

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

OCT 29 2009



Docket Nos.: 52-025
52-026

ND-09-1733

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 Request for Additional Information Letter No. 042

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. SNC subsequently submitted a letter dated May 29, 2009, that identified changes that will be made to a future revision of the VEGP Units 3 and 4 COL application to address NRC requirements in 10 CFR 52.80 (d). During their detailed review of this application, the NRC identified a need for additional information required to complete their review of the COL application's Loss of Large Areas of the Plant Mitigative Strategies Plan that was submitted to the NRC by the May 29, 2009 letter. By letter received October 1, 2009, the NRC provided SNC with Request for Additional Information (RAI) letter No. 042 concerning this information need. This RAI letter contains 68 RAI questions, numbered 19-10 through 19-79 (including 2 deleted draft RAIs). The enclosures to this letter provide the SNC responses to these questions. Enclosure 1 provides the responses to 41 of these questions that were developed without significant input from the AP1000 reactor vendor; Enclosure 2 provides the interim responses for the remaining 27 questions that require reactor vendor support and are expected to be applicable to AP1000 S-COLAs that also receive this question.

This letter identifies changes that will be made to a future revision of the Vogtle Electric Generating Plant (VEGP) Units 3 and 4 combined license application (COLA) to address Nuclear Regulatory Commission (NRC) requirements in 10 CFR 52.80(d).

The RAI responses provided in Enclosures 1 and 2 contain Security-Related Information, and accordingly SNC requests that these enclosures be withheld from public disclosure under 10 CFR 2.390(d).

D09Z
NRD

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

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

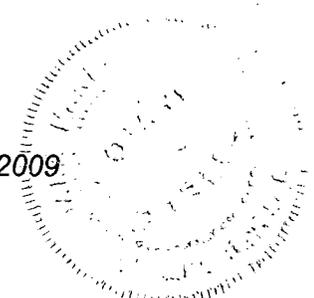
Charles R. Pierce

Charles R. Pierce

Sworn to and subscribed before me this 29th day of October, 2009

Notary Public: Dana M Williams

My commission expires: 12/29/2010



CRP/NH/dmw

- Enclosures: 1. Response to NRC RAI Letter No. 042 on the VEGP Units 3 & 4 COL Application involving the Loss of Large Areas of the Plant Mitigative Strategies Plan (Reactor Vendor Input not Required)
2. Response to NRC RAI Letter No. 042 on the VEGP Units 3 & 4 COL Application involving the Loss of Large Areas of the Plant Mitigative Strategies Plan (Reactor Vendor Input Required)

Attachment: 19-10, Partial Site Plan

cc: Southern Nuclear Operating Company

Mr. J. H. Miller, III, President and CEO (w/o enclosures)
Mr. J. A. Miller, Executive Vice President, Nuclear Development (w/o enclosures)
Mr. J. T. Gasser, Executive Vice President, Nuclear Operations (w/o enclosures)
Mr. D. H. Jones, Site Vice President – Vogtle 3 and 4 (w/o enclosures)
Mr. T. E. Tynan, Vice President - Vogtle (w/o enclosures)
Mr. M. K. Smith, Technical Support Director
Mr. D. M. Lloyd, Vogtle 3 and 4 Project Support Director
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 enclosures)
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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
Ms. S. Goetz, Project Manager of New Reactors
Mr. J. M. Sebrosky, Project Manager of New Reactors
Mr. D. C. Habib, Project Manager of New Reactors
Mr. C. P. Patel, Project Manager of New Reactors
Ms. M. A. Sutton, Environmental Project Manager
Mr. M. D. Notich, Environmental Project Manager
Mr. L. M. Cain, Senior Resident Inspector of VEGP

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Mr. M. W. Price, Chief Operating Officer (w/o enclosures)
Mr. K. T. Haynes, Director of Contracts and Regulatory Oversight

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

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Shaw Stone & Webster, Inc.

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Westinghouse Electric Company, LLC

Mr. W. E. Cummins, Vice President of Regulatory Affairs and Standardization
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Mr. N. C. Boyter, Consortium Project Director Vogtle Units 3 & 4 (w/o enclosures)
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

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Mr. N. T. Simms, Duke Energy
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Mr. R. H. Kitchen, PGN
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Mr. R. Reister, DOE/PM