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DEC 17 2008

Docket Nos.: 52-025
52-026

ND-08-1876

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. 015

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. During the NRC's detailed review of this application, the NRC identified a need for additional information, involving the program to monitor and maintain the quality of the fire water supply, required to complete their review of the COL application's Final Safety Analysis Report (FSAR) Subsection 9.5.1.2.1.3, "Fire Water Supply System." By letter dated November 26, 2008, the NRC provided SNC with Request for Additional Information (RAI) Letter No. 015 concerning this fire water supply quality information need. This RAI letter contains one RAI question numbered 09.05.01-1. The enclosure to this letter provides the SNC response to this RAI.

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

DO92
NRO

Mr. J. A. (Buzz) Miller states he is a Senior 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 December, 2008

Notary Public: Alvin H. Buin

My commission expires: 05/06/09

JAM/BJS/lac

Enclosure: Response to NRC RAI Letter No. 015 on the VEGP Units 3 & 4 COL Application
Involving Quality of Fire Water Supply

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. T. E. Tynan, Vice President - Vogtle (w/o enclosure)
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
Document Services RTYPE: AR01.1053
File AR.01.02.06

Nuclear Regulatory Commission

Mr. L. A. Reyes, Region II Administrator (w/o enclosure)
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Mr. D. B. Matthews, Director of Division of New Reactor Licensing (w/o enclosure)
Ms. S. M. Coffin, AP1000 Manager of New Reactors (w/o enclosure)
Mr. C. J. Araguas, Lead Project Manager of New Reactors
Mr. B. Hughes, Project Manager of New Reactors
Mr. R. G. Joshi, 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. S. C. Flanders, Director of Site and Environmental Reviews
Mr. W. F. Burton, Chief – Environmental Technical Support
Mr. M. D. Notich, Environmental Project Manager
Mr. J. H. Fringer, III, Environmental Project Manager
Mr. G. J. McCoy, Senior Resident Inspector of VEGP

Georgia Power Company

Mr. O. C. Harper, IV, Vice President, Resource Planning and Nuclear Development (w/o enclosure)

Oglethorpe Power Corporation

Mr. M. W. Price, Chief Operating Officer (w/o enclosure)

Municipal Electric Authority of Georgia

Mr. C. B. Manning, Jr., Senior Vice President, Participant and Corporate Affairs (w/o enclosure)

Dalton Utilities

Mr. D. Cope, President and Chief Executive Officer (w/o enclosure)

Bechtel Power Corporation

Mr. J. S. Prebula, Project Engineer (w/o enclosure)
Mr. R. W. Prunty, Licensing Engineer

Tetra Tech NUS, Inc.

Ms. K. K. Patterson, Project Manager

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Shaw Stone & Webster, Inc.

Mr. K. B. Allison, Project Manager (w/o enclosure)

Mr. J. M. Oddo, Licensing Manager

Westinghouse Electric Company, LLC

Mr. N. C. Boyter, Vice President, AP1000 Vogtle 3 & 4 Project (w/o enclosure)

Mr. J. L. Whiteman, Principal Engineer, Licensing & Customer Interface

Southern Nuclear Operating Company

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Enclosure

**Response to NRC RAI Letter No. 015
on the VEGP Units 3 & 4 COL Application
Involving
Quality of Fire Water Supply**

FSAR Subsection 9.5.1.2.1.3, Fire Water Supply System

eRAI Tracking No. 1396

NRC RAI Number 09.05.01-1:

RG 1.206, Regulatory Position C.III.1, Section C.I.9.5.1.1 identifies that the applicant should provide site specific information on the fire water supply system. RG 1.189 states that fire water supply should be filtered and treated as necessary to prevent or control bio-fouling or microbiologically-induced corrosion of the fire water system. Since the Vogtle COL application identifies the well water subsystem of the raw water system as the water source for filling and makeup to the primary and secondary fire water storage tanks, the applicant should describe the program to monitor and maintain an acceptable level of quality of the fire water supply.

SNC Response:

As noted above, and as described in FSAR Subsection 9.2.11.1.2, the well water subsystem of the raw water system is the water source for filling and makeup to the primary and secondary fire water storage tanks. As described in ESP SSAR Subsection 2.4.12.2, the wells will be installed in the Cretaceous Aquifer.

No filtration or water treatment of the well water supplied to the fire water storage tanks is expected. This is based on experience with the similar well water system supporting existing VEGP Units 1 and 2. The fire water supply for Units 1 and 2 is also supplied from wells installed in the same Cretaceous Aquifer. No filtration or water treatment has been necessary for the well water that is supplied to the Units 1 and 2 fire water system. No significant issues related to bio-fouling or microbiologically induced corrosion have been experienced on the Unit 1 and 2 fire water system.

As described in FSAR Subsection 9.2.11.1.2, the well water subsystem of the raw water system also serves as the source water for the potable water system (PWS) and the demineralized water treatment system (DTS). As such, the well water will be sampled upon initial installation of the wells and will be routinely monitored as required to support the proper operation of the water treatment systems on the PWS and DTS systems and as required to meet state drinking water requirements. It is expected that this monitoring will be adequate to identify any issues that could impact the fire water and no separate monitoring specifically focusing on the fire water supply is planned. If any water quality concerns are discovered as a result of the monitoring of the well water, appropriate actions will be taken to prevent or control bio-fouling and microbiologically-induced corrosion.

Associated VEGP COL Application Revisions:

None