



May 30, 2007  
NND-07-0005

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

ATTN: Document Control Desk

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) Units 2 and 3  
PROJECT NUMBER 743  
RESPONSE TO RIS 2007-08, UPDATED LICENSING SUBMITTAL  
INFORMATION TO SUPPORT THE DESIGN-CENTERED LICENSING  
REVIEW APPROACH

Reference: RIS 2007-08, Updated Licensing Submittal Information to Support the Design-  
Centered Licensing Review Approach

In the referenced Regulatory Issue Summary (RIS), the Nuclear Regulatory Commission (NRC) is requesting updated information to promote standardization of COL applications and facilitate the establishment of a predictable and consistent method for reviewing applications. To support this effort, the NRC identified several specific scheduler and standardization information items that would be useful.

South Carolina Electric & Gas (SCE&G) supports and endorses the design-centered review approach proposed by the NRC. Responses to the specific bulleted items from the RIS are provided in Enclosure 1 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined Operating License (COL) project. This information has been coordinated with the AP1000 Reference Plant information.

Please contact me at (803) 345-4757 with any questions.

Very truly yours,

*Ronald B. Clary*  
Ronald B. Clary

AMM/RBC/tkk  
Enclosure

c: K. B. Marsh  
S. A. Byrne  
N. S. Carns  
J. H. Hamilton  
R. J. White  
S. M. Coffin  
J. L. Starefos

W. D. Travers  
R. B. Clary  
NRC Resident Inspector  
K. M. Sutton  
File (NND-07-0005)

Enclosure 1

UPDATED LICENSING SUBMITTAL INFORMATION TO SUPPORT THE DESIGN-  
CENTERED LICENSING REVIEW APPROACH

SCE&G RESPONSE

Enclosure 1

UPDATED LICENSING SUBMITTAL INFORMATION TO SUPPORT THE DESIGN-CENTERED LICENSING REVIEW APPROACH

*Licensing Submittal Information*

1. a) Will the applicants be organized into DCWGs?

Response: South Carolina Electric & Gas (SCE&G) is a member of the AP1000 DCWG.

b) If so, what is the membership and who is the single point of contact designated for each DCWG?

Response: At present, all announced applicants who have indicated their intent to apply for a COL utilizing the AP1000 Design Control Document (DCD) are members of the AP1000 DCWG. As previously identified in NuStart's response to RIS 2006-006, Peter Hastings of Duke Energy is the AP1000 Reference Plant (Bellefonte Site) Licensing Lead for NuStart and the NRC single point of contact for the AP1000 DCWG.

c) Have protocols been developed to provide coordinated responses for RAIs with generic applicability to a design center?

Response: The AP1000 DCWG does intend to coordinate RAI responses, as appropriate, and is currently developing protocols for this purpose.

2. Which applicant referencing the design will be designated as the R-COL applicant?

Response: The Tennessee Valley Authority (TVA) will be the AP1000 DCWG R-COL applicant for the Bellefonte (BLN) site.

3. a) When (month and year) will each of the COL applications be submitted for review?

Response: SCE&G intends to submit a COL application for 2 AP1000 units within 1 month of the submittal of the R-COL. SCE&G will notify the NRC at least 90 days prior to the expected submittal date if this schedule requires modification.

b) In addition, what is the design, site location, and the number of units at each site?

Response: The application is for 2 Westinghouse AP1000 certified design units, located at the existing single unit Virgil C. Summer Nuclear Station (VCSNS) site in Jenkinsville, South Carolina.

4. What portions of the COL application (chapters, sections, subsections) will be relying on the DC?

Response: Most portions of the application for an AP1000 design will be relying on the design certification (DC) to varying extents. For example, every chapter of the COL application Part 2 (plant-specific DCD including the plant-specific Technical Specifications) will rely on the AP1000 DCD and will be supplemented as necessary to address additional needed information such as COL information items. Much information in Part 3 (the Environmental Report (ER)) will also rely on DCD information, e.g., design descriptions and the DCD Appendix 1B severe accident mitigation design alternatives (SAMDA) discussion. The COL application Part 10 will also rely on the Tier 1 ITAAC and associated ITAAC design descriptions. Each Part of the COL application is addressed in the Standardization Matrix

included as Attachment 1 of the NuStart reference plant (Bellefonte) RIS 2007-08 response, with section-by-section details provided for Part 2 of the COLA.

5. What portions of the R-COL application (chapters, sections, subsections) will be referenced (i.e., replicated verbatim) in S-COL applications, and what portions of the application are likely to be site-specific?

Response: Details in response to this request are also provided in the Standardization Matrix included as Attachment 1 of the NuStart reference plant (Bellefonte) RIS 2007-08 response for each part of the COL application, with section-by-section details provided for Part 2.

6. a) When (month and year) will applicants complete the detailed design information to be verified under those inspections, tests, analyses, and acceptance criteria that are directed at certification information (design acceptance criteria)?

Response: The detailed design information to be verified under inspections, tests, analyses, and acceptance criteria (ITAAC) that are directed at certification information (i.e., DAC) will be complete at varying times, depending on the availability of the information. Some DAC resolution information is currently being developed and is anticipated to be available at the time of COL application submittal, but other DAC resolution information will not be completed until after the COL is issued.

b) Will this information be completed in a design certification amendment application, in the R-COL application, in S-COL applications, in post-COL Final Safety Analysis Report updates, or a combination thereof?

Response: The detailed design information to be verified under ITAAC will be completed in a combination of a DC amendment application, the R-COL and S-COL applications, post-COL application updates, and post-COL notifications. The design information intended to resolve the Piping DAC will be included in the amendment to the AP1000 Design Certification. In addition, design information to partially resolve the Instrumentation and Control System and Human-System Interface DAC will also be included in the amendment.

### ***Site and Environmental Information***

7. Do any applicants intend to apply for an ESP prior to submitting their COL applications? If so, when (month and year) would the proposed ESP be submitted to the NRC for review?

Response: SCE&G does not intend to submit an ESP application prior to submitting the COL application.

8. For ESP applicants, is the applicant going to be seeking approval of either "proposed major features of the emergency plans" per 10 CFR 52.17(b)(2)(i), or "proposed complete and integrated emergency plans" per 10 CFR 52.17(b)(2)(ii)?

Response: Not applicable to the VCSNS application.

9. Do the applicants plan to submit an environmental report or limited work authorization request prior to other portions of the COL application, and if so, when (month and year)?

Response: SCE&G does intend to submit an Environmental Report (ER) prior to submitting the COL application. The current schedule for submittal of this document to the NRC is September 2007.

10. What scope and schedule do applicants project for site characterization activities, such as core borings and testing of core samples?

Response: The scope of site characterization activities is generally complete for the SCE&G projects at VCSNS.

11. What interactions have taken place with local and State authorities and other Federal agencies to support licensing new reactors?

Response: Interactions have taken place with several local and State authorities and other Federal agencies to support the licensing process for the COL application at the VCSNS site. This project has contacted the following Federal, State and local agencies to support the licensing of the new reactors.

- U.S. Fish and Wildlife Service – Contacted regarding rare, threatened or endangered species on the site.
- National Marine Fisheries – Contacted regarding rare, threatened or endangered species on the site.
- South Carolina Department of Health and Environmental Control – Contacted regarding permits for observation wells and schedule for submission of other air and water permit applications.
- South Carolina Department of Natural Resources – Contacted regarding rare, threatened or endangered species of State concern and water management in the Broad River.
- South Carolina Department of History and Archives, State Historic Preservation Office – Contacted regarding cultural resources on the site.
- South Carolina Office of Regulatory Support – Contacted regarding schedule for an application for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the station and associated transmission route(s).
- South Carolina Department of Emergency Management – Contacted regarding the station Emergency Plan.
- Fairfield, Newberry, Richland and Lexington Counties Emergency Management – Contacted regarding the station Emergency Plan.
- Fairfield County Department of Building Safety – Contacted regarding building permits for the station.
- Department of Energy – Contacted regarding the Spent Fuel Agreement.
- Federal Energy Regulatory Commission – Contacted regarding a revision to the Parr Project License.
- ANI/ASME – Contacted regarding the ASME NCA-3230 Owner's Certificate.

### ***Plant Construction Requirements Information***

12. a) Who are the vendors and consultants that are assisting in the preparation of the application?

Response: SCE&G is a member of NuStart and subsequently will be utilizing COLA section products developed by that organization. SCE&G has procured the services of Bechtel to lead in the development of the VCSNS COLA. Major subcontractors to Bechtel include Tetra Tech NUS, Inc. (TtNUS), William Lettis & Associates, and MACTEC Engineering and Consulting, Inc. (MACTEC).

b) The NRC requests that the potential applicants submit a list of entities that are providing input to and are preparing the COL application under a QA program.

Response: The entities that are providing input to and are preparing the COL application under a QA program include NuStart, Bechtel, William Lettis & Associates, TtNUS, MACTEC, and Enercon.

13. a) What information do the applicants have regarding the timing of construction, the ordering of long lead time components, and other commitments to construction?

Response: SCE&G has not yet made a commitment to construction, nor determined the timing of construction or ordering of long lead time components. When such a decision is made, the NRC will be notified by SCE&G of the procurement and construction schedules.

- b) Furthermore, what vendors will be designing, manufacturing, fabricating, and testing safety-related components for eventual plant construction?

Response: The prime vendors for the AP1000 are Westinghouse and Shaw Stone and Webster. A partial list of potential vendors (considered proprietary/business-sensitive information) that may be selected to perform design, manufacturing, fabricating, and testing of safety-related components is provided in Attachment 2 of the NuStart reference plant (Bellefonte) RIS 2007-08 response. Most vendors will not be determined until a full commitment to construction is made.