Southern Nuclear Operating Company, Inc. 40 Inverness Center Parkway Birmingham, Alabama 35242



OCT 30 2009

Docket Nos.: 52-025

52-026

ND-09-1770

U.S. Nuclear Regulatory Commission **Document Control Desk** Washington, DC 20555-0001

> Southern Nuclear Operating Company Vogtle Electric Generating Plant Units 3 and 4 Combined License Application Supplemental Response to Bellefonte Units 3 and 4 Safety Evaluation Report Open Items for Chapter 12

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. As a result of the NRC's detailed review of the initial AP1000 Reference COL application (Bellefonte Units 3 and 4), the NRC has written a safety evaluation report (SER) with open items for the subject chapter. The open items identified in Sections 12.1 and 12.3 of the SER for the reference COL (related to incorporation of NEI 07-08 and NEI 08-08 template information) are addressed by the enclosure to this letter. The open item change details have not yet been provided to the NRC, but are included in the enclosure. VEGP is addressing the open items identified in the SER in the enclosure to this letter as the new AP1000 Reference COL applicant. For completeness, each open item is identified, but responses are provided only for the items indicated in the listing of open items.

If you have any questions regarding this letter, please contact Mr. Wes Sparkman at (205) 992-5061 or Ms. Amy Aughtman at (205) 992-5805.

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Mr. M. K. Smith states he is the Nuclear Development Technical Support Director 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

Michael K. Smith

Sworn to and subscribed before me this 30th day of October

Notary Public: _

My commission expires: _

MKS/BJS/dmw

Enclosure: Supplemental Response to R-COLA SER with Open Items, Chapter 12

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cc: Southern Nuclear Operating Company

Mr. J. H. Miller, III, President and CEO (w/o enclosure)

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Mr. J. T. Gasser, Executive Vice President, Nuclear Operations (w/o enclosure)

Mr. D. H. Jones, Site Vice President – Vogtle 3 and 4 (w/o enclosure)

Mr. T. E. Tynan, Vice President - Vogtle (w/o enclosure)

Mr. D. M. Lloyd, Vogtle 3 & 4 Project Support Director (w/o enclosure)

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Nuclear Regulatory Commission

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Ms. M. A. Sutton, Environmental Project Manager

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Mr. K. T. Haynes, Director of Contracts and Regulatory Oversight

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Mr. S. M. Jackson, Vice President, Power Supply

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Ms. K. K. Patterson, Project Manager

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Mr. R. B. Sisk, Manager, AP1000 Licensing and Customer Interface

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Southern Nuclear Operating Company

ND-09-1770

Enclosure

Supplemental Response to R-COLA SER with Open Items

Chapter 12

Open Item	Response
12.01-01	Standard - See enclosed
12.03-01	Standard - See enclosed
12.04-01	Standard - See previous response dated July 16, 2009

eRAI Tracking No. 3282

NuStart Qb Tracking No. 3916

NRC SER OI Number 12.01-01:

STD COL 12.1-1 includes a commitment to the use of a "Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are as Low as Is Reasonably Achievable (ALARA)," as an operational program document, based on draft NEI Template 07-08, Revision 2. The NEI template presents the functional elements of an ALARA program, which, if met, would demonstrate compliance with 10 CFR 20.1101 and 10 CFR 19.12. Accordingly, BLN FSAR Section 12.1, STD COL 12.1-1 needs to be updated as to its commitment to the final NEI ALARA template if it is accepted by the NRC staff. Therefore, the staff cannot find the applicant's reference to the NEI 07-08 template to be acceptable until the staff completes its review of this template as a method to meet the regulatory requirements of an ALARA program, and the BLN FSAR is updated to reference the final version of this template. This is identified as **Open Item 12.1-1**.

SNC Response:

By letter dated October 29, 2009, the Nuclear Energy Institute submitted to the NRC the accepted version of their report NEI 07-08A, Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA). The R-COLA will be revised in a future amendment to incorporate this accepted report as shown in the Application Revisions section below.

This response is expected to be STANDARD for the S-COLAs.

Associated VEGP COL Application Revisions:

1. COLA Part 2, FSAR Chapter 1, Table 1.6-201 as revised by VEGP R-COLA letter dated October 16, 2009, Update of NEI 07-03A References, will be revised from:

Author / Report Number ^(a)	Title	Revision	FSAR Section	Document Transmittal	ADAMS Accession Number
NEI 07-08	Generic FSAR Template Guidance for Ensuring Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA)	3	12.1	November 2008	ML083380345
To read:					
Author / Report Number ^(a)	Title .	Revision	FSAR Section	Document Transmittal	ADAMS Accession Number
NEI 07-08A	Generic FSAR Template Guidance for Ensuring Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA)	0	12.1	October 2009	ML09(tbd)

- 2. COLA Part 2, FSAR Chapter 1, Table 1.6-201 footnote will be revised from:
 - (A) Denotes NRC approved document. Other listed documents are under NRC review.

To read:

- (A) Denotes NRC approved document.
- 3. COLA Part 2, FSAR Chapter 1, Table 1.9-201, Regulatory Guide 1.8 will be revised from "12.1 (NEI 07-08)" to read "12.1 (NEI 07-08A)" in the FSAR Chapter, Section, or Subsection column.
- COLA Part 2, FSAR Chapter 1, Table 1.9-201, Regulatory Guides 8.2, 8.7, 8.8, 8.9, 8.10, 8.13, 8.15, 8.27, 8.28, 8.29, 8.34, 8.35, 8.36, and 8.38 will be revised from "12.1 (NEI 07-08)" to read "12.1 (NEI 07-08A)" in the FSAR Chapter, Section, or Subsection column.
- 5. COLA Part 2, FSAR Chapter 12, Section 12.1, will be revised from:

This section incorporates by reference NEI 07-08, Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA), Revision 3, which is currently under review by the NRC staff. See Table 1.6-201. ALARA practices are developed in a phased milestone approach as part of the procedures necessary to support the Radiation Protection Program. Table 13.4-201 describes the major milestones for ALARA procedures development and implementation.

To read:

This section incorporates by reference NEI 07-08A, Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA), Revision 0. See Table 1.6-201. ALARA practices are developed in a phased milestone approach as part of the procedures necessary to support the Radiation Protection Program. Table 13.4-201 describes the major milestones for ALARA procedures development and implementation.

6. COL Part 2 FSAR Chapter 12, Section 12.1, will be revised to add new text (with an LMA of STD COL 12.1-1) that reads:

Revise the last sentence of NEI 07-08A Subsection 12.1.2 to read:

ALARA procedures are established, implemented, maintained and reviewed consistent with 10 CFR 20.1101 and the quality assurance criteria described in Part III of the Quality Assurance Program Description, which is discussed in Section 17.5.

7. COL Part 2 FSAR Chapter 12, Section 12.1.3, will be revised from:

This COL item is addressed in NEI 07-08 and Appendix 12AA.

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To read:

This COL item is addressed in NEI 07-08A and Appendix 12AA.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None

eRAI Tracking No. 0863

NuStart Qb Tracking No. 3917

NRC SER OI Number 12.03-01:

The applicant stated in a letter dated September 22, 2008, that it will adopt the NEI 08-08, "Generic FSAR Template Guidance for Life Cycle Minimization of Contamination," Revision 0 template. If approved by the NRC, the applicant will provide additional description of site specific design features and procedures for operation that minimize contamination of the facility, site, and environment. NEI 08-08 is currently under staff review. This is identified as **Open Item 12.3-1**.

SNC Response:

By letter dated October 29, 2009, the Nuclear Energy Institute submitted to the NRC the accepted version of their report NEI 08-08A, Generic FSAR Template Guidance for Life Cycle Minimization of Contamination. The R-COLA will be revised in a future amendment to incorporate this accepted report as shown in the Application Revisions section below.

This response is expected to be STANDARD for the S-COLAs.

Associated VEGP COL Application Revisions:

1. COLA Part 2, FSAR Chapter 12, Appendix 12AA, text after the last bullet of NEI 07-03 Subsection 12.5.4.8 will be revised from:

This subsection adopts NEI 08-08 (Reference 201), which is currently under review by the NRC staff, for discussion of compliance with 10 CFR 20.1406.

To read:

This subsection adopts NEI 08-08A (Reference 201), for a description of the operational and programmatic elements and controls that minimize contamination of the facility, site, and the environment, to meet the requirements of 10 CFR 20.1406.

COL Part 2 FSAR Chapter 12, Appendix 12AA 5.4.14 last paragraph, will be revised from:

This subsection adopts NEI 08-08 (Reference 201), which is currently under review by the NRC staff, for the Groundwater Monitoring Program description.

To read:

This subsection adopts NEI 08-08A (Reference 201) for the Groundwater Monitoring Program description.

3. COL Part 2 FSAR Chapter 12, Appendix 12AA.5.4.15, will be revised from:

This subsection adopts NEI 08-08 (Reference 201), which is currently under review by the NRC staff, for discussion of record keeping practices important to decommissioning.

To read:

This subsection adopts NEI 08-08A (Reference 201) for discussion of record keeping practices important to decommissioning.

- 4. COL Part 2 FSAR Chapter 12, Appendix 12AA reference to NEI 07-03 References will be revised from:
 - 201. NEI 08-08, Generic FSAR Template Guidance for Life Cycle Minimization of Contamination, Revision 0.

To read:

- 201. NEI 08-08A, Generic FSAR Template Guidance for Life Cycle Minimization of Contamination, Revision 0, October 2009.
- 5. COL Part 2 FSAR Chapter 13, Table 13.4-201 (Sheet 3 of 7) Item 10 will be revised to add a reference to 10 CFR 20.1406 to the Program Source (Required by) column.
- 6. COL Part 2 FSAR Chapter 13, Table 13.4-201 (Sheet 3 of 7) Item 10 will be revised to add a new sub-bullet "Minimization of Contamination" to the Program Title column.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None