J. A. "Buzz" Miller Executive Vice President Nuclear Development Southern Nuclear Operating Company, Inc. 42 Inverness Center Parkway Post Office Box 1295 Birmingham, Alabama 35201

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JUL 16 2009

Docket Nos.: 52-025 52-026 ND-09-1089

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 Response to Bellefonte Units 3 and 4 Safety Evaluation Report Open Items for Chapter 10

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.

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

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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 <u>16th</u> day of <u>July</u> Notary Public: <u>Dana M. Williams</u> 2009 My commission expires: 12/29/2010

JAM/BJS/dmw

Enclosure: Response to R-COLA SER with Open Items, Chapter 10

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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, Nuclear Development Licensing Manager

Mr. M. J. Ajluni, Nuclear Licensing Manager

Mr. W. A. Sparkman, COL Project Engineer

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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)

Ms. S. M. Coffin, AP1000 Manager of New Reactors (w/o enclosure)

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

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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)

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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)

Dalton Utilities

Mr. D. Cope, President and Chief Executive Officer (w/o enclosure)

Bechtel Power Corporation

Mr. J. S. Prebula, Project Engineer (w/o enclosure) Mr. R. W. Prunty, Licensing Engineer

Tetra Tech NUS, Inc.

Ms. K. K. Patterson, Project Manager

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Shaw Stone & Webster, Inc.

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

Mr. R. J. Grumbir Mr. E. R. Grant Mr. B. Hirmanpour Mr. N. Haggerty Ms. K. N. Slays

Other NuStart Energy Associates Ms. M. C. Kray, NuStart 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 Mr. P. Hinnenkamp, Entergy 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-09-1089

Enclosure

Response to R-COLA SER with Open Items

Chapter 10

Open Item 10.01-01 Response Standard - See enclosed ND-09-1089 Enclosure Response to SER OIs for Chapter 10

eRAI Tracking No. 0169 – 10.3.6-1 NuStart Qb Tracking No. 3489 NRC SER OI Number 10.01-01:

The response to RAI 10.3.6-1 described how susceptibility to FAC will be evaluated as the design and as-built information becomes available, and high-risk (of FAC) components will be evaluated for baseline testing prior to startup. The staff had the following concerns:

•••

c) The applicant did not add the FAC program implementation schedule and construction phase activities to the COL application.

The applicant submitted a supplemental RAI response dated May 26, 2009 (ML091480012).

The revised response to RAIs 10.3.6-1, 10.3.6-2, and 10.3.6-3 therefore addressed all of the concerns identified above, with the exception of identifying the program implementation schedule in the application. This is **Open Item 10.1-1**.

SNC Response:

The FAC program implementation schedule, including the construction phase activities, will be included in the application as shown in the Application Revisions section below.

The changes shown below also include previous changes identified in the response to BLN-RAI-LTR-152 (reformatting and the addition of item e), and the response to question 13.03-25.Q included with BLN-RAI-LTR-122, Supplement 5 (revision of item b), and one minor editorial revision for consistency in the language (delete "the" in item b).

The identified changes will be included in a future application revision.

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

Associated VEGP COL Application Revisions:

COLA Part 10, proposed License Condition 6, will be revised from:

6. OPERATIONAL PROGRAM READINESS:

The NRC inspection of operational programs will be the subject of the following license condition in accordance with SECY-05-0197.

PROPOSED LICENSE CONDITION:

The licensee shall submit to the appropriate Director of the NRC, a schedule, no later than 12 months after issuance of the COL, that supports planning for and conduct of NRC inspections of operational programs listed in the operational program FSAR Table 13.4-201. The schedule shall be updated every 6 months until 12 months before scheduled fuel loading, and every month thereafter until either the operational programs in the FSAR table have been fully implemented or the plant has been placed in commercial service, whichever comes first.

- a. This schedule shall include a submittal schedule for the emergency planning implementation procedures to the NRC consistent with 10 CFR Part 50, Appendix E, Section V.
- b. This schedule shall include a schedule for the development of the site specific Severe Accident Management Guidance.
- c. This schedule shall include a submittal schedule for the reactor vessel pressurized thermal shock evaluation at least 18 months prior to initial fuel load.
- d. This schedule shall include a submittal schedule for approved preoperational and startup test procedures in accordance with FSAR Section 14.2.3.

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To read:

6. OPERATIONAL PROGRAM READINESS:

The NRC inspection of operational programs will be the subject of the following license condition in accordance with SECY-05-0197.

PROPOSED LICENSE CONDITION:

The licensee shall submit to the appropriate Director of the NRC, a schedule, no later than 12 months after issuance of the COL, that supports planning for and conduct of NRC inspections of operational programs listed in the operational program FSAR Table 13.4-201. The schedule shall be updated every 6 months until 12 months before scheduled fuel loading, and every month thereafter until either the operational programs in the FSAR table have been fully implemented or the plant has been placed in commercial service, whichever comes first.

This schedule shall include a submittal schedule for:

- a. the emergency planning implementation procedures to the NRC consistent with 10 CFR Part 50, Appendix E, Section V.
- b. the implementation of site specific Severe Accident Management Guidance.
- c. a reactor vessel pressurized thermal shock evaluation at least 18 months prior to initial fuel load.
- d. approved preoperational and startup test procedures in accordance with FSAR Subsection 14.2.3.
- e. an emergency response data system (ERDS) implementation program plan consistent with 10 CFR Part 50, Appendix E, Section V.
- f. a flow accelerated corrosion (FAC) program implementation schedule, including the construction phase activities.