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Docket Nos.: 52-025  
52-026

ND-10-0243

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. That 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 letters dated October 29, 2009, November 13, 2009, and December 23, 2009. However, based on teleconference calls with the NRC and additional follow-up by SNC, the responses to five of these RAIs are being revised. The enclosure to this letter provides SNC's supplemental responses to these five RAIs.

This letter identifies 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).

**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).**

DD92  
NRD

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

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 5th day of February, 2010

Notary Public: Deborah A. Jaworski

My commission expires: October 24, 2012

JAM/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 Description



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 & 4 (w/o enclosure)  
Mr. B. L. Ivey, Vice President, Nuclear Development Support (w/o enclosure)  
Mr. T. E. Tynan, Vice President - Vogtle (w/o enclosure)  
Mr. M. K. Smith, Technical Support Director (w/o enclosure)  
Mr. D. M. Lloyd, Vogtle 3 & 4 Project Support Director (w/o enclosure)  
Mr. C. R. Pierce, AP1000 Licensing Manager  
Mr. M. J. Ajluni, Nuclear Licensing Manager (w/o enclosure)  
Mr. J. D. Williams, Vogtle 3 & 4 Site Support Manager (w/o enclosure)  
Mr. J. T. Davis, Vogtle 3 & 4 Site Licensing Manager (w/o enclosure)  
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 enclosure)  
Mr. F.M. Akstulewicz, Deputy Director Div. of Safety Systems & Risk Assess. (w/o encl.)  
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Mr. M. D. Notich, Environmental Project Manager (w/o enclosure)  
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Mr. O. C. Harper, IV, Vice President, Resource Planning and Nuclear Development (w/o enclosure)

Oglethorpe Power Corporation

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

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

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Mr. J. S. Prebula, Project Engineer (w/o enclosure)  
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Ms. K. K. Patterson, Project Manager (w/o enclosure)

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Mr. D. C. Shutt, Licensing Engineer (w/o enclosure)

Westinghouse Electric Company, LLC

Mr. S. D. Rupprecht, Vice President of Regulatory Affairs & Strategy (w/o enclosure)

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

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Mr. R. B. Sisk, Manager, AP1000 Licensing and Customer Interface (w/o enclosure)

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Other NuStart Energy Associates

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Ms. A. L. Sterdis, TVA (w/o enclosure)

Mr. J. P. Berger, EDF (w/o enclosure)

Mr. M. W. Gettler, FP&L (w/o enclosure)

Mr. P. Hinnenkamp, Entergy (w/o enclosure)

Mr. G. D. Miller, PG&N (w/o enclosure)

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Mr. R. H. Kitchen, PGN (w/o enclosure)

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Mr. T. Beville, DOE/PM