



South Carolina Electric & Gas Company  
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(803) 345-4344

Gary J. Taylor  
Vice President  
Nuclear Operations

April 15, 1996

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

Dear Sirs:

Subject: VIRGIL C. SUMMER NUCLEAR STATION  
DOCKET NO. 50/395  
OPERATING LICENSE NO. NPF-12  
EMERGENCY ACTION LEVEL PROPOSED CHANGE

South Carolina Electric & Gas Company (SCE&G) proposes to initiate a change to the Virgil C. Summer Nuclear Station (VCSNS) Radiation Emergency Plan which will revise two Notification of Unusual Event Emergency Action Levels (EAL).

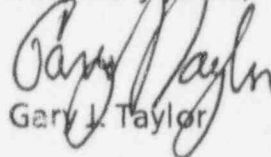
SCE&G proposes to change two EALs, originally based upon the example initiating conditions in Appendix 1 to NUREG-0654, to correspond to the classification scheme from the guidance in NUMARC/NESP-007. SCE&G further bases this change upon a Branch Technical Position communicated to the regions by letter from James H. Joyner, dated July 11, 1994. SCE&G does not consider the change to constitute a decrease in the effectiveness of the plan and the plan as revised will continue to meet the standards of 10 CFR 50.47 and the requirements of Appendix E to 10 CFR Part 50.

The proposed change has been discussed with and agreed upon by the state and counties within the primary emergency planning zone (see attached letter).

Attached is a discussion of the changes, the bases for the changes, and the 10 CFR 50.54(q) evaluation for your review and approval prior to implementation.

Should there be any questions, please call Mr. Victor Kelley at (803) 345-4464.

Very truly yours,

  
Gary J. Taylor

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PDR ADDCK 05000395  
F PDR

RAM/GJT/nkk  
Attachments

1900003

c: J. L. Skolds (w/o attachments)  
R. R. Mahan (w/o attachments)  
R. J. White  
S. D. Ebnetter (2 copies)  
J. I. Zimmerman  
NRC Resident Inspector  
W. F. Conway

J. B. Knotts (w/o attachments)  
H. L. O'Quinn  
NSRC  
DMS (RC-96-0106)  
RTS (EMP 960002)  
File (810.10-1)



NUCLEAR EXCELLENCE - A SUMMER TRADITION!

ADHS/1

#### CHANGE 1

Replace the NUREG 0654 Initiating Condition "**INDICATIONS OR ALARMS ON PROCESS OR EFFLUENT PARAMETERS NOT FUNCTIONAL IN THE CONTROL ROOM TO AN EXTENT REQUIRING SHUTDOWN AS PER TECHNICAL SPECIFICATIONS OR OTHER SIGNIFICANT LOSS OF ASSESSMENT OR COMMUNICATIONS CAPABILITY**".

Detection Method:

EITHER 1 OR 2 OR 3:

1. Loss of Radiation Monitoring System requiring shutdown.  
OR
2. EWSS declared inoperable.  
OR
3. Loss of all telephone communications to the State AND local governments AND the NRC.

With the NUMARC Initiating Condition "**Unplanned Loss of All Onsite or Offsite Communications Capability**"

Detection Method:

1. Either of the following conditions exists:
  - a. Loss of all onsite communications capability affecting the ability to perform routine operations.  
Internal telephone system, Gai-Tronics system, and radio system.  
OR
  - b. Loss of all offsite communications capability.  
Internal telephone system, Bell lines, FTS 2000 System, ESSX System, Fiberoptic links, radio systems.  
(When extraordinary means must be used to make communications.)

#### BASIS

The base documents for the formulation of Initiating Conditions for a nuclear plant are NUREG-0654/FEMA-REP-1 and NUMARC/NESP-007. Neither document mentions the Early Warning Siren System (EWSS) as a system requiring action if it is inoperable. The Code of Federal Regulations in 10CFR50.72 designates the loss of the EWSS as being a one-hour reportable event.

If this Detection Method is deleted, the Utility will continue to notify the State and Counties when the EWSS is determined to be inoperable. This requirement will be added to SAP-132, Off-Normal Occurrence Evaluation, Reporting, and Resolution, with the existing requirement to notify the NRC.

## CHANGE 2

Replace the NUREG 0654 Initiating Condition "**EXCEEDING TECHNICAL SPECIFICATION RCS LEAK RATE LIMIT**"

Detection Method:

RCS Leak Rate Exceeds Technical Specification 3.4.6.2 Limits:

1. >0 Pressure Boundary
2. >1 gpm Unidentified for >4 hours
3. >10 gpm Unidentified for >4 hours
4. >33 gpm Controlled (@  $\geq 2235 \pm 20$  psig) for >4 hours
5. >1 gpm Pressure Boundary Isolation Valve (@  $2235 \pm 15$  psig) per Table 3.4-1 for >4 hours

with the NUMARC Initiating Condition "**RCS LEAKAGE**"

Detection Method:

1. Unidentified or Pressure Boundary Leakage greater than 10 gpm.
- OR**
2. Identified Leakage greater than 25 gpm.
- (Only applicable during Modes 1-4.)

## BASIS

The Detection Methods associated with the "**RCS LEAKAGE**" Initiating Condition state values that are readily observed by normal Control Room instrumentation. Whereas the "**EXCEEDING ....**" Initiating Condition uses values that must generally be determined through time-consuming surveillance testing. The higher values in the "**RCS LEAKAGE**" Initiating Condition remain within the concept of "potential degradation in the level of safety of the plant" and continues to provide an adequate level of safety.

**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**EMERGENCY SERVICES**

**Subject:** Emergency Action Level  
Proposed Revision

**Date:** March 19, 1996

**To:** S. M. McKinney  
S. J. Threatt  
M. S. Kirkland  
N. W. Ellis  
T. P. Barber  
G. Sox

**File:** CGSS-96-0164  
151.20

**From:** V. J. Kelley 


The V.C. Summer Nuclear Station proposes to revise two Notification of Unusual Event Initiating Conditions. We are required to obtain your concurrence before forwarding these revisions to the Nuclear Regulatory Commission for their review.

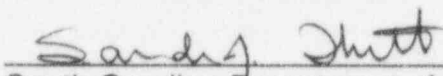
Below is a discussion of the changes and the basis for the changes. Please note that the Initiating Conditions that we propose to change to are commonly used at other nuclear plants.

If you concur with the changes, signify by affixing your signature in the appropriate space below. Any questions can be addressed to me at 345-4464. Thank you for your cooperation and support.

Concurrence:

*Stan  
McKinney*

 Date: 21 March 96  
South Carolina Emergency Preparedness Division

 Date: 20 MAR 96  
South Carolina Department of Health and Environmental Control

\_\_\_\_\_  
Fairfield County Date: \_\_\_\_\_

\_\_\_\_\_  
Lexington County Date: \_\_\_\_\_

\_\_\_\_\_  
Newberry County Date: \_\_\_\_\_

\_\_\_\_\_  
Richland County Date: \_\_\_\_\_

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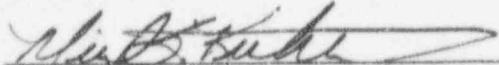
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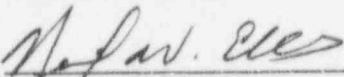
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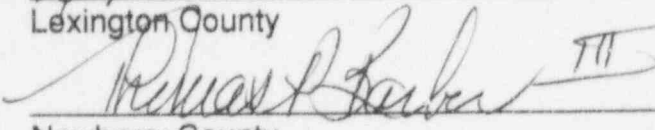
Concurrence:

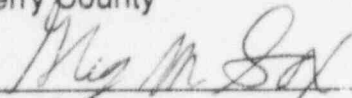
\_\_\_\_\_  
Date: \_\_\_\_\_  
South Carolina Emergency Preparedness Division

\_\_\_\_\_  
Date: \_\_\_\_\_  
South Carolina Department of Health and Environmental Control

  
Date: 3-21-96  
Fairfield County

  
Date: 3/21/96  
Lexington County

 TII  
Date: 3-21-96  
Newberry County

  
Date: 3-21-96  
Richland County

# **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

## EMERGENCY SERVICES

### CHANGE 1

Replace the NUREG 0654 Initiating Condition **"INDICATIONS OR ALARMS ON PROCESS OR EFFLUENT PARAMETERS NOT FUNCTIONAL IN THE CONTROL ROOM TO AN EXTENT REQUIRING SHUTDOWN AS PER TECHNICAL SPECIFICATIONS OR OTHER SIGNIFICANT LOSS OF ASSESSMENT OR COMMUNICATIONS CAPABILITY"**.

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### BASIS

The base documents for the formulation of Initiating Conditions for a nuclear plant are NUREG-0654/FEMA-REP-1 and NUMARC/NESP-007. Neither document mentions the Early Warning Siren System (EWSS) as a system requiring action if it is inoperable. The Code of Federal Regulations in 10CFR50.72 designates the loss of the EWSS as being a one-hour reportable event, meaning that the Utility has one hour to notify the NRC after the determination of EWSS inoperability.

If this Detection Method is deleted, the Utility will continue to notify the State and Counties when the EWSS is determined to be inoperable. This requirement will be added to SAP-132, Off-Normal Occurrence Evaluation, Reporting, and Resolution, with the existing requirement to notify the NRC.



# **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

## EMERGENCY SERVICES

### CHANGE 2

Replace the NUREG 0654 Initiating Condition "**EXCEEDING TECHNICAL SPECIFICATION RCS LEAK RATE LIMIT**"

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Detection Method:

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### BASIS

The Detection Methods associated with the "**RCS LEAKAGE**" Initiating Condition state values that are readily observed by normal Control Room instrumentation. Whereas the "**EXCEEDING ....**" Initiating Condition uses values that must generally be determined through time-consuming surveillance testing. The higher values in the "**RCS LEAKAGE**" Initiating Condition remain within the concept of "potential degradation in the level of safety of the plant" and continues to provide an adequate level of safety.

DETERMINATION OF A DECREASE IN THE EFFECTIVENESS OF THE  
EMERGENCY PLAN(S) IN ACCORDANCE WITH 10CFR50.54(q)

DOCUMENT EP-100 REVISION \_\_\_\_\_ DATE: 3-25-96

TITLE: VIRGIL C. SUMMER NUCLEAR STATION RADIATION  
EMERGENCY PLAN

DIRECTIONS FOR COMPLETING THIS ATTACHMENT:

1. Review all statements in sub-sections 1.1 and 1.2 and check applicable boxes if the statement applies.
2. Complete one sub-section of section 2.0 for each box checked in sub-section 1.1 or 1.2. (Additional copies of page 2 of 3 may be used, if necessary).
3. Complete sections 3.0 and 4.0, sign and date the form on line 4.4, and attach completed form to revision package prior to forwarding package to the Manager, Nuclear Protection Services for signature.
4. Check the appropriate block on the Procedure Development Form (Attachment IV) concerning decreasing the effectiveness of the Radiation Emergency Plan, based on this review.
5. PSRC review is required for the Radiation Emergency Plan prior to approval of the revision.

1.0 Effect of the Change on the Emergency Plan(s):

1.1 This change (DOES) DOES NOT affect SECTIONS under 10CFR50.47(b). The following subject areas of 10CFR50.47(b) have been affected:

- ☐ (1) Assignment of Emergency Response Organization responsibilities.
- ☐ (2) Assignment of onshift Emergency Response Organization personnel.
- ☐ (3) Arrangements for utilizing State or Local resources and staff.
- ☒ (4) Emergency Classification and Action Levels, including facility system, and effluent parameters.
- ☐ (5) Notification of State and Local agencies, the Emergency Response Organizations, and the public.
- ☐ (6) Communications between State and Local agencies, the Emergency Response Organizations, and the public.
- ☐ (7) Coordination with the public through periodic dissemination of information.
- ☐ (8) Adequacy of emergency facilities and equipment.
- ☐ (9) Adequate methods, systems, and equipment for offsite response to a radiological emergency.
- ☐ (10) Plume exposure pathway EPZ protective actions.
- ☐ (11) Emergency worker's radiological exposure.
- ☐ (12) Medical services for contaminated injured individuals.
- ☐ (13) Reentry and Recovery plans.
- ☐ (14) Emergency response periodic exercises.
- ☐ (15) Radiological emergency response training.
- ☐ (16) Plan development, review, and distribution.

1.2 This change (DOES) DOES NOT affect SECTIONS under 10CFR50, Appendix E. The following subject areas of 10CFR50, Appendix E, have been affected:

- ☐ (I), (II), (III) Emergency plans as described in the FSAR.
- ☐ (IV) A Organization for coping with radiological emergencies.
- ☐ (IV) B Release of radioactive materials (assessment).
- ☒ (IV) C Activation of Emergency Classification and Action Levels and activation of the Emergency Response Organizations.
- ☐ (IV) D Notification of Federal, State and Local agencies, and the public.
- ☐ (IV) E Emergency Facilities and Equipment including communication systems.
- ☐ (V) F Training on and exercising the Emergency Plan.
- ☐ (IV) G Maintaining emergency plans and procedures, and the surveillance of equipment and supplies.
- ☐ (IV) H Reentry of facility and recovery following an accident.



2.0 Basis for Determination per 10CFR50.54(q):

For applicable item 10CFR50.(47(b)(4)) of Section 1.0 above, this change  
(DOES/DOES NOT) decrease the effectiveness of the Emergency Plan(s). This change  
(DOES/DOES NOT) result in information presented in the Emergency Plan(s) being no longer  
true or accurate.

Basis for answer: BOTH EALs ARE LISTED IN NUMARC/NESP-007 WHICH  
HAS BEEN ACCEPTED BY THE NRC AS AN ALTERNATE TO NUREG-0654/  
FRMA-REP-1. THE CURRENT EALs WOULD CAUSE UNNECESSARY  
DECLARATION OF AN EVENT UNWARRANTED BY PLANT CONDITIONS.

For applicable item 10CFR50.(APP E(IV) C) of Section 1.0 above, this change  
(DOES/DOES NOT) decrease the effectiveness of the Emergency Plan(s). This change  
(DOES/DOES NOT) result in information presented in the Emergency Plan(s) being no longer  
true or accurate.

Basis for answer: SEE ABOVE STATEMENT.

For applicable item 10CFR50.( ) of Section 1.0 above, this change  
(DOES/DOES NOT) decrease the effectiveness of the Emergency Plan(s). This change  
(DOES/DOES NOT) result in information presented in the Emergency Plan(s) being no longer  
true or accurate.

Basis for answer: \_\_\_\_\_

For applicable item 10CFR50.( ) of Section 1.0 above, this change  
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(DOES/DOES NOT) result in information presented in the Emergency Plan(s) being no longer  
true or accurate.

Basis for answer: \_\_\_\_\_

For applicable item 10CFR50.( ) of Section 1.0 above, this change  
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true or accurate.

Basis for answer: \_\_\_\_\_

For applicable item 10CFR50.( ) of Section 1.0 above, this change  
(DOES/DOES NOT) decrease the effectiveness of the Emergency Plan(s). This change  
(DOES/DOES NOT) result in information presented in the Emergency Plan(s) being no longer  
true or accurate.

Basis for answer: \_\_\_\_\_

3.0 Determination/Action per 10CFR50.54(g):

- 3.1 This change (~~DOES~~ DOES NOT) decrease the effectiveness of the Emergency Plan(s).  
(If the change does decrease the effectiveness of the Emergency Plan(s), then the change shall not be implemented without prior NRC approval.)
- 3.2 This change (~~DOES~~ DOES NOT) require a further revision to the Emergency Plan(s) or the Implementing Procedures. (10CFR50, Appendix E, does NOT require that the NRC be notified of changes to the Emergency Plan(s) that do not decrease the effectiveness of the plan prior to implementation.)

3.2.1 List any additional Emergency Plan Procedures, forms, or supporting procedures requiring revision as a result of this revision.

EPP-001

4.0 Review and Approval:

- 4.1 YES ☐ NO ☒ Decrease the effectiveness of the Emergency Plan?
- 4.2 YES ☒ NO ☐ NRC approval of document required prior to implementing?
- 4.3 YES ☒ NO ☐ Is a change required to Emergency Plan or other procedures?  
(If yes, see Section 3.2.1 above for details.)

4.4 Review completed by: om/smt Date: 4/1/96

4.5 Approved by: [Signature] Date: 4/4/96  
Manager, Nuclear Protection Services

5.0 Comments:

VC SAYS will seek NRC confirmation to concur with  
this 10CFR50.54g, prior to implementation of this change  
to the Radiation Emergency Plan. 4/4/96