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May 16, 2000

SOUTHERN COMPANY
Energy to Serve Your World℠

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

NOG- 01158

VOGTLE ELECTRIC GENERATING PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE REVISION

Gentlemen:

In accordance with 10 CFR 50.4, as required by 10 CFR 50, Appendix E, Part V, Southern Nuclear hereby submits the following revision(s) to the Vogtle Emergency Plan Implementing Procedure(s):

Procedure	Revision	Effective Date
91201-C	09	05/08/00
91503-C	09	05/08/00
91602-C	13	05/08/00

By copy of this letter, the NRC Region II Administrator and the Site NRC Senior Resident Inspector will receive one copy each of the revision(s).

Please contact Angel Cardona at (706) 826-3114 if you have questions.

Sincerely,

Jeffrey T. Gasser
General Manager

JTG:AEC:jmm

Enclosure: Emergency Plan Implementing Procedure(s)

A045

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US NRC
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WASHINGTON, D.C. 20555

Submittal No. EP-00-07

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) are indicated by a mark in the SE column.

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	5/16/00		4 pages of documentation
91503-C	~~08~~ 09		"Control Room Instrumentation Output for Assessment of Core Damage"
			4 pages of documentation
91602-C	13		"Emergency Drills and Exercises"
			4 pages of documentation

5/8

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June J. McBride
Submitted By:

Received By: (Document Control)

Emergency Preparedness
Department

05/10/2000
Date

5/11/00
Date

Figure 2 (Example)

REFERENCE USE PROCEDURE **PRB REVIEW REQUIRED**

1.0 PURPOSE

The purpose of this procedure is to provide instructions for the activation and operation of the Technical Support Center (TSC).

2.0 RESPONSIBILITIES

2.1 The first knowledgeable person from the Emergency Response Organization (ERO) arriving at the TSC shall be responsible for initiating actions to physically activate the TSC (see the TSC activation checklist).

2.2 The TSC Manager shall be responsible for declaring the TSC operational and directing the operations of the TSC organization.

2.3 The TSC staff shall be responsible for assuring the physical readiness of their own workstations including startup and testing of communication systems and computers. Each staff member shall also be responsible for completing the individual checklist as the duties are performed.

2.4 The TSC Manager shall be responsible for directing activation of the alternate TSC in the Control Room and/or the Emergency Operations Facility (EOF) should the primary TSC become uninhabitable or not functional.

3.0 PREREQUISITES

An Alert, Site Area Emergency or General Emergency has been declared or the Emergency Director has ordered activation of the TSC.

4.0 PRECAUTIONS

If radiological conditions indicate that the TSC is uninhabitable, the TSC Manager should consider evacuation of the TSC and reassemble at the alternate TSC in the Control Room and/or the EOF, as appropriate.

5.0 PROCEDURE

5.1 ACTIVATION

5.1.1 The TSC shall be activated for an ALERT or higher Emergency declaration and notifications of appropriate TSC staff will be made per Procedure 91002-C, "Emergency Notifications". The TSC will be fully operational (capable of being activated) within about an hour of the initial notification.

5.1.1.1 To declare the facility activated the following minimum TSC staff must be present to perform the following functions:

POSITION	FUNCTION
• TSC Manager	TSC Management
• HP/Chem Shared Foreman	Dose Assessment
• FMT Communicator	Supervision of Field Monitoring Teams
• Electrical Engineer	Plant System Engineering
• Mechanical Engineer	Plant System Engineering
• ENN Communicator	Offsite Communications

5.1.2 The first knowledgeable person from the Emergency Response Organization who arrives at the TSC shall prepare the TSC for activation in accordance with the physical layout as posted in the TSC, and the TSC activation checklist. Others arriving at the TSC shall assist in the physical activation.

5.1.3 Personnel assigned to the TSC shall perform the TSC Activation Checklist.

NOTE

If other personnel have assumed their assigned position, stand by in the work area for second shift duty or other assignment in accordance with directions from the TSC Support Coordinator.

5.1.4 The TSC Manager shall evaluate readiness and declare the TSC operational in accordance with Procedure 91103-C, "Duties Of The TSC Manager".

5.2 FUNCTIONS AND OPERATIONS

5.2.1 After activation, the following functions shall be performed at the TSC by the organization shown in Figure 1:

5.2.1.1 Direction and control of onsite emergency response (TSC Manager Checklist in Procedure 91103-C, "Duties Of The TSC Manager").

5.2.1.2 In-plant radiological assessment and protective action recommendations (Health Physics Supervisor Checklist in Procedure 91110-C, "Duties Of The Health Physics Supervisor (TSC)").

5.2.1.3 Engineering and technical analyses (i.e., core damage assessment) for Control Room support (Engineering Supervisor Checklist in Procedure 91107-C, "Duties Of The Engineering Supervisor (TSC)").

5.2.1.4 Liaison between the Control Room and TSC (Operations Supervisor Checklist in Procedure 91109-C, "Duties Of The Operations Supervisor (TSC)").

5.2.1.5 Coordination of emergency maintenance (Maintenance Supervisor Checklist in Procedure 91108-C, "Duties Of The Maintenance Supervisor (TSC)").

5.2.1.6 Direction of post-accident and plant chemistry sampling and analysis; evaluation of chemistry data; (Chemistry Supervisor Checklist in Procedure 91111-C, "Duties Of The Chemistry Supervisor (TSC)").

5.2.1.7 Planning and implementation of logistical support (TSC Support Coordinator Checklist in Procedure 91106-C, "Duties Of The TSC Support Coordinator").

5.2.1.8 Access control and accountability in TSC (TSC Security Coordinator).

5.2.1.9 Offsite dose projection and direction of Field Monitoring Teams (by HP Supervisor) until the Emergency Operation Facility (EOF) is activated.

5.2.1.10 Initial and continuous accountability of all personnel reporting to the TSC (by the TSC Security Coordinator).

5.2.2 The TSC Manager will make provisions for a shift change within 12 to 16 hours of the initiation of the current shift.

5.3 TSC EVACUATION

5.3.1 Evacuation of the TSC should be considered if the facility is not functional or its radiological conditions reach or exceed either or both of the following values:

a. Dose Rate - 100 mRem/hr

b. Iodine Activity - 2.7E-7 μCi/cc

5.3.2 If TSC radiological conditions indicate that the TSC is uninhabitable, the Health Physics Supervisor should recommend evacuation.

5.3.3 The decision to evacuate shall be made by the TSC Manager in consultation with the Emergency Director.

5.3.4 The TSC Manager, Operations Supervisor, HP Supervisor and other necessary personnel shall relocate to the alternate TSC (Shift Superintendent Office) in the Control Room.

5.3.5 The TSC Manager shall ensure that other TSC personnel and necessary emergency equipment and supplies are relocated to the EOF.

5.3.6 The TSC Manager shall declare the alternate TSC operational and ensure that the Emergency Director, EOF Manager and OSC Manager are informed of the new location and communications links.

6.0 REFERENCES

6.1 VEGP EMERGENCY PLAN

6.2 PROCEDURES

6.2.1 91002-C, "Emergency Notifications"

6.2.2 91103-C, "Duties Of The TSC Manager"

6.2.3 91106-C, "Duties Of The TSC Support Coordinator"

6.2.4 91107-C, "Duties Of The Engineering Supervisor (TSC)"

6.2.5 91108-C, "Duties Of The Maintenance Supervisor (TSC)"

6.2.6 91109-C, "Duties Of The Operations Supervisor (TSC)"

6.2.7 91110-C, "Duties Of The Health Physics Supervisor (TSC)"

6.2.8 91111-C, "Duties Of The Chemistry Supervisor (TSC)"

6.2.9 91204-C, "Emergency Response Communications"

6.2.10 91702-C, "Emergency Equipment And Supplies"

6.2.11 91705-C, "Inventory And Testing Of Emergency Preparedness Material/Equipment Which Are Not Part Of The Emergency Kits"

6.3 NUREG-0654, FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

6.4 NUREG-0696, "Functional Criteria for Emergency Response Facilities"

6.5 NUREG-0737, Supplement No. 1, "Requirements for Emergency Response Capability"

END OF PROCEDURE TEXT

TSC ORGANIZATIONAL CHART

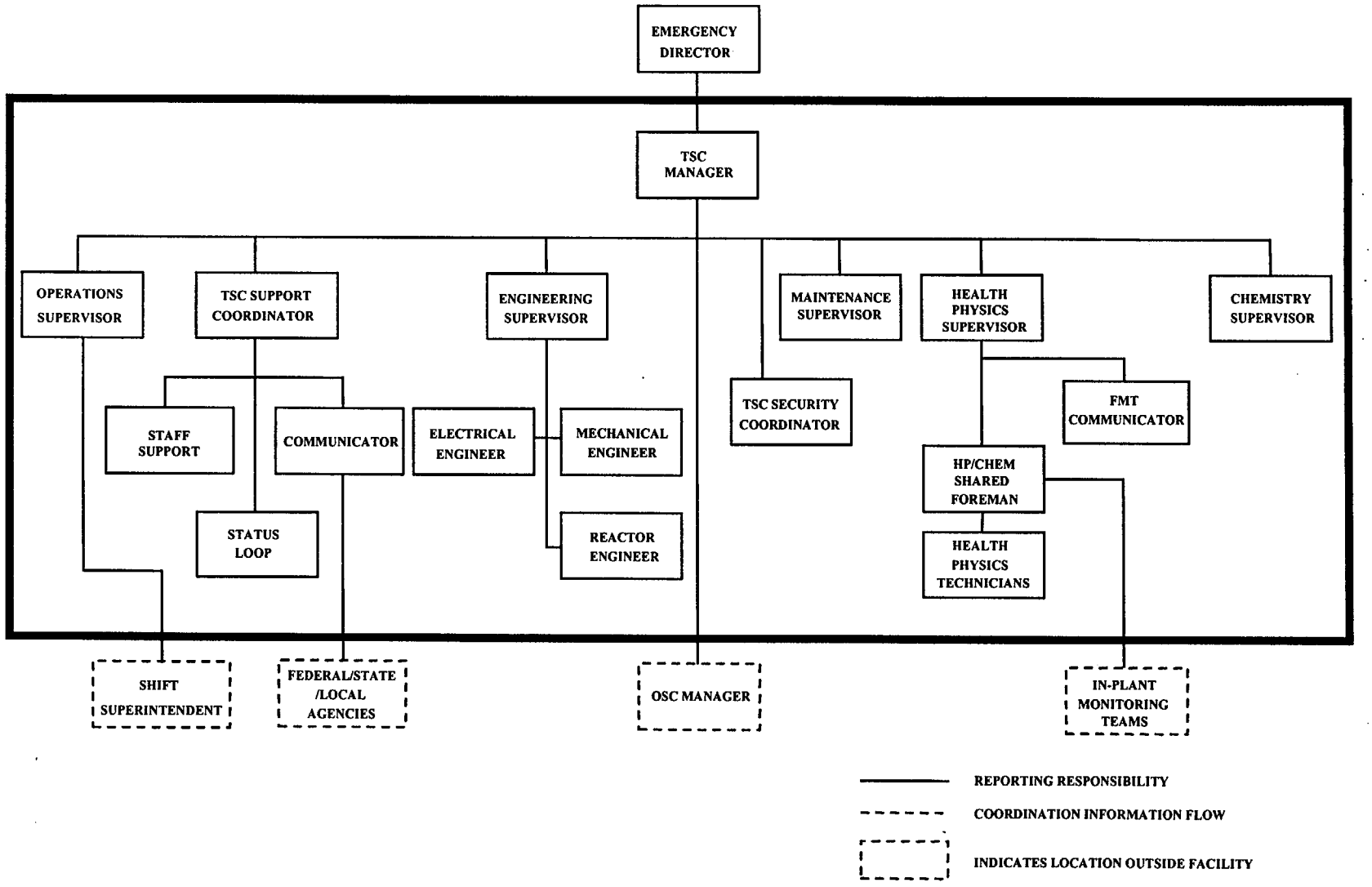

FIGURE 1

DATA SHEET 1
EMERGENCY RESPONSE FACILITY ROSTER

Facility _____

Date _____

TIME		BADGE NO.	NAME	(FOR RECALLED PERSONNEL ONLY) Have you consumed any alcohol in the past 5 hours?	
IN	OUT	(NO, SG, SD)		NO	YES

TSC ACTIVATION CHECKLIST

Sheet 1 of 1

RESPONSIBILITY:

Prepare the TSC physically for use by the VEGP Emergency Response Organization.

INITIAL ACTIONS

1. Badge in at the TSC ACAT and sign in on the Emergency Response Facility Roster, (use badge numbers ONLY i.e., NO, SD, SG)

2. Review the posted TSC floor plan.

3. Arrange physical facility per posted floor plan.

NOTE

Glass front Red lock box located outside TSC computer room contains keys for TSC doors and the gray solid front lock box. The solid front lock box contains keys for all cabinets and lockers in the TSC and is attached to the Admin. locker in main section of TSC.

4. Ensure plant computers are switched on and are displaying data.

5. Position telephones, copies of procedures, checklists, maps and other equipment/supplies from the TSC Admin. supply cabinet.

6. Test telephones and radios for operability by listening for a dial tone on the telephone and conducting a radio check on the remote radios.

7. Report readiness to the TSC Manager.

8. If the TSC Manager has not arrived, begin completing TSC Manager Checklist in Procedure 91103-C, "Duties Of The TSC Manager".

9. Establish workstation and complete individual position checklist as applicable.

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Received By: (Document Control)

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Figure 2 (Example)

PRB REVIEW REQUIRED

1.0 PURPOSE

This procedure provides instruction for collecting and recording information obtained from Control Room instrumentation needed in assessing the extent of core damage.

2.0 PRECAUTIONS AND LIMITATIONS

NONE

3.0 PREREQUISITES

An emergency condition has been declared and core damage is suspected.

4.0 RESPONSIBILITIES

4.1 ENGINEERING DEPARTMENT

4.1.1 Engineering personnel assigned to the Technical Support Center (TSC) are responsible for overall coordination of this procedure including the assignment of responsibilities to other groups or individual as is required to complete the assessment.

4.2 OPERATIONS DEPARTMENT

4.2.1 The Operations Department shall execute this procedure if requested by TSC. The recorded results will be transmitted to the TSC Engineering personnel coordinating core damage assessment activities.

5.0 MAIN BODY

5.1 RVLIS READINGS AND RECORDING

5.1.1 Review the Reactor Vessel Level Instrumentation System, (RVLIS) indications to determine if the core was uncovered (< 62 % Full Range) at any time during the transient. If it is apparent that it was uncovered, estimate the length of time, in minutes, that it was uncovered and record on Data Sheet 1, "Control Room Instrumentation Data Record For Core Damage Assessment". If the core was never uncovered, record "0 min." on Data Sheet 1.

5.2 CORE EXIT THERMOCOUPLE TEMPERATURES

5.2.2 Record on the core map of Data Sheet 1, "Control Room Instrumentation Data Record For Core Damage Assessment", all temperatures that exceed 750 degrees Fahrenheit during the incident along with the corresponding thermocouple identification numbers. A core map is provided for additional use in display of the location of thermocouples indicating high temperatures.

5.3 RADIATION MONITOR READINGS AND RECORDS

5.3.1 Determine the maximum reliable output value from the containment high range radiation monitor (RE-005/006) and containment atmosphere hydrogen monitor. (May require placing of hydrogen analyzers in service.)

5.3.2 Record the values obtained in the spaces provided on Data Sheet 1.

5.4 Determine volume of all Reactor Coolant System (RCS) additions made during the accident and prior to the collection of RCS core damage assessment data as follows:

a. From Control Room tank level indications for the refueling water storage tank (RWST) and boric acid tank prior to and following safety injection, estimate the volume of each addition, and convert to gallons.

b. If the accumulators discharge, add 26,900 gallons.

c. Record the estimated addition for each source on the appropriate line in Data Sheet 2, "Post-Accident RCS Addition Volume Determination".

d. Record initial Tavg at commencement of transient.

5.5 Transmit the completed Data Sheets to the Engineering personnel coordinating core damage assessment activities.

6.0 REFERENCES

6.1 VEGP EMERGENCY PLAN

6.2 PROCEDURES

6.2.1 91502-C, "Core Damage Assessment"

6.3 Westinghouse Owners Group Post Accident Core Damage Assessment Methodology, February 1984.

END OF PROCEDURE TEXT

Sheet 1 of 2

DATA SHEET 1

UNIT 1 - CONTROL ROOM INSTRUMENTATION DATA RECORD FOR CORE DAMAGE ASSESSMENT

Date: _____ Time: _____ Performed by: _____

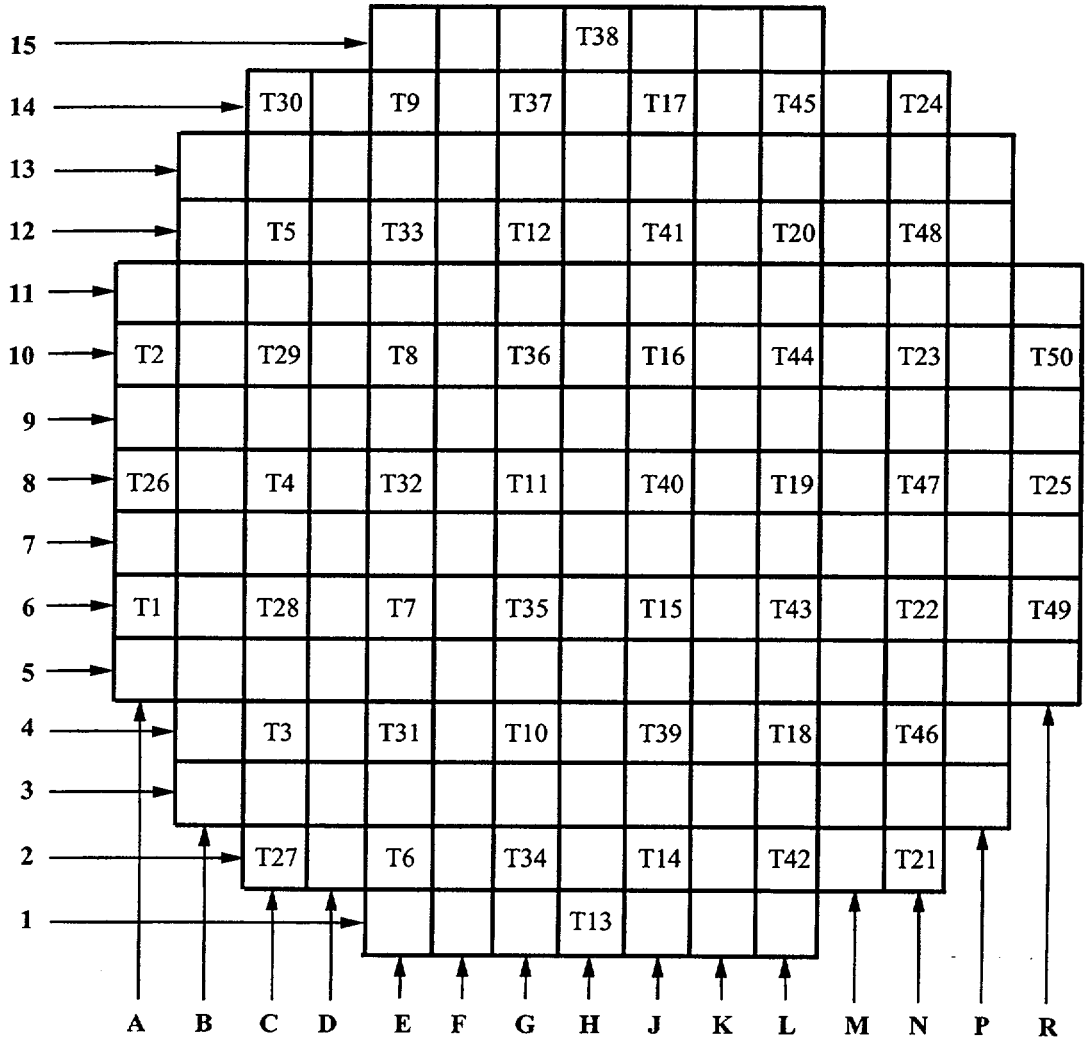
Length Of Time Core Uncovered (minutes) _____

Containment Building
Atmosphere Hydrogen (%) _____
*(UV 7501)

Maximum Reliable Containment Building
High Range Radiation Monitor
RE-005/006 Output (mrem/hr)_____
*(R6203) / (R6204)

* - Denotes Integrated Plant Computer Points

NORTH
0°



Thermocouple Temperatures >750 Degrees F

DATA SHEET 1

UNIT 2 - CONTROL ROOM INSTRUMENTATION DATA RECORD FOR CORE DAMAGE ASSESSMENT

Date: _____ Time: _____ Performed by: _____

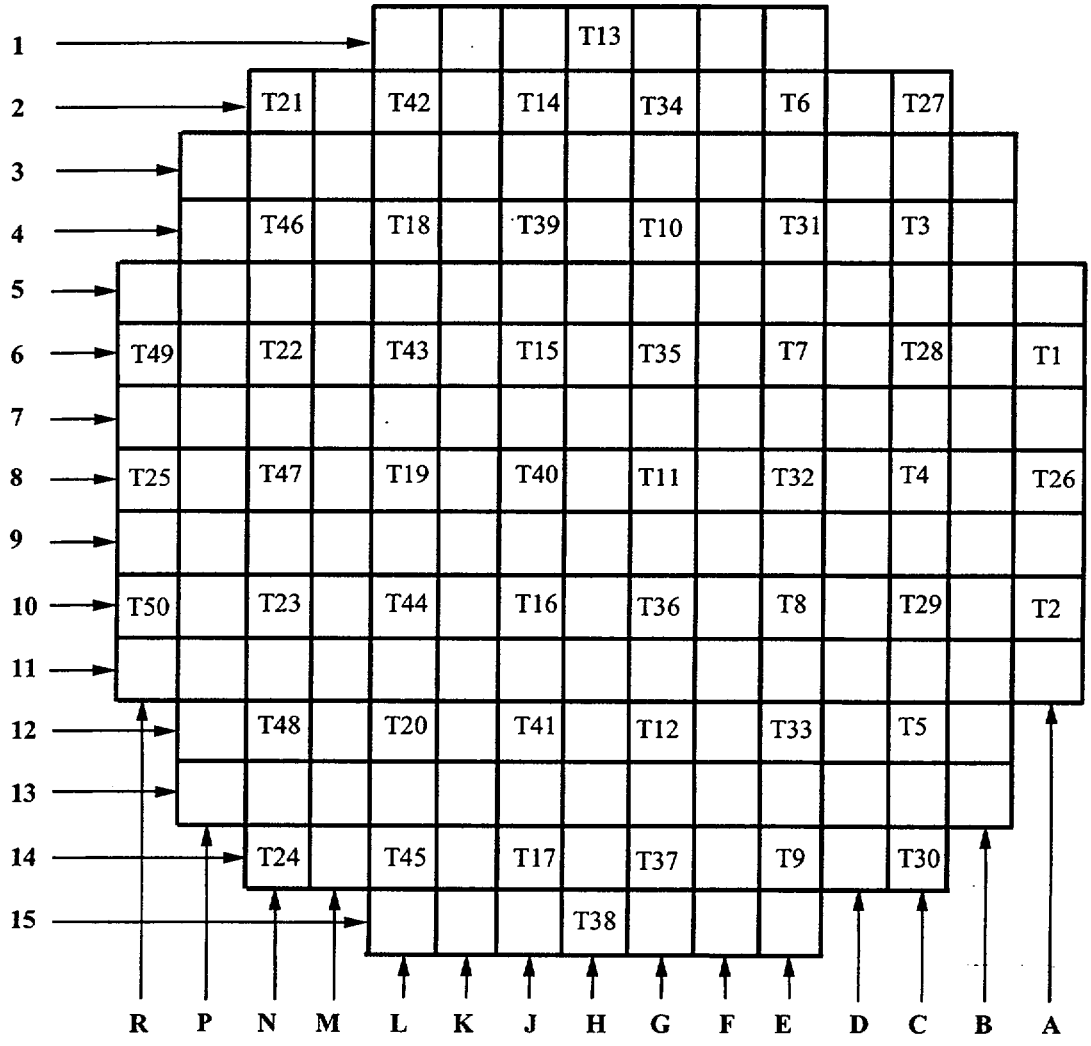
Length Of Time Core Uncovered (minutes) _____

Containment Building Atmosphere Hydrogen (%) _____
*(UV 7501)

Maximum Reliable Containment Building High Range Radiation Monitor RE-005/006 Output (mrem/hr)_____
*(R6203) / (R6204)

* - Denotes Integrated Plant Computer Points

NORTH
180°



Thermocouple Temperatures >750 Degrees F

Sheet 1 of 1

DATA SHEET 2

POST-ACCIDENT RCS ADDITION VOLUME DETERMINATION

Date: _____ Time: _____ Performed by: _____

Unit Number _____

1.

SOURCE OF ADDITION	TANK LEVEL (%) PRE-ACCIDENT From Logs (%)	POST-ACCIDENT Present Level (%)	DELTA LEVEL Pre-Post (%)	Conversion factor (GAL/%)	Gallons Added
RWST *(UV 6130)	(_____	- _____) = _____	X	6,900	= _____
Boric Acid Tank *Ch. 1 – (L6321) *Ch. 4 – (L6320)	(_____	- _____) = _____	X	442	= _____
Accumulators (If discharged add 26,900 gal) *Tank 1 – (LO 490) *Tank 2 – (LO 491) *Tank 3 – (LO 492) *Tank 4 – (LO 493)					= _____

TOTAL GALLONS ADDED _____

2. Record T_{avg} at the commencement of transient _____
*(UT 5468)

* - Denotes Integrated Plant Computer Points

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Figure 2 (Example)

REFERENCE USE PROCEDURE **PRB REVIEW REQUIRED**

1.0 PURPOSE

1.1 The purpose of this procedure is to provide guidance and instructions for developing, conducting, evaluating and documenting emergency preparedness drills and exercises.

1.2 This procedure includes provisions to exercise both onsite and offsite emergency response personnel, equipment, communications and procedures including the interface with federal, state, and county agencies.

1.3 The result of implementing this procedure will be to verify the adequacy of the Vogtle Electric Generating Plant (VEGP) Emergency Plan and Emergency Plan Implementing Procedures and the overall effectiveness of the onsite and offsite Emergency Response Organization (ERO).

2.0 RESPONSIBILITIES

2.1 The Emergency Preparedness Coordinator (EPC) shall have the following responsibilities:

2.1.1 Coordinating the planning and scheduling of drills and biennial exercises, and ensuring that this will fulfill the requirements of 10CFR50, Appendix E and the Emergency Plan.

2.1.2 With the assistance of state/county emergency planning personnel, developing the objectives to be met for each exercise, including mutually agreeable dates and times.

2.1.3 Developing scenarios for drills and biennial exercises.

2.1.4 Coordinating scenario development with state and local agencies.

2.1.5 Arranging for official observers to observe, evaluate and critique the drills and biennial exercises and for coordinating the critiques.

2.1.6 Ensuring that identified critique items are addressed and corrective actions planned with deadlines for completion.

2.1.7 Monitor the status of completion of corrective actions. Significant problems shall be brought to the attention of appropriate plant management.

2.1.8 Maintaining records of all drills and exercises.

2.1.9 Submitting scope, objectives and scenario to NRC for biennial exercises.

2.1.10 Conducting periodic drills or tabletop scenarios to exercise the plant staff on Severe Accident Management Guidelines (SAMG).

3.0 PRECAUTIONS

Drills and exercises shall be conducted in such a manner that the safety of the plant and personnel are not jeopardized.

4.0 PROCEDURE

4.1 DRILLS/EXERCISES

4.1.1 Scheduling

4.1.1.1 Drills/Exercises listed on Checklist 1 will be conducted at the periodicity specified. Additional drills/exercises may be conducted as deemed appropriate by the Manager Training and Emergency Preparedness.

4.1.1.2 NRC and FEMA evaluated emergency exercises that test integrated response capabilities are conducted in accordance with NRC and FEMA directives. Vogtle will conduct an exercise every two calendar years.

4.1.1.3 The scope and objectives of the biennial exercise will be submitted to the NRC (75) days prior to the exercise date.

4.1.1.4 During a six-year period, an exercise shall be conducted which starts between 6:00 P.M. and 4:00 A.M.

4.1.1.5 Some drills/exercises will be unannounced.

4.1.2 Scenarios

4.1.2.1 The EPC is responsible for preparing the scenario for the biennial exercise as directed by the Manager Training and Emergency Preparedness.

4.1.2.2 The scenario for the biennial exercise will be submitted to the NRC (45) days prior to the exercise date.

4.1.2.3 Drill/Exercise scenarios should be developed using Checklist 2 as a guide. Many parts of Checklist 2 are inappropriate for small scale drills and may be omitted at the discretion of the EPC.

4.1.2.4 The scenario shall be varied from year to year so that all major elements of the response plans and preparedness organizations are tested within a six year period.

4.1.2.5 An Exercise Coordinator, with the assistance of representatives of state and county organizations (as appropriate), shall develop the objectives to be met for each drill or exercise.

4.1.2.6 The Exercise Coordinator, with the cooperation of the state representatives, shall ensure that the simulated events and site initial conditions are developed in a manner that will adequately test the level of emergency preparedness of the groups participating in the exercise. FEMA will receive a copy of the scenario from the participating states.

4.1.2.7 The EPC shall assign controllers/evaluators to areas based on their skills and knowledge.

4.1.2.8 The EPC shall ensure that approval has been obtained from the General Manager Nuclear Plant and any other appropriate plant management prior to conducting a drill/exercise (see Data Sheet 2).

4.1.2.9 A pre-drill/exercise briefing shall be conducted to inform controllers/evaluators of the scenario, objectives, which portions of the scenario require strong control, and which portions of the scenario permit free play. Appropriate materials to conduct and evaluate the drill shall be distributed during the briefing.

4.1.2.10 As drills are a supervised instruction period, controllers/evaluators may assist and correct players during a drill.

4.1.2.11 During an exercise, Controllers/Evaluators should not provide guidance regarding the use of emergency procedures and equipment, unless the conduct of the exercise or safe operation of the plant would be jeopardized. Any such guidance will be made a critique item.

4.1.3 A critique will be conducted following each drill/exercise which includes players and controllers/evaluators. Players and controllers/evaluators are encouraged to identify areas where improvements are required.

4.1.4 The EPC shall submit a written report of drills and exercises to the General Manager Nuclear Plant or Assistant General Manager Plant Support which will include significant critique comments and corrective actions which will be tracked through the condition reporting tracking program. (See Data Sheet 3)

4.1.5 The EPC shall maintain a record of all drills for a period of 2 years and biennial exercises for 5 years.

4.2 OFF YEAR DRILLS

4.2.1 Off Year Drills shall be conducted to ensure that adequate response capabilities are maintained in the interval between biennial exercises. At least one of these drills will be conducted during the calendar year when there is no biennial exercise and shall involve a combination of some of the principal functional areas of the onsite emergency response capabilities.

4.2.2 The principal functional areas include the following activities:

4.2.2.1 Command and control of emergency response

4.2.2.2 Accident assessment

4.2.2.3 Protective action decision making

4.2.2.4 Plant system repair and corrective actions

4.2.3 Activation of all onsite emergency response facilities (TSC, OSC, and EOF) are not required.

4.2.4 The States of Georgia and South Carolina including the Counties of Burke, Aiken, Allendale and Barnwell will be permitted to participate in off year drills when requested by the State or County Government.

4.3 COMMUNICATION DRILLS

4.3.1 The EPC should develop, conduct, and document communications drills in accordance with the guidelines in Section 4.1 as appropriate.

4.3.2 Communications Drills shall make use of the actual message format.

4.3.3 Communication drills among the following shall be conducted every two-calendar years (usually during the biennial exercise):

a. Control Room (normally conducted from the Simulator)

b. Technical Support Center (TSC)

c. Operations Support Center (OSC)

d. Emergency Operations Facility (EOF)

e. Emergency News Center (ENC)

f. General Office Operations Center (GOOC)

g. State of Georgia (Georgia Emergency Management Agency)

h. Burke County

i. Savannah River Site (SRS)

j. VEGP Field Monitoring Teams

k. State of South Carolina

l. Aiken County

m. Barnwell County

n. Allendale County

o. VEGP Radiological Emergency Teams

4.4 MEDICAL EMERGENCY DRILLS

4.4.1 The EPC should coordinate with the Safety and Health representative to assure that medical emergency drills are developed, conducted and documented per Section 4.1 as appropriate.

4.4.2 A medical emergency drill shall be conducted each calendar year (annually) with one or more of the offsite support organizations listed below:

a. Burke County Ambulance Service

b. Burke County Hospital and/or Columbia Augusta Medical Center

4.4.3 The annual medical emergency drill shall involve treatment of a simulated contaminated person, transport by ambulance or other appropriate means, and arrival and treatment at the hospital, per Procedure 91307-C, "Contaminated Injury".

4.4.4 The annual medical drill may be held in conjunction with the biennial exercise.

4.5 RADIOLOGICAL MONITORING/HEALTH PHYSICS (HP) DRILLS

4.5.1 The EPC shall develop, conduct and document radiological monitoring and HP drills in accordance with Section 4.1 as appropriate.

4.5.2 Plant environs and radiological monitoring drills shall be conducted for VEGP each calendar year (annually). For these drills, a team is dispatched with a controller to obtain the required measurements or samples. The drill controller will evaluate the proper use of survey instruments, record keeping, communications and the collection of sample media (soil, air, water, and vegetation) as appropriate, per Procedures 91302-C, "In-Plant Sampling And Surveys" and 91303-C, "Field Sampling And Surveys". The use of sample techniques, survey techniques, monitoring methods, decontamination methods, protective clothing, respirators and exposure control considerations will be demonstrated as appropriate. (Field Monitoring teams will not wear protective clothing.) The annual plant environs and radiological monitoring drill may be performed in conjunction with one of the semi-annual Health Physics drills.

4.5.3 The use of the Post-Accident Sampling System (PASS) under simulated accident conditions will be demonstrated each calendar year. The PASS analysis may be performed using the installed in-line instruments or using laboratory equipment to demonstrate the methods employed under actual accident condition. Messages will be used to simulate high radiation levels.

4.5.4 Semi-annual HP drills shall be conducted to test response to and analysis of simulated airborne and liquid samples and radiation in the environment. The drill may include the actual use of protective equipment. Semi-annual HP drills may be conducted in conjunction with the biennial exercise or radiological monitoring drills.

4.6 ASSEMBLY AND ACCOUNTABILITY DRILLS

4.6.1 The EPC should develop, conduct and document assembly and accountability drills in accordance with the guidelines in Section 4.1 as appropriate.

4.6.2 An assembly and accountability drill shall be conducted each calendar year (annually) to test the response of plant personnel and to maintain their awareness of their responsibilities. Personnel in the protected area shall actually perform assembly unless otherwise directed by plant management.

4.6.3 The annual assembly and accountability drill may be held in conjunction with the biennial exercise.

4.7 SAMG (TABLETOP) DRILLS

4.7.1 A SAMG tabletop drill will normally be conducted once each calendar year. The tabletop drill will not normally be a part of or associated with the normal emergency drills or exercises.

4.7.2 A SAMG tabletop drill may be used when a new guideline has been developed or when major revisions have been made to guidelines.

4.7.3 Decision makers and evaluators, per procedure 60613-C, may receive retraining by participating in a SAMG tabletop drill.

5.0 EVALUATION OF THE BIENNIAL EXERCISE

5.1 Following the biennial exercise, critiques shall be conducted by VEGP Controllers/Evaluators as follows:

5.1.1 The lead controller/evaluator of each major facility (EOF, TSC & OSC) will conduct a facility critique with players and controllers/evaluators. Players are encouraged to submit written comments and evaluations in addition to verbal comments. Lead Controllers/evaluators are required to submit written evaluations.

5.1.2 Following the facility critique, controllers/evaluators and key players are invited to an overall exercise critique.

5.2 A written report with critique results and action items shall be prepared by the EPC and submitted to the General Manager Nuclear Plant.

5.2.1 Appropriate departments are responsible for implementing corrective actions approved by the General Manager Nuclear Plant.

5.2.2 The EPC is responsible for ensuring that Emergency Plan Implementing Procedures are revised as necessary, as a result of critique items identified by the exercise.

5.2.3 If resulting changes to the procedures warrant retraining of emergency personnel, such training shall be scheduled and conducted, per Procedure 91601-C, "Emergency Preparedness Training".

5.2.4 If changes to the procedures impact the interface with offsite agencies, or result in necessary changes to plans and/or procedures of offsite agencies, those items of impact will be documented and the changes sent to the offsite agencies by the Manager Training and Emergency Preparedness.

6.0 REFERENCES

6.1 VEGP EMERGENCY PLAN

6.2 PROCEDURES

6.2.1 00051-C, "Procedures Review And Approval"

6.2.2 00150-C, "Condition Reporting and Tracking System"

6.2.3	60613-C,	"Control and Use of Severe Accident Management Guidelines (SAMG)"
6.2.4	91302-C,	"In-Plant Sampling And Surveys"
6.2.5	91303-C,	"Field Sampling And Surveys"
6.2.6	91304-C,	"Estimating Offsite Dose"
6.2.7	91307-C,	"Contaminated Injury"
6.2.8	91601-C,	"Emergency Preparedness Training"
6.2.9	91701-C,	"Preparation And Control Of Emergency Planning Documents"
6.2.10	92000-C,	"Fire Protection Program"

6.3 NUREG-0654, FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

6.4 10CFR50.48, "Fire Protection"

6.5 10CFR50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities"

6.6 NRC Letter, Docket Nos. 50-424 and 50-425, License Nos. NPF-68 and NPF-61 "Submission of Emergency Preparedness Exercise Scope, Objectives and Scenarios"

END OF PROCEDURE TEXT

Sheet 1 of 1

CHECKLIST 1

DRILL/EXERCISE FREQUENCIES

1. **SEMI-ANNUALLY**

   - Health Physics drill.

2. **CALENDAR YEAR (ANNUALLY)**

   - Off year drill (perform during year when there is no biennial exercise).
   - Medical emergency drill.
   - Radiological monitoring drill.
   - Post-accident sampling system drill.
   - Assembly and accountability drill.
   - SAMG table top drill

3. **BIENNIAL (EVERY TWO YEARS)**

   - Communications between VEGP, federal, state and county Emergency Response Organizations, and emergency teams.
   - Emergency exercise.

CHECKLIST 2

DRILL/EXERCISE SCENARIO FORMAT

1. The following format may be used by the Drill or Exercise Preparer.

2. The first page of the drill/exercise package should be a Title Page containing the following information:

VOGTLE ELECTRIC GENERATING PLANT

Emergency Preparedness

Drill/Exercise

(Title)

(Date)

3. Page number 2 of the package should be a "Table of Contents" similar in design to the following outline:

Sections:

I Introduction

II Objectives and Extent of Play

III Guidelines

A. **Safety Precautions

B. **Controller/Evaluator Instruction

C. **Performance Evaluation Standards

D. Controller Assignments

**Information in Controller Handbook

CHECKLIST 2

DRILL/EXERCISE SCENARIO FORMAT

IV Scenario

A. Initial Conditions

1. Plant Status

2. Meteorological Conditions

B. Narrative Summary

C. Major Sequence of Events

V Data

A. Messages

B. Plant Parameters

C. In-plant Chemistry

D. In-plant Health Physics

E. PERMS

F. Meteorological

G. Dose Assessment

H. Offsite Plume Maps & Data

4. Introduction - This section contains the schedule, a list of participants, controller assignments and the extent of the drill or exercise.

5. Objectives and Extent of Play - This section shall clearly state, in detail, the objectives that the drill/exercise package was designed to evaluate. In addition, areas of simulation will be defined and the extent to which elements will be demonstrated.

CHECKLIST 2

DRILL/EXERCISE SCENARIO FORMAT

6. Guidelines - Includes those items that provide guidance to the participants, Controllers and Evaluators throughout the performance of the drill. This section is broken down into several subsections.

   a. Safety Precautions - General and detailed precautions necessary to prevent jeopardizing plant and personnel safety.

   b. Controller/Evaluator Instruction - Those information items that the Controllers and Evaluators need to be aware of to perform their function.

   c. Performance Evaluation Standards - To ensure validity of the evaluation, all drill Controllers must utilize the same grading criteria. The following standards should be utilized:

      (1) Recording Times of Actions

         (a) An Emergency Response Facility will be deemed to be in service when its personnel accountability check is completed and reported or when the facility manager declares that the facility is functional.

         (b) Controllers shall use the forms provided during the course of the drill to take notes of the time and events. It is intended to be used to complement the Evaluation Forms used to grade the exercise.

      (2) Evaluation Standards

         (a) Excellent - Personnel and equipment always functioned without error the first time, every time. There were no problems encountered and all personnel and equipment functioned at a level much greater than could reasonably be anticipated.

         (b) Good - Personnel and equipment generally performed better than expected. Any errors or problems were minor and easily correctable.

         (c) Satisfactory - Personnel and equipment performed according to expectations with few minor exceptions. Any errors noted were not severe and could be corrected without undue labor or expense.

CHECKLIST 2

DRILL/EXERCISE SCENARIO FORMAT

(d) Poor - Personnel and equipment generally performed below expectations and there were several significant deficiencies noted. The area's ability to carry out its functions was diminished.

(e) Failure - Personnel and equipment consistently failed to perform as required and there were serious deficiencies noted which severely impaired the ability of the Emergency Response Facility (ERF) to carry out its functions.

(f) Not Observed - Through no fault of the exercise.

(3) Categories for Evaluation

(a) Activation and Response

(b) Communications/Dissemination of Information

(c) Procedures

(d) Direction and Control

(e) Material and Equipment

(f) Protective Measures

(g) Access Control

7. Exercise Scenario - An outline of the sequence of drill events.

a. Initial Conditions - Those parameters and plant conditions necessary to be established to set the stage to commence the drill or exercise.

b. Meteorological Condition - Those meteorological parameters necessary to establish the initial conditions for the drill or exercise radiation release.

c. Narrative Summary - A brief narrative description of the drill/exercise sequence of events.

d. Major Sequence of Events - A timetable detailing when major drill/exercise events will occur.

CHECKLIST 2 **Sheet 5 of 5**

DRILL/EXERCISE SCENARIO FORMAT

8. Data

a. Messages Summary (optional) - a multi-column format which provides scenario time, page/message number, a summary of the message, anticipated response of the players and any instructions to the Controller.

b. Messages - Document used to transmit parameters and plant conditions to the participants of the drill/exercise. The Message (Data Sheet 1) should be given to the participant. The time block shall be the drill time or condition under which the message should be issued. The message should contain in chronological sequence the events, changes in parameters, indications or actions that the participant shall observe, hear, smell, feel or experience and then respond to.

c. Plant Data - This section shall include supportive tables of applicable plant data for various times throughout the drill/exercise. (When the simulator is used, a simulator script will be substituted for the plant data.)

d. Radiological Data - This section shall include offsite plume maps and data, in-plant radiological conditions and maps and tables of applicable radiation monitor readings.

e. Meteorological Data - This section shall contain meteorological conditions for the drill/exercise.

Sheet 1 of 1

DATA SHEET 1

SAMPLE MESSAGE FORM

DRILL/EXERCISE TITLE _____

TO: _____ TIME: _____

MESSAGE: _____

_____

_____

****

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

****

****

THIS IS A DRILL

****

EXPECTED ACTIONS:

CONTROLLER PROMPTS (IF NECESSARY):

Sheet 1 of 2

DATA SHEET 2

DRILL/EXERCISE APPROVAL REQUEST

DATE _____

From: Emergency Preparedness Coordinator _____

via Manager Training & Emergency Preparedness _____

To: General Manager Nuclear Plant

1. Request your approval to conduct an
   ☐ Emergency Drill ☐ Emergency Exercise ☐ Test as follows:
   Date _____ Start Time _____ Duration _____
2. Drill/Exercise date and time confidential? ☐ Yes ☐ No
3. Type of Drill
   - ☐ Full Scale Exercise
     - ☐ NRC Evaluated
     - ☐ FEMA Evaluated
   - ☐ On-Site Facility Activation
   - ☐ Classification & Notification
   - ☐ Recall
     - ☐ Drill
     - ☐ Test
   - ☐ Health Physics
   - ☐ Notification
   - ☐ Medical/Contaminated Injured
   - ☐ Assembly and Accountability
   - ☐ SAMG Table Top
   - ☐ Other _____
4. Anticipated Classification Levels
   - ☐ NOUE
   - ☐ ALERT
   - ☐ SITE AREA EMERGENCY
   - ☐ GENERAL EMERGENCY
   - ☐ Not Applicable
5. On-Site Participation
   - ☐ Control Room
   - ☐ Simulator
   - ☐ TSC
   - ☐ OSC
   - ☐ EOF
   - ☐ NONE
   - ☐ Security
   - ☐ General Office Operations Center
   - ☐ Public Info ☐ EOF ☐ ENC ☐GPC Atlanta
   - ☐ Other _____ _____ _____

Sheet 2 of 2

DATA SHEET 2

DRILL/EXERCISE APPROVAL REQUEST

6. Off-Site Participation: ☐ NONE ☐ Communications Only

☐ GEMA	☐ EOC	☐ FEOC	☐ Field Teams	☐ EOF
☐ S. Carolina	☐ EOC	☐ FEOC	☐ Field Teams	☐ EOF
☐ Burke County	☐ EOC	☐ Ambulance	☐ Fire Support	
☐ SRS	☐ EOC	☐ Field Teams	☐ EOF	
☐ Aiken County	☐ EOC			
☐ Allendale County	☐ EOC			
☐ Barnwell County	☐ EOC			
☐ Hospital	☐ Burke County	☐ Columbia Augusta Medical Center		
☐ NRC				
☐ Other _____	_____	_____		

7. Radiological ☐ NONE
   - ☐ Off-Site Release
   - ☐ On-Site High Radiation
   - ☐ Dose Projection and Field Monitoring
   - ☐ PASS Sampling

8. Objectives: Attached/See Below
   - a. _____
   - b. _____
   - c. _____
   - d. _____

Submitted: _____ _____
Emergency Preparedness Coordinator Date

_____ _____
Manager Training & Emergency Preparedness Date

Approved: _____ _____
General Manager Nuclear Plant Date

_____ _____
*Verbal Approval Obtained Date

* Verbal approval may be obtained for minor drills.

DATA SHEET 3

SAMPLE DRILL/EXERCISE REPORT

From: _____ _____
Emergency Preparedness Coordinator Date

_____ _____
Manager Training and Emergency Preparedness Date

To: General Manager Nuclear Plant

1. An Emergency Drill/Exercise was conducted on _____
Date

2. The results of the critique, recommended corrective actions, and responsibility for corrective actions are attached for your approval.

NOTE

[Format for Critique Items]

Item #

Critique Item:

Corrective Action:

Responsibility:

Due Date:

A/I# _____

From: General Manager Nuclear Plant

3. The results of the critique have been reviewed and corrective action recommendations are approved.

_____ _____
General Manager Nuclear Plant Date