J. A. "Buzz" Miller **Executive Vice President** Nuclear Development

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JUL 17 2009

Docket Nos.: 52-025

52-026

ND-09-1140

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 16

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.

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 17 day of July ..., 2009

Notary Public: Mais H. Buil

My commission expires: 04-01-2613

JAM/BJS/dmw

Enclosure:

1. Response to R-COLA SER with Open Items, Chapter 16

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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 Deployment Director

Mr. C. R. Pierce, Vogtle Development Licensing Manager

Mr. M. J. Ajluni, Nuclear Licensing Manager

Mr. W. A. Sparkman, COL Project Engineer

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File AR.01.02.06

Nuclear Regulatory Commission

Mr. L. A. Reyes, Region II Administrator (w/o enclosure)

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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

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

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Georgia Power Company

Mr. O. C. Harper, IV, Vice President, Resource Planning and Nuclear Development

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Mr. M. W. Price, Chief Operating Officer

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Ms. K. K. Patterson, Project Manager

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Mr. J. M. Oddo, Licensing Manager

Mr. D. C. Shutt, Licensing Engineer

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Mr. R. H. Kitchen, PGN

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Mr. R. Reister, DOE/PM

Southern Nuclear Operating Company

ND-09-1140

Enclosure

Response to R-COLA SER with Open Items

Chapter 16

Open Item Response

16.01-01 Standard - See enclosed

ND-09-1140 Enclosure Response to SER OIs for Chapter 16

eRAI Tracking No. 1450 NuStart Qb Tracking No. 3507 NRC SER OI Number 16.01-01:

Request for additional information (RAI) 16-1 was issued in accordance with COL/DC-ISG-8, and requested that the applicant identify the method of determining the trip setpoints and allowable values, as well as establish an associated document in which to record the site-specific values and other restrictions necessary to satisfy 10 CFR 50.36. The applicant should clarify that after selection of specific instrumentation, the trip setpoints and allowable values, referred to in Tables 3.3.1-1 and 3.3.2-1, will be calculated using the setpoint control program that specifies the approved methodology (i.e., WCAP-16361, APP-PMS-JEP-001, Revision 0, May 2006, "Westinghouse Setpoint Methodology for Protection Systems – AP1000"). In addition, the applicant should propose a setpoint control program to be added in the Administrative Control section of the TS, as stated in COL/DC-ISG-8. This is identified as Open Item 16.1-1.

SNC Response:

The selection of the trip setpoints and allowable values referred to in Tables 3.3.1-1 and 3.3.2-1, have been calculated using the approved methodology (i.e., WCAP-16361, APP-PMS-JEP-001, Revision 0, May 2006, "Westinghouse Setpoint Methodology for Protection Systems – AP1000"). This has already been addressed by the DCD in the closure of the COL item in Subsection 7.1.6 of the DCD (which is incorporated by reference into Chapter 7 of the COL application).

The response to RAI 16-1 clearly identified our response as having removed the brackets and provided the appropriate plant-specific values, which is consistent with Option 1 of ISG-8. The response further stated that "should new information become available that results in the need for a change to the Technical Specifications, an amendment will be sought in accordance with the pertinent regulations. Otherwise, the plant will be operated with the values provided in the PTS [Plant-specific Technical Specifications]." The guidance of ISG-8 indicates that a setpoint control program is necessary only when the applicant chooses Option 3 and further states "Such an administrative controls technical specification as described in Option (3) shall require (a) use of an NRC-reviewed and -approved methodology for determining the plant-specific value, (b) establishment of an associated document, outside the PTS, in which the relocated plant-specific value shall be recorded and maintained, and (c) any other information or restrictions the NRC staff deems necessary and appropriate to satisfy 10 CFR 50.36." Given the plant specific values are provided in the COL plant-specific Technical Specifications (as identified in ISG-8 Option 1) and the setpoint controls provided by the license amendment process, no additional setpoint control program is necessary.

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.