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**JUL 29 2009**

Docket Nos.: 52-025  
52-026

ND-09-1115

U.S. Nuclear Regulatory Commission  
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Washington, DC 20555-0001

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Units 3 and 4 Combined License Application  
Response to Bellefonte Units 3 and 4 Safety Evaluation Report Open Items for Chapter 17

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. 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 impacting standard information or otherwise resulting in standard changes for the AP1000 COL applications. The open items identified as plant specific will be addressed on the Bellefonte Units 3 and 4 docket by the Tennessee Valley Authority following the SER identified NRC Staff action.

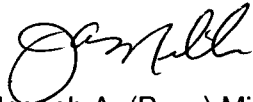
If you have any questions regarding this letter, please contact Mr. Wes Sparkman at (205) 992-5061.

1092  
KRW

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 29 day of July, 2009

Notary Public: Glenn H. Buie

My commission expires: 04/01/2013

JAM/BJS/dmw

Enclosure: Response to R-COLA SER with Open Items, Chapter 17

cc: Southern Nuclear Operating Company

Mr. J. H. Miller, III, President and CEO (w/o enclosure)  
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. M. K. Smith, Technical Support Director  
Mr. D. M. Lloyd, Vogtle 3 & 4 Project Support Director  
Mr. C. R. Pierce, AP1000 Licensing Manager  
Mr. M. J. Ajluni, Nuclear Licensing Manager  
Mr. W. A. Sparkman, COL Project Engineer  
Document Services RTYPE: AR01.1053  
File AR.01.02.06

Nuclear Regulatory Commission

Mr. L. A. Reyes, Region II Administrator (w/o enclosure)  
Mr. F.M. Akstulewicz, Deputy Director Div. of Safety Systems & Risk Assess. (w/o enclosure)  
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Mr. R. G. Joshi, Lead Project Manager of New Reactors  
Mr. B. Hughes, Project Manager of New Reactors  
Ms. T. E. Simms, Project Manager of New Reactors  
Mr. B. C. Anderson, Project Manager of New Reactors  
Mr. M. M. Comar, Project Manager of New Reactors  
Mr. M. D. Notich, Environmental Project Manager  
Mr. J. H. Fringer, III, Environmental Project Manager  
Mr. L. M. Cain, Senior Resident Inspector of VEGP

Georgia Power Company

Mr. O. C. Harper, IV, Vice President, Resource Planning and Nuclear Development (w/o enclosure)

Oglethorpe Power Corporation

Mr. M. W. Price, Chief Operating Officer (w/o enclosure)

Municipal Electric Authority of Georgia

Mr. S. M. Jackson, Vice President, Power Supply (w/o enclosure)

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Ms. K. K. Patterson, Project Manager

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Mr. K. B. Allison, Project Manager (w/o enclosure)  
Mr. J. M. Oddo, Licensing Manager  
Mr. D. C. Shutt, Licensing Engineer

Westinghouse Electric Company, LLC

Mr. W. E. Cummins, Vice President of Regulatory Affairs and Standardization  
Mr. N. C. Boyter, Consortium Project Director Vogtle Units 3 & 4 (w/o enclosure)  
Mr. S. A. Bradley, Vogtle Project Licensing Manager  
Mr. R. B. Sisk, Manager, AP1000 Licensing and Customer Interface  
Mr. J. L. Whiteman, Principal Engineer, Licensing & Customer Interface  
Mr. D. A. Lindgren, Principal Engineer AP1000 Licensing and Customer Interface

NuStart Energy

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Mr. E. R. Grant  
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Mr. N. Haggerty  
Ms. K. N. Slays

Other NuStart Energy Associates

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Mr. S. P. Frantz, Morgan Lewis  
Mr. P. S. Hastings, NuStart & Duke Energy  
Mr. J. A. Bailey, TVA  
Ms. A. L. Sterdis, TVA  
Mr. J. P. Berger, EDF  
Mr. M. W. Gettler, FP&L  
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Mr. G. D. Miller, PG&N  
Mr. M. C. Nolan, Duke Energy  
Mr. N. T. Simms, Duke Energy  
Mr. G. A. Zinke, NuStart & Entergy

(w/o Enclosure)

Mr. R. H. Kitchen, PGN  
Ms. A. M. Monroe, SCE&G  
Mr. R. Reister, DOE/PM

## **Southern Nuclear Operating Company**

**ND-09-1115**

**Enclosure**

**Response to R-COLA SER with Open Items**

### **Chapter 17**

<u>Open Item</u>	<u>Response</u>
17.01-01	Standard - See enclosed
17.01-02	Plant-Specific – Bellefonte (not included) NRC Staff action
17.01-03	Plant-Specific – Bellefonte (not included) NRC Staff action
17.05-01	Standard - See enclosed
17.05-02	Standard - See enclosed
17.05-03	Standard - See enclosed
17.05-04	Standard - See enclosed
17.05-05	Standard - See enclosed
17.05-06	Standard - See enclosed

**eRAI Tracking No. 1425 – 1-11**

**NuStart Qb Tracking No. 3489**

**NRC SER OI Number 17.01-01:**

In RAI 01-11, dated December 16, 2008, the NRC staff requested that the applicant document the mechanism for incorporation of the requirements of RG 1.33 since these requirements are not covered by NQA-1. In its letter, dated January 27, 2009, the applicant stated that conformance with RG 1.33 will be supplemented in a future amendment to include a reference to Nuclear Energy Institute (NEI) 06-14A. The NRC staff has addressed this issue with NEI since NEI 06-14A does not commit to RG 1.33. This issue will remain open until closure is reached with NEI 06-14A or the applicant. This is identified as Open Item 17.1-1.

**SNC Response:**

The revisions to the COL application associated with this open item cannot be completed until the NEI 06-14 template has been approved. Once this occurs, NEI must issue the approved (or –A) version of the template. Once the approved version of the template is issued, a supplemental response to this item will be provided that incorporates the appropriate changes into the COL application.

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

**Associated VEGP COL Application Revisions:**

To be provided in a future supplemental response.

**eRAI Tracking No. 0066 – 17.5-5**

**NuStart Qb Tracking No. 3493**

**NRC SER OI Number 17.05-01:**

In RAI 17.5-5, dated May 12, 2008, the NRC staff requested that the applicant revise the TVA QAPD Part II, Section 2.5 to cite the correct regulation of 10 CFR 52.79(a)(27) versus 10 CFR 50.34(b)(6)(ii). In its response dated June 26, 2008, the applicant proposed to revise the TVA QAPD Part II, Section 2.5 consistent with the proposed wording in NEI Technical Report 06-14A, "Quality Assurance Program Description," Revision 5, dated May 2008. Revision 5 of NEI 06-14A has not been approved by the NRC staff; therefore, this issue will remain open until Revision 5 of NEI 06-14A is approved and TVA has incorporated the approved changes into the TVA QAPD. This is identified as Open Item 17.5-1.

**SNC Response:**

The revisions to the COL application associated with this open item cannot be completed until the NEI 06-14 template has been approved. Once this occurs, NEI must issue the approved (or –A) version of the template. Once the approved version of the template is issued, a supplemental response to this item will be provided that incorporates the appropriate changes into the COL application.

Note that the SER OI specifically refers to the TVA QAPD, but for the AP1000 COL applications based on NEI 06-14, the change is expected to be a standard change (as noted below).

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

**Associated VEGP COL Application Revisions:**

To be provided in a future supplemental response.

**eRAI Tracking No. 0066 – 17.5-6**

**NuStart Qb Tracking No. 3494**

**NRC SER OI Number 17.05-02:**

In RAI 17.5-6, the NRC staff requested that the applicant explain how the discussion of the Independent Review Committee responsibilities in Part II, Section 2.7 of the TVA QAPD is consistent with the requirements of American National Standards Institute (ANSI) N18.7. In its response dated June 26, 2008, the applicant proposed to revise the TVA QAPD Part II, Section 2.7 consistent with the proposed wording in NEI 06-14A, Revision 5. This issue will remain open until Revision 5 of NEI 06-14A is approved and TVA has incorporated the approved changes into the TVA QAPD. This is identified as Open Item 17.5-2.

**SNC Response:**

The revisions to the COL application associated with this open item cannot be completed until the NEI 06-14 template has been approved. Once this occurs, NEI must issue the approved (or –A) version of the template. Once the approved version of the template is issued, a supplemental response to this item will be provided that incorporates the appropriate changes into the COL application.

Note that the SER OI specifically refers to the TVA QAPD, but for the AP1000 COL applications based on NEI 06-14, the change is expected to be a standard change (as noted below).

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

**Associated VEGP COL Application Revisions:**

To be provided in a future supplemental response.



**eRAI Tracking No. 0066 – 17.5-7**

**NuStart Qb Tracking No. 3495**

**NRC SER OI Number 17.05-03:**

In RAI 17.5-7, dated May 12, 2008, the NRC staff requested that the applicant revise TVA QAPD Part II, Section 4 to substitute "TVA's" for "licensee's" to make it clear that a supplier may work under TVA's approved QA program. In its response dated June 26, 2008, the applicant stated that current use of "licensee's" is consistent with the wording in NEI 06-14A, Revision 4, which has been approved by the NRC staff. In a letter, dated September 17, 2008, the NRC staff requested NEI to address this question as part of a future revision to NEI 06-14A. This issue will remain open until Revision 5 of NEI 06-14A is approved and TVA has incorporated the approved changes into the TVA QAPD. This is identified as Open Item 17.5-3.

**SNC Response:**

The revisions to the COL application associated with this open item cannot be completed until the NEI 06-14 template has been approved. Once this occurs, NEI must issue the approved (or –A) version of the template. Once the approved version of the template is issued, a supplemental response to this item will be provided that incorporates the appropriate changes into the COL application.

Note that the SER OI specifically refers to the TVA QAPD, but for the AP1000 COL applications based on NEI 06-14, the change is expected to be a standard change (as noted below).

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

**Associated VEGP COL Application Revisions:**

To be provided in a future supplemental response.

**eRAI Tracking No. 0137 – 17.5-13**

**NuStart Qb Tracking No. 3496**

**NRC SER OI Number 17.05-04:**

The NRC staff evaluated and found to be acceptable the NVLAP and A2LA accreditation programs. In RAI 17.5-13, dated May 12, 2008, the NRC staff requested that the applicant justify the wording discrepancy between TVA QAPD Part II, Section 7.2 and Section 17.5 of NUREG-0800, Section II.L.8.c, regarding the NRC approved alternative for commercial grade calibration services. In its response dated June 24, 2008, the applicant stated that wording is consistent with the wording in NEI 06-14A, Revision 4, which has been approved by the NRC staff. In a letter, dated September 17, 2008, the NRC staff requested NEI to address this question as part of Revision 5 to NEI 06-14A. This issue will remain open until Revision 5 of NEI 06-14A is approved and TVA has incorporated the approved changes into the TVA QAPD. This is identified as Open Item 17.5-4.

**SNC Response:**

The revisions to the COL application associated with this open item cannot be completed until the NEI 06-14 template has been approved. Once this occurs, NEI must issue the approved (or –A) version of the template. Once the approved version of the template is issued, a supplemental response to this item will be provided that incorporates the appropriate changes into the COL application.

Note that the SER OI specifically refers to the TVA QAPD, but for the AP1000 COL applications based on NEI 06-14, the change is expected to be a standard change (as noted below).

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

**Associated VEGP COL Application Revisions:**

To be provided in a future supplemental response.

**eRAI Tracking No. 0137 – 17.5-14**

**NuStart Qb Tracking No. 3497**

**NRC SER OI Number 17.05-05:**

In RAI 17.5-14, the NRC staff requested that the applicant provide an explanation as to how RIS 2002-22 represents an example of other approved regulatory means for commercial grade dedication activities. In its response dated June 24, 2008, the applicant stated that wording is consistent with the wording in NEI 06-14A, Revision 4, which has been approved by the NRC staff. In a letter, dated September 17, 2008, the NRC staff requested NEI to address this question as part of Revision 5 to NEI 06-14A. This issue will remain open until Revision 5 of NEI 06-14A is approved and TVA has incorporated the approved changes into the TVA QAPD. This is identified as Open Item 17.5-5.

**SNC Response:**

The revisions to the COL application associated with this open item cannot be completed until the NEI 06-14 template has been approved. Once this occurs, NEI must issue the approved (or –A) version of the template. Once the approved version of the template is issued, a supplemental response to this item will be provided that incorporates the appropriate changes into the COL application.

Note that the SER OI specifically refers to the TVA QAPD, but for the AP1000 COL applications based on NEI 06-14, the change is expected to be a standard change (as noted below).

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

**Associated VEGP COL Application Revisions:**

To be provided in a future supplemental response.

**eRAI Tracking No. 0137 – 17.5-17**

**NuStart Qb Tracking No. 3498**

**NRC SER OI Number 17.05-06:**

The NRC staff also reviewed Appendix 1AA of the BLN COL FSAR, which lists BLN's conformance with NRC RGs and provides any exceptions to conformance with those RGs. In RAI 17.5-17, the NRC staff requested that the applicant explain how the QAPD provides an acceptable exception to the RGs described in Appendix 1AA. In its response (ML081780171), the applicant stated that Part IV of the TVA QAPD is consistent with Revision 4 of NEI 06-14A. Additionally, the applicant provided further information addressing these RGs in response to RAIs 17.5-15 and 17.5-17. The response to RAI 17.5-15 proposed revisions to Appendix 1AA and Parts II and IV of the QAPD, whereas the response to RAI 17.5-17 provided further justification. The applicant provided a response to RAI 1-5 in a letter dated August 19, 2008, to address the discrepancies between the revisions of the RGs addressed in Appendix 1AA and those addressed in Westinghouse DCD Appendix 1A. The information in this letter appears to have superseded the changes that were proposed and acceptable to the NRC staff in the applicant's June 24, 2008 letter, thereby reopening the issue identified in RAI 17.5-17. This is identified as Open Item 17.5-6.

**SNC Response:**

The revisions to the COL application identified in the referenced TVA August 19, 2008, letter, do indeed supersede the changes identified in the referenced TVA June 24, 2008, letter, as shown in Revision 1 of the Bellefonte COL application. A revision to the June 24, 2008, response to BLN-RAI-LTR-016 was recently submitted by TVA (July 13, 2009) to reflect the actual changes made to the FSAR and the QAPD.

Note that the SER OI specifically refers to the BLN COL FSAR and the TVA QAPD, but for the AP1000 COL applications based on NEI 06-14, the change is expected to be a standard change (as noted below).

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

**Associated VEGP COL Application Revisions:**

No COLA revisions have been identified associated with this response.