

## PMSummerColpEM Resource

---

**From:** Ravindra Joshi  
**Sent:** Tuesday, February 17, 2009 8:36 AM  
**To:** SummerCOL Resource  
**Subject:** FW: Emailing: NND-09-0018.PDF  
**Attachments:** NND-09-0018.PDF

-----Original Message-----

From: KIBLER, TRIA K [mailto:TKKIBLER@scana.com]  
Sent: Monday, February 02, 2009 4:23 PM  
To: Luis Reyes; Ravindra Joshi; ZEILER, JOHN; BYRNE, STEPHEN A; CLARY, RONALD B;  
bmccall@santecooper.com; BROWNE, KENNETH; MAHAN, RANDOLPH R; KSutton@morganlewis.com;  
MONROE, AMY; Manny Comar  
Subject: Emailing: NND-09-0018.PDF

<<NND-09-0018.PDF>>

The message is ready to be sent with the following file or link attachments:

NND-09-0018.PDF

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

**Hearing Identifier:** VCSummer\_COL\_Public  
**Email Number:** 206

**Mail Envelope Properties** (CEEA97CC21430049B821E684512F6E5EB708BF12B0)

**Subject:** FW: Emailing: NND-09-0018.PDF  
**Sent Date:** 2/17/2009 8:36:27 AM  
**Received Date:** 2/17/2009 8:36:30 AM  
**From:** Ravindra Joshi

**Created By:** Ravindra.Joshi@nrc.gov

**Recipients:**  
"SummerCOL Resource" <SummerCOL.Resource@nrc.gov>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	685	2/17/2009 8:36:30 AM
NND-09-0018.PDF	3378895	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**



February 2, 2009  
NND-09-0018

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 Response to NRC Request for Additional Information (RAI) Letter No. 011

Reference: Letter from Manny Comar (NRC) to Alfred M. Paglia (SCE&G), Request for Additional Information Letter No. 011 Related to SRP Section 17.1 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License Application, dated December 31, 2008.

The enclosure to this letter provides the South Carolina Electric & Gas Company (SCE&G) response to the RAI items included in the above referenced letter. The enclosure also identifies any associated changes that will be incorporated in a future revision of the VCSNS Units 2 and 3 COLA.

Should you have any questions, please contact Mr. Al 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 2nd day of February, 2009.

Sincerely,

A handwritten signature in black ink that reads "Ronald B. Clary".

Ronald B. Clary  
General Manager  
New Nuclear Deployment

CDT/RBC/jg

Enclosure

c:

Luis A. Reyes  
Ravindra G. Joshi  
Manny Comar  
John Zieler  
Stephen A. Byrne  
Ronald B. Clary  
Bill McCall  
Kenneth J. Browne  
Randolph R. Mahan  
Kathryn M. Sutton  
Amy M. Monroe  
FileNet

**NRC RAI Letter No. 011 Dated December 31, 2008**

**SRP Section: 17.1 – Quality Assurance During the Design and Construction Phases**

**Questions from Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)**

**NRC RAI Number: 17.01-1**

Section 17.1 of the V.C. Summer FSAR states, in part, that, “NuStart maintains oversight for those activities performed as part of its COL application contract and SCE&G exercises oversight through their NuStart participation...” The staff requests the applicant to describe in detail, NuStart’s scope of work related to V. C. Summer combined license application (COLA) development activities and to identify the specific provisions in V. C. Summer’s quality assurance program that govern such development activities.

**VCSNS RESPONSE:**

COLA Part 2 (FSAR), Section 17.1 (Quality Assurance During the Design and Construction Phases), will be revised to include a better description of NuStart’s scope of work utilized in the VCSNS COLA. These changes will be incorporated in a future revision of the VCSNS Units 2 and 3 FSAR.

This response is PLANT SPECIFIC.

**ASSOCIATED VCSNS COLA REVISIONS:**

COLA Part 2, FSAR Section 17.1 will be revised to read:

~~The VCSNS COLA has been assembled from material incorporated by reference from the Westinghouse AP1000 DCD, from standard departure and supplemental materials developed by NuStart, and from site specific materials developed by SCE&G and its contractors.~~

~~The quality program applicable to the development of the AP 1000 DCD material is described in **Section 17.3** of the DCD which is incorporated by reference.~~

~~NuStart was created by multiple utilities for the purpose of demonstrating the licensing process defined by 10 CFR Part 52. For the standard DCD departure and supplemental materials, NuStart maintains oversight for those activities performed as part of its COL application contract. SCE&G maintains oversight through the NuStart member review and approval of the NuStart QA Plan (**Reference 201**), NuStart member review and approval of the industry standard COL sections, and through direct participation in generic COL development~~



activities.

The SCE&G quality assurance program for design, construction, and operations is defined in [Section 17.5](#). The QA program will evolve in a phased approach through COL preparation, site preparation, construction, start-up testing and eventually operations. A version of the current QA program for VC Summer Unit 1 was used during preparation of the COLA. This plan provided QA guidance meeting the requirements of 10CFR50 Appendix B applicable to safety-related site characterization activities and oversight of COLA content providers. An interim version of the program described in [Section 17.5](#) (eliminating, for example, operational considerations) will be implemented upon receipt of the VCSNS COL. The [Section 17.5](#) program will be fully incorporated and implemented prior to execution of safety-related operational activities.

South Carolina Electric & Gas (SCE&G) is responsible for the establishment and execution of quality assurance program requirements during the design and construction phases of V.C. Summer Nuclear Plant Units 2 & 3. SCE&G may delegate and has delegated to others, such as NuStart Energy Development, LLC, Westinghouse Electric Company, and Bechtel Power Corporation, the work of establishing and executing the quality assurance program, or any parts thereof, but retains responsibility for the quality assurance program.

Effective during COL application development, through and until COL issuance, the NuStart Energy Development, LLC (NuStart) Quality Assurance (QA) Plan (Reference 201), along with the Westinghouse Electric Company Quality Management System (DCD Section 17.6) and Bechtel Power Corporation Nuclear Quality Assurance Manual (Reference 205) define the QA program requirements for design activities. Construction activities at SCE&G are not planned before the COL is issued.

NuStart was created in part for the purpose of demonstrating the licensing process defined by 10 CFR Part 52. NuStart consists of multiple utilities including SCE&G. Bechtel Power Corporation was contracted to develop the V.C. Summer Nuclear Units 2 & 3 COL application, including site characterization activities. The process of collection, review and analysis of specific data for site characterization was performed under the Bechtel Power Corporation Quality Assurance Manual (Reference 205). Bechtel Power Corporation maintains oversight of the activities performed under the COL application contract. SCE&G maintains oversight under its existing 10 CFR Part 50, Appendix B program, as described in SCE&G "New Nuclear Deployment Quality Assurance Plan" (Reference 204) and V.C. Summer Nuclear Station Unit 1 "Operational Quality Assurance Plan" (Reference 206). These plans provide QA guidance meeting the requirements of 10 CFR Part 50 Appendix B and oversight of safety-related site characterization activities and COL application content providers. SCE&G maintains oversight of COL application development through review and approval of the NuStart QA Plan (Reference 201), conducting QA audits and surveillances of NuStart and

Bechtel activities, and providing input to the COL application development, including but not limited to, review of COL application content.

Implementation of the applicable portions of the "Quality Assurance Program Description" (QAPD) discussed in Section 17.5 begins at COL issuance. The program establishes the QA program requirements for the remaining portion of the design and construction phases and for operations; full implementation of the operations related requirements will be no later than as indicated in FSAR Table 13.4-201.

COLA Part 2, FSAR Section 17.8 will be revised to read:

201. NuStart Energy, LLC., "NuStart Energy Project Instruction – Quality Assurance Plan," PI-009.
202. "NRC Audit Report for the South Carolina Electric and Gas (SCE&G) VC Summer Nuclear Plant Combined License Application Review," J. W. Chung to A. M. Monroe, November 16, 2007 (ML073100387).
203. U.S. Nuclear Regulatory Commission, "Final Safety Evaluation Report for Technical Report NEI 06-14A, "Quality Assurance Program Description," Rev. 4, ML072200084, July 2007.
204. South Carolina Electric & Gas, "New Nuclear Deployment Quality Assurance Plan," current applicable revision.
205. Bechtel Power Corporation, "Nuclear Quality Assurance Manual," Rev.4, 11/01/02.
- 206 South Carolina Electric & Gas, V.C. Summer Nuclear Station Unit 1 "Operational Quality Assurance Plan," current applicable revision.



**NRC RAI Letter No. 011 Dated December 31, 2008**

**SRP Section: 17.1 – Quality Assurance During the Design and Construction Phases**

**Questions from Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)**

**NRC RAI Number: 17.01-2**

Chapter 17.1 states that the QA program will evolve in a phased approach. Upon COL issuance, the QA program described in Chapter 17.5 of the FSAR will become effective. Please clarify the meaning of phased approach as described in Section 17.1 of the FSAR and clarify when the QAPD described in Section 17.5 will be fully implemented.

**VCSNS RESPONSE:**

South Carolina Electric & Gas (SCE&G) Quality Assurance Program Description begins at COL issuance, and establishes the QA program requirements for the remaining portion of the design and construction phases.

FSAR Table 13.4-201, Item 16. QA Program – Operation identifies an implementation milestone for operational programs 30 days prior to the scheduled date for initial fuel loading. This implementation milestone recognizes that portions of the QAPD are specific to operations activities. Examples of these operations related requirements are described in QAPD Part II Section 2.7, "Independent Review," Section 3.4, "Setpoint Control," and Section 6.1, "Review and Approval of Documents." Implementation of the QAPD will begin at COL issuance for applicable portions of the program; however, as indicated in Table 13.4-201, full implementation of operations related requirements is not expected until 30 days prior to fuel load. The last paragraph of Section 17.1 will be revised to provide clarification of this point as indicated in the response to RAI 17.01-1.

This response is PLANT SPECIFIC.

**ASSOCIATED COLA REVISIONS:**

See response to RAI 17.01-1.

**ASSOCIATED ATTACHMENTS**

None



**NRC RAI Letter No. 011 Dated December 31, 2008**

**SRP Section: 17.1 – Quality Assurance During the Design and Construction Phases**

**Questions from Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)**

**NRC RAI Number: 17.01-3**

Section 17.1 of the V. C. Summer FSAR does not state that SCE&G will be responsible for the establishment and execution of quality assurance program requirements during the design and construction phases of V. C. Summer Units 2 and 3. Similar to the revised Section 17.1 of Bellefonte FSAR, as documented by letter dated January 8, 2008, the NRC staff requests that SCE&G revise Section 17.1 of the V. C. Summer FSAR to clearly state that SCE&G is responsible for the establishment and execution of quality assurance program requirements during the design and construction phases of V. C. Summer Units 2 and 3. Consistent with Criterion I of Appendix B to 10 CFR Part 50, SCE&G may delegate to others, such as NuStart Energy Inc, the work of establishing and executing the quality assurance program or any part thereof, but retains responsibility for the quality assurance program. Further, the "current QA Program," that is being implemented during the preparation of the COLA and up through COL issuance should be specifically referenced in the FSAR by its revision and date.

**VCSNS RESPONSE:**

The SCE&G response to RAI 17.01-1 addresses both of these items. The revised first sentence of Section 17.1 reads "South Carolina Electric & Gas (SCE&G) is responsible for the establishment and execution of quality assurance program requirements during the design and construction phases of V.C. Summer Nuclear Plant Units 2 & 3." Both Sections 17.1 and 17.8 will be revised, as indicated in the response to RAI 17.01-1, adding the "current QA Program" being implemented during the preparation of the COLA through COL issuance.

This response is PLANT SPECIFIC.

**ASSOCIATED COLA REVISIONS:**

See the response to RAI 17.01-1.

**ASSOCIATED ATTACHMENTS:**

None

**NRC RAI Letter No. 011 Dated December 31, 2008**

**SRP Section: 17.1 – Quality Assurance During the Design and Construction Phases**

**Questions from Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)**

**NRC RAI Number: 17.01-4**

Chapter 17.1 states in part, that, an interim version of the quality assurance program described in Section 17.5 (eliminating, for example, operational considerations) will be implemented upon receipt of the VCSNS COL. It further states, that the Section 17.5 quality assurance program will be fully incorporated and implemented prior to execution of safety related operational activities. Please clarify when such safety-related operational activities will be executed.

**VCSNS RESPONSE:**

The SCE&G response to RAI 17.01-1 addresses this item. The term “interim version” has been deleted from Section 17.1 with clarification as to full implementation of the operations related requirements.

**ASSOCIATED COLA REVISIONS:**

See response to RAI 17.01-1.

**ASSOCIATED ATTACHMENTS:**

None