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U.S. Nuclear Regulatory Commission
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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4 Combined License Application
Response to Request for Additional Information Letter No. 032

Ladies and Gentlemen:

By letter dated March 28, 2008, Southern Nuclear Operating Company (SNC) submitted an application for combined licenses (COLs) for proposed Vogtle Electric Generating Plant (VEGP) Units 3 and 4 to the U.S. Nuclear Regulatory Commission (NRC) for two Westinghouse AP1000 reactor plants, in accordance with 10 CFR Part 52. During the NRC's detailed review of this application, the NRC identified an apparent inconsistency between COL application Part 5, which states that the Vogtle Early Site Permit (ESP) Application Part 5 is incorporated by reference with no supplements, and several examples in COL application Part 2 that identify specific supplements to ESP application Part 5. By letter dated April 17, 2009, the NRC provided SNC with Request for Additional Information (RAI) Letter No. 032 concerning this apparent inconsistency and requested clarification. This RAI letter contains one RAI question numbered 13.03-5. The enclosure to this letter provides the SNC response to this RAI.

If you have any questions regarding this letter, please contact Mr. Wes Sparkman at (205) 992-5061.

D092
NRO

Mr. J. A. (Buzz) Miller states he is an Executive Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Joseph A. (Buzz) Miller

Sworn to and subscribed before me this 15 day of May, 2009

Notary Public: Glori H. Bain

My commission expires: April 1, 2013

JAM/BJS/dmw

Enclosure: Response to NRC RAI Letter No. 032 on the VEGP Units 3 & 4 COL
Application Involving Emergency Plan Incorporation By Reference With
Supplements

cc: Southern Nuclear Operating Company

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U.S. Nuclear Regulatory Commission
ND-09-0745
Page 4 of 4

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Southern Nuclear Operating Company

ND-09-0745

Enclosure

Response to NRC RAI Letter No. 032

on the

VEGP Units 3 & 4 COL Application

Involving

Emergency Plan Incorporation By Reference With Supplements

COL Application Part 5, Emergency Plan

eRAI Tracking No. 2312

NRC RAI Number 13.03-5:

COL application Part 5, "Emergency Plan" (page 1), states that "[p]art 5 of the referenced ESP application is incorporated by reference with no supplements" (emphasis added). In addition, Part 7, "Departures, Exemptions, and Variances," identifies (on page 1, and elsewhere) departure (DEP) number VEGP DEP 18.8-1, "Emergency Response Facility Locations," stating that "[t]he [VEGP DEP 18.8-1] change is described and evaluated in the VEGP Units 3 and 4 ESPA Part 5 (Emergency Plan)."

VEGP DEP 18.8-1 includes changes – i.e., supplements (SUPs) – to Part 5 of the ESP application, such as movement of the Operations Support Center (OSC) to the Control Support Area (CSA); which is the area identified in the AP1000 DCD as the (Tier 2*) location of the Technical Support Center (TSC). In addition, Section 1.6, "Material Referenced," of Part 2 (page 1.6-1) states under VEGP SUP 1.6-2 that "[t]he Vogtle Early Site Permit Application (ESPA) Site Safety Analysis Report (SSAR) is incorporated by reference into this Combined License Application (COLA) Final Safety Analysis Report (FSAR) with variance and/or supplements as noted" (emphasis added). Additional ESP-related supplements are provided elsewhere in Part 2; e.g., VEGP SUP 13.3-1, VEGP SUP 13.3-3.

Please reconcile the apparent inconsistency between COL application Part 5, which states that the ESP application Part 5 is incorporated by reference with no supplements, and the several examples in Part 2 that identify specific supplements to ESP application Part 5. Additional examples of supplements (SUP) are identified below, which reflect the COL application.

COLA Summary Description

In COL application Part 7, the applicant addressed deviations in FSAR (Part 2), including a requested departure from the information in the AP1000 DCD, pursuant to 10 CFR Part 52, Appendix D, Sections VIII and X.B.1. Departure number VEGP DEP 18.8-1, "Emergency Response Facility Locations," is a change to Tier 2* information in the AP1000 DCD, for which Section VIII.B.6.a of Appendix D to 10 CFR Part 52 requires NRC approval. . . . In addition, the application includes a variance from the ESP application SSAR. Variance number VEGP (ESP) VAR 1.6-1 incorporates by reference the updated information from Section 1.6 of the AP1000 DCD Revision 16, rather than the comparable, superseded Section 1.6 of DCD Revision 15.

The variance (VAR), departure (DEP), AP1000 Standard Plan COL Information Items (STD COL), VEGP ESP COL Action Items (VEGP ESP COL), and supplemental information (STD SUP and VEGP SUP) associated with emergency planning are identified below. The [bracketed] information provides cross references to the various designations used by the applicant to represent the same information that is addressed elsewhere in the COL application, ESP application SSAR, or AP1000 DCD. These numerous and varying information designations reflect the general format of the COL application, as well as accommodate the incorporation of applicable emergency planning information from the referenced ESP application and the AP1000 DCD. The resolutions of various AP1000 COL information items and VEGP ESP COL action items are described, and applicable VEGP ESP permit conditions and ITAAC are identified.

Variance

- VEGP (ESP) VAR 1.6-1 – ESPA SSAR Section 1.6, “Material Incorporated by Reference,” is not incorporated by reference into COL application Part 2 FSAR. Instead, the COL application incorporates by reference the updated information from Section 1.6, “Material Referenced,” of the AP1000 DCD (Revision 16). [STD SUP 1.1-1, STD SUP 1.6-1, VEGP SUP 1.6-2]

Tier 2* Departure

- VEGP (DCD) DEP 18.8-1 – For VEGP Units 3 and 4, the (AP1000 DCD Tier 2*) Technical Support Center (TSC) location is moved from the Control Support Area (CSA) in the Annex Building, to a central location in the lower level of an administration building sited between the Units 2 and 3 power blocks within the VEGP site protected area, as shown on Figure ii, “Vogtle Electric Generating Plant Site Plan.” The VEGP Units 3 and 4 Operations Support Center (OSC) is moved to the Units’ respective CSA. [VEGP SUP 1.8-1, VEGP SUP 1.8-3, VEGP SUP 13.3-1, VEGP SUP 13.3-3 (part 3 of 3), VEGP ESP COL 13.3-3, VEGP ESP Permit Condition 8, VEGP ESP Unit 3 ITAAC 5.1.4]

AP1000 Standard Plant COL Information Items

- STD COL 13.3-1 – Post-72 hour support actions, as discussed in DCD Subsections 1.9.5.4 and 6.3.4, are addressed in DCD Subsections 6.2.2, 8.3, and 9.1.3. Provisions for establishing post-72 hour ventilation for the main control room, instrumentation and control rooms, and dc equipment rooms are established in operating procedures. [VEGP DEP 1.1-1, COL Action Item 13.3-1, VEGP SUP 1.8-2]
- STD COL 13.3-2 – The emergency plan describes the plans for coping with emergency situations, including communications interfaces and staffing of the emergency operations facility. [VEGP DEP 1.1-1, COL Action Item 13.3-1, COL Action Item 13.3-2, VEGP SUP 1.8-2]

VEGP ESP COL Action Items

- VEGP ESP COL 13.3-1 – See Supplemental Information, VEGP SUP 13.3-3 (part 1 of 3) (below). [VEGP SUP 1.8-3, VEGP ESP Permit Conditions 2 and 3, VEGP ESP Units 3 & 4 ITAAC 1.1.2]
- VEGP ESP COL 13.3-2 – See Supplemental Information, VEGP SUP 13.3-3 (part 2 of 3) (below). [VEGP SUP 1.8-3, VEGP ESP Permit Conditions 4, 5, 6, and 7, VEGP ESP Units 3 & 4 ITAAC 1.1.2]
- VEGP ESP COL 13.3-3 – See Tier 2* Departure, VEGP DEP 18.8-1 (above). [VEGP SUP 1.8-1, VEGP SUP 1.8-3, VEGP SUP 13.3-1, VEGP SUP 13.3-3 (part 3 of 3), VEGP ESP Permit Condition 8, VEGP ESP Unit 3 ITAAC 5.1.4]

Supplemental Information

- STD SUP 13.3-1 – Table 13.4-201 provides milestones for emergency planning implementation, regarding conduct of full-participation and onsite exercises, and

submission of applicant's detailed implementing procedures. (See pages 13.4-5 and 13.4-6 of COL application Part 2 FSAR, Operational Program (Item) 14, "Emergency Planning".)

- VEGP SUP 1.6-2 – Section 13.3, "Emergency Planning," of the ESP application SSAR (Revision 4, March 2008) is incorporated by reference into COL application Part 2 FSAR Section 13.3, "Emergency Planning" (with noted variances and/or supplements).
- VEGP SUP 1.8-3 – Table 1.8-203 lists the ESP COL action items and the corresponding FSAR section(s) that address these COL action items. ESP COL action items that are not addressed in the FSAR are not identified in Table 1.8-203. These ESP COL action items will be resolved through the ESP proceedings. ESP permit conditions are continuing to be addressed through the ESP review process, and thus, are not addressed or identified in the FSAR. [VEGP SUP 1.8-1, VEGP SUP 13.3-3, VEGP ESP COL 13.3-1, 13.3-2 and 13.3-3, VEGP ESP Permit Conditions 2 through 8, VEGP ESP Units 3 & 4 ITAAC 1.1.2 and Unit 3 ITAAC 5.1.4]
- VEGP SUP 13.3-1 – Add the following text after the last paragraph of ESPA SSAR Section 13.3: "The emergency planning information is submitted to the Nuclear Regulatory Commission as a separate licensing document. The emergency plan is provided in the VEGP Units 3 and 4 ESP application."
- VEGP SUP 13.3-2 – No new or additional emergency planning information that would materially change the bases for compliance with emergency planning requirements has been identified. (See 10 CFR 52.79(b)(4).) [VEGP COL 13.3-1]
- VEGP SUP 13.3-3 (part 1 of 3) – SNC will submit a revision to the VEGP Units 3 and 4 Emergency Action Levels (EALs) within 90 days of NRC endorsement of NEI 07-01. [VEGP SUP 1.8-3, VEGP ESP COL 13.3-1, VEGP ESP Permit Conditions 2 and 3, VEGP ESP Units 3 & 4 ITAAC 1.1.2]
- VEGP SUP 13.3-3 (part 2 of 3) – SNC will submit a fully developed set of VEGP Units 3 and 4 EALs when design details are completed or propose ITAAC for those elements of the EAL scheme not completed. [VEGP SUP 1.8-3, VEGP ESP COL 13.3-2, VEGP ESP Permit Conditions 4, 5, 6 and 7, VEGP ESP Units 3 & 4 ITAAC 1.1.2]
- VEGP SUP 13.3-3 (part 3 of 3) – Location of the Technical Support Center (TSC) is described in the ESPA emergency plan. [VEGP SUP 1.8-1, VEGP SUP 1.8-3, VEGP SUP 13.3-1, VEGP ESP COL 13.3-3, VEGP DEP 18.8-1, VEGP ESP Permit Condition 8, VEGP ESP Unit 3 ITAAC 5.1.4]
- VEGP SUP 14.3-1 – Emergency Planning (EP) ITAAC were developed in the ESP application to address implementation of elements of the Emergency Plan. Site-specific EP ITAAC are based on the generic ITAAC provided in Table 13.3-1 of SECY-05-0197. These ITAAC have been tailored to the specific reactor design and emergency planning program requirements. (See *Exception* to Standard Review Plan (SRP) Section 14.3.10, COL application Part 2 FSAR Table 1.9-202, Sheet 22 of 27.) [VEGP SUP 1.9-2]

SNC Response:

The VEGP Units 3 and 4 COL application utilizes the design centered review approach, as described in Regulatory Issue Summary 2006-06. The COL application contains information from the referenced Early Site Permit (ESP) Site Safety Analysis Report, the referenced Design Control Document (DCD), and standard content from the Reference COL application. In addition, supplemental information may be added that is not contained in the DCD or ESP. This supplemental information may be standard for all COL applications or may be unique to the site. All Subsequent COL applications referencing the same design are developed containing the standard information provided in the reference application with the addition of site specific supplemental information. The use of supplemental information is intended to provide a means to add information to an application section that is not contained in the DCD, ESP, or Reference COL application, but is required for the unique aspects of the site for which the application is developed. For example, Supplement VEGP SUP 13.3-1 adds information to Section 13.3 not contained in the Reference COLA pertaining to emergency planning. Specifically, this supplement adds information to Section 13.3 indicating that the Emergency Plan is contained in the Vogtle Early Site Permit application.

Similarly, information contained in the FSAR may address a departure from the requirements contained in the DCD, a variance to the requirements of an Early Site Permit, and the inclusion of information related to COL action items.

In the Reference COL application, the Emergency Plan is contained in Part 5. Since the VEGP Emergency Plan is contained in the Vogtle ESP application, the VEGP COL application incorporates by reference the ESP Emergency Plan. The statement that it is incorporated with no supplements, means that the Emergency Plan contained in Part 5 of the ESPA is to be used in the COL Application without changes, and thus no inconsistency exists with regard to the use of supplemental information.

Please note that in the response to NRC RAI Letter 029, SNC committed to revising certain information contained in the ESP Emergency Plan and thus Part 5 of the COL application will be revised to include supplemental information.