

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



MAR 01 2010

Docket Nos.: 52-025  
52-026

ND-10-0383

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  
Revised 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 Reference COL applicant. This response replaces the previous response submitted on July 17, 2009 (ADAMS ML092030409). 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 or Ms. Amy Aughtman at (205) 992-5805.

D092  
NR0

Mr. C.R. Pierce states he is the AP1000 Licensing Manager 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

*Charles R. Pierce*

Charles R. Pierce

Sworn to and subscribed before me this 1st day of March, 2010

Notary Public: Deborah A. Jaworski

My commission expires: October 24, 2012

CRP/BJS/dmw

Enclosure: Response to R-COLA SER with Open Items, Chapter 16



cc: Southern Nuclear Operating Company

Mr. J. H. Miller, III, President and CEO (w/o enclosure)  
Mr. J. A. Miller, Executive Vice President, Nuclear Development (w/o enclosure)  
Mr. J. T. Gasser, Executive Vice President, Nuclear Operations (w/o enclosure)  
Mr. D. H. Jones, Site Vice President, Vogtle 3 & 4 (w/o enclosure)  
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Mr. T. E. Tynan, Vice President - Vogtle (w/o enclosure)  
Mr. D. M. Lloyd, Vogtle 3 & 4 Project Support Director (w/o enclosure)  
Mr. M. K. Smith, Technical Support Director (w/o enclosure)  
Mr. M. J. Ajluni, Nuclear Licensing Manager  
Mr. J. D. Williams, Vogtle 3 & 4 Site Support Manager  
Mr. J. T. Davis, Vogtle 3 & 4 Site Licensing Manager  
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Document Services RTYPE: AR01.1053  
File AR.01.02.06

Nuclear Regulatory Commission

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

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Mr. N. C. Boyter, Consortium Project Director Vogtle Units 3 & 4 (w/o enclosure)

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Mr. M. A. Melton, Manager, Regulatory Interfaces

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

Mr. D. A. Lindgren, Principal Engineer, AP1000 Licensing and Customer Interface

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**Southern Nuclear Operating Company**

**ND-10-0383**

**Enclosure**

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

**Chapter 16**

**Open Item**

**Response**

**16.01-01**

**July 17, 2009; Revised - See enclosed**

**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:**

This response completely supersedes the response provided on July 17, 2009.

The operating trip setpoints and allowable values (for the RTS Instrumentation and the ESFAS Instrumentation listed in Technical Specification Tables 3.3.1-1 and 3.3.2-1) will be calculated using the approved methodology (i.e., WCAP-16361, APP-PMS-JEP-001, Revision 0, May 2006, "Westinghouse Setpoint Methodology for Protection Systems – AP1000").

As requested, the plant specific technical specification Administrative Controls section will be revised as discussed in the COL Application Revision section below to incorporate a setpoint control program. The COL Application Revision section below also identifies the necessary corresponding changes to other plant specific technical specifications and bases.

Westinghouse included these same changes in a recent submittal and will include these in an upcoming amendment to the AP1000 DCD generic technical specifications, and as such, these changes are not considered to be a departure from the DCD. Should Westinghouse not incorporate these changes as expected, a revision to this response will be provided to address the differences.

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

**Associated VEGP COL Application Revisions:**

*See attachments to Westinghouse letter DCP/NRC2784 (dated February 19, 2010) - the same changes identified in the Westinghouse letter for the DCD Generic Technical Specifications and Bases will be directly incorporated into the COL plant-specific Technical Specifications and Bases.*