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Vice President  
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June 28, 2011  
NND-11-0246

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

ATTN: Document Control Desk

Subject: Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 Combined License Application (COLA) - Docket Numbers 52-027 and 52-028 South Carolina Electric & Gas Company (SCE&G) Response to NRC Request for Additional Information Related to Emergency Planning ITAAC

Reference: 1. Letter from Ronald B. Clary (SCE&G) to Document Control Desk (NRC), February 7, 2011 Submittal of the VCSNS COL Application.

On June 21, 2011, SCE&G had a call with NRC personnel related to the Emergency Planning (EP) Inspections Tests Analyses and Acceptance Criteria (ITAAC). The purpose of this submittal is to provide clarifications to several EP ITAAC as discussed in that call. The attachment to this letter provides that information and identifies several clarifying changes to EP ITAAC that will be included in the next revision of the VCSNS Units 2 and 3 COLA.

Should you have any questions, please contact Mr. Alfred M. Paglia by telephone at (803) 345-4191, or by email at [apaglia@scana.com](mailto:apaglia@scana.com).

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

Executed on this 28<sup>th</sup> day of June, 2011.

Sincerely,

Ronald B. Clary  
Vice President  
New Nuclear Deployment

AMM/RBC/jg

DOB3  
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Attachment

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### **Discussion of EP ITAAC**

The VCSNS Units 2 and 3 COLA incorporates by reference the AP1000 Design Control Document (DCD) which includes ITAAC relating to the EP in Table 3.1-1. This table includes 6 acceptance criteria related to the Technical Support Center (TSC) and it appears that 5 of those are very similar to the additional EP ITAAC included in Part 7 of the COLA. A table is included below to cross reference the similar ITAAC from DCD Table 3.1-1 and COLA Part 10, Table 3.8-1. As discussed in the COLA, SCE&G has taken a departure from the DCD by relocating the VCSNS Units 2 and 3 TSC to a single TSC located outside the protected area of the units. However, as clarified in a June 21, 2011 call with several NRC staff, SCE&G intends to meet both the DCD and the COLA Part 10 ITAAC.

DCD, Tier 1, Table 3.1-1	COLA, Part 10, Table 3.8-1
Item 1	5.1.1
Item 2	5.1.4
Item 3	5.1.5
Item 4	5.1.7
Item 5	5.1.2 and 5.1.6
Item 6	5.1.3 <sup>1</sup>

<sup>1</sup> SCE&G Letters NND 10-0076 (ML100630822) and NND-10-0002 (ML100120290) provide additional relevant information.

The Units 2 and 3 site specific EP ITAAC 5.1.1 currently refers to the DCD ITAAC 3.1-1 which requires the TSC to have at least 1,875 square feet of floor space. The Emergency Plan for Units 2 and 3 contained in Part 4 of the COLA states in section H.1.b that the TSC is sized to accommodate 40 people. As required by NUREG 0696, the TSC sizing should assume at least 75 square feet of floor space per person. Therefore, the TSC should have at least 3,000 square feet of floor space. To ensure this requirement is appropriately demonstrated during the completion of the EP ITAAC, the site specific EP acceptance criteria for 5.1.1 will be revised to require at least 3,000 square feet of floor space. This change will be included in the next COLA revision as described in the first item of the COLA revisions section below. Also, per discussions with the NRC, a new acceptance criteria has been added to EP ITAAC 5.1 as 5.1.8 to address the electrical power supply.

Additionally, as identified by both the NRC staff and SCE&G during COLA reviews, some minor modifications were acknowledged that would provide clarification to several of the site specific EP ITAAC. These modifications are detailed in the COLA revisions section below, and will be incorporated in the next COLA revision.

**COLA Revisions**

The following changes will be included to Part 10 of the EP ITAAC in the next revision of the VCSNS Units 2 and 3 COLA. Deletions are identified by red strike-through text, while additions are noted by green underlined text. The relevant marked up sections from the COLA Part 10, Table 3.8-1 are also shown for reference.

1. Inspection, Tests, Analyses 1.1:

“An inspection of the Control Rooms, Technical Support Center”

2. Acceptance Criteria 1.1:

“the Control Rooms, TSC and”

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
<b>1.0 Emergency Classification System</b>			
10 CFR 50.47(b)(4) — A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.	1.1 A standard emergency classification and emergency action level (EAL) scheme exists, and identifies facility system and effluent parameters constituting the bases for the classification scheme. [D.1**]  [**D.1 corresponds to NUREG-0654/FEMA-REP-1 evaluation criteria.]	1.1 An inspection of the Control Rooms, Technical Support Center (TSC), and Emergency Operations Facility (EOF) will be performed to verify that they have displays for retrieving facility system and effluent parameters that are specified in the Emergency Classification and EAL scheme and the displays are functional.	1.1 The specified parameters as listed in DCD Table 7.5-1 and FSAR Table 7.5-201 are retrievable in the Control Rooms, TSC and EOF, and the ranges of the displays encompass the values specified in the Emergency Classification and EAL Technical Basis Document.

3. EP Program Elements 3.1:

“among the Control Rooms, TSC”

4. Acceptance Criteria 3.1:

“3.1 Communications (both primary and secondary methods/systems) were established among the Control Rooms and the EOF with the South Carolina Emergency Management Division (SCEMD) warning point and EOC; Fairfield County Warning Point and EOC; Richland County Warning Point and EOC; Newberry County Warning Point and EOC; and Lexington County Warning Point and EOC. Communications were established between the Control Rooms and the EOF with the VCSNS radiological field monitoring teams. See also AC 5.1.4.”

5. EP Program Elements 3.2:

“the Control Rooms, TSC”

6. Inspections, Tests, Analyses 3.2:

“3.2 A test is performed of the capabilities to communicate using ENS from ~~each operating the~~ Control Room,”

7. Acceptance Criteria 3.2:

“3.2 Communication was established from the Control Rooms, TSC”

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
<b>3.0 Emergency Communications</b>			
10 CFR 50.47(b)(6) — Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.	3.1 The means exists for communications among the Control Rooms, TSC, EOF, principal State and local emergency operations centers (EOCs), and radiological field assessment teams. [F.1.d]	3.1 A test will be performed of the capabilities. The test for the contact with the principal EOCs and the radiological field assessment teams will be from the Control Room and the EOF. See also ITA 5.1.1.	3.1 Communications (both primary and secondary methods/systems) were established among the Control Rooms and the EOF with the South Carolina Emergency Management Division (SCEMD) warning point and EOC; Fairfield County Warning Point and EOC; Richland County Warning Point and EOC; Newberry County Warning Point and EOC; and Lexington County Warning Point and EOC. Communications were established between the Control Rooms and the EOF with the VCSNS radiological field monitoring teams. See also AC 5.1.4.

	<p>3.2 The means exists for communications from the Control Rooms, TSC, and EOF to the NRC headquarters and regional office EOCs (including establishment of the Emergency Response Data System (ERDS) [or its successor system] between the onsite computer system and the NRC Operations Center.) [F.1.f]</p>	<p>3.2 A test is performed of the capabilities to communicate using ENS from <del>each</del> <u>operating the</u> Control Room, TSC and EOF to the NRC headquarters and regional office EOCs. HPN is tested to ensure communications between the TSC and EOF with the NRC Operations Center. ERDS is established [or its successor system] between the onsite computer systems and the NRC Operations Center.</p>	<p>3.2 Communication was established from the Control Rooms, TSC and EOF to the NRC headquarters and regional office EOCs utilizing the ENS. The TSC and EOF demonstrated communications with the NRC Operations Center using HPN. The access port for ERDS [or its successor system] successfully completed a transfer of data to the NRC Operations Center.</p>
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8. Acceptance Criteria 5.1.1:

~~“5.1.1 See DCD Table 3.1-1 Item 1~~ The TSC has at least 3000 ft<sup>2</sup> of floor space.”

9. Inspections, Tests, Analyses 5.1.1:

“5.1.1 An inspection of the TSC and OSCs will be”

10. Acceptance Criteria 5.1.4:

“communications with the Control Rooms, the OSC”

11. Acceptance Criteria 5.1.6:

“5.1.6 There is an OSC located inside ~~each~~ the Unit.”

12. New Acceptance Criteria 5.1.8 is added to read:

“5.1.8 There is a reliable and backup electrical supply available for the TSC”

13. Acceptance Criteria 5.2.3:

“are accomplished with the Control Rooms, TSC”

Planning Standard	EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
<b>5.0 Emergency Facilities and Equipment</b>			
<p>10 CFR 50.47(b)(8) — Adequate emergency facilities and equipment to support the emergency response are provided and maintained.</p>	<p>5.1 The licensee has established a TSC and onsite OSC. [H.1, H.9]</p>	<p>5.1.1 An inspection of the TSC and OSCs will be performed, including a test of the capabilities. These facilities will meet the criteria of NUREG-0696 with exceptions.</p>	<p>5.1.1 <u>The TSC has at least 3000 ft<sup>2</sup> of floor space.</u> See DCD Table 3.1-1 Item 4</p> <p>5.1.2 The TSC is located outside the Protected Area and advanced communication capabilities are available and utilized to ensure communications between the emergency response facilities. Procedures are in place to enhance passage through security checkpoints expeditiously.</p> <p>5.1.3 The TSC ventilation system includes a high efficiency particulate air (HEPA) and charcoal filter and radiation monitors are installed.</p> <p>5.1.4 TSC communications equipment is installed per specifications and is operable. Communications have been initiated and found to be acceptable in giving and receiving voice communications with the Control Rooms, the OSC and the EOF.</p> <p>5.1.5 The TSC has the means to receive, store, process, and display plant and environmental information as listed in DCD Table 7.5-1 and FSAR Table 7.5-201, and to initiate emergency measures and conduct emergency assessment.</p> <p>5.1.6 There is an OSC located inside each the Unit. It is separate from the Control Room and within the Protected Area.</p>

			<p>5.1.7 OSC communications equipment is installed, and voice transmission and reception have been demonstrated between the OSC, OSC Teams, the TSC, and Control Room.</p> <p><u>5.1.8 A reliable and backup electrical supply is available for the TSC.</u></p>
	<p>5.2 The licensee has established an EOF. [H.2]</p>	<p>5.2 An inspection of the EOF will be performed, including a test of the capabilities. The EOF is located outside of the 10 mile Emergency Planning Zone.</p>	<p>5.2.1 The EOF working space size is consistent with NUREG-0696 (75 ft<sup>2</sup>/person), and is large enough for required systems, equipment, records and storage.</p> <p>5.2.2 The EOF habitability is consistent with Table 2 of NUREG-0696.</p> <ul style="list-style-type: none"> <li>• Distance at or beyond 10 mi of the TSC</li> <li>• Built to meet the criteria of the County Building Code</li> </ul> <p>5.2.3 EOF communications equipment is installed, and voice transmission and reception are accomplished with the Control Rooms, TSC, radiological monitoring teams, NRC, state and county agencies using typical data generated during facility activation.</p> <p>5.2.4 Radiological data identified in the EP Unit Annex, meteorological data, and plant system data pertinent to determining offsite protective measures as listed in DCD Table 7.5-1 and FSAR Table 7.5-201 are available and displayed when activated in the EOF.</p>