

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



November 13, 2009

Docket Nos.: 52-025
52-026

ND-09-1846

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
Supplemental Response to Request for Additional Information Letter No. 042
Loss of Large Areas of the Plant due to Explosions or Fire

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 contained 68 RAI questions, numbered 19-10 through 19-79 (including 2 deleted draft RAIs). SNC provided responses to these RAI questions by letter dated October 29, 2009. The enclosure to this letter provides supplemental SNC responses to 27 questions that were determined to require reactor vendor support and are expected to be applicable to AP1000 S-COLAs that also receive these questions.

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

The enclosure to this letter contains Security-Related Information, and accordingly SNC requests that this enclosure be withheld from public disclosure under 10 CFR 2.390(d).

DO92
NRO

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

Mr. Charles 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 13th day of November, 2009

Notary Public: Deborah A. Jaworski

My commission expires: October 24, 2012

CRP/BJS/dmw

Enclosure: Supplemental 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)



cc: Southern Nuclear Operating Company

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Document Services RTYPE: AR01.1053
File AR.01.02.06

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