



Ronald B. Clary  
Vice President  
New Nuclear Deployment

June 7, 2012  
NND-12-0298

Document Control Desk  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

Attention: Document Control Desk

Subject: South Carolina Electric & Gas Company (SCE&G) V.C. Summer Units 2 and 3 60-Day Response to NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident; dated April 13, 2012 Docket numbers 52-027 and 52-028

Reference: 1. NRC Letter to Ronald B. Clary, Request for Information (RFI) Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident; dated April 13, 2012

On April 13, 2012, the Nuclear Regulatory Commission (NRC) staff issued to SCE&G a letter entitled, *Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident*. The letter's enclosure contains specific requested actions and requested information associated with Recommendation 9.3 for Emergency Preparedness (EP) programs. In accordance with 10 CFR 50.54, "Conditions of licenses," paragraph (f), addressees were requested to submit a written response to the information requests within 90 days.

The letter states that if an addressee cannot meet the requested response date, then the addressee must provide a response within 60 days of the date of the letter and describe the alternative course of action that it proposes to take, including the basis of the acceptability of the proposed alternative course of action and estimated completion date. After a careful review of the requested actions and information, SCE&G plans to take the alternative course of action described in Enclosure 1 of this letter. The basis for this proposal is explained in more detail in Enclosure 2.

SCE&G's alternative course of action is due to the staggered construction schedule for V.C. Summer Nuclear Station (VCSNS) Units 2 and 3. VCSNS is currently a single unit site requiring Unit 1 to respond to their RFI with a schedule for communications and staffing assessments independent of Units 2 and 3. Before construction of Unit 3 is complete however, Unit 2 will load fuel and VCSNS will become a multi-unit site. This will require the Unit 2 communications and staffing assessments to include Units 1 and 3.

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Also, due to the dynamic nature of construction, the dates included in this letter are not absolute and are subject to change. In the event that changes occur, SCE&G will promptly notify the NRC.

Should you have any questions concerning the content of this letter, please contact Mr. Alfred M. Paglia by telephone at (803) 941-9876, 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 7<sup>th</sup> day of June, 2012

Sincerely,



Ronald B. Clary  
Vice President  
New Nuclear Deployment

EDK/RBC/edk

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**Enclosure 1**  
Proposed Alternative Course of Action for  
Responding to Recommendation 9.3 Information Request

**Communications**

Request #	Estimated Completion Date	Requested Information
1	10/13/2015	<p>Provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the conditions described in NEI 12-01. The assessment should:</p> <ul style="list-style-type: none"> <li>• Identify any planned or potential improvements to existing onsite communications systems and their required normal and/or backup power supplies,</li> <li>• Identify any planned or potential improvements to existing offsite communications systems and their required normal and/or backup power supplies,</li> <li>• Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions described above, and</li> <li>• Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all AC power</li> </ul>
2	10/13/2015	Describe any interim actions that have been taken or are planned to be taken to enhance existing communications systems power supplies until the communications assessment and the resulting actions are complete.
3		Provide an implementation schedule of the time needed to conduct and implement the results of the communications assessment.
	9/13/2015	Conduct the communications assessment.
	10/13/2015	Provide an implementation schedule of the time needed to implement the results of the communications assessment.

## Staffing

Request #	Estimated Completion Date	Requested Information
1		<p>Provide an assessment of the onsite and augmented staff needed to respond to a large scale natural event meeting the conditions described in NEI 12-01. This assessment should include a discussion of the onsite and augmented staff available to implement the strategies as discussed in the emergency plan and/or described in plant operating procedures. The following functions are requested to be assessed:</p> <ul style="list-style-type: none"> <li>• How onsite staff will move back-up equipment (e.g., pumps, generators) from alternate onsite storage facilities to repair locations at each reactor as described in the order regarding the Near Term Task Force (NTTF) Recommendation 4.2. It is requested that consideration be given to the major functional areas of NUREG-0654, Table B-1 such as plant operations and assessments of operational aspects, emergency direction and control, notification/communication, radiological accident assessment, and support of operational accident assessment, as appropriate.</li> <li>• New staff of functions identified as a result of the assessment.</li> <li>• Collateral duties (personnel not being prevented from timely performance of their assigned functions).</li> </ul>
	10/13/2015	Provide onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]
	10/13/2015	Provide onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]

2		Provide an implementation schedule of the time needed to conduct the onsite and augmented staffing assessment. If any modifications are determined to be appropriate, please include in the schedule the time to implement the changes.
	9/13/2015	1. Conduct the onsite and augmented staffing assessment:  The onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]
	9/13/2015	The onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2 [Phase 2 staffing assessment]
	10/13/2015 10/13/2015	2. A schedule of the time needed to implement changes will be provided as follows:  Those associated with the Phase 1 staffing assessment.  Those associated with the Phase 2 staffing assessment.
3	10/13/2015	Identify how the augmented staff would be notified given degraded communications capabilities.
4	10/13/2015	Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.
5	10/13/2015	Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.
6		Identify changes that have been made or will be made to your emergency plan regarding the on-shift or augmented staffing changes necessary to respond to a loss of all AC power, multi-unit event, including any new or revised agreements with offsite resource providers (e.g., staffing, equipment, transportation, etc.).  Changes will be identified as follows:
	10/13/2015	Those associated with the Phase 1 staffing assessment.
	10/13/2015	Those associated with the Phase 2 staffing assessment.

**Enclosure 2**  
**Basis for Proposed Alternative Course of Action for**  
**Responding to EP Requested Information**

**Communications**

There are two separate responses to the information requests related to communications. The alternative timing of responses to requests #1 and #3 proposed in this letter reflects the higher priority placed by the staff, and approved by the Commission in SRM-SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (76 Fed. Reg. 72,560). The proposed alternative timing is warranted as many of the licensee staff resources necessary for performing the communications assessment are the same resources involved in implementing new EP Rule requirements, responding to Institute of Nuclear Power Operations (INPO) initiatives related to enhancing communications capabilities (e.g., IER 11-4), and maintaining existing EP communications equipment.

In addition, the estimated completion date assigned to information request #3 will promote alignment between the out-year budgeting/funding of future enhancements, and the development of an accurate and complete enhancement implementation schedule.

**Staffing**

<b>Plant Type</b>	<b>Phase 1 Staffing Assessment</b> (for functions except those related to NTTF Recommendation 4.2)	<b>Phase 2 Staffing Assessment</b> (for functions related to NTTF Recommendation 4.2)
Multi-unit plants	<ul style="list-style-type: none"><li>• Perform staffing assessment and implement actions as required by recent EP Rule using ISG and NEI 10-05</li><li>• Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01 and material from NEI 10-05; provide results per Enclosure 1 of this letter</li></ul>	Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01; provide results per Enclosure 1 of this letter

The basis for this approach is discussed below.

- V.C. Summer is currently a single unit site, with Units 2 & 3 under construction. In the current construction schedule, Unit 2 will perform an emergency planning exercise on October 13, 2015, and load fuel in September 2016. Much of the information regarding communications and staffing required for Units 2 & 3 in this request is in a developmental stage and not yet available for the 90 day response deadline. All of the requested information, however, will be available before the Unit 2 emergency planning exercise.
- The proposed schedule for this alternative course of action aligns with the construction schedule for Units 2 & 3. There is no impact on public safety, since the assessment will be submitted while construction is ongoing, and the assessment submittal occurs nearly one year prior to Unit 2 fuel load.
- For VCSNS Units 2 & 3, the Phase 1 staffing assessment will be performed by September 13, 2015, and provided to the NRC by October 13, 2015. This assessment will consider all requested functions included in the EP Rule, interim staff guidance and Nuclear Energy Institute 10-05 and 12-01 documents. Phase 1 does not include those functions related to Fukushima Near-Term Task Force (NTTF) Recommendation 4.2. An assessment considering these functions will be performed in Phase 2.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 1 staffing assessment.

The timing of the Phase 1 staffing assessment reflects the higher priority placed by the staff, and approved by the Commission in SRM-SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (76 Fed. Reg. 72,560). In particular, Section IV.A.9 of 10 CFR 50, Appendix E, requires that licensees complete a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. As stated in the EP Rule, this analysis must be completed by December 24, 2012. However, VCSNS Units 2 & 3 plan to submit a license amendment requests before December 31, 2013, in accordance with the EP rule.

- The Phase 2 staffing assessment will be performed by September 13, 2015, and provided to the NRC by October 13, 2015. This assessment will consider the requested functions included in the interim staff guidance and Nuclear Energy Institute 12-01 document and those functions related to Fukushima Near-Term Task Force (NTTF) Recommendation 4.2.

The industry will be responding to multiple regulatory actions resulting from the recommendations contained in the Fukushima NTTF Report, as modified in related Commission Papers (SECY's) and Staff Requirements Memoranda (SRM). One of these actions, in particular, has the potential to impact emergency response staffing

levels. This action is associated with Fukushima NTTF Recommendation 4.2 and subsequently issued to V.C. Summer Nuclear Station (VCSNS) Units 2 & 3 as a license condition with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events. A summary of the license condition is provided below.

This license condition requires VCSNS Units 2 & 3 to implement the final phase of a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core cooling, containment and spent fuel pool (SFP) cooling. The transition phase requires providing sufficient, portable, onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely.

Additional details on an acceptable approach for complying with this license condition will be contained in final Interim Staff Guidance (ISG) scheduled to be issued by the NRC in August 2012.

In response to the license condition, VCSNS must develop new strategies for mitigating beyond-design-basis external events. To ensure accurate results, the staffing assessment for response functions related to NTTF Recommendation 4.2 must be based on the actions delineated in procedures and guidelines developed in response to the license condition. Once the site-specific actions associated with the new response strategies are defined (e.g., down to the procedure or guideline step level), the staffing needed to perform these actions can be assessed with the necessary level of accuracy.

Based on a review of the planned actions necessary to comply with the VCSNS Units 2 & 3 license condition, an assessment of the staffing for the functions related to NTTF Recommendation 4.2 will be provided by October 13, 2015.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 2 staffing assessment.