEN COMPLETED.

FRAMATOME ANP, INC QUALITY MANAGEMENT MANUAL 56-5015885-02 DATED 5/27/2003.

ADDITIONAL REQUIREMENTS FOR AUGMENTED QUALITY SERVICES:

THIS IS A QUALITY RELATED ORDER FOR AUGMENTED QUALITY MATERIALS. LEGIBLE, REPRODUCIBLE COPIES OF DOCUMENTATION REQUIRED BY THE PURCHASE ORDER MUST ACCOMPANY SHIPMENT TO FACILITATE PURCHASER RECEIVING AND PAYMENT OF INVOICES. THIS DOES NOT RELIEVE THE SUPPLIER OF THE RESPONSIBILITY TO FURNISH OTHER DOCUMENTATION, NOT SPECIFICALLY IDENTIFIED IN THIS PURCHASE ORDER. WHICH IS REQUIRED UNDER THE PROVISIONS OF APPLICABLE CODES AND STANDARDS INVOKED BY

#### (continued)

**INTERNAL** 

Seller's Name
FRAMATOME ANP, INC

 Purchase Order Number
 Date
 Vendor Nbr

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 07-01-2004
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Page Number 4

THIS PURCHASE ORDER. EACH DOCUMENT SHALL REFERENCE THIS PURCHASE ORDER AND THE PURCHASE ORDER ITEM NUMBER(S) TO WHICH IT APPLIES AND SHALL BE ATTESTED TO BY A PERSON RESPONSIBLE FOR THIS QUALITY ASSURANCE FUNCTION. WHERE THIS PURCHASE ORDER INVOKES A QUALITY ASSURANCE OR QUALITY CONTROL PROGRAM, CERTIFICATES OF CONFORMANCE SHALL BE ATTESTED TO BY A PERSON WHOSE FUNCTION AND POSITION ARE DESCRIBED IN THE SUPPLIER'S QUALITY PROGRAM.

1. PURCHASER APPROVAL IS REQUIRED FOR THE DISPOSITION OF ANY DEVIATIONS OR NONCONFORMANCES TO PROCUREMENT REQUIREMENTS OR TO PURCHASER APPROVED DOCUMENTS, INCLUDING PART NUMBER CHANGES, EXCEPT WHERE THE MATERIAL CAN BE REWORKED TO FULL COMPLIANCE. PROPOSED DISPOSITIONS FOR "REPAIR" OR "USE-AS-IS" SHALL BE IDENTIFIED ALONG WITH A TECHNICAL JUSTIFICATION TO SUPPORT THE SUPPLIER'S RECOMMENDATION AND SUBMITTED TO:

SOUTHERN NUCLEAR OPERATING COMPANY 42 INVERNESS CENTER PARKWAY BIRMINGHAM, ALABAMA 35242 ATTN: MERRILL MADDOX BIN B-031 (205) 992-6399

- 2. EXCEPT FOR THOSE RECORDS PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PURCHASE ORDER, ALL SUPPLIER RECORDS NECESSARY TO VERIFY THE VALIDITY OF SUPPLIER CERTIFICATIONS SHALL BE RETAINED BY THE SUPPLIER IN ACCORDANCE WITH THE PURCHASER ACCEPTED SUPPLIER QUALITY ASSURANCE PROGRAM (IF INVOKED BY THE PURCHASER) REFERENCED HEREIN OR ANSI-N45.2.9 (1974); AND ASME NCA-3800/4000 FOR ASME CODE ITEMS. ALTERNATELY, IF THE SUPPLIER SO DESIRES, THE PURCHASER WILL ACCEPT ALL SUCH SUPPLIER RECORDS AND BE RESPONSIBLE FOR STORAGE AND RETENTION.
- 3. THE SUPPLIER SHALL INCORPORATE IN SUBTIER PROCUREMENT DOCUMENTS ALL THE REQUIREMENTS OF THIS ORDER THAT ARE APPLICABLE TO THE SCOPE OF SUBTIER WORK ON PRODUCTS OR SERVICES FURNISHED HEREUNDER.
- 4. IF THIS PURCHASE ORDER REQUIRES SERVICES TO BE FURNISHED UNDER A SPECIFIC SUPPLIER QUALITY PROGRAM, THEN THE SUPPLIER SHALL ALLOW PURCHASER ACCESS TO THE SUPPLIER'S PLANT FACILITIES AND RECORDS FOR QUALITY INSPECTION OR AUDIT BY THE PURCHASER, OR PURCHASER'S REPRESENTATIVE. SUCH PURCHASER ACCESS SHALL EXTEND TO THE SUPPLIER'S SUB-SUPPLIERS AS DEEMED NECESSARY BY THE PURCHASER. (SUB-SUPPLIER ACCESS WILL BE COORDINATED THROUGH THE SUPPLIER.)
- 5. IF A CERTIFICATE OF CONFORMANCE IS REQUIRED BY THIS PURCHASE ORDER, THE SUPPLIER SHALL USE THE ATTACHED FORM OR THE SUPPLIER'S EQUIVALENT FORM WHICH PROVIDES THE INFORMATION REQUIRED BY THE PURCHASER'S FORM.
- 6. UNLESS OTHERWISE SPECIFIED HEREIN, ANY MATERIALS PROVIDED UNDER THIS PURCHASE ORDER SHALL BE NEW AND UNUSED; REFURBISHED, REPAIRED, AND/OR SURPLUS EQUIPMENT IS NOT ACCEPTABLE TO THE PURCHASER AND SHALL NOT BE PROVIDED. BY SUPPLYING GOODS HEREUNDER, THE SUPPLIER WARRANTS COMPLIANCE WITH THIS CONDITION.

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CONTRACTOR HEREBY ACKNOWLEDGES AND AGREES THAT, BY COMMENCEMENT OF THE WORK HEREUNDER,

#### (continued)

INTERNAL

Seller's Name
FRAMATOME ANP, INC

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CONTRACTOR SHALL BE DEEMED TO HAVE ACCEPTED AS PART OF THE AGREEMENT ALL TERMS AND CONDITIONS PREVIOUSLY PROPOSED BY PURCHASER TO GOVERN WORK (INCLUDING WITHOUT LIMITATION, THOSE TERMS AND CONDITIONS DISPUTED BY CONTRACTOR WHICH HAVE NOT BEEN WITHDRAWN IN WRITING BY AN AUTHORIZED PURCHASER REPRESENTATIVE), AS ANY SUCH TERMS AND CONDITIONS MAY HAVE BEEN SPECIFICALLY MODIFIED BY PURCHASER IN WRITING SIGNED BY AN AUTHORIZED PURCHASER REPRESENTATIVE.

FSP50 \*\*\* TAX STATUS \*\*\*

TAX STATUS: "TAXABLE" NOTE TO VENDOR: "DO NOT BILL SALES TAX. BILL LABOR AND MATERIAL ON SEPARATE LINE ITEM SO THAT TAX CAN BE ACCRUED AND PAID ON MATERIAL ONLY BY ALABAMA POWER COMPANY."

Total price:

\$1,500.00

## (attachments)

**INTERNAL** 

Seller's Name FRAMATOME ANP, INC

Purchase Order Number	Date	Vendor Nbr
SN040082	07-01-2004	124685

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This Blanket Purchase Order has the following attachments which are hereby incorporated by reference:

1. EXHIBIT NO. 1:
MASTER AGREEMENT JPC-0007 BETWEEN SOUTHERN NUCLEAR OPERATING COMPANY, INC. AND FRAMATOME ANP, INC.,
AS MODIFIED BY ADDENDA NOS. 1-3 FOR FURNISHING EQUIPMENT AND SERVICES.

End of Blanket Purchase Order

This Purchase Order replaces previously issued Purchase Order Number: SN010086

Southern Nuclear Operating Company, Inc.

Post Office Box 1295

Birmingham, Alabama 35201

D.M. Varner

(PHONE:

Supply Chain General Manager

INTERNAL

Vendor Nbr PO Type 124685

IMPORTANT: Please show this number on all packages, invoices, bills of lading, or any other references to this Order.

Date

07-01-2004

**Business ID** 124685

Order Number

SN040082

BILLING AND MARKING INSTRUCTIONS:

Mail Invoice to:

SOUTHERN NUCLEAR OPERATING CO.

ACCOUNTING DEPARTMENT

P.O. BOX 1295

BIRMINGHAM, AL. 35201

IMPORTANT SALES TAX INFORMATION:

State of ALABAMA...4% Shelby County......1%

City of Hoover....3%

FILE COPY



Seller: FRAMATOME ANP. INC

MS CHERYL M WARREN

8048323742)

3315 OLD FOREST ROAD

PO BOX 10935

LYNCHBURG, VA 24506-0935

Ship To: Southern Nuclear Operating Company

Merrill Maddox P. O Box 1295 205-992-6399

Birmingham, AL 35201 Purchase Order: SN040082

Effective Date Project Name **Expiration Date** Merrill Maddox 06-25-2004 12-31-2007

ATTN: CHERYL WARREN PHONE: 434-832-3742 FAX: 434-832-3703 OR

CHARLIE MAYER PHONE: 434-832-4065 FAX: 434-832-3660

THIS ORDER IS A BLANKET PURCHASE ORDER FOR OFF-SITE SERVICES.

THIS BPO WILL BE ADMINISTERED BY SOUTHERN NUCLEAR OPERATING COMPANY (SNC) FARLEY-PLANT SUPPORT EMERGENCY PLANNING COORDINATORS. TELEPHONE AUTHORIZATIONS SHALL BE MADE BY THE FOLLOWING AUTHORIZED SNC PERSONNEL:

MERRILL MADDOX PHONE: 205-992-6399 OR

WALT LEE PHONE: 205-992-5627

PSPIG \*\*\* TERM OF PURCHASE ORDER \*\*\*

THIS ORDER SHALL BE EFFECTIVE FOR THE PERIOD JUNE 25, 2004 THROUGH EITHER DECEMBER 31, 2007 OR THE DATE OF TERMINATION BY PURCHASER (WHETHER FOR BREACH OR FOR PURCHASER'S CONVENIENCE, AT ITS SOLE DISCRETION), WHICHEVER OCCURS FIRST.

905 TERMS AND CONDITIONS

THIS PURCHASE ORDER SHALL BE GOVERNED BY THE MASTER AGREEMENT BETWEEN SOUTHERN NUCLEAR OPERATING COMPANY AND FRAMATOME ANP, NUMBER JPC-0007, AS AMENDED REFERENCED HERETO AND MADE A PART HEREOF.

By accepting and filling this order or any part thereof, the seller agrees to be bound by the terms and conditions contained herein.

PLEASE ADDRESS QUESTIONS OR OTHER INFORMATION CONCERNING THIS ORDER TO THE ATTENTION OF BETTY MIDDLEBROOKS (205)992-6406

#### (continued)

**INTERNAL** 

Seller's Name FRAMATOME ANP, INC Purchase Order Number Date Vendor Nbr 07-01-2004 SN040082 124685

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#### PRICING:

Pricing will be based on time and material basis to locate and subsequently coordinate the analysis of highly radioactive liquid and/or gaseous samples as requested in the event of a severe accident event. All schedules and deliverables will be provided on a Best-Effort basis at the time of performance. Support could include such activities as locating a laboratory to perform analysis and coordinating shipments with reporting of sample results.

969 \*\*\* NOT TO EXCEED \*\*\*

NOTE TO CONTRACTOR: THE UNIT PRICE OF LINE ITEM ONE IS A NOT-TO-EXCEED AMOUNT ONLY AND SHOULD NOT BE CONSTRUED AS A FIRM PRICE EXPENDITURE COMMITMENT BY THE PURCHASER. TOTAL EXPENDITURE FOR LINE ITEM ONE SHALL NOT EXCEED THE UNIT PRICE SHOWN WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF THE PURCHASER VIA CHANGE ORDER.

EXPENDITURES ON THIS PURCHASE ORDER SHALL NOT EXCEED \$

Request Number Commodity Number Quantity Unit of Measure Unit Price Discount Item Extended Price 100 4SNR0404768:001

Description:

AREVA/FRAMATOME, ANP, INC. to provide support to Southern Nuclear (Farley, Hatch and Vogtle) contingency plans for coordinating the capability for off-site laboratory over-check analysis of highly radioactive gas and liquid samples. AREVA/Framatome, ANP, Inc. will provide Southern Nuclear (Purchaser) technical support on a time and material basis to locate and subsequently coordinate the analysis of highly radioactive liquid and/or gaseous samples as requested in the event of a severe accident event. All schedules and deliverables will be provided on a Best-Effort basis at the time of performance. Support could include such activities as locating a laboratory to perform analysis and coordinating shipments with reporting of sample results.

Date Required:

06-30-2004

Date Promised:

12-31-2007

Payment Terms: NET 30 DAYS

FOB Terms: DESTFA

Manufacturer: Vendor Part Number:

Part Number: Procurement Level:

**Expediting Code:** 

Ship From: LYNCHBURG, VA

Ship Via BEST WAY

Carrier: None

Account Numbers:

PRCN | Ferc | Sub | CT | Loc | Act | RRCN | EWO | Percent

00230 000000 33.00% 00230 524 00000 EEF 08250 ND20000 00330 524 00000 EEF 08220 ND20000 00330 000000 34.00% 00430 524 00000 EEF 00793 ND20000 00430 000000 33.00%

By accepting and filling this order or any part thereof, the seller agrees to be bound by the terms and conditions contained herein.

PLEASE ADDRESS QUESTIONS OR OTHER INFORMATION CONCERNING THIS ORDER TO THE ATTENTION OF **BETTY MIDDLEBROOKS** (205)992-6406

#### (continued)

**INTERNAL** 

Seller's Name FRAMATOME ANP, INC 
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ITEM(S) CLASSIFIED AS AUGMENTED QUALITY

"OFF-SITE SERVICE" POST ACCIDENT SAMPLE ANALYSIS

OR PURCHASE

THIS PURCHASE ORDER REQUIRES QUALITY RELATED ITEMS AND SPECIFIC DOCUMENTATION. ALL SPECIFIED DOCUMENTATION MUST ACCOMPANY THE SHIPPED ITEMS UNLESS OTHERWISE SPECIFIED HEREIN. FINAL INVOICES WILL NOT BE PROCESSED FOR PAYMENT UNTIL ALL DOCUMENTATION HAS BEEN RECEIVED BY THE PURCHASER.

\*\*\* DOCUMENTATION REQUIREMENTS: \*\*\*

WITH EACH SHIPMENT, VENDOR SHALL PROVIDE:

FOR ALL ITEMS: SAMPLE ANALYSIS RESULTS

FOR ALL ITEMS: CERTIFICATE OF CONFORMANCE CERTIFYING COMPLIANCE TO THE SPECIFICATIONS AND REQUIREMENTS OF THE PURCHASE ORDER (WITH DATE, TITLE AND SIGNATURE) ATTESTED TO BY THE PERSON WHO IS RESPONSIBLE FOR THIS QUALITY ASSURANCE FUNCTION AND WHOSE FUNCTION AND POSITION ARE DESCRIBED IN THE SUPPLIERS QUALITY ASSURANCE PROGRAM.

\*\*\* APPLICABLE QUALITY ASSURANCE PROGRAM \*\*\*

THE FOLLOWING QUALITY ASSURANCE PROGRAM HAS BEEN REVIEWED AND ACCEPTED BY PURCHASER AND IS APPLICABLE TO THIS PURCHASE ORDER. IF THE ITEMS OR SERVICES OF THIS PURCHASE ORDER ARE TO BE PROVIDED UNDER A PROGRAM OR REVISION DIFFERENT FROM THE ONE(S) LISTED BELOW, THE SUPPLIER SHALL SUBMIT TO THE PURCHASER'S MANAGER - CORPORATE QUALITY SERVICES SUCH OTHER PROGRAM(S) OR REVISION(S) FOR REVIEW AND ACCEPTANCE PRIOR TO PERFORMING ANY ACTIVITIES OR PROVIDING ANY MATERIALS UNDER THIS PURCHASE ORDER. ALL SUBSEQUENT REVISIONS TO THE SUPPLIER'S QUALITY ASSURANCE PROGRAM(S) MUST BE SUBMITTED TO THE PURCHASER FOR REVIEW AND ACCEPTANCE UNTIL ALL ITEMS OF THE PURCHASE ORDER HAVE BEEN SHIPPED OR UNTIL THE SERVICE HAS BEEN COMPLETED.

FRAMATOME ANP, INC QUALITY MANAGEMENT MANUAL 56-5015885-02 DATED 5/27/2003.

ADDITIONAL REQUIREMENTS FOR AUGMENTED QUALITY SERVICES:

THIS IS A QUALITY RELATED ORDER FOR AUGMENTED QUALITY MATERIALS. LEGIBLE, REPRODUCIBLE COPIES OF DOCUMENTATION REQUIRED BY THE PURCHASE ORDER MUST ACCOMPANY SHIPMENT TO FACILITATE PURCHASER RECEIVING AND PAYMENT OF INVOICES. THIS DOES NOT RELIEVE THE SUPPLIER OF THE RESPONSIBILITY TO FURNISH OTHER DOCUMENTATION, NOT SPECIFICALLY IDENTIFIED IN THIS PURCHASE ORDER, WHICH IS REQUIRED UNDER THE PROVISIONS OF APPLICABLE CODES AND STANDARDS INVOKED BY

#### (continued)

INTERNAL

Seller's Name
FRAMATOME ANP, INC

 Purchase Order Number
 Date
 Vendor Nbr

 SN040082
 07-01-2004
 124685

Page Number

THIS PURCHASE ORDER. EACH DOCUMENT SHALL REFERENCE THIS PURCHASE ORDER AND THE PURCHASE ORDER ITEM NUMBER(S) TO WHICH IT APPLIES AND SHALL BE ATTESTED TO BY A PERSON RESPONSIBLE FOR THIS QUALITY ASSURANCE FUNCTION. WHERE THIS PURCHASE ORDER INVOKES A QUALITY ASSURANCE OR QUALITY CONTROL PROGRAM, CERTIFICATES OF CONFORMANCE SHALL BE ATTESTED TO BY A PERSON WHOSE FUNCTION AND POSITION ARE DESCRIBED IN THE SUPPLIER'S QUALITY PROGRAM.

1. PURCHASER APPROVAL IS REQUIRED FOR THE DISPOSITION OF ANY DEVIATIONS OR NONCONFORMANCES TO PROCUREMENT REQUIREMENTS OR TO PURCHASER APPROVED DOCUMENTS, INCLUDING PART NUMBER CHANGES, EXCEPT WHERE THE MATERIAL CAN BE REWORKED TO FULL COMPLIANCE. PROPOSED DISPOSITIONS FOR "REPAIR" OR "USE-AS-IS" SHALL BE IDENTIFIED ALONG WITH A TECHNICAL JUSTIFICATION TO SUPPORT THE SUPPLIER'S RECOMMENDATION AND SUBMITTED TO:

SOUTHERN NUCLEAR OPERATING COMPANY 42 INVERNESS CENTER PARKWAY BIRMINGHAM, ALABAMA 35242 ATTN: MERRILL MADDOX BIN B-031 (205) 992-6399

- 2. EXCEPT FOR THOSE RECORDS PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PURCHASE ORDER, ALL SUPPLIER RECORDS NECESSARY TO VERIFY THE VALIDITY OF SUPPLIER CERTIFICATIONS SHALL BE RETAINED BY THE SUPPLIER IN ACCORDANCE WITH THE PURCHASER ACCEPTED SUPPLIER QUALITY ASSURANCE PROGRAM (IF INVOKED BY THE PURCHASER) REFERENCED HEREIN OR ANSI-N45.2.9 (1974); AND ASME NCA-3800/4000 FOR ASME CODE ITEMS. ALTERNATELY, IF THE SUPPLIER SO DESIRES, THE PURCHASER WILL ACCEPT ALL SUCH SUPPLIER RECORDS AND BE RESPONSIBLE FOR STORAGE AND RETENTION.
- 3. THE SUPPLIER SHALL INCORPORATE IN SUBTIER PROCUREMENT DOCUMENTS ALL THE REQUIREMENTS OF THIS ORDER THAT ARE APPLICABLE TO THE SCOPE OF SUBTIER WORK ON PRODUCTS OR SERVICES FURNISHED HEREUNDER.
- 4. IF THIS PURCHASE ORDER REQUIRES SERVICES TO BE FURNISHED UNDER A SPECIFIC SUPPLIER QUALITY PROGRAM, THEN THE SUPPLIER SHALL ALLOW PURCHASER ACCESS TO THE SUPPLIER'S PLANT FACILITIES AND RECORDS FOR QUALITY INSPECTION OR AUDIT BY THE PURCHASER, OR PURCHASER'S REPRESENTATIVE. SUCH PURCHASER ACCESS SHALL EXTEND TO THE SUPPLIER'S SUB-SUPPLIERS AS DEEMED NECESSARY BY THE PURCHASER. (SUB-SUPPLIER ACCESS WILL BE COORDINATED THROUGH THE SUPPLIER.)
- 5. IF A CERTIFICATE OF CONFORMANCE IS REQUIRED BY THIS PURCHASE ORDER, THE SUPPLIER SHALL USE THE ATTACHED FORM OR THE SUPPLIER'S EQUIVALENT FORM WHICH PROVIDES THE INFORMATION REQUIRED BY THE PURCHASER'S FORM.
- 6. UNLESS OTHERWISE SPECIFIED HEREIN, ANY MATERIALS PROVIDED UNDER THIS PURCHASE ORDER SHALL BE NEW AND UNUSED; REFURBISHED, REPAIRED, AND/OR SURPLUS EQUIPMENT IS NOT ACCEPTABLE TO THE PURCHASER AND SHALL NOT BE PROVIDED. BY SUPPLYING GOODS HEREUNDER, THE SUPPLIER WARRANTS COMPLIANCE WITH THIS CONDITION.

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CONTRACTOR HEREBY ACKNOWLEDGES AND AGREES THAT, BY COMMENCEMENT OF THE WORK HEREUNDER.

#### (continued)

INTERNAL

1	Seller's Name	
1	FRAMATOME ANP, INC	

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CONTRACTOR SHALL BE DEEMED TO HAVE ACCEPTED AS PART OF THE AGREEMENT ALL TERMS AND CONDITIONS PREVIOUSLY PROPOSED BY PURCHASER TO GOVERN WORK (INCLUDING WITHOUT LIMITATION, THOSE TERMS AND CONDITIONS DISPUTED BY CONTRACTOR WHICH HAVE NOT BEEN WITHDRAWN IN WRITING BY AN AUTHORIZED PURCHASER REPRESENTATIVE), AS ANY SUCH TERMS AND CONDITIONS MAY HAVE BEEN SPECIFICALLY MODIFIED BY PURCHASER IN WRITING SIGNED BY AN AUTHORIZED PURCHASER REPRESENTATIVE.

FSP50 \*\*\* TAX STATUS \*\*\*

TAX STATUS: "TAXABLE" NOTE TO VENDOR: "DO NOT BILL SALES TAX. BILL LABOR AND MATERIAL ON SEPARATE LINE ITEM SO THAT TAX CAN BE ACCRUED AND PAID ON MATERIAL ONLY BY ALABAMA POWER COMPANY."

Total price:

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## (attachments)

**INTERNAL** 

Seller's Name FRAMATOME ANP, INC Purchase Order Number Date Vendor Nbr SN040082 07-01-2004 124685

Page Number 6

This Blanket Purchase Order has the following attachments which are hereby incorporated by reference:

1. EXHIBIT NO. 1:
MASTER AGREEMENT JPC-0007 BETWEEN SOUTHERN NUCLEAR OPERATING COMPANY, INC. AND FRAMATOME ANP. INC., AS MODIFIED BY ADDENDA NOS. 1-3 FOR FURNISHING EQUIPMENT AND SERVICES.

End of Blanket Purchase Order

Final Sheet of Enclosure

# **Southern Nuclear Operating Company**

AR-06-1721

Enclosure 12

Vogtle Electric Generating Plan Emergency Plan

Correlation To NUREG-0654

## VEGP Emergency Plan Correlation to NUREG 0654

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Section 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 Zones 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. (10 CFR 50.47(b)(1))		
Criteria 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.	A.1,VEGP A.2, Georgia A.3, Burke County, Georgia A.4, South Carolina A.5, Aiken, Barnwell, and Allendale Counties, South Carolina A.6, DOE-Savannah River Site A.7, Medical Support - Burke County EMA; Burke County Hospital; RMC; Doctors Hospital A.8, Private Sector Organizations – Bechtel Power Corporation; Westinghouse; Voluntary Assistance Groups A.9, Federal Government Support Table A-1	A.8 - Voluntary Assistance Group - SNC is a signatory to two comprehensive agreements: The Nuclear Power Plant Emergency Response Voluntary Assistance Agreement and the Voluntary Assistance Agreement by and among Electric Utilities Involved in Transportation of Nuclear Materials. Copies of these agreements are included in the Institute of Nuclear Power Operations (INPO) Emergency Resources Manual.  A.9 – Provisions of Federal Master Plan – may involve FEMA, EPA, Department of Health and Human Services; DOT, and Department of Agriculture

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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.	A.10, Concept of Operations A.10.1, VEGP-Continuous communications A.10.2, Georgia and Burke County A.10.3, South Carolina and Counties A.10.4, Savannah River Site Figure A — 1, Formal Interfaces	See respective State and local plans for details of their respective concept of operations and their relationship to the total effort.
Criteria A.1.c.  Each plan shall illustrate these interrelationships in a block diagram.	Figure A – 1, Formal Interfaces	
Criteria A.1.d.  Each organization shall identify a specific individual by title who shall be in charge of the emergency response	Table A - 1, Responsible Individuals of Primary Response	
Criteria A.1.e.  Each organization shall provide for 24-hour per day emergency response, including 24-hour per day manning of communications links.	A.10.1, Continuous Communication Capability	See respective State and local plans for details of 24-hour per day manning for communication links
Criteria 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. (See Section B for licensee).	A.1, VEGP A.2, Georgia A.3, Burke County A.4, South Carolina A.5, SC Counties of Aiken, Barnwell, and Allendale A.6, DOE-Savannah River A.7, Medical Support – Burke County EMA A.8, Private Sector Organizations A.9, Federal Support Agencies	See respective State and local plans for additional details related to assignment of responsibilities

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria A.2.b.  Each plan shall contain (by reference to specific acts, codes or statutes) the legal basis for such authorities.		See respective State plans for details related to the legal basis for their plans.
Criteria 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.	Appendix 2	Copies of the letters of agreement will be submitted under separate correspondence.
Criteria 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.	A.10.1, VEGP A.10.2, GA and Burke County A.10.3, SC and Counties A.10.4 SRS	See respective State and local plans for details of 24-hour per day manning for communication links
Section 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. (10 CFR 50.47(b)(2))		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria B.1.	B.1, Normal Plant Organization	
Each licensee shall specify the onsite emergency organization	B.2, Emergency Response Organization	
of plant staff personnel for all shifts and its relation to the responsibilities and duties of the normal staff complement.	Table B-1, Minimum Staffing for Power Operation	
	Table B-2 Emergency Response Organization Assignment	
	Figure B-1, Site Organization Chart	
	Figure B-2, Response Organization for Alert	
	Figure B-3, Site Area or General ERO	
Criteria B.2.	B.2.1.1, Emergency Director; Table B-1	
Each licensee shall designate an individual as emergency coordinator who shall be on shift at all times and who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations to authorities responsible for implementing offsite emergency measures.		
Criteria B.4.	B.2.1.1, Emergency Director	
Each licensee shall establish the functional responsibilities assigned to the emergency coordinator and shall clearly specify which responsibilities may not be delegated to other elements of the emergency organization. Among the responsibilities which may not be delegated shall be the decision to notify and to recommend protective actions to authorities responsible for offsite emergency measures.		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria B.5.	B.2.1.1, Emergency Director	<del></del>
Each licensee shall specify the positions or title and major tasks to be performed by the persons to be assigned to the functional	B.2.1.2.1, TSC Manager	•
areas of emergency activity. For emergency situations, specific	B.2.1.2.2, TSC Support Coordinator	
assignments shall be made for all shifts and for plant staff	B.2.1.2.3, Engineering Supervisor	
members, both onsite and away from the site. These	B.2.1.2.4, Maintenance Supervisor	•
assignments shall cover the emergency functions in Table B-1 entitled, "Minimum Staffing Requirements for Nuclear Power	B.2.1.2.5, Operations Supervisor	
Plant Emergencies." The minimum on-shift staffing levels shall	B.2.1.2.6, Heath Physics Supervisor	
be as indicated in Table B-1. The licensee must be able to	B.2.1.2.7, Chemistry Supervisor	,
augment on-shift capabilities within a short period after	B.2.1.2.8, TSC Security Supervisor	
declaration of an emergency. This capability shall be as	B.2.1.3.1, OSC Manager	
indicated in Table B-1. The implementation schedule for licensed operators, auxiliary operators and the shift technical	B.2.1.3.2, OSC Personnel	·
advisor on shift shall be as specified in the July 31, 1980 letter	Appendix 7, B.1, EOF Manager	
to all power reactor licensees. Any deficiencies in the other	Appendix 7, B.2, EOF Technical Supervisor	
staffing requirements of Table B-1 must be capable of	Appendix 7, B.3, EOF Support Coordinator	
augmentation within 30 minutes by September 1, 1981, and such deficiencies must be fully removed by July 1, 1982.	Appendix 7, B.4, Dose Assessment Supervisor	
·	Appendix 7, B.5, Security Coordinator	
	Appendix 7, B.6, Offsite Response Coordinator	
	Appendix 7, B.7, Engineering/Technical Support Staff and Administrative Support Staff	
Criteria B.6.	Figure A-1, Formal Interfaces	
Each licensee shall specify the interfaces between and among the onsite functional areas of emergency activity, licensee headquarters support, local services support, and State and local government response organization. This shall be illustrated in a block diagram and shall include the onsite technical support center and the operational support (assembly) center and the licensee's near-site Emergency		

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NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Operations Facility (EOF)		
Criteria B.7.	Appendix 7, B.1, EOF Manager	
Each licensee shall specify the corporate management, administrative, and technical support personnel who will	Appendix 7, B.2, EOF Technical Supervisor	
augment the plant staff as specified in the table entitled	Appendix 7, B.3, EOF Support Coordinator	
"Minimum Staffing Requirements for Nuclear Power Plant	Appendix 7, B.4, Dose Assessment Supervisor	
Emergencies," (Table B-1) and in the following areas:	Appendix 7, B.5, Security Coordinator	
·	Appendix 7, B.6, Offsite Response Coordinator	
	Appendix 7, B.7, Engineering/Technical Support Staff and Administrative Support Staff	
	Table A7-1, Corporate Emergency Response Organization	
Criteria B.7.a.		
logistics support for emergency personnel, e.g., transportation, communications, temporary quarters, food and water, sanitary facilities in the field, and special equipment and supplies procurement;		·
Criteria B.7.b.	Appendix 7 – See B.7.a above	
Technical support for planning and reentry/recovery operations;		
Criteria B.7.c.	Appendix 7 –see B.7.a above	
Management level interface with governmental authorities; and		
Criteria B.7.d	Appendix 8	
Release of information to news media during an emergency (coordinated with governmental authorities).		
Criteria B.8.	A.8, Private Sector Organizations	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Each licensee shall specify the contractor and private organizations who may be requested to provide technical assistance to and augmentation of the emergency organization.	B.3.1 Contractor Support	
Criteria B.9.	A.7, Medical Support	
Each licensee shall identify the services to be provided by	B.3.2, Medical Assistance	
local agencies for handling emergencies, e.g., police, ambulance, medical, hospital, and fire-fighting organizations shall be specified. The licensee shall provide for transportation and treatment of injured personnel who may also be contaminated. Copies of the arrangements and agreements reached with contractor, private, and local support agencies shall be appended to the plan. The agreements shall delineate the authorities, responsibilities, and limits on the actions of the contractor, private organization, and local services support groups.	Appendix 2, Letters of Agreement	
Section 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. (10CFR 50.47(b)(3))		
Criteria C.1.		
The Federal government maintains in-depth capability to assist licensees, States and local governments through the Federal Radiological Monitoring and Assessment Plan (formerly Radiological Assistance Plan (RAP) and Interagency Radiological Assistance Plan (IRAP). Each State and licensee shall make provisions for incorporating the Federal response capability into its operation plan, including the following:		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria C.1.a.  Specific persons by title authorized to request Federal assistance.	B.2.1.1 Emergency Director	See respective state plans for state authorization
Criteria C.1.b.  Specific Federal resources expected, including expected times of arrival at specific nuclear facility sites; and	C.2 Federal Government Support	See respective state and county plans for state and county details
Criteria C.1.c.  Specific licensee, State and local resources available to support the Federal response, e.g., air fields, command posts, telephone lines, radio frequencies and telecommunications centers.	C.2 Federal Government Support Table C-1 State and County Emergency Operation Centers	See respective state and county plans for state and county details
Criteria C.2.b.  The licensee shall prepare for the dispatch of a representative to principal offsite governmental emergency operations centers.	C.2 Federal Government Support C.3 VEGP Site Support	See respective state and county plans for state and county details
Criteria 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.	C.4 Other Support	See respective state and county plans for state and county details
Criteria 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.	C.4 Other Support	See respective state and county plans for state and county details

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Section 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 facility licensees for determinations of minimum initial offsite response measures. (10CFR 50.47(b)(4))		
Criteria D.1.	D.1	See Table V2A3-1, Inspections, Tests,
An emergency classification and emergency action level scheme as set forth in Appendix 1 must be established by the licensee. The specific instruments, parameters or equipment status shall be shown for establishing each emergency class, in the in-plant emergency procedures. The plan shall identify the parameter values and equipment status for each emergency class.		Analysis, and Acceptance Criteria (ITAAC), 1.0 Emergency Classification System
Criteria D.2.	Table V1A2-1 FSAR Postulated Transients	
The initiating conditions shall include the example conditions found in Appendix I and all postulated accidents in the Final Safety Analysis Report (FSAR) for the nuclear facility.	and Table V2A2-1 VEGP Units 3 and 4 SSAR Transient Table	
Criteria D.3.		See respective State and County plans
Each State and local organization shall establish an emergency classification and emergency action level scheme consistent with that established by the facility licensee.		
Criteria D.4.		See respective State and County plans
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.		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Section 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. (10CFR 50.47(b)(5))		
Criteria 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.	E Notification Methods and Procedures	
Criteria E.2.  Each organization shall establish procedures for alerting, notifying, and mobilizing emergency response personnel.	E.1 Notification of VEGP Personnel Table E-1 Initial Notification System – Normal Working Hours and Table E-2 Initial Notification System – Backshift Hours	
Criteria E.3.  The licensee in conjunction with State and local organizations shall establish the contents of the initial emergency messages to be sent from the plant. These measures shall contain information about the class of emergency, whether a release is taking place, potentially affected population and areas, and whether protective measures may be necessary.	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	Also see respective State and County plans
Criteria E.4.  Each licensee shall make provisions for follow-up messages from the facility to offsite authorities which shall contain the following information if it is known and appropriate:	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	

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NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria E.4.a.  location of incident and name and telephone number (or communications channel identification) of caller;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.b. date/time of incident;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.c. class of emergency;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.d.  type of actual or projected release (airborne, waterborne, surface spill),and estimated duration/impact times;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.e. estimate of quantity of radioactive material released or being released and the points and height of releases;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.f.  chemical and physical form of released material, including estimates of the relative quantities and concentration of noble gases, iodines and particulates;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.g.  meteorological conditions at appropriate levels (wind speed, direction (to and from), indicator of stability, precipitation, if any);	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.h. actual or projected dose rates at site boundary; projected integrated dose at site boundary;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.i.  projected dose rates and integrated dose at the projected peak and at 2, 5 and 10 miles, including sector(s) affected;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria E.4.j. estimate of any surface radioactive contamination in-plant, onsite or offsite;		
Criteria E.4.k. licensee emergency response actions underway	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.I. recommended emergency actions, including protective measures;	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.m. request for any needed onsite support by offsite organizations; and	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.4.n. prognosis for worsening or termination of event based on plant information	Figure E-1 Example of Initial Emergency Message for State and Local Response Agencies	
Criteria E.5.  State and local government organizations shall establish a system for disseminating to the public appropriate information contained in initial and follow-up messages received from the licensee including the appropriate notification to appropriate broadcast media, e.g., the Emergency Broadcast System (EBS).		See respective State and County plans
Criteria 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.	E.4 Notification of the Public	See respective State and County plans

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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 instruction 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.		See respective State and County plans
Section F: Emergency Communications  Provisions exist for prompt communications among principal response organizations to emergency Personnel and to the public. (10CFR 50.47(b)(6))		
Criteria 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 Emergency Communications	See respective State and County plans for additional details
Criteria F.1.a. provision for 24-hour, per day notification to and activation of the State/local emergency response network; and at a	F.1.1 State of Georgia F.1.2 Burke County F.2.1 State of South Carolina	See respective State and County plans for additional details

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
minimum, a telephone link and alternate, including 24-hour per day manning of communications links that initiate emergency response actions.	F.3 Communications with the Savannah River Site	
Criteria F.1.b.	F.1.1 State of Georgia	
provision for communications with continuous State/local	F.1.2 Burke County	
governments within the Emergency Planning Zones;	F.2.1 State of South Carolina	Ì
	F.3 Communications with the Savannah River Site	
Criteria F.1.c. provision for communications as needed with Federal emergency response organizations;	F.4 Communications with the Nuclear Regulatory Commission and other Federal Agencies	See respective State and County plans for additional details
Criteria F.1.d. provision for communications between the nuclear facility and	F.5 Communications among VEGP Emergency Response Facilities	
the licensee's near-site Emergency Operations Facility, State	F.1.1 State of Georgia	· ·
and local emergency operations center, and radiological	F.1.2 Burke County	
monitoring teams;	F.2.1 State of South Carolina	
	F.3 Communications with the Savannah River Site	
	F.9 VEGP Radiological Monitoring Teams	
Criteria F.1.e. provision for alerting or activating emergency personnel in each response organization; and	F.7 Alerting Emergency Response Personnel	See respective State and County plans for additional details
Criteria F.1.f.	F.4 Communications with the Nuclear	
provision for communication by the licensee with NRC headquarters and NRC Regional Office Emergency	Regulatory Commission and other Federal Agencies	

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NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Operations Centers and the licensee's near-site Emergency Operations Facility and radiological monitoring team assembly area.	F.5 Communications among VEGP Emergency Response Facilities F.9 VEGP Radiological Monitoring Teams	
Criteria F.2.  Each organization shall ensure that a coordinated communication link for fixed and mobile medical support facilities exists.	F.6 Medical Support Facility Communications	
Criteria F.3.  Each organization shall conduct periodic testing of the entire emergency communications system (see evaluation criteria H.10, N.2.a and Appendix 3).	F.8 Communications Systems Tests	See respective State and County plans for additional details
Section 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. (10CFR 50.47(b)(7))		

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NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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. special needs of the handicapped.  Means for accomplishing this dissemination 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.	G Public Education and Information	
Criteria 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.	G Public Education and Information G.1 Information for Transients	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria G.3.a.  Each principal organization shall designate the points of contact and physical locations for use by news media during an emergency.	G.2 Emergency News Center Operations Appendix 8 VEGP Emergency Communications Plan	
Criteria G.3.b.  Each licensee shall provide space which may be used for a limited number of the news media at the near-site Emergency Operations Facility.	N/A	Due to the location of the EOF, it is not anticipated that News media will arrive at the EOF. News media will be directed to the Emergency News Center – See G.2, Emergency News Center Operations, and Appendix 8, Emergency Communications Plan for a description of the facility
Criteria G.4.a.  Each principal organization shall designate a spokesperson who should have access to all necessary information.	G.2 Emergency News Center Operations	
Criteria G.4.b.  Each organization shall establish arrangements for timely exchange of information among designated spokespersons.	G.2 Emergency News Center Operations Appendix 8, Emergency Communications Plan	
Criteria G.4.c.  Each organization shall establish coordinated arrangements for dealing with rumors.	G.4 Rumor Control Appendix 8 Section I Rumor Control	
Criteria 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 in an emergency.	G.5 Media Education Appendix 8 Section P.2 News Media Training	
Section H: Emergency Facilities and Equipment  Adequate emergency facilities and equipment to support the emergency response are provided and maintained. (10CFR 50.47(b)(8))		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria H.1.  Each licensee shall establish a Technical Support Center and an onsite operations support center (assembly area) in accordance with NUREG-0696, Revision 1.	H.1.1 Technical Support Center (TSC)	See Table V2A3-1 Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 5.0 Emergency Facilities and Equipment
Criteria H.2.  Each licensee shall establish an Emergency Operations Facility from which evaluation and coordination of all licensee activities related to an emergency is to be carried out and from which the licensee shall provide information to Federal, State and local authorities responding to radiological emergencies in accordance with NUREG-0696, Revision 1.	Appendix 7, Emergency Operations Facility Figure A7-1, EOF Layout	
Criteria H.3.  Each organization shall establish an emergency operations center for use in directing and controlling response functions.	H Emergency Facilities and Equipment	See respective State and County plans for a description of emergency operation centers
Criteria H.4.  Each organization shall provide for timely activation and staffing of the facilities and centers described in the plan.	H.3 Activation and Staffing of Emergency Facilities	
Criteria H.5.  Each licensee shall identify and establish onsite monitoring systems that are to be used to initiate emergency measures in accordance with Appendix 1, as well as those to be used for conducting assessment.  The equipment shall include	Annex V1, H.4 Plant Monitoring and Data Handling Systems (Units 1 and 2) Annex V2, H.4 Plant Monitoring and Data Handling Systems (Units 3 and 4)	
Criteria H.5.a. geophysical phenomena monitors, (e.g., meteorological, hydrologic, seismic);	Annex V1 H.4.1.1 Meteorological Annex V2 H.4.1.1 Meteorological Annex V1 H.4.1.2 Hydrologic Annex V2 H.4.1.2 Hydrologic Annex V1 H.4.1.3 Seismic Annex V2 H.4.1.3 Seismic	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria H.5.b. radiological monitors, (e.g., process, area, emergency, effluent, wound and portable monitors and sampling equipment);	Annex V1 H.4.2 Process and Effluent Radiation Monitoring System (PERMS) Annex V2 H.4.2 Radiation Monitoring System (RMS)	
Criteria H.5.c. process monitors, (e.g., reactor coolant system pressure and temperature, containment pressure and temperature, liquid levels, flow rates, status or lineup of equipment components); and	Annex V1 H.4.3 Integrated Plant Computer Annex V2 H.4.3 Process Monitoring	
Criteria H.5.d.	Annex V1 H.4.1.4 Fire Detection	
fire and combustion products detectors.	Annex V2 H.4.1.4 Fire Detection	·
Criteria H.6.  Each licensee shall make provision to acquire data from or for emergency access to offsite monitoring and analysis equipment including:	Annex V1 H.4.5 Safety Parameter Display System Annex V2 H.4.3 Process Monitoring	•
Criteria H.6.a. geophysical phenomena monitors, (e.g., meteorological, hydrologic, seismic);	Annex V1 H.4.4 Emergency Response Data System (ERDS) Annex V2 H.4.3 Emergency Response Data System (ERDS)	
Criteria H.6.b. radiological monitors including radiometers and sampling devices. Dosimetry shall be provided and shall meet, as a minimum, the NRC Radiological Assessment Branch Technical position for the Environmental Radiological Monitoring Program; and	Annex V1 H.4.4 Emergency Response Data System (ERDS) Annex V2 H.4.3 Emergency Response Data System (ERDS)	·
Criteria H.6.c. laboratory facilities, fixed or mobile.	H.5.3 Laboratory Facility	

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NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria H.7.  Each organization, where appropriate, shall provide for offsite radiological monitoring equipment in the vicinity of the nuclear facility.	H.5.2 Radiological Monitoring	
Criteria H.8.  Each licensee shall provide meteorological instrumentation and procedures which satisfy the criteria in Appendix 2, and provisions to obtain representative current meteorological information from other sources.	H.5.1 Geophysical Monitoring	
Criteria H.9.  Each licensee shall provide for an onsite operations support center (assembly area) which shall have adequate capacity, and supplies, including, for example, respiratory protection, protective clothing, portable lighting, portable radiation monitoring equipment, cameras and communications equipment for personnel present in the assembly area.	Annex V1 H.1.2 Operations Support Center (OSC) Annex V2 H.1.2 Operations Support Center (OSC)	
Criteria 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.	H.6 Emergency Kits	
Criteria 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).	Appendix 4 Emergency Equipment List	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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.		
Section 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. (10CFR 50.47(b)(9))		· <u></u>
Criteria I.1.  Each licensee shall identify plant system and effluent parameter values characteristic of a spectrum of off-normal conditions and accidents, and shall identify the plant parameter values or other information which correspond to the example initiating conditions of Appendix 1. Such parameter values and the corresponding emergency class shall be included in the appropriate facility emergency procedures. Facility emergency procedures shall specify the kinds of instruments being used and their capabilities.	I.1 Plant Parameters	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 6.0 Accident Assessment
Criteria I.2.  Onsite capability and resources to provide initial values and continuing assessment throughout the course of an accident shall include post-accident sampling capability, radiation and effluent monitors, in-plant iodine instrumentation, and containment radiation monitoring in accordance with NUREG-0578, as elaborated in the NRC letter to all power reactor licensees dated October 30, 1979.	I.1 Radiological Monitors	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 6.0 Accident Assessment
Criteria I.3.  Each licensee shall establish methods and techniques to be used for determining:		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria I.3.a.  the source term of releases of radioactive material within plant systems. An example is the relationship between the containment radiation monitor(s) reading(s) and radioactive material available for release from containment.	1.3 Determination of Release Rate	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 6.0 Accident Assessment
Criteria I.3.b.  the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors.	I.3 Determination of Release Rate	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 6.0 Accident Assessment
Criteria I.4.  Each licensee shall establish the relationship between effluent Monitor readings and onsite and offsite exposures and contamination for various meteorological conditions.	I.4 Dose Assessment System	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 6.0 Accident Assessment
Criteria 1.5.  Each licensee shall have the capability of acquiring and evaluating meteorological information sufficient to meet the criteria of Appendix 2. There shall be provisions for access to meteorological information by at least the near-site Emergency Operations Facility, the Technical Support Center, the Control Room and an offsite NRC center. The licensee shall make available to the State suitable meteorological data processing interconnections which will permit independent analysis by the State, of facility generated data in those States with the resources to effectively use this information.	Annex V1 H.4.1.1 Meteorological Annex V2 H.4.1.1 Meteorological	
Criteria 1.6.  Each licensee shall establish the methodology for determining the release rate/projected doses if the instrumentation used for assessment are offscale or inoperable.	1.3 Determination of Release Rate	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 6.0 Accident Assessment

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NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria I.7.  Each organization shall describe the capability and resources	I.5 Field Monitoring	
for field monitoring within the plume exposure Emergency Planning Zone which are an intrinsic part of the concept of operations for the facility.		
Criteria 1.8.	1.5 Field Monitoring	
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.		
Criteria I.9.	I.5 Field Monitoring	
Each organization shall have a capability to detect and measure radioiodine concentrations in air in the plume exposure EPZ as low as 10 <sup>7</sup> uci/cc (microcuries per cubic centimeter) under field conditions. Interference from the presence of noble gas and background radiation shall not decrease the stated minimum detectable activity.		
Criteria 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.	I.4 Dose Assessment System	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAA 6.0 Accident Assessment

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 1.11.  Arrangements to locate and track the airborne radioactive plume shall be made, using either or both Federal and State resources.		See respective State plans
Section J: Protective Response  A range of protective actions have been developed for the plume exposure pathway EPZ for emergency Workers and the public. 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. (10CFR 50.47(b)(10))		
Criteria J.1.  Each licensee shall establish the means and time required to warn or advise onsite individuals and individuals who may be in areas controlled by the operator, including:	J.1 Protective Response for Onsite Personnel	
Criteria J.1.a.  Employees not having emergency assignments;	J.1 Protective Response for Onsite Personnel	
Criteria J.1.b.  Visitors;	J.1 Protective Response for Onsite Personnel	
Criteria J.1.c. Contractor and construction personnel; and	J.1 Protective Response for Onsite Personnel	
Criteria J.1.d.  Other persons who may be in the public access areas on or passing through the site or within the owner controlled area.	J.1 Protective Response for Onsite Personnel	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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.	J.1.4 Site Dismissal	
Criteria J.3.  Each licensee shall provide for radiological monitoring of people evacuated from the site.	J.1.5 Monitoring and Decontamination	
Criteria J.4.  Each licensee shall provide for the evacuation of onsite non- essential personnel in the event of a Site or General Emergency and shall provide a decontamination capability at or near the monitoring point specified in J.3.	J.1.4 Site Dismissal	
Criteria J.5.  Each licensee shall provide for a capability to account for all individuals onsite at the time of the emergency and ascertain the names of missing individuals within 30 minutes of the start of an emergency and account for all onsite individuals continuously thereafter.	J.1.2 Assembly and Accountability	
Criteria J.6.  Each licensee shall, for individuals remaining or arriving onsite during the emergency, make provisions for:		
Criteria J.6.a. Individual respiratory protection;	Table J-1 Use of Equipment and Supplies	
Criteria J.6.b.  Use of protective clothing; and	Table J-1 Use of Equipment and Supplies	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria J.6.c.  Use of radioprotective drugs, (e.g., individual thyroid protection).	J.1.6 Use of Onsite Protective Equipment and Supplies	
Criteria J.7.	J.2.2 Protective Action Recommendations	
Each licensee shall establish a mechanism for recommending protective actions to the appropriate State and local authorities. These shall include Emergency Action Levels corresponding to projected dose to the population-at-risk, in accordance with Appendix 1 and with the recommendations set forth in Tables 2.1 and 2.2 of the Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (EPA-520/1-75-001). As specified in Appendix 1, prompt notification shall be made directly to the offsite authorities responsible for implementing protective measures within the plume exposure pathway Emergency Planning Zone.	J.2.3 Evacuation and Sheltering	
Criteria J.8.	Table J-4, Evacuation Time Estimates	·
Each licensee's plan shall contain time estimates for evacuation within the plume exposure EPZ. These shall be in accordance with Appendix 4.	Appendix 6, Evacuation Time Estimates for the Vogtle Electric Generating Plant Plume Exposure Pathway Emergency Planning Zone	
Criteria J.9.		See respective State and County plans
Each State and local organization shall establish a capability for implementing protective measures based upon protective action guides and other criteria. This shall be consistent with the recommendations of EPA regarding exposure resulting from passage of radioactive airborne plumes, (EPA-520/1-75-001) and with those of DHEW (DHHS)/FDA regarding radioactive contamination of human food and animal feeds as published in the Federal Register of December 15, 1978 (43 FR 58790).		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria J.10.  The organization's plans to implement protective measures for the plume exposure pathway shall include:		
Criteria J.10.a.  Maps showing evacuation routes, evacuation areas, preselected radiological sampling and monitoring points, relocation centers in host areas, and shelter areas; (identification of radiological sampling and monitoring points shall include the designators in Table J-1 or an equivalent uniform system described in the plan);	Table J-5, Reception Centers/Shelters	Evacuation routes, evacuation areas, and relocation centers are shown in the IEM April 2006 report, Evacuation Time Estimates for the Vogtle Electric Generating Plan  Tables listing radiological sampling and monitoring points are shown in EIP 91303-C, Field Sampling and Surveys
Criteria 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);	Figure v, 2006 Permanent Population with in the VEGP Plume EPZ Figure vi, Transient and Special Facility Population within the VEGP Plume EPZ	
Criteria J.10.c.  Means for notifying all segments of the transient and resident population;	Appendix 3, Means for Providing Prompt Alerting and Notification of the Public	
Criteria J.10.d.  Means for protecting those persons whose mobility may be impaired due to such factors as institutional or other confinement;	J.2.3 Evacuation and Sheltering	
Criteria 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.	J.1.6 Use of Onsite Protective Equipment and Supplies	See respective State and County plans for additional details

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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;		See respective State and County plans
Criteria J.10.g.  Means of relocation;		See respective State and County plans
Criteria 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 K.8)	Table J-5, Reception Centers/Shelters	
Criteria J.10.i.  Projected traffic capacities of evacuation routes under emergency conditions;		See respective State and County plans
Criteria J.10.j.  Control of access to evacuated areas and organization responsibilities for such control;		See respective State and County plans Also see IEM April 2006 report, Evacuation Time Estimates for the Vogtle Electric Generating Plan
Criteria 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;		See respective State and County plans
Criteria J.10.I  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	Appendix 6, Evacuation Time Estimates for the Vogtle Electric Generating Plant Plume Exposure Pathway Emergency Planning Zone	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria J.10.m.	J.2.2 Protective Action Recommendations	
The bases for the choice of recommended protective actions from the plume exposure pathway during emergency	Table J-2, Protective Action Recommendations	·
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.	Able J-3, Sheltering Guidance	
Criteria J.11.  Each State shall specify the protective measures to be used		See respective State and County plans
for the ingestion pathway, including the methods for protecting the public from consumption of contaminated food stuffs. This shall include criteria for deciding whether dairy animals should be put on stored feed. The plan shall identify procedures for		
detecting contamination, for estimating the dose commitment consequences of uncontrolled ingestion, and for imposing protection procedures 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, water sheds, water supply intake and treatment plants		
and reservoirs shall be maintained. Provisions for maps showing detailed crop information may be by including reference to their availability and location and a plan for their		
use. The maps shall start at the facility and include all of the 50-mile ingestion pathway EPZ. Up-to-date lists of the name and location of all facilities which regularly process milk products and other large amounts of food or agricultural		•.
products originating in the ingestion pathway Emergency Planning Zone, but located elsewhere, shall be maintained.		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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.		See respective State and County Plans
Section 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. 10CFR 50.47(b)(11))		
Criteria K.1.  Each licensee shall establish onsite exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective	K.1 Emergency Exposure Guidelines K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	
Criteria K.1.a. removal of injured persons;	K.1 Emergency Exposure Guidelines K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	
Criteria K.1.b. undertaking corrective actions;	K.1 Emergency Exposure Guidelines K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	
Criteria K.1.c performing assessment actions;	K.1 Emergency Exposure Guidelines K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria K.1.d providing first aid;	K.1 Emergency Exposure Guidelines K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	
Criteria K.1.e performing personnel decontamination;	K.1 Emergency Exposure Guidelines K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	
Criteria K.1.f providing ambulance service; and		See respective State and County plans
Criteria K.1.g providing medical treatment services.		See respective State and County plans
Criteria K.2.  Each licensee shall provide an onsite radiation protection program to be implemented during emergencies, including methods to implement exposure guidelines. The plan shall identify individual(s), by position or title, who can authorize emergency workers to receive doses in excess of 10 CFR Part 20 limits. Procedures shall be worked out in advance for permitting onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities. These procedures shall include expeditious decision making and a reasonable consideration of relative risks.	K.2 Onsite Radiation Protection Program Table K-1, Emergency Worker Limits for Workers Performing Emergency Services	
Criteria 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.	K.2 Onsite Radiation Protection Program Appendix 4, Emergency Equipment List	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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.	K.2 Onsite Radiation Protection Program	
Criteria 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).		See respective State and County plans
Criteria K.5.a.  Each organization as appropriate shall specify action levels for determining the need for decontamination.	K.3 Decontamination	
Criteria 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.	K.3 Decontamination	
Criteria K.6.  Each licensee shall provide onsite contamination control measures including:	K.4 Onsite Radiological Contamination Control	
Criteria K.6.a. area access control;	K.4 Onsite Radiological Contamination Control	
Criteria K.6.b. drinking water and food supplies;	K.4 Onsite Radiological Contamination Control	
Criteria K.6.c.  criteria for permitting return of areas and items to normal use, see Draft ANSI 13.12.	K.4 Onsite Radiological Contamination Control	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria K.7.  Each licensee shall provide the capability for decontaminating relocated onsite personnel, including provisions for extra clothing and decontaminants suitable for the type of contamination expected, with particular attention given to radioiodine contamination of the skin.	L.3 Offsite Support Services	
Section L: Medical and Public Health Support  Arrangements are made for medical services for contaminated injured individuals. (10 CFR 50.47(b)(12))		
Criteria 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.	L.2 Medical Transportation Appendix 2, Letters of Agreement	
Criteria L.2.  Each licensee shall provide for onsite first aid capability.	L.1 On-Site Capability	
Criteria L.3.  Each State shall develop lists indicating the location of public, private and military hospitals and other emergency medical services 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.		See respective State plans
Criteria L.4.  Each organization shall arrange for transporting victims of radiological accidents to medical support facilities.	L.2 Medical Transportation	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Section M: Recover and Reentry Planning and Postaccident Operations		<del> </del>
General plans for recovery and reentry are developed. (10CFR 50.47(b)(13))		
Criteria M.1.	M.1 Commencement of Recovery Phase	
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.		
Criteria M.2.	M.1 Commencement of Recovery Phase	
Each licensee plan shall contain the position/title, authority and responsibilities of individuals who will fill key positions in the facility recovery organization. This organization shall include technical personnel with responsibilities to develop, evaluate and direct recovery and reentry operations. The recovery organization recommended by the Atomic Industrial Forum's "Nuclear Power Plant Emergency Response Plan" dated October 11, 1979, is an acceptable framework.	M.2 Recovery Operations	
Criteria M.3.	M.2 Recovery Operations	
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.		
Criteria M.4.	M.4 Exposure Monitoring	
Each plan shall establish a method for periodically estimating total population exposure.		

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Section 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. (10CFR 50.47(b)(14))		
Criteria 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.	N Exercises and Drills N.1 Exercises	
Criteria 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 annual exercise by Federal and State observers/evaluators. The scenario should be varied from year to year such that all major elements of the plans and preparedness organizations are tested within a five-year period. Each organization should make provisions to start an exercise between 6:00 p.m. and midnight, and another between midnight and 6:00 a.m. once every six years. Exercises should be conducted under various weather conditions. Some exercises should be unannounced.	N.1 Exercises	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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 annual exercise at the frequencies indicated below:	N.2 Drills	
Criteria N.2.a.  Communication Drills  Communications with State and local governments within the plume exposure pathway Emergency Planning Zone shall be tested monthly. 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 shall be tested annually. Communication drills shall also include the aspect of understanding the content of messages.	N.2.2 Communication Drills F.8 Communication Systems Tests	
Criteria N.2.b.  Fire Drills  Fire drills shall be conducted in accordance with the plant (nuclear facility) technical specifications.	N.2.3 Fire Drills	
Criteria N.2.c.  Medical Emergency Drills  A medical emergency drill involving a simulated contaminated individual which contains provisions for participation by the 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 annual exercise.	N.2.4 Medical Emergency Drills	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria N.2.d.  Radiological Monitoring Drills  Plant environs and radiological monitoring drills (onsite and offsite) shall be conducted annually. These drills shall include collection and analysis of all sample media (e.g., water, vegetation, soil and air), and provisions for communications and record keeping. The State drills need not be at each site.  Where appropriate, local organizations shall participate.	N.2.5 Radiological Monitoring Drills	
Criteria N.2.e.  Health Physics Drills  (1) Health Physics drills shall be conducted semiannually 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.  (2) Analysis of inplant liquid samples with actual elevated radiation levels including use of the post-accident sampling system shall be included in Health Physics drills by licensees annually.	N.2.6 Health Physics Drills	
Criteria 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 Scenarios	
Criteria N.3.a.  The basic objective(s) of each drill and exercise and appropriate evaluation criteria;	N.3 Scenarios	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria N.3.b.  The date(s), time period, place(s) and participating organizations;	N.3 Scenarios	
Criteria N.3.c. The simulated events;	N.3 Scenarios	
Criteria N.3.d. A time schedule of real and simulated initiating events;	N.3 Scenarios	
Criteria 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	N.3 Scenarios	
Criteria N.3.f.  A description of the arrangements for and advance materials to be provided to official observers.	N.3 Scenarios	
Criteria 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.	N.4 Evaluations and Corrective Actions	J

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria 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.	N.4 Evaluations and Corrective Actions	
Section O: Radiological Emergency Response Training Radiological emergency response training is provided to those who may be called on to assist in an emergency. (10CFR 50.47(b)(15))		
Criteria O.1.  Each organization shall assure the training of appropriate individuals.	O Radiological Emergency Response Training	
Criteria O.1.a.  Each facility to which the plant applies shall provide site specific emergency response training for those offsite emergency organizations who may be called upon to provide assistance in the event of an emergency.	O Radiological Emergency Response Training O.1 Training	
Criteria 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 shall also be offered to the other departments who are members of the mutual aid district.	O Radiological Emergency Response Training O.1 Training	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria O.2.  The training program for members of the onsite emergency organization shall, besides classroom training, include practical drills in which each individual demonstrates ability to perform his assigned emergency function. During the practical drills, on-the-spot correction of erroneous performance shall be made and a demonstration of the proper performance offered by the instructor.	O.1 Training O.2 Qualification	
Criteria O.3.  Training for individuals assigned to licensee first aid teams shall include courses equivalent to Red Cross Multi-Media.	Table O-2, Training Course Description	
Criteria 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 categories:	Table O-2, Training Course Description	
Criteria O.4.a.  Directors or coordinators of the response organizations;	Table O-2, Training Course Description	
Criteria O.4.b.  Personnel responsible for accident assessment;	Table O-2, Training Course Description	
Criteria O.4.c.  Radiological monitoring teams and radiological analysis personnel;	Table O-2, Training Course Description	
Criteria O.4.d.  Police, security and fire fighting personnel;	Table O-2, Training Course Description	
Criteria O.4.e.  Repair and damage control/correctional action teams (onsite);	Table O-2, Training Course Description	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria O.4.f. First aid and rescue personnel;	Table O-2, Training Course Description	
Criteria O.4.g.  Local support services personnel including Civil  Defense/Emergency Service personnel;	Table O-2, Training Course Description	
Criteria O.4.h.  Medical support personnel;	Table O-2, Training Course Description	
Criteria O.4.i. Licensee's headquarters support personnel;	Appendix 7, Emergency Operations Facility, G.1.1 Training Table A7-2, Corporate Emergency Response Organization Training Matrix Table A7-3, Description of Training Subject Areas	
Criteria O.4.j.  Personnel responsible for transmission of emergency information and instructions.	Table O-2, Training Course Description	/
Criteria O.5.  Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.	O.1 Training	
Section P: Responsibility for the Planning Effort: 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. (10CFR 50.47(b)(16))		
Criteria P.1.  Each organization shall provide for the training of individuals responsible for the planning effort.	P Responsibility for the Planning Effort	

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria P.2.  Each organization shall identify by title the individual with the overall authority and responsibility for radiological emergency response planning.	P Responsibility for the Planning Effort	
Criteria 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.	P Responsibility for the Planning Effort	
Criteria 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.	P Responsibility for the Planning Effort	
Criteria 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.	P Responsibility for the Planning Effort	
Criteria P.6  Each plan shall contain a detailed listing of supporting plans and their source.	NMP-EP- 300, SNC Corporate Emergency Planning Activities	
Criteria 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.	Annex V1 Appendix 1, Index of Procedures AnnexV2 Appendix 1, Index of Procedures	Table V2A3-1, Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), 9.0 Implementing Procedures

NUREG 0654 Criteria (10 CFR 50.47(b))	VEGP Emergency Plan Section(s)	Comments
Criteria P.8.	See table of contents	
Each plan shall contain a specific table of contents. Plans submitted for review should be cross-referenced to these criteria.		
riteria P.9.	P Responsibility for the Planning Effort	
Each licensee shall arrange for and conduct independent reviews of the emergency preparedness program at least every 12 months. (An independent review is one conducted by any competent organization either internal or external to the licensees' organization, but who are not immediately responsible for the emergency preparedness program). The review shall include the emergency plan, its implementing procedures and practices, training, readiness testing, equipment, and interfaces with State and local governments. Management controls shall be implemented for evaluation and correction of review findings. The result of the review, along with recommendations for improvements, shall be documented, reported to appropriate licensee corporate and plant management, and involved Federal, State and local organizations, and retained for a period of five years.		
Criteria P.10		Reference EIP 91701-C, Preparation and
nch organization shall provide for updating telephone imbers in emergency procedures at least quarterly.		Control of Emergency Preparedness Documents.

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Final Sheet of Enclosure