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Docket Nos.: 52-025
52-026

ND-10-0993

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. 056

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 inservice testing program for squib valves, required to complete their review of the COL application's Final Safety Analysis Report (FSAR) Section 3.9.6, "Functional Design Qualification and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints." By letter dated April 29, 2010, the NRC provided SNC with Request for Additional Information (RAI) Letter No. 056 concerning this information need. That RAI letter contained one RAI question numbered 03.09.06-01. The enclosure to this letter provides SNC's response to this RAI.

This letter identifies changes that will be made to a future revision of the VEGP Units 3 and 4 combined license application (COLA).

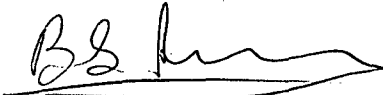
If you have any questions regarding this letter, please contact Mr. Wes Sparkman at (205) 992-5061.

DO92
NRO

Mr. B. L. Ivey states he is a 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



B. L. Ivey

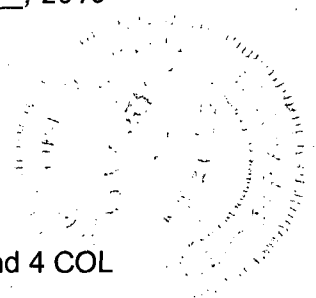
Sworn to and subscribed before me this 27th day of May, 2010

Notary Public: Nancy Louise Henderson

My commission expires: March 23, 2014

BLI/BJS

Enclosure: Response to NRC RAI Letter No. 056 on the VEGP Units 3 and 4 COL
Application



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)
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)
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Mr. M. J. Ajluni, Nuclear Licensing Manager
Mr. T. C. Moorer, Manager – Env. Affairs, Chemistry and Rad. Services
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Document Services RTYPE: AR01.1053
File AR.01.02.06

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Municipal Electric Authority of Georgia

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Mr. N. C. Boyter, Consortium Project Director Vogtle Units 3 & 4 (w/o enclosure)
Mr. S. A. Bradley, Vogtle Project Licensing Manager
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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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Mr. R. H. Kitchen, PGN
Ms. A. M. Monroe, SCE&G
Mr. T. Beville, DOE/PM

Southern Nuclear Operating Company

ND-10-0993

Enclosure

Response to NRC RAI Letter No. 056

on the

VEGP Units 3 and 4 COL Application

FSAR Section 3.9.6, Inservice Testing of Pumps and Valves

eRAI Tracking No. 4645

NRC RAI Number 03.09.06-01

General Design Criterion 1, "Quality Standards and Records," in 10 CFR Part 50, Appendix A, requires that codes and standards to be applied shall be evaluated to determine their applicability, adequacy, and sufficiency; and shall be supplemented or modified as necessary to assure a quality product in keeping with the required safety function. Section C.IV.4 in Regulatory Guide 1.206 discusses the requirement in 10 CFR 52.79(a) for descriptions of operational programs that need to be included in the FSAR for a COL application to allow a reasonable assurance finding of acceptability. In particular, a COL applicant should fully describe the inservice testing (IST) program as defined in SECY-05-197 (accepted in an SRM dated February 22, 2006). Subsection ISTC-5260, "Explosively Actuated Valves," in the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) specifies that at least 20% of the charges in explosively actuated valves shall be fired and replaced at least once every 2 years.

In light of the updated design and safety significance of squib valves in new reactors, the need for improved surveillance activities for squib valves is being considered by the nuclear industry, ASME, and U.S. and international nuclear regulators. The NRC staff requests that Southern Nuclear describe in the Vogtle FSAR its plans for establishing appropriate surveillance activities for squib valves in support of the Vogtle COL application. For example, the Vogtle FSAR should indicate that the IST program for squib valves at Vogtle Units 3 & 4 will be developed to incorporate lessons learned from the design and qualification process for these valves such that surveillance activities provide reasonable assurance of the operational readiness of squib valves to perform their safety functions.

SNC Response:

This RAI requested annotating the FSAR description to include additional details for establishing the IST program for squib valves to address lessons learned and improved surveillance activities being considered by nuclear industry. Testing of explosively actuated valves is described in subsection 3.9.6.2.2 "Valve testing" of DCD. This section of the DCD is incorporated by reference into the FSAR. Therefore, FSAR section 3.9.6.2.2 will be supplemented in a future submittal of the COLA to include consideration of lessons learned and industry development as shown in the Associated VEGP COL Application Revisions section that follows.

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

Associated VEGP COL Application Revisions:

COLA Part 2, FSAR Chapter 3, Subsection 3.9.6.2.2, will be revised to include the following new paragraph with a left margin annotation (LMA) of STD COL 3.9-4:

Add the following new paragraph under the heading "Other Valve Inservice Tests" following the Explosively Actuated Valves paragraph in DCD Subsection 3.9.6.2.2:

Industry and regulatory guidance is considered in development of the IST program for squib valves. In addition, the IST program for squib valves incorporate lessons learned from the design and qualification process for these valves such that surveillance activities provide reasonable assurance of the operational readiness of squib valves to perform their safety functions.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None