B. L. "Pete" Ivey
Vice President
Nuclear Development Support

Southern Nuclear Operating Company, Inc.
42 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35242

Tel 205.992.7619
Fax 205.992.5217

SOUTHERN COMPANY

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Docket Nos.: 52-025
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ND-11-0253

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
Information to Address ACRS Questions

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. Following the NRC's detailed review of the initial AP1000 Reference COL application and issuance of an advanced final safety evaluation report (AFSER), the Advisory Committee for Reactor Safeguards (ACRS) also reviewed the application. VEGP is addressing one of the questions from the ACRS members in the enclosure to this letter as the new Reference COL applicant.

If you have any questions regarding this letter, please contact Mr. Wes Sparkman at (205) 992-5061 or Ms. Amy Aughtman at (205) 992-5805.

D092
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 8th *day of* February, *2011*

Notary Public: Nancy Louise Henderson

My commission expires: March 23, 2014

BLI/BJS

Enclosure: VEGP Units 3 and 4 COL Application - Information to Address ACRS Question

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)
Mr. M. J. Ajluni, Nuclear Licensing Director
Mr. C. R. Pierce, AP1000 Licensing Manager
Mr. T. C. Moorer, Manager, Environmental Affairs, Chemistry and Rad. Services
Mr. J. D. Williams, Vogtle 3 & 4 Site Support Manager
Mr. J. T. Davis, Vogtle 3 & 4 Site Licensing Supervisor
Mr. W. A. Sparkman, COL Project Engineer
Ms. A. G. Aughtman, Lead AP1000 Licensing Project Engineer
Document Services RTYPE: COR0507-03
File AR.01.02.06

Nuclear Regulatory Commission
Mr. V. M. McCree, Region II Administrator
Mr. F. M. Akstulewicz, Deputy Director Div. of Safety Systems & Risk Assess. (w/o encl.)
Mr. R. G. Joshi, Lead 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
Ms. D. L. McGovern, Project Manager of New Reactors
Ms. T. L. Spicher, 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 1 & 2
Mr. J. D. Fuller, Senior Resident Inspector of VEGP 3 & 4

Georgia Power Company
Mr. T. W. Yelverton, Nuclear Development Director
Ms. A. N. Faulk, Nuclear Regulatory Affairs Manager

Oglethorpe Power Corporation
Mr. M. W. Price, Executive Vice President and Chief Operating Officer
Mr. K. T. Haynes, Director of Contracts and Regulatory Oversight

Municipal Electric Authority of Georgia
Mr. J. E. Fuller, Senior Vice President, Chief Financial Officer
Mr. S. M. Jackson, Vice President, Power Supply

Dalton Utilities
Mr. D. Cope, President and Chief Executive Officer

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

Shaw Stone & Webster, Inc.
Mr. B. Davis, Vogtle Project Manager (w/o enclosure)
Mr. J. M. Oddo, Licensing Manager

Westinghouse Electric Company, LLC
Mr. S. D. Rupprecht, Vice President, New Plant Product Services (w/o enclosure)
Mr. R. J. Buechel, Consortium Project Director Vogtle Units 3 & 4 (w/o enclosure)
Mr. R. F. Ziesing, Director, US Licensing, NPP
Mr. S. A. Bradley, Vogtle Project Licensing Manager
Mr. M. A. Melton, Manager, Regulatory Interfaces
Mr. D. A. Lindgren, Principal Engineer, AP1000 Licensing and Customer Interface

NuStart Energy
Mr. R. J. Grumbir
Mr. E. R. Grant
Mr. P. S. Hastings
Mr. B. Hirmanpour
Mr. N. Haggerty
Ms. K. N. Slays

Other NuStart Energy Associates
Ms. M. C. Kray, NuStart
Mr. S. P. Frantz, Morgan Lewis
Mr. J. A. Bailey, TVA
Ms. A. L. Sterdis, TVA
Mr. M. Vidard, EDF
Mr. W. Maher, FP&L
Mr. K. Hughey, Entergy
Mr. N. T. Simms, Duke Energy
Mr. G. A. Zinke, NuStart & Entergy
Mr. R. H. Kitchen, PGN
Ms. A. M. Monroe, SCE&G
Mr. T. Miller, DOE/PM

Southern Nuclear Operating Company

ND-11-0253

Enclosure

VEGP Units 3 and 4 COL Application -

Information to Address ACRS Question

eRAI Tracking No. 3951
NuStart Qb Tracking No. 4254
Re: NRC SER OI Number 15.00-01:

Information related to COL SER open item 15.00-01 was provided in Southern Nuclear Operating Company (SNC) letter ND-10-2091 dated October 29, 2010. During ACRS review of the R-COLA, there was a question as to whether the applicant had sufficiently committed to complete the required calibrations.

In that letter, the four items from the Safety Evaluation Report for use of the Caldon CheckPlus™ Leading Edge Flow Meter (LEFM) were addressed. Item 4 of the SER requested:

4. Licensees for plant installations where the LEFM was not installed with flow elements calibrated to a site-specific piping configuration (flow profiles and meter factors not representative of the plant-specific installation), should provide additional justification for use. This justification should show either that the meter installation is independent of the plant-specific flow profile for the stated accuracy, or that the installation can be shown to be equivalent to known calibrations and the plant configuration for the specific installation, including the propagation of flow profile effects at higher Reynolds numbers. Additionally, for previously installed and calibrated LEFM, the licensee should confirm that the piping configuration remains bounding for the original LEFM installation and calibration assumptions."

To address the ACRS question regarding the clarity of the commitment, the information provided to address this SER item is revised to read as follows:

4. This application represents construction of a new plant with no previously installed flow metering equipment. The AP1000 main feedwater flow measurement instrumentation, consistent with the use of normalized flow meters, is required to be calibrated at a certified test laboratory in hydraulic model geometry consistent with AP1000 plant design. Prior to installation, the LEFM Check Plus System will be calibrated at a certified facility (e.g., Alden Research Laboratories) with a test model representative of plant piping configurations. Calibration standards will be traceable to National Institute of Standards and Technology standards. After installation in the plant, the LEFM Check Plus System will be tested in accordance with the LEFM Check Plus system commissioning procedure developed by Cameron to confirm that the actual instrument performance is consistent with the assumptions of the uncertainty calculation. Therefore, additional justification for use of the LEFM is not required.

In addition, the material included in FSAR Chapter 15, Subsection 15.0.3.2 will also be revised as shown below in the Application Revisions section.

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

Associated VEGP COL Application Revisions:

COLA Part 2 (Rev. 4), FSAR Chapter 15, Subsection 15.0.3.2, will be revised from:

The plant operating instrumentation selected for feedwater flow measurement is a Caldon [Cameron] LEFM CheckPlus™ System (Reference 201). This selected plant operating instrumentation has documented instrumentation uncertainties to calculate a power calorimetric uncertainty that confirms the 1% uncertainty assumed for the initial reactor power in the safety analysis bounds the calculated calorimetric power measurement uncertainty values. This calculated calorimetric is done in accordance with a previously accepted Westinghouse methodology (Reference 202). Administrative controls implement maintenance and contingency activities related to the power calorimetric instrumentation.

To read:

The plant operating instrumentation selected for feedwater flow measurement is a Caldon [Cameron] LEFM CheckPlus System (Reference 201), which will be calibrated (in a certified laboratory using a piping configuration representative of the plant piping design) prior to installation and will be tested after installation in the plant in accordance the LEFM CheckPlus commissioning procedure. This selected plant operating instrumentation has documented instrumentation uncertainties to calculate a power calorimetric uncertainty that confirms the 1% uncertainty assumed for the initial reactor power in the safety analysis bounds the calculated calorimetric power uncertainty values. The calculated calorimetric is done in accordance with a previously accepted Westinghouse methodology (Reference 202). Administrative controls implement maintenance and contingency activities related to the power calorimetric instrumentation.