

South Carolina Electric & Gas Company P.O. Box 88 Jenkinsville, SC 29065 (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.

9604190043 960415 PDR ADDCK 05000395

190003

RAM/GJT/nkk Attachments

J. L. Skolds (w/o attachments)
R. R. Mahan (w/o attachments)
R. J. White
S. D. Ebneter (2 copies)

J. I. Zimmerman NRC Resident Inspector

W. F. Conway

J. B. Knotts (w/o attachments)

Very truly yours,

H. L. O'Quinn

NSRC

DMS (RC-96-0106) RTS (EMP 960002) File (810.10-1)



#### 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

EWSS declared inoperable.

OR

 Loss of all telephone communications to the State <u>AND</u> local governments <u>AND</u> 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.
  - 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
- 33 gpm Controlled (@ ≥2235 ± 20 psig) for >4 hours
- >1 gpm Pressure Boundary Isolation Valve (@ 2235 ± 15 psig) per Table 3.4-1 fro >4 hours

with the NUMARC Initiating Condition "RCS LEAKAGE" Detection Method:

- Unidentified or Pressure Boundary Leakage greater than 10 gpm.
- 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.

### **EMERGENCY SERVICES**

Subjec	ct: Emergency Action Level Proposed Revision	Date:	March 19, 1996
То:	S. M. McKinney S. J. Threatt M. S. Kirkland N. W. Ellis T. P. Barber	File:	CGSS-96-0164 151.20
	G. Sox		
From:	V. J. Kelley		
Event I forward review. Below that the other in If you dapprop	C. Summer Nuclear Station proportinitiating Conditions. We are required these revisions to the Nuclear is a discussion of the changes and Initiating Conditions that we proportional plants. Concur with the changes, signify being space below. Any questions you for your cooperation and sup	ired to obtain ir Regulatory of the basis for pose to chan- by affixing you can be adding	your concurrence before Commission for their or the changes. Please not ge to are commonly used a cur signature in the
Concu	rrence:		
	h	Da	ite: 21 mush 26
South	Carolina Emergency Preparednes	ss Division	
5	Carolina Department of Health an	Da	te: ZO MAR96
South	Carolina Department of Health an	d Environme	ntal Control
		Da	ite:
Fairfiel	d County		
		D.s	ite:
Lexing	ton County		
		Da	ute:
Newbe	erry County		
		Da	nte:
Richlan	nd County		

Stan McKinney

### EMERGENCY SERVICES

Subjec	Proposed Revision	Date:	March 19, 1996
То:	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		
forward review Below that the other r If you d approp Thank	Initiating Conditions. We are required these revisions to the Nuclear is a discussion of the changes are Initiating Conditions that we producted plants. Concur with the changes, signify the price of the space below. Any questions you for your cooperation and supprence:	ar Regulatory  nd the basis f  pose to chan  by affixing you  s can be addi	Commission for their or the changes. Please note ge to are commonly used at ur signature in the
		D	ate:
South	Carolina Emergency Preparedne	ss Division	
		D	ate:
South	Carolina Department of Health a	CONTRACTOR	The state of the s
	d County	D	ate:3-21-94
May	Dav. Eles	D	ate: 3/21/95
	remark Jane	7/5 D	ate: 3-21-96
	Mig M Sox	D	ate: 3-21-96
Richla	nd County		

### **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".

Detection Method:

EITHER 1 OR 2 OR 3:

Loss of Radiation Monitoring System requiring shutdown.

OR

EWSS declared inoperable.

OR

 Loss of all telephone communications to the State <u>AND</u> local governments <u>AND</u> the NRC.

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

Detection Method:

- 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.

b. Loss of all offsite communications capability.
 Internal telephone system, Bell lines, Fiberoptic links, radio system.
 (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, 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.

### **EMERGENCY SERVICES**

### 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 (@ ≥2235 ± 20 psig) for >4 hours
- 5. >1 gpm Pressure Boundary Isolation Valve (@ 2235 ± 15 psig) per Table 3.4-1 fro >4 hours

with the NUMARC Initiating Condition "RCS LEAKAGE" Detection Method:

Unidentified or Pressure Boundary Leakage greater than 10 gpm.

OR

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.

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

			-100 REVISION DATE: 3-25-96					
TITLE:	Y	RGIL	C. SUMMER NUCLEAR STATION RADIATION					
DIRECT	TON	FOR C	OMPLETING THIS ATTACHMENT:					
1. Rev	view	all state	ements in sub-sections 1.1 and 1.2 and check applicable boxes if the statement applies.					
2. Cor	. Complete one sub-section of section 2.0 for each box checked in sub-section 1.1 or 1.2. (Additional copie of page 2 of 3 may be used, if necessary).							
3. Cor	mple	te secti e prior t	ons 3.0 and 4.0, sign and date the form on line 4.4, and attach completed form to revision to forwarding package to the Manager, Nuclear Protection Services for signature.					
4. Che	eck t	he appr	opriate block on the Procedure Development Form (Attachment IV) concerning decreasing ses of the Radiation Emergency Plan, based on this review.					
S. PSF	RC re	view is	required for the Radiation Emergency Plan prior to approval of the revision.					
1.0	Effe	ect of th	e Change on the Emergency Plan(s):					
	1.1	This cho of 10Cf	ange (DOES) DOES NOT) affect SECTIONS under 10CFR50.47(b). The following subject areas R50.47(b) have been affected:					
			Assignment of Emergency Response Organization responsibilities. Assignment of onshift Emergency Response Organization personnel. Arrangements for utilizing State or Local resources and staff. Emergency Classification and Action Levels, including facility system, and effluent parameters. Notification of State and Local agencies, the Emergency Response Organizations, and the public. Communications between State and Local agencies, the Emergency Response Organizations, and the public. Coordination with the public through periodic dissemination of information. Adequacy of emergency facilities and equipment. Adequate methods, systems, and equipment for offsite response to a radiological emergency. Plume exposure pathway EPZ protective actions. Emergency worker's radiological exposure. Medical services for contaminated injured individuals. Reentry and Recovery plans. Emergency response periodic exercises. Radiological emergency response training. Plan development, review, and distribution.  ange DOES/DOES NOT) affect SECTIONS under 10CFR50, Appendix E. The following careas of 10CFR50, Appendix E, have been affected:					
	2 11000 0000	(I), (II), (IV) A (IV) B (IV) C (IV) C (IV) E (IV) G (IV) G (IV) G						

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 FALS ARE USTED IN NUMARC/NESP-007 WHICH
HAS REEN ACCEPTED BY THE NAC AS AN AUTERNATE TO NUREGOOS.
FEMA-REP-1. THE CHREAT EAL'S NOULD CAUSE HONGES SSARY
DEPLARATION OF AN EVENT UNWARRANTED BY PLANT CONDITION
For applicable item 10CFR50.(APR 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 long 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 long 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 long 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 long true or accurate.  Basis for answer:
For applicable item 10CFR50.( ) of Section 1.0 above, this change

SAP-139 ATTACHMENT XIII PAGE 3 OF 3 REVISION 16

Dete	rmination/Action per 10CFR50.54(q):		
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) the Implementing Procedures. (10CFR50, Appendix E, does NOT require that the 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.		
Revie	ew and Approval:		
4.1	YES Decrease the effectiveness of the Emergency Plan?		
4.2	YES NO IN 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: more Date: 4/1/96		
4.5	Approved by: Manager, Nuclear Protection Services 7		
Com	this 10 CFR 50.540 Plice to implementation of this change		