



October 16, 2000  
RC-00-0325

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

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION  
DOCKET NO. 50/395  
OPERATING LICENSE NO. NPF-12  
TRANSMITTAL OF EMERGENCY PLAN PROCEDURE  
REVISION AND CHANGE

Melvin N. Browne  
Manager, Nuclear Licensing  
& Operating Experience  
803.345.4141

In compliance with 10CFR50 Appendix E(V), South Carolina Electric & Gas Company, acting for itself and as agent for South Carolina Public Service Authority, transmits one controlled copy each of the following Emergency Plan Procedure Revision and Change.

PROCEDURE	REV.	CHG.	TITLE
EPP-015	14	-	Natural Emergency (Earthquake, Tornado, Hurricane)
EPP-104	5	F	Verification of Communications Operability

South Carolina Electric & Gas Co  
Virgil C. Summer Nuclear Station  
P. O. Box 88  
Jenkinsville, South Carolina  
29065

803.345.4344  
803.345.5209  
www.scana.com

The effectiveness of the Virgil C. Summer Nuclear Station Radiation Emergency Plan is not decreased by these procedure changes.

Should you have any questions, please contact Mrs. Donna Railey at (803) 345-4107.

Very truly yours,

  
Melvin N. Browne

DWR/MNB/dr  
Attachments

- c: (Without Attachment unless noted)
- L. A. Reyes (With 2 Attachments)
- NRC Resident Inspector
- RTS (RR 6000, O-L-99-0354)
- File (810.10-2)
- DMS (RC-00-0325)

A045

SOUTH CAROLINA ELECTRIC & GAS COMPANY

VIRGIL C. SUMMER NUCLEAR STATION

NUCLEAR OPERATIONS

NUCLEAR OPERATIONS

COPY NO. 157

EMERGENCY PLAN PROCEDURE

EPP-104

VERIFICATION OF COMMUNICATIONS OPERABILITY

REVISION 5

  
DISCIPLINE SUPERVISOR

5/1/97  
DATE

  
APPROVAL AUTHORITY

5/1/97  
DATE

RECORD OF CHANGES

CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE	CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE
A	P	09-09-97		E	P	06-05-00	
B	P	09-22-97		F	P	9-26-00	
C	P	11-04-98					
D	P	12-29-98					

INFORMATION USE

Procedure may Be Performed From Memory.  
User Retains Accountability For Proper Performance.

# NUCLEAR OPERATIONS

COPY NO. \_\_\_\_\_

SAP-139  
ATTACHMENT III  
PAGE 1 OF 3  
REVISION 19

PROCEDURE DEVELOPMENT FORM - A

I. DATE: <u>07-26-00</u> PROC.# <u>EPP-104</u> REV.# <u>5</u> CHG. <u>F</u> COMM.# _____																																										
TITLE: <u>Verification of Communications Operability</u>																																										
NEW PROC _____ CHANGE <input checked="" type="checkbox"/> PERMANENT <input checked="" type="checkbox"/>	SAFETY RELATED _____																																									
REVISION _____ RESTRICTED _____ FROM _____ TO _____	QUALITY RELATED _____																																									
	NON-SAFETY RELATED <input checked="" type="checkbox"/>																																									
II. DESCRIPTION: <u>Add Note 5.3</u>																																										
REASON FOR CHANGE: <u>Ensure sirens are not disabled for maintenance reasons prior to test.</u>																																										
Originator <u>Leonard Bouknight</u>	Sign/Print <u>Leonard Bouknight</u>																																									
III. WILL THIS REVISION/CHANGE/NEW PROCEDURE:																																										
	*YES      NO      N/A																																									
1. Result in significant increased personnel radiation exposure? (ALARA review)	_____ <input checked="" type="checkbox"/> _____																																									
2. Result in a release of effluents to the Environment?	_____ <input checked="" type="checkbox"/> _____																																									
3. Degrade the effectiveness of the Radiation Emergency Plan?	_____ <input checked="" type="checkbox"/> _____																																									
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency of Training and Qualification Plans?	_____ <input checked="" type="checkbox"/> _____																																									
• If any question 1 through 4 is answered "YES", refer to appropriate section of procedure for direction																																										
Required Reviews: Check ALL selections in first 3 columns for SAPs																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> MCHS</td> <td><input type="checkbox"/> MNL&amp;OE</td> <td><input type="checkbox"/> MPLE</td> <td><input type="checkbox"/> GMES</td> <td><input type="checkbox"/> CWPS</td> <td><input type="checkbox"/> ISEG</td> <td><input type="checkbox"/> NOET</td> <td><input type="checkbox"/> QC</td> <td rowspan="6" style="vertical-align: top;">Other Reviews: <u>Discipline/Supervisor</u> <u>8/29/00</u> Date</td> </tr> <tr> <td><input type="checkbox"/> MDE</td> <td><input type="checkbox"/> MNPS</td> <td><input type="checkbox"/> MPSE</td> <td><input type="checkbox"/> GMNPO</td> <td><input type="checkbox"/> DE</td> <td><input type="checkbox"/> MNTS</td> <td><input checked="" type="checkbox"/> NPS</td> <td><input checked="" type="checkbox"/> QR</td> </tr> <tr> <td><input type="checkbox"/> MHPS</td> <td><input type="checkbox"/> MNT</td> <td><input type="checkbox"/> MSPD</td> <td><input checked="" type="checkbox"/> GMNSS</td> <td><input type="checkbox"/> FFD</td> <td><input type="checkbox"/> MQS</td> <td><input type="checkbox"/> NTET</td> <td><input type="checkbox"/> RC</td> </tr> <tr> <td><input type="checkbox"/> MMPR</td> <td><input type="checkbox"/> MOPS</td> <td><input type="checkbox"/> SAS</td> <td><input type="checkbox"/> GMSPD</td> <td><input checked="" type="checkbox"/> HPS</td> <td><input type="checkbox"/> MPR</td> <td><input checked="" type="checkbox"/> OPS</td> <td><input type="checkbox"/> RE</td> </tr> <tr> <td><input type="checkbox"/> MMS</td> <td><input type="checkbox"/> MP&amp;S</td> <td><input type="checkbox"/> QA</td> <td><input type="checkbox"/> CHS</td> <td><input type="checkbox"/> ISD</td> <td><input type="checkbox"/> NL&amp;OE</td> <td><input type="checkbox"/> PSE</td> <td><input type="checkbox"/> TU</td> </tr> </table>	<input type="checkbox"/> MCHS	<input type="checkbox"/> MNL&OE	<input type="checkbox"/> MPLE	<input type="checkbox"/> GMES	<input type="checkbox"/> CWPS	<input type="checkbox"/> ISEG	<input type="checkbox"/> NOET	<input type="checkbox"/> QC	Other Reviews: <u>Discipline/Supervisor</u> <u>8/29/00</u> Date	<input type="checkbox"/> MDE	<input type="checkbox"/> MNPS	<input type="checkbox"/> MPSE	<input type="checkbox"/> GMNPO	<input type="checkbox"/> DE	<input type="checkbox"/> MNTS	<input checked="" type="checkbox"/> NPS	<input checked="" type="checkbox"/> QR	<input type="checkbox"/> MHPS	<input type="checkbox"/> MNT	<input type="checkbox"/> MSPD	<input checked="" type="checkbox"/> GMNSS	<input type="checkbox"/> FFD	<input type="checkbox"/> MQS	<input type="checkbox"/> NTET	<input type="checkbox"/> RC	<input type="checkbox"/> MMPR	<input type="checkbox"/> MOPS	<input type="checkbox"/> SAS	<input type="checkbox"/> GMSPD	<input checked="" type="checkbox"/> HPS	<input type="checkbox"/> MPR	<input checked="" type="checkbox"/> OPS	<input type="checkbox"/> RE	<input type="checkbox"/> MMS	<input type="checkbox"/> MP&S	<input type="checkbox"/> QA	<input type="checkbox"/> CHS	<input type="checkbox"/> ISD	<input type="checkbox"/> NL&OE	<input type="checkbox"/> PSE	<input type="checkbox"/> TU	
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<input type="checkbox"/> MHPS	<input type="checkbox"/> MNT	<input type="checkbox"/> MSPD	<input checked="" type="checkbox"/> GMNSS	<input type="checkbox"/> FFD	<input type="checkbox"/> MQS	<input type="checkbox"/> NTET	<input type="checkbox"/> RC																																			
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<input type="checkbox"/> MMS	<input type="checkbox"/> MP&S	<input type="checkbox"/> QA	<input type="checkbox"/> CHS	<input type="checkbox"/> ISD	<input type="checkbox"/> NL&OE	<input type="checkbox"/> PSE	<input type="checkbox"/> TU																																			
IV. 10CFR50.59 SCREENING REVIEW/SAFETY EVALUATION																																										
<input type="checkbox"/> REQUIRED <input checked="" type="checkbox"/> EXEMPT <input type="checkbox"/> PSRC SUPPORTING DOCUMENT: <u>50.540</u>																																										
Discipline Supervisor Concurrence <u>Discipline Supervisor</u>																																										
V. TEMPORARY APPROVAL:																																										
QUALIFIED REVIEWER _____ DATE _____	QA REVIEW _____ DATE _____																																									
TELECON BY _____	TELECON BY _____																																									
SHIFT SUPERVISOR _____ DATE _____	FINAL APPROVAL REQUIRED BY: DATE _____																																									
VI. DISCIPLINE SUPERVISOR FINAL REVIEW:																																										
PSRC REVIEW PRIOR TO IMPLEMENTATION? YES _____ NO <input checked="" type="checkbox"/>																																										
TRAINING REQUIRED? YES _____ NO <input checked="" type="checkbox"/>																																										
IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES _____ NO _____																																										
P/CAP AFFECTED? YES _____ NO <input checked="" type="checkbox"/>																																										
COMMENTS RESOLVED: <u>Discipline Supervisor</u> <u>9/14/00</u> Date																																										
VII. P/CAP ACCEPTABLE?																																										
C. YES _____ NO _____ NL&OE _____ Date																																										
N. YES _____ NO _____ RESP. MGR. _____ Date																																										
VIII. FINAL QA REVIEW (As Applicable)																																										
QA Concurrence _____ Date																																										
IX. APPROVAL AUTHORITY:																																										
Training Completed _____ Date																																										
Procedure Approval/Concurrence <u>Discipline Supervisor</u> <u>9/26/00</u> Date																																										
X. PSRC REVIEW:																																										
A. REVIEWED BY:	B. PSRC COMMENTS RESOLVED:																																									
PSRC Chairman _____ Date	Responsible Manager _____ Date																																									
COMMENTS: YES _____ NO _____	PSRC Chairman _____ Date																																									

**NUCLEAR OPERATIONS  
COPY NO. \_\_\_\_\_**

SAP-139  
ATTACHMENT IV  
PAGE 1 OF 3  
REVISION 18

**PROCEDURE DEVELOPMENT FORM - A**

**I. DATE:** 03/01/00 **PROC#:** EPP-104 **REV.#:** 5 **CHG.:** E **COMM.#:** \_\_\_\_\_  
**TITLE:** Verification of Communications Operability

NEW PROC  CHANGE  PERMANENT  SAFETY RELATED   
 REVISION  RESTRICTED  FROM \_\_\_\_\_ TO \_\_\_\_\_ QUALITY RELATED   
 NON-SAFETY RELATED

**II. DESCRIPTION:** 1) Change step 5.2.7.C and Att. 1-D to read Plant Radiation Alarms  
 2) Change 5.3.1.L.4.a and 5.3.3.J.10.a to 25 MWR.  
 3) Delete from Att. 1-B Item # 2.F.2 "LEA Radio".  
**REASON FOR CHANGE:** 1) Clarify which alarms will be heard during test.  
 2) To give siren repairs a higher priority MWR.  
 3) Replaced by new radio channels to Newberry and Electric Counties

Originator: James Bouknight Sign/Print: Leonard Bouknight

**III. WILL THIS REVISION/CHANGE/NEW PROCEDURE:**

	YES	NO	N/A
1. Result in significant increased personnel radiation exposure? (ALARA review)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Result in a release of effluents to the Environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Degrade the effectiveness of the Radiation Emergency Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency of Training and Qualification Plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

\* If any question 1 through 4 is answered "YES", refer to appropriate section of procedure for direction.

**REQUIRED REVIEW AND COMMENT:**

<input type="checkbox"/> MOPS	<input type="checkbox"/> MHPS	<input type="checkbox"/> GMNPO	<input type="checkbox"/> QA	<input type="checkbox"/> TU	<input type="checkbox"/> ISD	<input type="checkbox"/> _____
<input type="checkbox"/> MMS	<input type="checkbox"/> MDE	<input type="checkbox"/> GMES	<input type="checkbox"/> QC	<input type="checkbox"/> CHS	<input type="checkbox"/> RC	<input type="checkbox"/> _____
<input type="checkbox"/> MQS	<input type="checkbox"/> MNT	<input checked="" type="checkbox"/> GMINSS	<input type="checkbox"/> SAS	<input checked="" type="checkbox"/> RPS	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> MPSE	<input type="checkbox"/> MNL&OE	<input type="checkbox"/> GMSPD	<input type="checkbox"/> MINTS	<input type="checkbox"/> PSE	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> MCHS	<input type="checkbox"/> MNPS	<input type="checkbox"/> OPS	<input type="checkbox"/> NPS	<input type="checkbox"/> DE	<input type="checkbox"/> _____	<input type="checkbox"/> _____

Requested Review: Discipline Supervisor 13/7/00 Date

**IV. 10CFR50.69 SCREENING REVIEW/SAFETY EVALUATION**  
 REQUIRED  EXEMPT  PSRC SUPPORTING DOCUMENT: \_\_\_\_\_  
 Discipline Supervisor Concurrence

**V. TEMPORARY APPROVAL:**

QUALIFIED REVIEWER \_\_\_\_\_ DATE \_\_\_\_\_ QA REVIEW \_\_\_\_\_ DATE \_\_\_\_\_  
 TELECON BY \_\_\_\_\_ TELECON BY \_\_\_\_\_  
 SHIFT SUPERVISOR \_\_\_\_\_ DATE \_\_\_\_\_ FINAL APPROVAL REQUIRED BY: DATE \_\_\_\_\_

**VI. DISCIPLINE SUPERVISOR FINAL REVIEW:**

PSRC REVIEW PRIOR TO IMPLEMENTATION? YES \_\_\_ NO

TRAINING REQUIRED? YES \_\_\_ NO

IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES \_\_\_ NO \_\_\_

PICAP AFFECTED? YES \_\_\_ NO

COMMENTS RESOLVED: 15-9-00  
 Discipline Supervisor \_\_\_\_\_ Date \_\_\_\_\_

**VII. PICAP ACCEPTABLE?**

C. YES \_\_\_ NO N/A Date \_\_\_\_\_  
 N. YES \_\_\_ NO N/A Date \_\_\_\_\_  
 RESP. MGR. \_\_\_\_\_ Date \_\_\_\_\_

**VIII. FINAL QA REVIEW (As Applicable)**

NA  
 QA Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**IX. APPROVAL AUTHORITY:**

N/A  
 Training Completed \_\_\_\_\_ Date \_\_\_\_\_  
 Procedure Approval/Concurrence 6/5/2000 Date \_\_\_\_\_

**X. PSRC REVIEW:**

**A. REVIEWED BY:**

PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_  
 COMMENTS: YES \_\_\_ NO \_\_\_

**B. PSRC COMMENTS RESOLVED:**

Responsible Manager \_\_\_\_\_ Date \_\_\_\_\_  
 PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_



**NUCLEAR OPERATIONS**  
**COPY NO. \_\_\_\_\_**

SAP-139  
 ATTACHMENT IV  
 PAGE 1 OF 3  
 REVISION 18

**PROCEDURE DEVELOPMENT FORM - A**

**I. DATE:** 10/6/98 **PROC#** EPP-164 **REV.#** 5 **CHG.** C **COMM.#** \_\_\_\_\_  
**TITLE:** VERIFICATION OF COMMUNICATIONS OPERABILITY

NEW PROC  CHANGE  PERMANENT  SAFETY RELATED \_\_\_\_\_  
 REVISION \_\_\_\_\_ RESTRICTED \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_ QUALITY RELATED \_\_\_\_\_  
 NON-SAFETY RELATED

**II. DESCRIPTION:**  
ATT. 1-E REFLECT NEW LOCATIONS OF COMMUNICATIONS EQUIPMENT IN THE BACK-UP EDF :  
**REASON FOR CHANGE:**  
RELOCATION OF THE BACK-UP EDF

CM Counts  
 Originator Sign/Print

**III. WILL THIS REVISION/CHANGE/NEW PROCEDURE:**

	YES	NO	N/A
1. Result in significant increased personnel radiation exposure? (ALARA review)	_____	<input checked="" type="checkbox"/>	_____
2. Result in a release of effluents to the Environment?	_____	<input checked="" type="checkbox"/>	_____
3. Degrade the effectiveness of the Radiation Emergency Plan?	_____	<input checked="" type="checkbox"/>	_____
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency of Training and Qualification Plans?	_____	_____	<input checked="" type="checkbox"/>

**REQUIRED REVIEW AND COMMENT:**

<input checked="" type="checkbox"/> MOPS	<input checked="" type="checkbox"/> MHPs	<input type="checkbox"/> GMNPO	<input type="checkbox"/> QA	<input type="checkbox"/> TU	<input type="checkbox"/> ISD	<input type="checkbox"/> RC	<input type="checkbox"/> _____
<input type="checkbox"/> MMS	<input type="checkbox"/> MDE	<input type="checkbox"/> GMES	<input type="checkbox"/> QC	<input type="checkbox"/> CHS	<input type="checkbox"/> RC	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> MQS	<input type="checkbox"/> MNT	<input type="checkbox"/> GMNSS	<input type="checkbox"/> SAS	<input type="checkbox"/> HPS	<input checked="" type="checkbox"/> Schatz	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> MPSE	<input type="checkbox"/> MNL&OE	<input type="checkbox"/> GMSPD	<input type="checkbox"/> MNTS	<input type="checkbox"/> PSE	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> MCHS	<input type="checkbox"/> MINPS	<input type="checkbox"/> OPS	<input checked="" type="checkbox"/> MNPS	<input type="checkbox"/> DE	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____

**REQUESTED REVIEWS:**  
John Keller, 10/6/98  
 Discipline Supervisor Date

**IV. 10CFR50.59 SCREENING REVIEW/SAFETY EVALUATION**  
 REQUIRED  EXEMPT  PSRC SUPPORTING DOCUMENT: 10 CFR 50.54(g)  
John Keller  
 Discipline Supervisor Concurrence

**V. TEMPORARY APPROVAL:**

QUALIFIED REVIEWER \_\_\_\_\_ DATE N/A QA REVIEW \_\_\_\_\_ DATE \_\_\_\_\_  
 TELECON BY \_\_\_\_\_ TELECON BY \_\_\_\_\_  
 SHIFT SUPERVISOR \_\_\_\_\_ DATE \_\_\_\_\_ FINAL APPROVAL REQUIRED BY: DATE \_\_\_\_\_

**VI. DISCIPLINE SUPERVISOR FINAL REVIEW:**

PSRC REVIEW PRIOR TO IMPLEMENTATION? YES \_\_\_\_\_ NO

TRAINING REQUIRED? YES \_\_\_\_\_ NO

IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES \_\_\_\_\_ NO \_\_\_\_\_

P/CAP AFFECTED? YES \_\_\_\_\_ NO

COMMENTS RESOLVED: John Keller, 10/29/98  
 Discipline Supervisor Date

**VII. P/CAP ACCEPTABLE?**

C. YES \_\_\_\_\_ NO NA \_\_\_\_\_ Date \_\_\_\_\_  
 N. YES \_\_\_\_\_ NO NA \_\_\_\_\_ Date \_\_\_\_\_  
 RESP. MGR.

**VIII. FINAL QA REVIEW (As Applicable)**

QA Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**IX. APPROVAL AUTHORITY:**

N/A \_\_\_\_\_ Date \_\_\_\_\_  
 Training Completed  
John Keller \_\_\_\_\_ Date 11/14/98  
 Procedure Approval/Concurrence

**X. PSRC REVIEW:**

**A. REVIEWED BY:**

PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_  
 COMMENTS: YES \_\_\_\_\_ NO \_\_\_\_\_

**B. PSRC COMMENTS RESOLVED:**

Responsible Manager \_\_\_\_\_ Date \_\_\_\_\_  
 PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_

**NUCLEAR OPERATIONS  
COPY NO. \_\_\_\_\_**

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ATTACHMENT IV  
PAGE 1 OF 3  
REVISION 18

**PROCEDURE DEVELOPMENT FORM - A**

**I. DATE:** 09/19/97 **PROC.#** EPP-104 **REV.#** 5 **CHG.** B **COMM.#** \_\_\_\_\_  
**TITLE:** Verification of Communications Operability

NEW PROC \_\_\_\_\_ CHANGE  PERMANENT  SAFETY RELATED \_\_\_\_\_  
 REVISION \_\_\_\_\_ RESTRICTED \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_ QUALITY RELATED \_\_\_\_\_  
 NON-SAFETY RELATED

**II. DESCRIPTION:** Correct pagination error in change A. Reissued entire procedure

**REASON FOR CHANGE:**  
Information lost because of pagination in change A.  
Personnel Error.

Originator [Signature] Sign/Print CM Counts

**III. WILL THIS REVISION/CHANGE/NEW PROCEDURE:**

	*YES	NO	N/A
1. Result in significant increased personnel radiation exposure? (ALARA review)	_____	<input checked="" type="checkbox"/>	_____
2. Result in a release of effluents to the Environment?	_____	<input checked="" type="checkbox"/>	_____
3. Degrade the effectiveness of the Radiation Emergency Plan?	_____	<input checked="" type="checkbox"/>	_____
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency of Training and Qualification Plans?	_____	_____	<input checked="" type="checkbox"/>

\* If any question 1 through 4 is answered "YES", refer to appropriate section of procedure for direction.

**REQUIRED REVIEW AND COMMENT:**

( ) MOPS	( ) MHPS	( ) GMNPO	( ) QA	( ) TU	( ) ISD	( ) RC	( ) QA
( ) MMS	( ) MDE	( ) GMES	( ) QC	( ) CHS	( ) RC	( ) RC	( ) GMNSS
( ) MQS	( ) MNT	( ) GMNSS	( ) SFADC	( ) RPS	( ) _____	( ) _____	( ) _____
( ) MSCE	( ) MNL&OE	( ) GMSFD	( ) MNTS	( ) SCE	( ) _____	( ) _____	( ) _____
( ) MCHS	( ) MNPS	( ) OPS	( ) NPS	( ) DE	( ) _____	( ) _____	( ) _____

**REQUESTED REVIEWS:**  
[Signature] 9/22/97  
 Discipline Supervisor Date

**IV. 10CFR50.59 SCREENING REVIEW/SAFETY EVALUATION**  
 REQUIRED  EXEMPT  PSRC **SUPPORTING DOCUMENT:** 10CFR50.54  
[Signature]  
 Discipline Supervisor Concurrence

**V. TEMPORARY APPROVAL:**

QUALIFIED REVIEWER \_\_\_\_\_ DATE \_\_\_\_\_ NA QA REVIEW \_\_\_\_\_ DATE \_\_\_\_\_  
 TELECON BY \_\_\_\_\_ TELECON BY \_\_\_\_\_  
 SHIFT SUPERVISOR \_\_\_\_\_ DATE \_\_\_\_\_ FINAL APPROVAL REQUIRED BY: DATE \_\_\_\_\_

**VI. DISCIPLINE SUPERVISOR FINAL REVIEW:**

PSRC REVIEW PRIOR TO IMPLEMENTATION? YES \_\_\_\_\_ NO

TRAINING REQUIRED? YES \_\_\_\_\_ NO

IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES \_\_\_\_\_ NO \_\_\_\_\_

P/CAP AFFECTED? YES \_\_\_\_\_ NO

COMMENTS RESOLVED: [Signature] 9/22/97  
 Discipline Supervisor Date

**VII. P/CAP ACCEPTABLE?**

C. YES \_\_\_\_\_ NO NA \_\_\_\_\_ Date \_\_\_\_\_  
 N. YES \_\_\_\_\_ NO \_\_\_\_\_ NL&OE \_\_\_\_\_ Date \_\_\_\_\_  
 RESP. MGR. \_\_\_\_\_ Date \_\_\_\_\_

**VIII. FINAL QA REVIEW (As Applicable)**  
NA \_\_\_\_\_ Date \_\_\_\_\_  
 QA Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**IX. APPROVAL AUTHORITY:**

Training Completed \_\_\_\_\_ Date \_\_\_\_\_  
[Signature] 9/22/97  
 Procedure Approval/Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**X. PSRC REVIEW:**

**A. REVIEWED BY:**

PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_  
 COMMENTS: YES \_\_\_\_\_ NO \_\_\_\_\_

**B. PSRC COMMENTS RESOLVED:**

Responsible Manager \_\_\_\_\_ Date \_\_\_\_\_  
 PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_

NUCLEAR OPERATIONS

COPY NO. \_\_\_\_\_

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ATTACHMENT IV  
PAGE 1 OF 3  
REVISION 17

PROCEDURE DEVELOPMENT FORM - A

I. DATE: 8-5-97 PROC. # EPP-104 REV. # 5 CHG. A COMM. # \_\_\_\_\_  
 TITLE: VERIFICATION OF COMMUNICATIONS OPERABILITY

NEW PROC \_\_\_\_\_ CHANGE  PERMANENT  SAFETY RELATED \_\_\_\_\_  
 REVISION \_\_\_\_\_ RESTRICTED \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_ QUALITY RELATED \_\_\_\_\_  
 NON-SAFETY RELATED

II. DESCRIPTION: Page 1, added Attachment V, Added step 4.16, Added Section 5.10, Added Attachment X. I pg 2 of 2  
mc 8/23/97  
cm  
8/18/97

REASON FOR CHANGE: Provide mechanism to test and document faxing capability of EIS to the State and local governments. QA97001-4  
CM Counts CM Counts  
 Originator Sign/Print

III. WILL THIS REVISION/CHANGE/NEW PROCEDURE:

	* YES	NO	N/A
1. Result in significant increased personnel radiation exposure? (ALARA review)	_____	<input checked="" type="checkbox"/>	_____
2. Result in a release of effluents to the Environment?	_____	<input checked="" type="checkbox"/>	_____
3. Degrade the effectiveness of the Radiation Emergency Plan?	_____	<input checked="" type="checkbox"/>	_____
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency or Training and Qualification Plans?	_____	_____	<input checked="" type="checkbox"/>

\* If any question 1 through 4 is answered "YES", refer to appropriate section of procedure for direction.

REQUIRED REVIEW AND COMMENT:

<input checked="" type="checkbox"/> ORLES	<input type="checkbox"/> NL&OE	<input type="checkbox"/> CHS	<input type="checkbox"/> GMNPO	<input type="checkbox"/> _____
<input type="checkbox"/> OPS	<input type="checkbox"/> MNTS	<input type="checkbox"/> HPS	<input type="checkbox"/> GMES	<input type="checkbox"/> _____
<input type="checkbox"/> QA	<input type="checkbox"/> TNPS	<input type="checkbox"/> SCE	<input type="checkbox"/> GMNSS	<input type="checkbox"/> _____
<input type="checkbox"/> QC	<input type="checkbox"/> TU	<input type="checkbox"/> DE	<input type="checkbox"/> _____	<input type="checkbox"/> _____

REQUESTED REVIEWS:

GMNSS  
John Kelly 18-12-97  
 Discipline Supervisor Date

IV. 10CFR50.59 SCREENING REVIEW/SAFETY EVALUATION  
 REQUIRED  EXEMPT  PSRC 8/18/97 SUPPORTING DOCUMENT: 10CFR50.51(e)  
John Kelly  
 Discipline Supervisor concurrence

V. TEMPORARY APPROVAL:

QUALIFIED REVIEWER \_\_\_\_\_ DATE NA QA REVIEW \_\_\_\_\_ DATE \_\_\_\_\_  
 TELECON BY \_\_\_\_\_ TELECON BY \_\_\_\_\_  
 SHIFT SUPERVISOR \_\_\_\_\_ DATE \_\_\_\_\_ FINAL APPROVAL REQUIRED BY: DATE \_\_\_\_\_

VI. DISCIPLINE SUPERVISOR FINAL REVIEW:

PSRC REVIEW PRIOR TO IMPLEMENTATION? YES \_\_\_\_\_ NO   
 TRAINING REQUIRED? YES \_\_\_\_\_ NO   
 IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES \_\_\_\_\_ NO \_\_\_\_\_  
 P/CAP AFFECTED? YES \_\_\_\_\_ NO   
 COMMENTS RESOLVED: John Kelly 8/28/97  
 Discipline Supervisor Date  
 TRAINING COMPLETED: NA  
 Discipline Supervisor Date

VII. P/CAP ACCEPTABLE?  
 C. YES \_\_\_\_\_ NO NA NL&OE \_\_\_\_\_ Date \_\_\_\_\_  
 N. YES \_\_\_\_\_ NO \_\_\_\_\_ RESP. MGR. \_\_\_\_\_ Date \_\_\_\_\_

VIII. FINAL QA REVIEW (As Applicable)  
NA  
 QA Concurrence \_\_\_\_\_ Date \_\_\_\_\_

IX. APPROVAL AUTHORITY:  
St. A. Paul 19/9/97  
 Approval/Concurrence Date

X. PSRC REVIEW:

A. REVIEWED BY: NA  
 PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_  
 COMMENTS: YES \_\_\_\_\_ NO \_\_\_\_\_

B. PSRC COMMENTS RESOLVED:  
 Responsible Manager \_\_\_\_\_ Date \_\_\_\_\_  
 PSRC Chairman \_\_\_\_\_ Date \_\_\_\_\_

**EPP-104, Verification of Communications Operability  
Revision 5, Change E  
Addendum to 10CFR50.54q Evaluation  
Page 1 of 1**

**Description:**

Change step 5.2.7.C and Att. I-D to read "Plant Radiation Alarm".

**Reason for Change:**

Clarify which alarm will be heard during test.

**10CFR50.54q Evaluation**

This change does not affect sections in 10CFR50.47 or 10CFR50 Appendix E. This change is administrative in nature. This change is to clarify that only the Plant Radiation Alarm will be sent over the speaker at the Circulating Water Intake. Therefore, this change does not decrease the effectiveness of the Radiation Emergency Plan. This change does not require further revision of the Radiation Emergency Plan or Emergency Plan Procedures.

**Description:**

Change 3.2.2.L.4.a and 5.3.3.J.10.a to 2S MWR.

**Reason for Change:**

To give siren repairs a higher priority MWR.

**10CFR50.54q Evaluation**

This change does not affect sections in 10CFR50.47 or 10CFR50 Appendix E. This change is administrative in nature. The priority of the repair of sirens is not mentioned in the Radiation Emergency Plan. . Therefore, this change does not decrease the effectiveness of the Radiation Emergency Plan. This change does not require further revision of the Radiation Emergency Plan or Emergency Plan Procedures.

**Description:**

Delete from Att. I-B Item # 2.F.2 "LLEA Radio".

**Reason for Change:**

Radio channels to Newberry and Fairfield Counties replaced this radio.

**10CFR50.54q Evaluation**

Due to the age of this radio it was replaced with radio channels on the 800 mhz radio system.

**10CFR50.54q Evaluation**

This change affects 10CFR50.47(b)(5) and 10CFR50.Appendix E (IV)D. This radio is a backup system to the telephones for the notification of state and local governments. The radio was replaced because of its age and the difficulty in obtaining repair parts. The new channels are part of the current radio system utilized by the site. The radio is not identified in the Radiation Emergency Plan. Therefore, this change does not decrease the effectiveness of the Radiation Emergency Plan. This change does not require further revision of the Radiation Emergency Plan or Emergency Plan Procedures.

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ATTACHMENTS

- Attachment I-A - Verification of Communications Operability (Monthly Test)
- Attachment I-B - Verification of Communications Operability (Quarterly Test)
- Attachment I-C - Verification of Communications Operability (Annual Test)
- Attachment I-D - Verification of Plant Emergency Alarm Warning Lights and Speakers (Quarterly Test)
- Attachment I-E - Verification of Communications Operability - Backup EOF (Quarterly Test)
- Attachment II - Verification of School Monitor Radios (Annual Test)
- Attachment III - Equipment Trouble Report
- Attachment IV - Transient Sign Verification (Annual Test)

## 1.0 PURPOSE

- 1.1 The purpose of this procedure is to provide guidance for verifying that communications designated for use during an emergency are operational.
- 1.2 This procedure provides a method to document the tests of the emergency communications equipment.

## 2.0 REFERENCES

- 2.1 FEMA-43, Standard Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants.
- 2.2 NUREG-0654/FEMA REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.
- CO<sub>6</sub>→ 2.3 10CFR50, Appendix E, IV,E,9 a-d.
- 2.4 10CFR50.72.
- 2.5 EP-100, Virgil C. Summer Nuclear Station Radiation Emergency Plan.
- 2.6 Emergency Planning Telephone Directory.
- 2.7 EMP-170.003, Warning Siren Maintenance.
- 2.8 NL-122, Regulatory Notification and Reporting.
- 2.9 EPP-002, Communications and Notification.
- 2.10 EPP-021, Activation of the Early Warning Siren System (EWSS).
- 2.11 EPP-026, Operation of the Siren Control System.
- 2.12 SAP-143, Preventative Maintenance Program.

| Chg D

### 3.0 DEFINITIONS

#### 3.1 Definitions

- 3.1.1 EWSS Annual Operability - The percentage of operability of the Early Warning Siren System (EWSS) for a 12 month period.
- 3.1.2 Percentage of Operability of the EWSS - The total number of sirens tested divided into the number of satisfactory tests, for all tests.

### 4.0 CONDITIONS AND PREREQUISITES

#### 4.1 The required frequency for verification of communications (telephone and/or radio, as applicable) operability is as follows:

- 4.1.1 Monthly tests will be conducted with State and county governments within the 10 mile Plume Emergency Planning Zone (EPZ).
- 4.1.2 Quarterly tests will be conducted with federal and State agencies within the 50 mile Ingestion EPZ.
- 4.1.3 Annual tests will be conducted among VCSNS, state and county Emergency Operation Centers and Radiation Monitoring Teams.

#### 4.2 The EWSS shall be tested at the following frequency:

- 4.2.1 A silent test of the EWSS shall be performed at least every 14 days.
- 4.2.2 A growl test of each siren shall be performed at least monthly, and when preventive maintenance has been performed.
- 4.2.3 A complete cycle test (full system activation) shall be performed at least annually.

#### 4.3 Plant Emergency Alarms shall be tested weekly, normally on the first scheduled workday, satisfactory results will be signified by the approval signatures on the PMTS sheet. There is no requirement for a data sheet.

CO<sub>3</sub>→4.4 The Plant Emergency Alarm Warning Lights shall be tested quarterly.

#### 4.5 School Monitor Radios shall be tested annually.

NO<sub>1</sub>→ 4.6 When a test is conducted on the DHEC radio, ensure the radios are separated by a distance of at least 15 air miles.

#### 4.7 Designated telephone numbers in the Emergency Planning Telephone Directory shall be verified quarterly by the Emergency Services Unit (ESU).

- 4.8 All tests shall be documented in accordance with SAP-143, Preventative Maintenance Program.
- CO<sub>6</sub>→4.9 The FTS 2000 Telephone System shall be tested monthly in the Control Room, TSC and EOF, as applicable.
- 4.10 The ESU shall ensure all tests specified in this procedure are performed and documented.
- 4.11 The 75% operability of the EWSS is based on the acceptance criteria for the Public Response Survey conducted during the final acceptance test of the EWSS by the Federal Emergency Management Agency.
- 4.12 The Public Address Speakers at siren locations #9 and #45 are not considered part of the EWSS.
- 4.13 Annual preventative maintenance activities on sirens will be performed in accordance with SAP-143 and EMP-170.003.
- 4.14 EPP-026 Attachment VI provides a list of sirens, siren locations and the company supplying power to the siren.
- 4.15 RTU STATUS indicating a RESTART indicates the RTU had a power fluctuation and has lost the data gathered during a test. This condition does not indicate a failure of the siren to properly sound. A retest shall be done of the siren and the results recorded on the original test documentation.
- 4.16 Communications to the State and local governments via fax using the VCS Emergency Information System (EIS) shall be performed monthly. Test results will be documented using Attachment I-A. | Chg.  
A

## 5.0 PROCEDURE

- 5.1 In-Plant Communications
- 5.1.1 The ESU, or designee, shall perform communications tests and record results on Attachments I-A, I-B, I-C, or I-E.
- 5.1.2 The person performing the test shall verify that the method of communication is operable, as follows:
- A. A ringdown telephone shall contact the party it is intended to reach.
  - B. The all-call function shall simultaneously contact all parties it is intended to reach. | Chg.  
B
  - C. A normal telephone circuit shall be able to reach the number dialed.

- D. A radio shall be tested to ensure it is operable.
- E. The Plant Page shall be tested to ensure each set can page and communicate with another set.
- F. The FTS 2000 telephones shall be tested to ensure that they contact another telephone with a callback.
- G. A fax machine shall be tested to ensure it can send and receive messages.

**NOTE 5.1.3**

Failure of an ENS telephone is a one hour reportable event in accordance with 10CFR50.72.

- 5.1.3 If there is a failure of the FTS 2000 telephone system, the Control Room/SS will be notified. The SS (or his designee) shall:
  - A. Notify the NRC Operations Center.
  - B. When the telephone service is restored, notify the NRC Operations Center.
- 5.1.4 The person performing the test shall record the results in the Test Results space on the appropriate attachments. If the test results are unsatisfactory, contact the applicable maintenance group for repair and notify the SS.
- 5.1.5 When the equipment has been repaired, the ESU, or designee, shall test the equipment and document the test.

**CO<sub>3</sub>→5.2 Plant Emergency Alarm Warning Lights and Speakers**

- 5.2.1 Announce over Plant Paging System, the weekly Emergency Alarm Test.
- 5.2.2 A weekly test of the Plant Fire Alarm shall be conducted by Operations personnel as follows:
  - A. Simultaneously depress both FIRE ALARM buttons on the FIRE AND SECURITY panel (XCP-6040).
  - B. Verify the CONTROL ROOM SPEAKERS MUTED light is illuminated.

- C. Verify with personnel located in the buildings that the alarm can be heard.
- 5.2.3 A weekly test of the Plant Radiation Alarm shall be conducted by Operations personnel, as follows:
- A. Simultaneously depress both PLANT RADIATION buttons on the FIRE AND SECURITY panel (XCP-6040).
  - B. Verify the CONTROL ROOM SPEAKERS MUTED light is illuminated.
  - C. Verify with personnel located in the buildings that the alarm can be heard.
- 5.2.4 A weekly test of the Reactor Building Evacuation Alarm shall be conducted by Operations personnel, as follows:
- A. Simultaneously depress both REACTOR BLDG. EVACUATION ALARM buttons on the FIRE AND SECURITY panel (XCP-6040).
  - B. Verify that the red flashing warning lights on the 463' Turbine Building or other locations are functional.
  - C. If the Reactor Building is occupied during the test, ensure the alarm is heard.
- 5.2.5 If a Plant Alarm Test is unsatisfactory, promptly notify the ESU and contact Electrical Maintenance to begin repairs.
- 5.2.6 Document the results of the Plant Emergency Alarms on the PMTS sheet. There is no requirement for a data sheet.
- 5.2.7 Quarterly Test of Plant Emergency Alarm Warning Lights and Speakers
- A. Dispatch available Electrical Maintenance personnel to the Circulating Water Intake Structure.
  - B. The quarterly test of the Plant Emergency Alarm Warning Lights shall be conducted in conjunction with a weekly Plant Alarms Test by the Operations Department and documented on Attachment I-D.
  - C. Station personnel shall verify Plant Radiation Alarm can be heard over the speaker at the Circulating Water Intake Structure and documented on Attachment I-D.
- CO<sub>5</sub>→ D. Contact Security at the Central Alarm Station

Chg.  
E

1. Instruct them to contact a minimum of 3 security personnel and verify the alarms can be heard throughout the plant.
  2. Document the results on Attachment I-D of this procedure. If the alarms cannot be heard in an area(s) of the plant, initiate an MWR for repairs.
- E. If the test is unsatisfactory, promptly notify the ESU and contact Electrical Maintenance to repair.
- F. Retest of the equipment will be documented on the MWR.

**NOTE 5.3**

Prior to testing the Early Warning Siren System, ensure the Siren Control System Computer is designated as PRIMARY Mode and the printer is ready to operate. EPP-026, Operation of the Siren Control System provides instructions on changing the Mode.

**NOTE 5.3**

Prior to testing the Early Warning Siren System, ensure Maintenance Personnel do not have a siren disabled for Preventive Maintenance purposes.

Chg  
F

**5.3 Early Warning Siren System**

**5.3.1 Silent Test**

- A. The silent test of the EWSS is the responsibility of the Operations Department.
- B. Obtain the EWSS key from the Control Room Supervisor's Key Box.
- C. Insert the key into the Siren Control Console's SYSTEM Switch in the Control Room and turn the key to the ON position.
- D. Verify the SYSTEM READY Indicator Light is illuminated. The Siren Control Console is now operational.
- E. Place the CALL SELECTOR Switch to ALL CALL.
- F. Press and hold the SILENT TEST button until the light illuminates. It will take a minimum of 3 seconds.

- G. Turn the key to the OFF position and return the key to the Control Room Supervisor's Key Box.
- H. Once the system has completed the Silent Test cycle after approximately 20 minutes, the results of the silent test will be printed at the Siren Control System Computer designated as PRIMARY Mode.
- I. If the percentage of operability for the EWSS is less than 75%, declare the system inoperable and accomplish the following:
  - 1. Refer to NL-122 for reportability requirements. | Chg  
D
  - 2. Notify the ESU, who will contact the appropriate group to make repairs.
- J. Notify the ESU of any sirens reporting a failure.
- K. Attach the results to the PMTS and forward to the ESU.
- L. The ESU shall:
  - 1. Review the printout of the test.
  - 2. Record siren(s) failures on Attachment III.
  - 3. Notify the appropriate group to make repairs to any inoperable siren(s) utilizing Attachment III.
  - 4. If there is an electrical repair, the ESU will generate a plant MWR and forward it to Electrical Maintenance. The following guidance will be used to establish the priority:
    - a. 2S -The percentage of siren operability is greater than or equal to 75%. | Chg.  
E
    - b. 1 -The percentage of operability is less than 75%.
  - 5. Update the percentage of operability of the EWSS on the ESU computer network.
- M. When a failed siren is repaired, perform a silent test on that siren. If the retest is satisfactory, return the siren to service. Document the retest on Attachment III. |
- N. Attach Attachment III to the PMTS package, when all retests are complete. | Chg.  
B

**5.3.2 Growl Test**

- A. Prior to conducting a Growl Test, ensure the following are notified:**
  - 1. SCANA, Public Affairs**
  - 2. Control Room Personnel**
  - 3. NRC Resident Inspector**
  - 4. State Emergency Preparedness Division**
  - 5. County Emergency Preparedness Offices**
  - 6. Station Switchboard Operator**
- B. Growl testing of the siren system is the responsibility of the ESU.**
- C. The tester shall verify operability of each siren by sending a growl test signal using the Siren Control System computer designated as PRIMARY Mode.**
- D. The results of the growl test will be printed at the Siren Computer System terminal designated as PRIMARY Mode.**
- CO<sub>1</sub>→ E. Once the test has been completed, the ESU shall:**
  - 1. Ascertain the numbers and locations of sirens that failed to operate.**
  - 2. Poll the siren(s) that failed to verify the operability status of the siren(s).**
  - 3. Record the cause of the failure on the printout.**

4. Do a FIELD RTU RESET, as follows:
    - a. Press the F2 key to display the Directory Screen.
    - b. Move the cursor to the FIELD RTU RESET block.
    - c. Press the "1" key.
    - d. Press the ENTER key.
  5. If the RTU STATUS indicated a RESTART do a retest of the individual siren. Indicate the results of the retest on the printout.
  6. If necessary, correct the siren numbers and percent operability on the printout.
  7. Record siren failure(s) on Attachment III.
  8. Notify the appropriate group to make repairs to any inoperable siren(s) utilizing Attachment III.
  9. If there is an electrical repair, the ESU will generate a plant MWR and forward it to Electrical Maintenance. The following guidance will be used to establish the priority:
    - a. 2S - The percentage of siren operability is greater than or equal to 75%.
    - b. 1 - The percentage of operability is less than 75%.
  10. Update the percentage of operability of the EWSS on the ESU computer network.
- F. If the system-wide growl test success percentage for the EWSS is less than 75%, declare the system inoperable and accomplish the following:
1. Notify the SS. The SS should refer to NL-122 for reportability requirements. Chg D
  2. Notify the appropriate group to make repairs.
- G. When a failed siren is repaired, perform a growl test on that siren. If the retest is satisfactory, return the siren to service. Document the retest on Attachment III.

- H. **Attach Attachment III to the PMTS package, when all retest are complete.**

**5.3.3. Complete Cycle Test**

- A. **Prior to conducting a Complete Cycle Test, ensure the following are notified:**
  - 1. **SCANA, Public Affairs**
  - 2. **Control Room Personnel**
  - 3. **NRC Resident Inspector**
  - 4. **State Emergency Preparedness Division**
  - 5. **County Emergency Preparedness Offices**
  - 6. **Station Switchboard Operator**
- B. **The complete cycle test is the responsibility of the ESU.**
- C. **Obtain the EWSS key from the Control Room Supervisor's Key Box.**
- D. **Insert the key into the Siren Control Console's SYSTEM Switch in the Control Room and turn the key to the ON position.**
- E. **Verify the SYSTEM READY Indicator Light is illuminated. The Siren Control Console is now operational.**
- F. **Place the CALL SELECTOR Switch to ALL CALL.**
- G. **Press and hold the ACTIVATE button until the light illuminates. It will take a minimum of 3 seconds.**
- H. **Turn the key to the OFF position and return the key to the Control Room Supervisor's Key Box.**
- I. **Once the system has completed the Activation Cycle, an Activation Report will be printed at the Siren Control System Computer designated as PRIMARY.**

- J. Once the test has been completed, the ESU shall:
1. Ascertain the numbers and locations of sirens that failed to operate.
  2. Poll the siren(s) that failed to verify the operability status of the siren(s).
  3. Record the cause of the failure on the printout.
  4. Do a FIELD RTU RESET, as follows:
    - a. Press the F2 key to display the Directory Screen.
    - b. Move the cursor to the FIELD RTU RESET block.
    - c. Press the "1" key.
    - d. Press the ENTER key.
  5. If the RTU STATUS indicated a RESTART, do a retest of the individual siren. Indicate the results of the retest on the printout.
  6. If a siren indicates a failure, personnel may be dispatched to the siren location to interview residents in the immediate area to determine if the siren sounded. The name of the residents shall be recorded with the results of the interview to determine if the siren activated properly.
  7. If necessary, correct the siren numbers and percent operability on the printout.
  8. Record siren failure(s) on Attachment III.
  9. Notify the appropriate group to make repairs to any inoperable siren(s) utilizing Attachment III.
  10. If there is an electrical repair, the ESU will generate a plant MWR and forward it to Electrical Maintenance. The following guidance will be used to establish the priority:
    - a. 2S - The percentage of siren operability is greater than or equal to 75%.
    - b. 1 - The percentage of operability is less than 75%.

Chg.  
E

11. Update the percentage of operability of the EWSS on the ESU computer network.

K. If the percentage of operability for the EWSS is less than 75%, declare the system inoperable and accomplish the following:

1. Notify the SS. The SS should refer to NL-122 for reportability requirements. | Chg  
D
2. Notify Electrical Maintenance to make repairs.

L. Update the percentage of operability to the EWSS on the ESU computer network.

M. When a failed siren is repaired, perform a complete cycle test on that siren. If the retest is satisfactory, return the siren to service. Document the retest on Attachment III.

N. Attach Attachment III to the PMTS package, when all retest are complete.

#### 5.4 School Monitor Radios

5.4.1 The ESU is responsible for the verification of operability of the School Monitor Radios.

**NOTE 5.4.2**

Prior to testing, the ESU shall ensure coordination between the station and the schools.

5.4.2 The School Monitor Radios shall be tested annually by the ESU, as follows:

- A. Obtain the EWSS key from the Control Room Supervisor's Key Box.
- B. Insert the key into the Siren Control Console's SYSTEM Switch in the Control Room and turn the key to the ON position.
- C. Verify the SYSTEM READY Indicator Light illuminates. It will take a minimum of 3 seconds.
- D. Key the SCHOOL MONITOR MICROPHONE and hold down.
- E. Read the message below into the microphone

**This is a Drill! This is a Drill! This is the V. C. Summer Nuclear Station testing the School Monitor Radios. (Repeat)**

- F. Release the microphone key to deactivate the system.
- G. Turn the key to the OFF position and return the key to the Control Room Supervisor's Key Box.
- H. Document the test on Attachment II by contacting the holders of School Monitor Radios and verifying operability.
- I. If a radio fails to receive the test, contact the appropriate maintenance group to make repairs.
- J. When a failed School Monitor Radio is repaired, perform a test of that radio and return it to service when the test is satisfactorily performed.

#### 5.5 Public Address Speakers

- 5.5.1 The ESU is responsible for the verification of operability of the Public Address Speakers.
- 5.5.2 The Public Address Speakers shall be tested quarterly, as follows:
  - A. Ensure personnel are in position to hear the speaker.
  - B. Obtain the EWSS key from the Control Room Supervisor's Key Box.
  - C. Insert the key into the Siren Control Console's SYSTEM Switch in the Control Room and turn the key to the ON position.
  - D. Verify the SYSTEM READY Indicator Light illuminates. It will take a minimum of 3 seconds.
  - E. Key the PUBLIC ADDRESS MICROPHONE and hold down.

- F. Read the message below into the microphone

This is a Drill! This is a Drill! This is the V. C. Summer Nuclear Station testing the Public Address Speakers. (Repeat)

- G. Release the microphone key to deactivate the system.
- H. Turn the key to the OFF position and return the key to the Control Room Supervisor's Key Box.
- I. Document the test on Attachment I-B by contacting personnel at the Speakers to learn if they heard the announcement.
- J. If a Speaker is inoperable, notify the appropriate maintenance group to make repairs. If there is an electrical problem, the ESU will generate a plant MWR and forward it to Electrical Maintenance. The priority of the MWR shall be 2S or greater.
- K. When a failed speaker is repaired, perform a test on that speaker and return it to service when the test has been satisfactorily performed.

#### 5.6 Emergency Response Data System (ERDS)

- 5.6.1 A quarterly test of the ERDS shall be performed by the ESU normally on Thursday of the sixth complete week of the quarter.
- 5.6.2 The test shall be coordinated with the NRC Operations Center.
- 5.6.3 The test will demonstrate the ability to:
- A. Establish a link with the ERDS in accordance with EPP-002.
  - B. Transmit all parameters in the plant's ERDS database for two hours.
  - C. Reconnect the ERDS upon a loss of telephone connection.
  - D. Terminate the ERDS link in accordance with EPP-002.
- 5.6.4 Test results shall be documented on the PMTS sheet. If the test results are unsatisfactory, contact the applicable maintenance group for repairs and notify the SS.

**5.7 Public Information Brochure**

- 5.7.1** An information brochure to the public within the plume exposure pathway shall be published annually.
- 5.7.2** The brochure development will begin in the third quarter of each year and will normally be accomplished by the SCANA Public Affairs Department.
- 5.7.3** This brochure shall be reviewed and approved by the ESU prior to distribution.

**NO<sub>2</sub>→5.8 Information for Transient Population**

- 5.8.1** Signs located throughout the plume exposure pathway provide the transient population instructions on obtaining local emergency information should an emergency or accident occur.
- 5.8.2** These signs shall be inspected annually for legibility and information, using Attachment IV, which also includes an assessment of the need for signs at additional locations.

**5.9 Badge Accountability Printer**

- 5.9.1** Request personnel in the Access Portal to send a printout to the TSC Badge Accountability Printer.
- 5.9.2** Verify the printout is legible.

**5.10 Emergency Information System (EIS) Communication verification.**

- 5.10.1** In conjunction with the monthly test of the ESSX lines or separately, notify the State and local government warning point dispatchers that a test fax will be transmitted to them and they will be called to verify receipt. Document on Attachment I-A page 2 of 2.
- 5.10.2** Generate an Emergency Notification Form using EIS and transmit it using the Initial Notification fax group.
- 5.10.3** Wait four minutes and call the dispatchers either individually or using the group call option in ESSX and verify receipt and legibility. Document on Attachment V.
- 5.10.4** Upon successful completion of this test, stop and restart EIS to clear all data.
- 5.10.5** If any location failed to receive a legible fax, notify the appropriate group for repairs.

Chg.  
A

Chg.  
A

- 5.10.6 If EIS faxing capability cannot be repaired by the end of the current shift, notify the duty Shift Supervisor that manual faxing of Emergency Notification Forms must be performed until repairs are effected.
- 5.10.7 When repairs are complete and a successful retest has been performed, notify the duty Shift Supervisor that EIS is repaired and can be used for faxing.

## 6.0 RECORDS

- 6.1 All of the attachments to this procedure will be retained in accordance with the Document Management System (DMS).

## 7.0 REVISION SUMMARY

- 7.1 Added Section 4.15 to define an RTU RESTART and to provide instructions for what to do when one is received. This is being incorporated per letter from Motorola dated April 15, 1997.
- 7.2 Added Step 3,5 &6 to Section 5.3.2.E to provide better guidance for the performance of Growl test.
- 7.3 Added Steps 3,5,6 & 7 to Section 5.3.3.J to provide better guidance for the performance of the Complete Cycle Test.
- 7.4 Changed the Title Page from "STATION ADMINISTRATIVE" to "EMERGENCY PLAN". This was a typographical mistake from the previous revision.

VERIFICATION OF COMMUNICATIONS OPERABILITY  
 (MONTHLY TEST)

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT		
1	A. ESSX Comm.Equip. and Programs in TSC				
	1 - State Emerg. Ops. Center			1	
	2 - State Forward Emerg. Ops. Center			1	
	3 - Fairfield Co.			1	
	4 - Newberry Co.			1	
	5 - Richland Co.			1	
	6 - Lexington Co.			1	
	7 - State Warning Point			1	
	8 - "All Call"			1	
	B. CR ESSX Telephone			1	
C. EOF ESSX Telephone			1		
2	NRC Telephones				
	1 - Control Room				
	ENS			1	
	2 - TSC Command Center				
	RSCPL			1	
	ENS			2	
	3 - TSC NRC area				
	PMCPL			1	
	HPN			1	
	5 - EOF Command Center				
	RSCPL			1	
	PMCPL			1	
	ENS			1	
	MCL			1	
	HPN			1	
	6 - EOF NRC Area				
	ENS			1	
MCL			1		
3	TSC Badge Accountability Printer			1	

CHG  
A

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

**VERIFICATION OF COMMUNICATIONS OPERABILITY  
 (MONTHLY TEST)**

**VERIFICATION OF EIS COMMUNICATIONS**

**I. Notify the State and local government dispatchers of the test fax:**

	NAME	TIME
State Warning Point	_____	_____
Newberry County	_____	_____
Fairfield County	_____	_____
Lexington County	_____	_____
Richland County	_____	_____

**II. Generate the ENF and transmit to the Initial Notification fax group:**

Time of transmission: \_\_\_\_\_

**III. Call the Warning Points and verify receipt of legible faxes:  
 (Denote specific problems and corrective actions in the remarks section.)**

	LEGIBLE? (YES/NO)	TIME RECEIVED
State Warning Point	_____	_____
Newberry County	_____	_____
Fairfield County	_____	_____
Lexington County	_____	_____
Richland County	_____	_____

**IV. Remarks:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Satisfactory Test:** \_\_\_\_\_  
 \_\_\_\_\_  
**Date:** \_\_\_\_\_  
 \_\_\_\_\_  
**SIGNATURE**

Chg.  
A

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

VERIFICATION OF COMMUNICATIONS OPERABILITY  
 (QUARTERLY TEST)

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
1	Plant Status Communicator Network				
	A. Control Room			1	
	B. TSC			1	
	C. EOF			1	
2	Technical Support Center				
	A. Engineering Area				
	1 - Telephone Lines			3	
	2 - Plant Page			1	
	B. NRC Area				
	1 - Telephone Lines			3	
	2 - Plant Page			1	
	C. Westinghouse Area				
	1- Telephone Line			1	
	D. Architect/Engineer Area				
	1 - Telephone Line			1	
	E. Command Center				
	1 - Plant Page			1	
	F. Communications Area				
	1 - Telephone Lines			2	
	2- 800 mHz Radio			1	
	3 - Telecopiers			2	
	G. Media Area				
	Telephone			1	
	H. Chemistry/Administration Supervisor Area				
	1 -Telephone Lines			2	
	2 -Plant Page			1	

Chg.  
F

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

VERIFICATION OF COMMUNICATIONS OPERABILITY  
 (QUARTERLY TEST)

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
3	Operations Support Center				
	1 - Telephones			3	
	2 - Plant Page			1	
4	CREP Room				
	1 - State and Counties Notification Telephone			1	
	2 - One Telephone Line			1	
5	EOF				
	A Fax			2	
	B. EOF Environmental Base Radio			1	
	C. EOF State (DHEC) Radio Tranceiver			1	
	D. EOF State (EPD) Radio Transceiver			1	
	E Westinghouse Telephone Line			1	
	F. Architect/Engineer Telephone Line			1	
6	Monitoring Team				
	1 - HP Lab Radios			5	
	2 - Environmental Lab Radios			2	
7	Public Address Speakers				
	1 - Speaker #9			1	
	2 - Speaker #45			1	
	3 - School Monitor Radio Transmitter			1	
8	Review Emergency Planning Telephone Directory and Call Tree			N/A	

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

VERIFICATION OF COMMUNICATIONS OPERABILITY  
(ANNUAL TEST)

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
1	Fairfield County Emergency Operations Center (EOC)			N/A	
2	Newberry County EOC			N/A	
3	Richland County EOC			N/A	
4	Lexington County EOC			N/A	

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

**VERIFICATION OF  
 PLANT EMERGENCY ALARM WARNING LIGHTS AND SPEAKERS  
 (QUARTERLY TEST)**

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
1	Plant Emergency Alarm Warning Lights				
	A. Diesel Generator Room A			2	
	B. Diesel Generator Room B			2	
	C. Turbine Building 412'			4	
	D. Turbine Building 436'			4	
	E. Turbine Building 463'			1	
	F. Auxillary Building 485'			1	
	G. Auxillary Building 388'				
	(1 In each Charging Pump Rm.)			3	
2	Speakers at Circulating Water Intake Structure			1	
3	Contact Security personnel located throughout the plant to verify the plant alarms can be heard in the plant.			3	

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

VERIFICATION OF COMMUNICATIONS OPERABILITY - BACKUP EOF  
 (QUARTERLY TEST)

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
1	Rooms 1109 and 1110				
	A. Telephone extensions and instruments			9	
	B. ED to OEC Ringdown (931-5552)			1	
	C. ED Briefing (931-5992)			1	
	D. Plant Status Communicator (931-5128)			1	
2	Communicator Room				
	A. Telephone extensions and instruments			2	
	B. Fax extension (ESSX 251-6256) and Machine			1	
	C. ESSX Line (256-6255)				
3	Room 1112				
	A. Telephone extensions and instruments			2	
	B. Fax Extension			1	
4	AP Card Room				
	A. Telephone extensions and instruments			1	

Chg  
C

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

VERIFICATION OF SCHOOL MONITOR RADIOS  
 (ANNUAL TEST)

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
1	School Monitor Radios in schools:				
	A. Kelley Miller School			1	
	B. McCrorey Liston School			1	
	C. Pomaria-Garmany School			1	
	D. Little Mountain School			1	
	E. Mid-Carolina High School			1	
	F. Chapin Elementary School			1	
	G. Chapin High School			1	
	H. Chapin Middle School			1	
	I. Mid-Carolina Middle School			1	

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.



TRANSIENT SIGN VERIFICATION

ITEM #	EQUIPMENT DESCRIPTION	TEST RESULTS		MINIMUM QUANTITY	COMMENTS
		SAT	UNSAT*		
1	Glenn's 6 to 10 - Hwy 215			1	
2	Tanner's Grocery - Hwy 215 & 99			1	
3	Salem Crossroads Store - Hwy 215 & 34			1	
4	Berley's Store - Hwy 34 & 28			1	
5	Frick's Grocery - Hwy 76 in Lt. Mountain			1	
6	Wicker's Store - Hwy 213			1	
7	Shealy Brothers Store - Pomaria			1	
8	Ray Blair's Store - Blair			1	
9	Overlook Park - Hwy 215			1	
10	Hwy 215 Boat Landing			1	
11	Highway 99 Lake Monticello Boat Landing			1	
12	Entrance to Broad River Water Fowl Area			1	
13	Cannons Creek Boat Landing			1	
14	Highway 99 Causeway			1	
15	Heller's Creek Boat Landing			1	
16	Lake Monticello Sub Impoundment Entrance			1	
17	Pinner's Bridge Primitive Boat Landing			1	
18	Hwy 34 Primitive Boat Landing			1	
19	Offsite Holding Area Signs			9	

c

\*If the test results are unsatisfactory, contact the appropriate maintenance group for repair and notify the Shift Supervisor.

Are additional signs needed at other locations? Yes / No (Circle one). If yes, specify location(s) \_\_\_\_\_

SOUTH CAROLINA ELECTRIC & GAS COMPANY

VIRGIL C. SUMMER NUCLEAR STATION

NUCLEAR OPERATIONS

NUCLEAR OPERATIONS

COPY NO. 157

EMERGENCY PLAN PROCEDURE

EPP-015

NATURAL EMERGENCY  
(EARTHQUAKE, TORNADO, HURRICANE)

REVISION 14

SAFETY RELATED

*Victor Kelly*  
DISCIPLINE SUPERVISOR

9/13/00  
DATE

*BC Williams*  
APPROVAL AUTHORITY

9/18/2000  
DATE

RECORD OF CHANGES

CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE	CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE

INFORMATION USE

Procedure May Be Performed From  
Memory. User Retains Accountability For  
Proper Performance.

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ATTACHMENTS

ATTACHMENT I	Seismic Event Control Room Observations
ATTACHMENT II	Tornado Shelters
ATTACHMENT III	Hurricane Preparation Checklist

1.0 PURPOSE

- 1.1 To provide guidelines for initiating actions when a tornado, hurricane, earthquake, or Fairfield Hydro Dam failure threatens plant structures or personnel.

2.0 REFERENCES

- 2.1 FSAR Section 3.0.
- 2.2 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans & Preparedness in Support of Nuclear Power Plants.
- 2.3 10CFR50.54(x) and 10CFR50.54(y).
- 2.4 10CFR50.72(b).
- 2.5 Emergency Action Plan, Fairfield Pumped Storage Facility.
- 2.6 Emergency Planning Telephone Directory.
- 2.7 Virgil C. Summer Nuclear Station General Operating Procedures.
- 2.8 Virgil C. Summer Nuclear Station Radiation Emergency Plan.
- 2.9 EPP-001, Activation and Implementation of the Emergency Plan.
- 2.10 EPP-002, Communication and Notification.
- 2.11 EPP-012, Onsite Personnel Accountability and Evacuation.
- 2.12 ES-426, Earthquake Response Procedure Retrieval.
- 2.13 SAP-1131, Electronic Processing of Condition Evaluation Reports.
- 2.14 OAP-109.1, Guidelines for Severe Weather.
- 2.15 ICP-391.010, Seismic Monitoring System Data Retrieval.

### 3.0 DEFINITIONS

#### 3.1 Definitions

- 3.1.1 Tornado Watch - declared by the National Weather Service when meteorological conditions in an area are such that the potential for the formation of tornadoes exists.
- 3.1.2 Tornado Warning - declared by the National Weather Service when a tornado has been sighted (radar sighting, verified visual observation).
- 3.1.3 Emergency Repair Team - a team consisting of Operations personnel, Health Physics personnel and/or Maintenance personnel, as necessary, dispatched by the OSC.
- 3.1.4 Hurricane Watch - declared by the National Weather Service when conditions are favorable for a hurricane to enter land in the area.
- 3.1.5 Hurricane Warning - declared by the National Weather Service when it is imminent for a hurricane to enter land in the area.

### 4.0 CONDITIONS AND PREREQUISITES

- 4.1 Personnel safety should be considered in the decision making process for evacuation in the event of severe weather or earthquake.
- 4.2 Refer to OAP-109.1, Guidelines for Severe Weather for additional guidance on actions for severe weather.

### 5.0 PROCEDURE

#### 5.1 Tornadoes

##### 5.1.1 Tornado Warning with Imminent Danger to the Site

- A. The following are Shift Supervisor actions when a tornado has been observed within the site boundary or information has been received from the Load Dispatcher, National Weather Service, or some other credible source, that a tornado is approaching the site boundary. The Shift Supervisor shall:

1. Make the following announcement over the plant paging system:

Attention all personnel. A tornado is on (or approaching) the site. Take cover immediately.

2. Sound the fire alarm.
3. Repeat the announcement.
4. Refer to EPP-001, Activation and Implementation of the Emergency Plan, and declare the appropriate emergency classification when the initiating conditions are met.
5. When the tornado has passed consider performing accountability of personnel in accordance with EPP-012.
6. When it is safe to do so, make a plant announcement to resume normal activities.
7. Initiate damage assessments of the Nuclear Exclusion Area.

**B. Site Personnel Actions for a Tornado Warning with Imminent Danger**

1. When the announcement is made to take cover immediately, seek protection in the nearest tornado shelter shown on Attachment II, or in an interior room of a building, away from windows and under a desk or other object that can afford protection. If outside, lie face down in a ditch, gully, culvert, or other low spot in the ground.

**5.1.2 Tornado Warning with No Imminent Danger**

- A. The following are Shift Supervisor actions when information is received from the Load Dispatcher or the National Weather Service that a Tornado Warning is in effect for Newberry, Fairfield, Lexington, or Richland Counties with no imminent danger to the site. The Shift Supervisor shall inform the Emergency Director and:**

1. Direct Security and appropriate Operators to monitor weather conditions and report degrading conditions to the Control Room immediately.
2. Dispatch personnel to accomplish the following:
  - a. Shut all exterior doors to plant buildings.
  - b. Secure equipment/materials in the Protected Area (PA) that could become missiles in high winds.
  - c. Secure heavy equipment in a safe condition (i.e., lowering crane booms).
  - d. If time permits, secure equipment/materials in the area outside the PA.
3. If weather conditions warrant advanced protective measures be taken to protect personnel, such as a tomado sighted in an adjacent county and moving toward the site, perform the following:
  - a. Make the following announcement over the plant paging system:

Attention all personnel. The site is under a Tomado Warning. There is no imminent danger. All personnel are to proceed to a designated tomado shelter. There is no imminent danger.

- b. Sound the fire alarm.
- c. Repeat the announcement.

- d. If notified by Security that weather conditions have degraded to the point where rapid access to tornado shelters within the PA is needed to prevent personal injury, the Shift Supervisor may authorize the Security Team Leader to suspend security measures for PA access. Notify the NRC within one hour.
- B. Site Personnel Actions for a Tornado Warning with No Imminent Danger. When the announcement is made to proceed to a tornado shelter, perform the following:
1. Do not leave the site.
  2. Stay calm.
  3. Proceed to the closest tornado shelter. Designated tornado shelters are shown on Attachment II.
  4. Work groups should attempt to stay together to facilitate accountability. Work groups should escort visitors and personnel. Supervisors should account for their employees and visitors.
  5. If a tornado is near while traveling to a tornado shelter, seek protection in an interior room of a building, away from windows and under a desk or another object that can afford protection. If outside, lie face down in a ditch, gully, culvert, or other low spot in the ground.
  6. As personnel move into tornado shelters, supervisors shall assess capacity of the shelter and redirect personnel, as necessary, to other areas, including the Radiation Controlled Area.
- C. The following are Shift Supervisor actions when a tornado has been observed within the site boundary or information has been received from the Load Dispatcher, National Weather Service, or some other credible source, that a tornado is approaching the site boundary. The Shift Supervisor shall:
1. Make the following announcement over the plant paging system:

**Attention all personnel. A tornado is on (or approaching) the site. Take cover immediately.**

2. Sound the fire alarm.
  3. Repeat the announcement.
  4. Refer to EPP-001, Activation and Implementation of the Emergency Plan, and declare the appropriate emergency classification when the initiating conditions are met.
  5. When the tornado has passed consider performing accountability of personnel in accordance with EPP-012.
  6. When it is safe to do so, make a plant announcement to resume normal activities.
  7. Initiate damage assessments of the Nuclear Exclusion Area.
- 5.1.3 Upon cancellation of the Tornado Warning, the Shift Supervisor should make the appropriate announcement over the plant paging system to resume normal activities.
- 5.1.4 **Tomado Watch:** When information is received from the Load Dispatcher or the National Weather Service that a Tomado Watch is in effect for Newberry, Fairfield, Lexington, or Richland Counties, the Shift Supervisor should direct Security and appropriate Operators to monitor weather conditions and report degrading conditions to the Control Room immediately.

## 5.2 Hurricane

### NOTE 5.2.1

When a Hurricane Watch is declared for the coast of South Carolina, no actions are required by this procedure.

- 5.2.1 When a Hurricane Warning is declared for the coast of South Carolina and high winds are forecast for the Columbia area, ESU will begin hurricane preparations as outlined on Attachment III.
- 5.2.2 The Shift Supervisor shall refer to EPP-001, Activation and Implementation of the Emergency Plan, and declare the appropriate emergency classification when initiating conditions are met.
- 5.2.3 Upon cancellation of the Hurricane Warning by the National Weather Service or other reliable source, the Control Room shall make the appropriate announcement over the plant paging system to resume normal activities and initiate damage assessments of the Nuclear Exclusion Area.

## 5.3 Earthquake

- 5.3.1 In the event a seismic disturbance is observed, either physically or by Control Room seismic instrumentation, the SS shall:
  - A. Inform the Emergency Director.
  - B. Initiate the appropriate corrective actions for any resulting damage.
  - C. Evaluate the available seismic information. Refer to EPP-001, Activation and Implementation of the Emergency Plan, and declare the appropriate emergency classification when initiating conditions are met.
  - D. Notify Design Engineering.
  - E. Direct the Shift Engineer to complete Attachment I as soon as possible and forward it to Design Engineering. Notify I&C personnel to obtain a printout from XPN-6041-EI, Seismic Monitoring System (Relay Room), and include with this package.
  - F. Ensure all Control Room seismic annunciators are reset as soon as possible for recording aftershocks.

- G. If the Operating Basis Earthquake (OBE) has been met or exceeded, shutdown the plant in accordance with GOP-4 and GOP-5 after a functional review is made to ensure the plant can be safely shutdown using the following criteria:
  - 1. Conduct the shutdown in an orderly manner, i.e., the plant functions should be checked prior to initiating shutdown.
  - 2. Verify functionality of heat removal systems and supporting components and systems required for shutdown.
  - 3. Initiate shutdown using plant operating procedures.
- H. Immediately contact duty I&C personnel to retrieve seismic data and calibrate instruments as outlined by ICP-391.010.
- I. If evacuation of the site is required, implement EPP-012, Onsite Personnel Accountability and Evacuation.
- J. Design Engineering shall analyze the data and inform the Emergency Director of the results as quickly as possible.

**5.4 Failure or potential failure of Fairfield Pumped Storage Facility Dam(s).**

- 5.4.1 Failure or potential failure of the dam(s) may be a result of the natural emergencies described in this procedure or may occur from unrelated causes.
- 5.4.2 The Control Room will receive notification from Fairfield Pumped Storage Facility when their Emergency Action Plan is activated. The message will include the type or emergency situation, as follows:
  - A. Class I - Failure is imminent or has occurred.
  - B. Class II - Potentially hazardous situation is developing.
- 5.4.3 Upon receipt of either of the above notifications, the Control Room should advise the Emergency Director.
- 5.4.4 The Load Dispatcher or Fairfield Pumped Storage Facility may be called for amplifying information.
- 5.4.5 Place the plant in a safe condition as dictated by the magnitude of the hazard.

## 6.0 RECORDS

- 6.1 Forward written material or copies of written material generated because of an emergency to the Emergency Services Unit (ESU). The ESU will insure appropriate written material is included in the applicable Condition Evaluation Report.

## 7.0 REVISION SUMMARY

- 7.1 Incorporate Changes A-C.
- 7.2 Deleted Seismic System related ICPs and STPs from Section 2.0 with the exception of reference 2.15, ICP-391.010. All procedures required for Seismic System data retrieval are referenced in ICP-391.010.
- 7.3 Revised Section 5.3.1.E to direct I&C to obtain a printout and Section 5.3.1.H to reference ICP-391.010 to retrieve seismic data. All procedures required for Seismic System data retrieval are referenced in ICP-391.010. These revisions address Corrective Action 7 of PIP C-99-1500.

**SEISMIC EVENT**  
**CONTROL ROOM OBSERVATIONS**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Earthquake Felt: [ ] Yes [ ] No

Duration of Noticeable Motion: [ ] < 1 sec [ ] 1-4 sec  
[ ] 5-10 [ ] > 10 sec

\_\_\_\_\_ Estimated Duration (sec)

Earthquake Heard: [ ] Yes [ ] No

Description of Sound: \_\_\_\_\_

Direction of Sound/Motion, if determinable: \_\_\_\_\_

Background Noise at Start of Earthquake: [ ] Quiet [ ] Moderate [ ] Loud

Plant Status: [ ] Operational \_\_\_\_\_ % Power Level

[ ] Shutdown

[ ] Reactor Trip \_\_\_\_\_ Time

**OBSERVATIONS/PLANT EFFECTS:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTE: Include printout from XPN-6041-EI with this package

\_\_\_\_\_  
Shift Engineer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time

**SEISMIC EVENT CONTROL ROOM OBSERVATIONS**  
**MAIN FRONT PANEL STATUS**

Indicate with an "X" in the appropriate box, the lamps that are lit on the RX Bldg FOUNDATION MATT DETECTOR IYA 1780 P.O. SN-10253.

2/3 OBE yellow	OBE red	2/3 OBE yellow	OBE red	2/3 OBE yellow	OBE red	NOMINAL FREQUENCY (Hz)
<input type="checkbox"/>	2					
<input type="checkbox"/>	2.5					
<input type="checkbox"/>	3.2					
<input type="checkbox"/>	4					
<input type="checkbox"/>	5					
<input type="checkbox"/>	6.4					
<input type="checkbox"/>	8					
<input type="checkbox"/>	10.1					
<input type="checkbox"/>	12.7					
<input type="checkbox"/>	16					
<input type="checkbox"/>	20.2					
<input type="checkbox"/>	25.4					

NORTH/SOUTH  
HORIZONTAL SHOCK

VERTICAL SHOCK

EAST/WEST  
HORIZONTAL SHOCK

ALARMS NOT LIT \_\_\_\_\_

TIME \_\_\_\_\_

DATE \_\_\_\_\_

INITIALS \_\_\_\_\_

**SEISMIC EVENT CONTROL ROOM OBSERVATIONS  
 MAIN CONTROL BOARD ANNUNCIATOR PANEL**

Indicate with an "X" in the appropriate box the Annunciators on panel XCP-638 on the Main Control Board which alarms.

- RB FOUND SEIS SWITCH OBE EXCEED (Panel 3-5)
- SEIS RCDR SYS START/PWR LOSS (Panel 3-6)
- SEIS RESPNS SPECTRUM ANNUN TRBL (Panel 4-6)
- No Alarms Lit

		RB FOUND SEIS SWITCH OBE EXCEED			
		SEIS RCDR SYS START/ PWR LOSS	SEIS RESPNS SPECTRUM ANNUN TRBL		

TIME \_\_\_\_\_

DATE \_\_\_\_\_

INITIALS \_\_\_\_\_

## TORNADO SHELTERS

**\*NOTE:** In addition to the areas shown, interior, first floor rooms provide a substantial degree of protection.

<u>Site Area</u>	<u>Designated Tornado Shelter</u>
Craft/Technical Training Center (CTC)	CTC Records Vault
Warehouse A Warehouse B	CTC Records Vault or NOB Records Vault or NOB Receiving Area
Nuclear Operations Building (NOB) Security Building Fitness and Wellness Center	NOB Records Vault or NOB Receiving Area
Civil Shop, Carpenter Shop, Metal Shop, Pipe Shop, Warehouse F, Vehicle Maintenance Shop and other adjacent buildings	NOB Records Vault or NOB Receiving Area
Service Building I & C Shop	Control Bldg., 436' Elevation -
Auxiliary Service Building Operations Support Center (OSC)	Control Bldg., 448' Elevation -
Protected Area Yard Warehouse C and Adjacent Buildings	Control Bldg., 436' Elevation - I & C Shop
Rad Maintenance Building Fuel Handling Building	Auxiliary Building
Hot Warehouse NDE Radiography Laboratory	Control Bldg., 448' Elevation - Operations Support Center (OSC)

**Hurricane Preparation Checklist**

<b>Responsibility</b>	<b>Action</b>	<b>Status</b>
<b>ESU</b>	Develop and distribute schedule for hurricane preparation status meetings.	
	Provide information to plant staff on a frequent basis via Voice Mailbox 3456 or some other means.	
	Consult with the GMNPO to determine the level of staffing needed based on storm projections. Develop and distribute schedule for duty and relief ERO teams. Include list of items to bring. Consider some ERO personnel may have volunteered for Company Storm Response Teams.	
	Consult with the VP and General Managers to determine if a temporary generator needs to be leased for the NTC or other locations. Communicate the decision to M&P.	
	Determine whether the Primary or Backup EOF will be used. Consider expected severity of road conditions and reliability of power to the NTC.	
	Determine whether the Radiopagers or the Call Tree will be used for notification of the ERO for a declared emergency.	
	Assist Operations with tracking the path of the storm and monitoring the inland wind projections.	
	Obtain satellite and cell phones with spare batteries for the TSC and EOF.	
	Contact counties and request notification of tornado warnings for our area.	
	Develop a list of non-perishable food and supplies for extended ERF staffing and deliver to M&P.	
	Review FEMA and NRC documents ,including IN 97-05, pertaining to plant restart following damage to EWSS. Contact Electrical Shop and the Radio Shop to begin planning for restoration work.	
	Review reportability requirements and communications procedures for EWSS degradation with Operations, located in NL-122.	
	<b>Operations</b>	Track the path of the storm and monitor the inland wind projections.
Determine plant shutdown time per AOP-109.1.		
Assess electrical distribution capability and suspend any operations or maintenance that may degrade the system.		
Evaluate the adequacy of DG Fuel inventory.		

<b>Responsibility</b>	<b>Action</b>	<b>Status</b>
Operations	Determine the need for alternate power sources.	
Operations Facilities Maintenance Security	Secure missile hazards over entire site and determine and implement building protection measures.	
Materials & Procurement	Arrange for delivery of an emergency generator for the NTC, if necessary.	
	Arrange for delivery of alternate power sources for other locations, if necessary.	
	From a list provided by ESU, procure and stage non-perishable food and supplies for extended ERF staffing.	
Nuclear Training	Prepare NTC for families and distribute information.	
ISD	Distribute information concerning protecting computer equipment.	
Administrative Services	Provide coffee in the facilities.	
Nuclear Protection Services	Distribute information on vehicle parking.	
	Enable local TV stations on CCTV	