

**Thomas D. Gatlin**  
*Vice President, Nuclear Operations*  
803.345.4342



August 13, 2015  
RC-15-0133

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

Dear Sir / Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1  
DOCKET NO. 50-395  
OPERATING LICENSE NO. NPF-12  
TRANSMITTAL OF UPDATED EXPEDITED SEISMIC EVALUATION  
PROCESS PAGES

South Carolina Electric & Gas Company (SCE&G), acting for itself and as agent for South Carolina Public Service Authority is submitting copies of updated pages of the Expedited Seismic Evaluation Process (ESEP) report. Please find the updated ESEP pages in Attachment I.

These pages are provided in response to a conference call between VC Summer and the NRC on July 28, 2015 at 1300.

This letter contains three new commitments. The new commitments are shown in Attachment I in the update to Section 8.4 of the ESEP and Attachment II.

Should you have any questions, please call Bruce L. Thompson at 803-931-5042.

A001  
NRR

I declare under penalty of perjury that the foregoing is true and correct.

8/13/15  
Executed on

Thomas D. Gatlin  
Thomas D. Gatlin

WLT/TDG/ts

Attachments:

- I. Updated Expedited Seismic Evaluation Process Report Pages for the V.C.  
Summer Nuclear Station
- II. Regulatory Commitments

c: K. B. Marsh  
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RTS (CR-15-03436/CR-12-01097)  
File (815.07)  
PRSF (RC-15-0133)

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**VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1**

**Attachment I**

**Updated Expedited Seismic Evaluation Process Report Pages for the V.C.  
Summer Nuclear Station**

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Replace the following pages of the Expedited Seismic Evaluation Process report with the attached revised pages.

<u>ESEP Page</u>	<u>Affected Section</u>	<u>Description of Change</u>
26 of 67	Table 7.1	Updated Table 7.1 Notes and corrected complete ESEP and ESEL date.
30 of 67	8.4	Updated CR information.
31 of 67	8.4	Added three new commitments.
50 of 67	Attachment A	Added Table 7.1 items to ESEL list.
63 of 67	Table B-1	Updated Table B-1 to include Table 7.1 items and HCLPF information.
64 of 67	Table B-2	Added Table 7.1 items to Table B-2.

## 7.0 Inaccessible Items

The items in Table 7.1 are inside containment and currently inaccessible. The station will perform walkdowns of the items in Table 7.1 during the fall 2015 refueling outage. The station proposes to submit a letter to NRC stating walkdowns have been completed and provide HCLPF results for the items in Table 7.1 by February 1, 2016.

TABLE 7.1 – INACCESSIBLE ITEMS TO BE ADDED TO ESEL					
ESEL Item Num	Equipment		Operating State <sup>1</sup>		Notes/Comments
	ID	Description	Normal State	Desired State	
219	ILI00477	SG A WD RGE LEVEL INDICATOR	N/A	N/A	OIP
220	ILI00487	SG B WD RGE LEVEL INDICATOR	N/A	N/A	OIP
221	ILI00497	SG C WD RANGE LEVEL INDICATOR	N/A	N/A	OIP
222	ILT00477	SG A WIDE RANGE LEVEL XMTR	N/A	N/A	D-302-011
223	ILT00487	SG B WIDE RANGE LEVEL XMTR	N/A	N/A	D-302-011
224	ILT00497	SG C WIDE RANGE LEVEL XMTR	N/A	N/A	D-302-011
225	IPI00402B	RCS WIDE RANGE PRESSURE INDICATOR	N/A	N/A	OIP
226	IPT00402	PT-402 RC WIDE RNG. PRESS. TRANSMITTER	N/A	N/A	D-302-604
227	ITE00410	RC LOOP A COLD LEG TEMPERATURE ELEMENT	N/A	N/A	D-302-601
228	ITI00410	RC LOOP A COLD LEG TEMP INDICATOR	N/A	N/A	OIP

#### 8.4 Summary of Regulatory Commitments

The following actions have been added to VCSNS Corrective Action Program as CR-12-01097 and CR-15-03436, and will be performed as a result of the ESEP.

Action #	Equipment ID	Equipment Description	Action Description	Completion Date
1	XSWIDA	7.2KV Switchgear	Modify FLEX Support Procedures to include operator actions to reset relays with HCLPF values less than the RLGM.	December 2016
2	XSWIDA1	480V Switchgear	Modify FLEX Support Procedures to include operator actions to reset relays with HCLPF values less than the RLGM.	December 2016
3	XSWIDA2	480V Switchgear	Modify FLEX Support Procedures to include operator actions to reset relays with HCLPF values less than the RLGM.	December 2016
4	XVT03169-SW	DRPI Cooling Unit Outlet Header Isolation Valve	Modify the seismic interaction to provide sufficient shake space, or modify piping system supports such that HCLPF > GMRS.	No later than the end of the second Unit 1 refueling outage after December 31, 2014 (Tentative Spring 2017)
5	IPV02000-MS	Main Steam Header Power Relief Valve	Modify valve or handrail to provide sufficient shake space.	December 2016
6	XBA-1A	125V DC Distribution Bus Battery	Modify rack to reduce front rail gaps.	No later than the end of the second Unit 1 refueling outage after December 31, 2014 (Tentative Spring 2017)

Action #	Equipment ID	Equipment Description	Action Description	Completion Date
7	XBA-1B	125V DC Distribution Bus Battery	Modify rack to reduce front rail gaps.	No later than the end of the second Unit 1 refueling outage after December 31, 2014 (Tentative Spring 2017)
8	XVT02843B-MS	Main Steam Header Drain Valve	Trim the steel angle post to mitigate potential seismic interaction.	December 2016
9	XVT03164-SW	DRPI Cooling Unit Inlet Header Isolation Valve	Modify the handrail to mitigate potential seismic interaction.	No later than the end of the second Unit 1 refueling outage after December 31, 2014 (Tentative Spring 2017)
10	Various	See Section 7.1	Complete walkdowns of Inaccessible Items listed in Table 7.1 of Expedited Seismic Evaluation Process report prior to end of Fall 2015 refueling outage.	Prior to completion of Fall 2015 Outage
11	Various	See Section 7.1	Submit letter to NRC stating walkdowns have been completed and provide HCLPF results in Attachment B of Expedited Seismic Evaluation Process report.	February 1, 2016
12	N/A	N/A	Submit letter to NRC stating all Expedited Seismic Evaluation Process report Modifications, Actions 1 through 9 of Section 8.4, are complete.	60 days following completion of the second Unit 1 refueling outage after December 31, 2014 (Tentative Spring 2017)

ESEL Item Num	Equipment		Operating State <sup>1</sup>		Notes/Comments
	ID	Description	Normal State	Desired State	
219	ILI00477	SG A WD RGE LEVEL INDICATOR	N/A	N/A	OIP
220	ILI00487	SG B WD RGE LEVEL INDICATOR	N/A	N/A	OIP
221	ILI00497	SG C WD RANGE LEVEL INDICATOR	N/A	N/A	OIP
222	ILT00477	SG A WIDE RANGE LEVEL XMTR	N/A	N/A	D-302-011
223	ILT00487	SG B WIDE RANGE LEVEL XMTR	N/A	N/A	D-302-011
224	ILT00497	SG C WIDE RANGE LEVEL XMTR	N/A	N/A	D-302-011
225	IPI00402B	RCS WIDE RANGE PRESSURE INDICATOR	N/A	N/A	OIP
226	IPT00402	PT-402 RC WIDE RNG. PRESS. TRANSMITTER	N/A	N/A	D-302-604
227	ITE00410	RC LOOP A COLD LEG TEMPERATURE ELEMENT	N/A	N/A	D-302-601
228	ITI00410	RC LOOP A COLD LEG TEMP INDICATOR	N/A	N/A	OIP

**Notes**

1. The operating states for the equipment selected for inclusion on the ESEL can be found in Attachment 5 of Reference 20.
2. These components were identified to have lockout relays, which were considered in this analysis. For more information regarding the identification of these lockout relays, see tab "VCSNS U1 Elec ESEL Relay List" within Attachment 5 of Reference 20.

**Table B-1: ESEL HCLPF Values**

No.	ID	Description	Bldg	Elev (ft)	Class	HCLPF (g)	Controlling Failure Mode
168	IFT00495	SG C STEAM FLOW DP XMTR	RB	463	18	$\geq 0.30$	Screened
169	IFT00495A	NARROW RANGE STEAM FLOW	RB	463	18	$\geq 0.30$	Screened
170	XAA0001A	RB COOLING UNIT 1A	RB	514	10	0.35	Overall structural integrity.
171	IYE40000	RBCU FAN XFN0064A VIBRATION SENSOR	RB	514	0	$\geq 0.30$	Screened
172	XVR03146A-SW	RB CLG UNIT 1A OUTLET HDR RELIEF VALVE	RB	518	7	$\geq 0.30$	Screened
173	XVT03164-SW	DRPI COOLING UNIT INLET HDR ISOL VALVE	RB	518	7	0.44	Functionality
174	XVT03169-SW	DRPI COOLING UNIT OUTLET HDR ISOL VLV	RB	518	7	0.24	Seismic interaction.
175	XVG03108B-SW	RB COOLING UNIT 2A INLET ISOLATION VLV	RB	518	8	0.82	Functionality
176	XVG03109B-SW	RB COOLING UNIT 2A OUTLET ISOLATION VLV	RB	518	8	0.82	Functionality
177	ITE09201	REACTOR BLDG TEMP ELEM	RB	518	19	$\geq 0.30$	Screened
178	ILT03631	CONDENSATE STORAGE TANK LEVEL XMTR	YD	435	18	$\geq 0.30$	Screened
179	XTK0008	CONDENSATE STORAGE TANK	YD	435	21	0.88	Sliding due to exceedance of base shear capacity.
180	ILT00477	SG A WIDE RANGE LEVEL XMTR	RB	436	18	$\geq 0.30$	Screened, pending walkdown
181	ILT00487	SG B WIDE RANGE LEVEL XMTR	RB	436	18	$\geq 0.30$	Screened, pending walkdown
182	ILT00497	SG C WIDE RANGE LEVEL XMTR	RB	436	18	$\geq 0.30$	Screened, pending walkdown
183	IPT00402	PT-402 RC WIDE RNG. PRESS. TRANSMITTER	RB	412	18	$\geq 0.30$	Screened, pending walkdown
184	ITE00410	RC LOOP A COLD LEG TEMPERATURE ELEMENT	RB	412	19	$\geq 0.30$	Screened, pending walkdown



<b>Table B-2: ESEL Rule-of-Box Items</b>				
<b>ID</b>	<b>Description</b>	<b>Bldg</b>	<b>Elev (ft)</b>	<b>Parent</b>
IFI03525	TDEFP DISCHARGE FLOW INDICATOR	CB	463	XCP6103
IFI04466	SW BOOSTER PUMP A DISCHARGE FLOW IND	CB	463	XCP6103
IFI04468	RBCU RETURN HDR A FLOW INDICATOR	CB	463	XCP6103
IPI00950	CONTAINMENT PRESSURE, PRESSURE IND I	CB	463	XCP6103
IPI04528	SW FROM RBCU LOOP A PRESS INDICATOR	CB	463	XCP6103
ITI04467	RBCU RETURN HDR A TEMP INDICATOR	CB	463	XCP6103
ITI09201A	REACTOR BLDG AMBIENT TEMP INDICATOR	CB	463	XCP6103
TPP0008-PP1	EF PUMP TURBINE LUBE OIL ROTARY PUMP	IB	412	TPP0008
TPP0008-SC1	EF PUMP TURBINE SPEED CONTROL GOVERNOR	IB	412	TPP0008
XFN0038A-M	BATT&CHG RM AH UNIT A SUPPLY FAN MOTOR	IB	423	XAH0024A
XFN0039A-M	BATTERY ROOM EXHAUST FAN A MOTOR	IB	423	XFN0039A
XFN0038A	BATT&CHG RM AIR HANDLING UNIT A SUP FAN	IB	423	XAH0024A
XFN0064A	REACTOR BLDG COOLING UNIT 1A EMERG FAN	RB	514	XAA0001A
ILI00477	SG A WD RGE LEVEL INDICATOR	CB	463	XCP6112
ILI00487	SG B WD RGE LEVEL INDICATOR	CB	463	XCP6112
ILI00497	SG C WD RANGE LEVEL INDICATOR	CB	463	XCP6112
IPI00402B	RCS WIDE RANGE PRESSURE INDICATOR	CB	463	XCP6106
ITI00410	RC LOOP A COLD LEG TEMP INDICATOR	CB	463	XCP6106

Notes

Valve operators on the ESEL are not listed above. The parent for each valve operator is the corresponding valve.

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**VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1**

**Attachment II**

**Regulatory Commitments**

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The following table identifies those actions committed to by SCE&G, Virgil C. Summer Nuclear Station in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Bruce L. Thompson, Manager, Nuclear Licensing, (803) 931-5042.

<b>Action #</b>	<b>Commitment</b>	<b>Due Date/ Event</b>
1	Complete walkdowns of Inaccessible Items listed in Table 7.1 of Expedited Seismic Evaluation Process report prior to end of Fall 2015 refueling outage.	Prior to completion of Fall 2015 Outage
2	Submit letter to NRC stating walkdowns have been completed and provide HCLPF results in Attachment B of Expedited Seismic Evaluation Process report.	February 1, 2016
3	Submit letter to NRC stating all Expedited Seismic Evaluation Process report Modifications, Actions 1 through 9 of Section 8.4, are complete.	60 days following completion of the second Unit 1 refueling outage after December 31, 2014 (Tentative Spring 2017)