



South Carolina Electric and Gas  
V. C. Summer Nuclear Station, Units 2 & 3  
COL Application

**COLA Table of Contents Navigation Page**

[Part 1 — General and Administrative Information](#)

[Part 2 — Final Safety Analysis Report](#)

[Part 3 — Applicant's Environmental Report—Combined License Stage](#)

[Part 4 — Technical Specifications](#)

[Part 5 — Emergency Plan](#)

[Part 7 — Departures and Exemptions](#)

[Part 9 — Withheld Information](#)

[Part 10 — Proposed License Conditions and ITAAC](#)

[Part 11 — COLA Enclosure 1 - Subsurface Reports](#)

[Part 12 — COLA Enclosure 2 - Seismic Technical Advisory Review Letter](#)

[Part 13 — COLA Enclosure 3 - QAPD](#)

**V. C. Summer Nuclear Station, Units 2 and 3**

**COL Application**

**Part 7**

**Departures and Exemptions**

**Revision 1**

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

**A. STD and VCS Departures**

This Departure Report includes deviations in the V. C. Summer Nuclear Station (VCSNS) COL application FSAR from the information in the AP1000 Design Control Document (DCD), pursuant to 10 CFR Part 52, Appendix D, Section VIII and Section X.B.1.

The following Departures are described and evaluated in detail in this report.

<b><u>Departure Number</u></b>	<b><u>Description</u></b>
STD DEP 1.1-1	Administrative departure for organization and numbering for the FSAR sections
VCS DEP 2.0-1	Administrative departure for organization and numbering for FSAR Chapter 2
VCS DEP 18.8-1	Emergency Response Facility locations

Departure number VCS DEP 18.8-1 is a change to Tier 2\* information in the DCD, and prior NRC approval is required. The change is described and evaluated in the VCS Units 2 and 3 Part 5 (Emergency Plan).

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

Departure Number: STD DEP 1.1-1

Affected DCD/FSAR Sections: 9.2.11, 9.2.12, 9.2.13, 9.5.1.8, 9.5.1.9, 13.1, 13.1.4, 13.5, 13.5.3, 13.7, 17.5, 17.6, 17.7, 17.8 (Note the affected sections may vary in subsequent COL applications, but the departure is standard.)

Summary of Departure:

This FSAR generally follows the AP1000 DCD organization and numbering. Some organization and numbering differences are adopted where necessary to include additional material, such as additional content identified in Regulatory Guide 1.206.

Scope/Extent of Departure:

The renumbered sections associated with this Tier 2 departure are identified in the FSAR (at the sections identified above).

Departure Justification:

An administrative departure is established to identify instances where the renumbering of FSAR sections is necessary to effectively include content consistent with Regulatory Guide 1.206, as well as NUREG-0800, Standard Review Plan.

Departure Evaluation:

This Tier 2 departure is an administrative change that affects only section numbering of the indicated FSAR sections. Accordingly, it does not:

1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD;
2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety and previously evaluated in the plant-specific DCD;
3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD;
4. Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD;
5. Create a possibility for an accident of a different type than any evaluated previously in the plant-specific DCD;
6. Create a possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant-specific DCD;

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

7. Result in a design basis limit for a fission product barrier as described in the plant-specific DCD being exceeded or altered; or
8. Result in a departure from a method of evaluation described in the plant-specific DCD used in establishing the design bases or in the safety analyses.

This Tier 2 departure does not affect resolution of a severe accident issue identified in the plant-specific DCD.

Therefore, this departure has no safety significance.

NRC Approval Requirement:

This departure does not require NRC approval pursuant to 10 CFR Part 52, Appendix D, Section VIII.B.5.

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

Departure Number: VCS DEP 2.0-1

Affected DCD/FSAR Sections: 2.0, 2.1, 2.2, 2.4, 2.5

Summary of Departure:

For V.C. Summer Nuclear Station (VCSNS), section or subsection numbering of Chapter 2 differs from STD DEP 1.1-1. The numbering is based on Regulatory Guide 1.206 down to the X.Y.Z level, rather than following the AP1000 DCD or STD DEP 1.1-1 numbering and organization.

Scope/Extent of Departure:

The renumbered sections associated with this Tier 2 departure are identified in the FSAR (at the sections identified above).

Departure Justification:

An administrative departure is established to identify instances where the renumbering of FSAR Chapter 2 is necessary to readily support NRC review or applicant presentation of required information consistent with Regulatory Guide 1.206, but differs from STD DEP 1.1-1.

Departure Evaluation:

This Tier 2 departure is an administrative change that affects only section numbering of the indicated FSAR sections. This change does not alter the nature of the information required to be provided. Accordingly, it does not:

1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD;
2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety and previously evaluated in the plant-specific DCD;
3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD;
4. Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD;
5. Create the possibility for an accident of a different type than any evaluated previously in the plant-specific DCD;
6. Create the possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant-specific DCD;
7. Result in a design basis limit for a fission product barrier as described in the plant-specific DCD being exceeded or altered; or

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

8. Result in a departure from a method of evaluation described in the plant-specific DCD used in establishing the design bases or in the safety analyses.

This Tier 2 departure does not affect resolution of a severe accident issue identified in the plant-specific DCD.

Therefore, this departure has no safety significance.

NRC Approval Requirement:

This departure does not require NRC approval pursuant to 10 CFR Part 52, Appendix D, Section VIII.B.5.

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

Departure Number: VCS DEP 18.8-1

Affected DCD/FSAR Sections: 1.2.2, 9A, 12.3, 12.5.2.2, 12.5.3.2, 18.8.3.5, 18.8.3.6.

Summary of Departure:

At V.C. Summer Nuclear Station (VCSNS), the Technical Support Center (TSC) is not located in the control support area (CSA) as identified in DCD Subsection 18.8.3.5; the TSC location is as described in the Emergency Plan. Additionally, the Operations Support Center (OSC) is also being moved from the location identified in DCD Subsections 18.8.3.6, 12.5.2.2, and 12.5.3.2 and as identified on DCD Figure 1.2-18; the OSC location is as described in the Emergency Plan.

Scope/Extent of Departure:

This Tier 2\* departure is identified in FSAR Subsections 12.5.2.2, 12.5.3.2, 18.8.3.5, and 18.8.3.6. Additionally, this Tier 2\* departure is identified on FSAR Figures 1.2-201, 9A-201, 12.3-201, 12.3-202, and 12.3-203. These figures replace DCD Figures 1.2-18, 9A-3 (Sheet 1 of 3), 12.3-1 (Sheet 11 of 16), 12.3-2 (Sheet 11 of 15), and 12.3-3 (Sheet 11 of 16).

Departure Justification:

The referenced DCD states "The TSC is located in the control support area (CSA)." This is not the case for VCSNS. The TSC location is moved to a central location such that a single TSC can serve VCSNS Units 1, 2, and 3 as identified in the Emergency Plan. The referenced DCD also states "The ALARA briefing and operations support center is located off the main corridor immediately beyond the main entry to the annex building" and indicates that the OSC location is identified on Figure 1.2-18. In addition, the referenced DCD states, "The ALARA briefing and operational support room in the annex building is an example. . ." However, the OSC is being moved to the CSA vacated by the move of the TSC in order to better use the now available space.

Departure Evaluation:

This Tier 2\* departure is for a nonsafety-related system, and the alternate locations of the TSC and OSC meet applicable requirements. Relocating the TSC and OSC does not adversely affect their function and, therefore, this Departure does not:

1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD;
2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component



**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

- (SSC) important to safety and previously evaluated in the plant-specific DCD;
3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD;
  4. Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD;
  5. Create a possibility for an accident of a different type than any evaluated previously in the plant-specific DCD;
  6. Create a possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant-specific DCD;
  7. Result in a design basis limit for a fission product barrier as described in the plant-specific DCD being exceeded or altered; or
  8. Result in a departure from a method of evaluation described in the plant-specific DCD used in establishing the design bases or in the safety analyses.

This Tier 2\* departure does not affect resolution of a severe accident issue identified in the plant-specific DCD.

Therefore, this departure has no safety significance.

Relocation of the TSC — This Tier 2\* departure from DCD Subsection 18.8.3.5 requires prior NRC approval in accordance with 10 CFR 52 Appendix D, Section VIII.B.6.b. The details regarding the proposed TSC location and features are provided in Part 5 (Emergency Plan). Approval of the Tier 2\* departure is requested as part of this COLA.

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

**B. VCS Exemption Requests**

South Carolina Electric & Gas requests the following exemptions related to:

1. Not used.
2. Combined License Application Organization and Numbering

Discussion and justifications for each of these requests is provided in the following pages.

**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

**1) Fitness for Duty Program Description (10 CFR Part 26)**

Withdrawn – This exemption is no longer required.

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**V. C. Summer Nuclear Station, Units 2 and 3  
COL Application  
Part 7, Departures and Exemptions**

**2) Combined License Application Organization and Numbering (Part 52, Appendix D)**

Applicable Regulation(s): 10 CFR Part 52, Appendix D, Section IV.A.2.a

Specific wording from which exemption is requested:

IV. Additional Requirements and Restrictions

A. An applicant for a combined license that wishes to reference this appendix shall, in addition to complying with the requirements of 10 CFR 52.77, 52.78, and 52.79, comply with the following requirements:

1. Incorporate by reference, as part of its application, this appendix.

2. Include, as part of its application:

a. A plant-specific DCD containing the same type of information and using the same organization and numbering as the generic DCD for the AP1000 design, as modified and supplemented by the applicant's exemptions and departures;

Pursuant to 10 CFR 52.7 and 52.93 (as amended and promulgated effective September 27, 2007), the South Carolina Electric & Gas (SCE&G) requests an exemption from the requirement of 10 CFR 52, Appendix D, Section IV.A.2.a, to include a plant-specific DCD "containing the same type of information and using the same organization and numbering as the generic DCD for the AP1000 design...." While the V.C. Summer Nuclear Station (VCSNS) plant-specific DCD (i.e., the FSAR) does contain the same type of information and generally follows the same organization and numbering as the generic DCD for the AP1000 design, some limited sections and subsections of the FSAR (as identified in the departures report as items STD DEP 1.1-1 and VCS DEP 2.0-1) do not follow the "same organization and numbering as the generic DCD for the AP1000 design." SCE&G proposes to provide the plant-specific DCD (i.e., FSAR) with some administrative revisions to the organization and numbering of the AP1000 DCD.

Discussion:

The AP1000 Design Control Document (DCD) generally has an organization and numbering format that provides text by subject in general conformance with the Standard Review Plan (SRP) in effect at the time the DCD was written. Generally, COL information items are included at the end of a chapter, section, or subsection. In some cases, the section may consist solely of a short description of topic and the COL information item subsection. This organization and numbering does not allow for the detailed discussion of these topics that is to be included in a complete FSAR section. As such, it is necessary to include numerous additional subsections to fully address the topic as identified in the guidance of Regulatory Guide 1.206 and the applicable SRP. In other cases, the organization and numbering must be modified slightly to allow for inclusion of plant-specific discussions within the appropriate section of the FSAR, such as including an additional water system description in Section 9.2. In these cases, the COL information item discussions are retained at the end of the DCD corresponding chapter, section, or subsection (to maintain the organization), but the numbering may be different.

**V. C. Summer Nuclear Station, Units 2 and 3**  
**COL Application**  
**Part 7, Departures and Exemptions**

These differences are well identified in the FSAR as STD DEP 1.1-1 or VCS DEP 2.0-1 at each location where the departure is taken and are considered to be purely administrative to support a logical construction of the document. Where the departure from the DCD organization and numbering is taken, the revised organization and numbering generally follows the guidance provided in Regulatory Guide 1.206 and the applicable SRP. As such, there are no significant departures from the expected organization and numbering of a typical FSAR, and the information is readily identifiable to facilitate NRC review.

In view of the above, we believe that it would be less efficient for both SCE&G and the NRC to comply with the portion of the regulation of 10 CFR Part 52, Appendix D, Section IV.A.2.a, that requires strict adherence to the “same organization and numbering as the generic DCD for the AP1000 design.” Accordingly, SCE&G hereby submits a request for an exemption from the regulations of 10 CFR 52, Appendix D, Section IV.A.2.a, pursuant to 10 CFR 52.7, “Specific Exemptions,” and 10 CFR 52.93, “Exemptions and Variances.”

Granting this request, which is authorized by law, would facilitate the NRC review of the VCSNS COL application. For this and other reasons, granting this exemption request will not present an undue risk to the public health and safety, and is consistent with the common defense and security.

Moreover, compliance with the current rule would cause undue hardship for SCE&G and would also be inefficient and burdensome for the NRC staff. That approach would require SCE&G to prepare, and NRC to review, information with an organization and numbering that is unfamiliar and inconsistent with the current guidance for format and content of a COL application.

Additionally, compliance with Appendix D, Section IV.A.2.a is not necessary to achieve its underlying purpose. Most of the FSAR conforms to the organization and numbering of the referenced DCD. The exceptions are limited and do not lead to confusion regarding the incorporation of the DCD into the FSAR.

For these reasons, SCE&G requests approval of the requested exemption from current regulations of 10 CFR 52, Appendix D, Section IV.A.2.a, as identified herein.