PMVogtleCOLPEm Resource

From: Anderson, Brian
Sent: Friday, April 17, 2009 11:17 AM
To: agaughtm@southernco.com; wasparkm@southernco.com; VogtleCOL Resource
Cc: Nguyen, John-Chau; Araguas, Christian; Joshi, Ravindra; Anderson, Brian
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 13.3 FOR THE VOGTLE UNITS 3 AND 4 COMBINED LICENSE APPLICATION
Attachments: VOG RAI 032 - ML091070271.pdf

Importance: High

Attached is RAI Letter No. 032 related to SRP Section 13.3 for the Vogtle Units 3 and 4 combined license application. The ADAMS Accession number is ML091070271.

Brian Anderson
301-415-9967
Project Manager, AP1000 Projects Branch 1
Office of New Reactors
U.S. Nuclear Regulatory Commission

Hearing Identifier: Vogtle_COL_Public
Email Number: 168

Mail Envelope Properties (CB87FC66F95637428C5E0D066E756B6FAC7E4898A5)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 13.3 FOR THE VOGTLE UNITS 3 AND 4 COMBINED LICENSE APPLICATION
Sent Date: 4/17/2009 11:17:08 AM
Received Date: 4/17/2009 11:17:10 AM
From: Anderson, Brian

Created By: Brian.Anderson@nrc.gov

Recipients:
"Nguyen, John-Chau" <John-Chau.Nguyen@nrc.gov>
Tracking Status: None
"Araguas, Christian" <Christian.Araguas@nrc.gov>
Tracking Status: None
"Joshi, Ravindra" <Ravindra.Joshi@nrc.gov>
Tracking Status: None
"Anderson, Brian" <Brian.Anderson@nrc.gov>
Tracking Status: None
"agaughtm@southernco.com" <agaughtm@southernco.com>
Tracking Status: None
"wasparkm@southernco.com" <wasparkm@southernco.com>
Tracking Status: None
"VogtleCOL Resource" <VogtleCOL.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	315	4/17/2009 11:17:10 AM
VOG RAI 032 - ML091070271.pdf	179791	

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

VogtlecolRAIsPEm Resource

From: Brian Anderson
Sent: Friday, April 17, 2009 10:55 AM
To: VogtlecolRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 13.3 FOR THE VOGTLE ELECTRIC GENERATING PLANT
Attachments: VOG-RAI-LTR-032.doc

Importance: High

Hearing Identifier: Vogtle_COL_eRAIs
Email Number: 35

Mail Envelope Properties (CB87FC66F95637428C5E0D066E756B6FAC7E48987B)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 13.3 FOR THE VOGTLE ELECTRIC GENERATING PLANT
Sent Date: 4/17/2009 10:55:21 AM
Received Date: 4/17/2009 10:55:23 AM
From: Brian Anderson

Created By: Brian.Anderson@nrc.gov

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

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	8	4/17/2009 10:55:23 AM
VOG-RAI-LTR-032.doc	71674	

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

April 17, 2009

Mr. Joseph A. (Buzz) Miller
Senior Vice President
Southern Nuclear Operating Company
P.O. Box 1295
Birmingham, AL 35201

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 032 RELATED TO SRP SECTION 13.3 FOR THE VOGTLE ELECTRIC GENERATING PLANT UNITS 3 AND 4 COMBINED LICENSE APPLICATION

Dear Mr. Miller:

By letter dated March 28, 2008, Southern Nuclear Operating Company (SNC), submitted its application to the U.S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advanced passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me at 301-415-9967 or you may contact Christian Araguas, the lead project manager for the Vogtle Electric Generating Plant combined license at 301-415-3637.

Sincerely,

/**RA**/

Brian C. Anderson, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-025
52-026

eRAI Tracking No. 2312

Enclosure:
Request for Additional Information

If you have any questions or comments concerning this matter, you may contact me at 301-415-9967 or you may contact Christian Araguas, the lead project manager for the Vogtle Electric Generating Plant combined license at 301-415-3637.

Sincerely,

/**RA**/

Brian C. Anderson, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-025
52-026

eRAI Tracking No. 2312

Enclosure:
Request for Additional Information

Distribution:

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RidsNroDnrlNwe1	JSebrosky	SGoetz	KWilliams
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NRO-002

OFFICE	LIB/BC	NWE1/PM	OGC	NWE1/L-PM
NAME	KWilliams *	BAnderson *	AHodgdon*	CAraguas*
DATE	03/13/09	03/20/09	03/21/09	04/17/09

*Approval captured electronically in the electronic RAI system.

OFFICIAL RECORD COPY

Request for Additional Information
Vogtle Units 3 and 4
Southern Nuclear Operating Co.
Docket No. 52-0025 and 52-0026
SRP Section: 13.03 - Emergency Planning
Application Section: Part 5-Emergency Planning

QUESTIONS for Licensing and Inspection Branch (NSIR/DPR/LIB) (EP)

13.03-5

[Basis: 10 CFR 52.79(a)(21), 10 CFR 52.79(b)(1), 10 CFR 50.47(b)(8), Section IV.E of Appendix E to 10 CFR Part 50]

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]

1[1] The referenced COL Action Item 13.3-2 in the COL application represents COL Action Item 13.3.3.3.5-1 from Section 13.3, "Emergency Planning," of the AP1000 Final Safety Evaluation Report (FSER), NUREG-1793, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design," issued September 13, 2004 (ADAMS Accession ML042540268).

1[2]The NRC initially identified (VEGP ESP) COL Action Items 13.3-1, 13.3-2, and 13.3-3 in the August 30, 2007, Safety Evaluation Report with Open Items, which were replaced by seven permit conditions in the November 12, 2008, Advanced Safety Evaluation Report.

1[3]The NRC is reviewing the VEGP Units 3 & 4 ESP application **under docket number 52-011**.

1[4] Regulatory Guide (RG) 1.206, Table C.II.1-B1 of Section B, provides an acceptable set of generic emergency planning ITAAC that an applicant may use to develop application-specific ITAAC. SECY-05-0197 (October 28, 2005), and associated February 22, 2006, Staff Requirements Memorandum (SRM) (ADAMS Accession ML052770225 and ML060530316, respectively), provided an earlier (smaller) set of generic ITAAC. While the smaller set could be appropriate for a proposed new reactor at an existing reactor site, the staff subsequently expanded the number of allowable generic ITAAC in Table C.II.1-B1 to accommodate a new reactor at a new site (i.e., so-called *greenfield site*), and thus provide additional flexibility for prospective ESP or COL applicants. See also, SRP Sections 13.3 and 14.3.10.