

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



NOV 02 2010

Docket Nos.: 52-025
52-026

ND-10-2114

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. 063

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 regarding construction impact evaluations. By letter dated October 6, 2010, the NRC provided SNC with Request for Additional Information (RAI) Letter No. 063 concerning this information need. This RAI letter contains one RAI numbered 01.05-2. The enclosure to this letter provides the SNC response to this request. Note that this item is also related to Safety Evaluation Report (SER) Open Item 1.4-3 for the AP1000 Reference COL Application.

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 or Ms. Amy Aughtman at (205) 992-5805.

DO92
NRD

Mr. C. 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

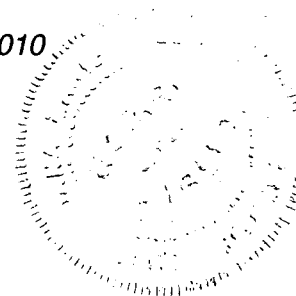
Sworn to and subscribed before me this 2nd day of November, 2010

Notary Public: Dana Marie Williams

My commission expires: 12/29/2010

CRP/AGA

Enclosure: VEGP Units 3 and 4 COL Application - Response to NRC RAI Letter No. 063



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. B. L. Ivey, Vice President, Nuclear Development Support (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 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. L. A. Reyes, 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

Enclosure

**VEGP Units 3 and 4 COL Application –
Response to NRC RAI Letter No. 063**

eRAI Tracking No. 5115

NuStart Qb Tracking No. 4239

NRC SER OI Number 01.04-03 and NRC RAI Number 01.05-2:

A new Interim Staff Guidance (ISG)-22 is being issued to assist the staff with the evaluation of COL applicants' compliance with the requirements of 10 CFR 52.79(a)(31). The above interim Guidance document was made available to the public including the applicant and was discussed at a public meeting on August 26, 2010.

The regulation at 10 CFR 52.79(a)(31) requires, in part, applicants for a combined license (COL) intending to construct and operate new nuclear power plants (NPPs) on multi-unit sites to provide an evaluation of the potential hazards to the structures, systems, and components (SSCs) important to safety for operating units resulting from construction activities on the new units. The requirement in 10 CFR 52.79(a)(31) can be viewed as having two subparts:

1. The COL applicant must evaluate the potential hazards from constructing new plants on SSCs important to safety for existing operating plants that are located at the site.
2. The COL applicant must evaluate the potential hazards from constructing new plants on SSCs important to safety for newly constructed plants that begin operation at the site.

The interim guidance requires that the applicant provide a construction impact evaluation plan that contains:

- A discussion of the construction activity identification process and the impact evaluation criteria used to identify and evaluate the construction activities that may pose potential hazards to the SSCs important to safety for operating unit(s).
- A table of those construction activities and the potential hazards that are identified using that construction impact evaluation plan, the SSCs important to safety for the operating unit potentially impacted by the construction activity, and expected mitigation method.
- Identification of the managerial and administrative controls, such as proposed license conditions that may involve construction schedule constraints or other restrictions on construction activities, that are credited to preclude and/or mitigate the impacts of potential construction hazards to the SSCs important to safety for the operating unit(s).
- A discussion of the process for communications and interactions planned and credited between the construction organization and the operations organization to ensure appropriate coordination and authorization of construction activities and implementation of the prevention or mitigation activities as necessary.
- A memorandum of understanding or agreement (MOU or MOA) between the COL applicant and the operating unit(s) licensee as a mechanism for communications, interactions, and coordination to manage the impact of the construction activities.
- An implementation schedule corresponding to construction tasks or milestones to ensure the plan is reviewed on a recurring basis and maintained current as construction progresses.

The staff has reviewed the VEGP COL FSAR Section 1.10 which provides information to address compliance with 10 CFR 52.79(a)(31). In order to complete the staff's review, the following information is required:

Please provide a construction impact evaluation plan that contains:

- A discussion of the process for communications and interactions planned and credited between the construction organization and the operations organization to ensure

appropriate coordination and authorization of construction activities and implementation of the prevention or mitigation activities as necessary.

- A memorandum of understanding or agreement (MOU or MOA) between the COL applicant and the operating unit(s) licensee as a mechanism for communications, interactions, and coordination to manage the impact of the construction activities.
- An implementation schedule corresponding to construction tasks or milestones to ensure the plan is reviewed on a recurring basis and maintained current as construction progresses.

In addition, please identify the managerial and administrative controls (VEGP COL FSAR Table 1.10-203) that are credited to preclude and/or mitigate the impacts of potential construction hazards to the SSCs important to safety for the operating units (Vogtle Units 1 and 2).

SNC Response:

A compliance statement follows each item from the guidance as identified below.

A construction impact evaluation plan that contains:

1. A discussion of the process for communications and interactions planned and credited between the construction organization and the operations organization to ensure appropriate coordination and authorization of construction activities and implementation of the prevention or mitigation activities as necessary.

Compliance statement: Final Safety Analysis Report (FSAR) Subsections 1.10.2 and 13AA.1.1.1.1.8 are revised as shown in the Application Revisions section below to improve the discussion of the process for communications and interactions planned and credited between the construction organization and the operations organization.

2. A memorandum of understanding or agreement (MOU or MOA) between the COL applicant and the operating unit(s) licensee as a mechanism for communications, interactions, and coordination to manage the impact of the construction activities.

Compliance statement: The COL applicant and the operating unit(s) licensee are the same entity, thus, no MOU or MOA is considered necessary.

3. An implementation schedule corresponding to construction tasks or milestones to ensure the plan is reviewed on a recurring basis and maintained current as construction progresses.

Compliance statement: FSAR Subsections 1.10.3 and 13AA.1.1.1.1.8 are revised as shown in the Application Revisions section below to improve the discussion of the implementation schedule corresponding to construction tasks or milestones.

In addition, please identify the managerial and administrative controls (VEGP COL FSAR Table 1.10-203) that are credited to preclude and/or mitigate the impacts of potential construction hazards to the SSCs important to safety for the operating units (Vogtle Units 1 and 2).

Compliance statement: As indicated in the Application Revisions section below, the FSAR (when revised as shown) indicates that managerial and administrative controls are developed and implemented as work progresses on site. These controls are intended to preclude and/or mitigate the impacts of potential construction hazards to the SSCs important to safety for the operating units.

Supplemental revisions to the COLA FSAR necessary to address this new guidance are provided in the Application Revisions section below.

This response is expected to be STANDARD for the S-COLAs. However, it should be noted that Item 3 is a change to plant-specific material. This plant-specific change is also expected to be endorsed by the S-COLAs.

Associated VEGP COL Application Revisions:

1. COLA Part 2, FSAR Chapter 1, Subsection 1.10.2, last paragraph, will be revised from:

This assessment identified administrative and managerial controls to avoid impacts to SSCs from construction. The results of the assessment are presented in Table 1.10-202.

To read:

The initial assessment consisted of a review of individual SSCs and LCOs to determine whether an item is applicable, or may be eliminated due to either examination or being internal and specific to an operating unit. The assessment identified the SSCs that could reasonably be expected to be impacted by construction activities unless administrative and managerial controls are established. The results of the assessment are presented in Table 1.10-202.

Periodic assessment during construction is addressed in Appendix 13AA, Subsection 13AA.1.1.1.1.8.

2. COLA Part 2, FSAR Chapter 1, Subsection 1.10.3, last paragraph, will be revised from:

The above discussed controls to eliminate or mitigate construction hazards that could potentially impact operating unit SSCs important to safety are in place when there is an operating nuclear unit on the site.

To read:

The above discussed controls to eliminate or mitigate construction hazards that could potentially impact operating unit SSCs important to safety are in place when there is an operating nuclear unit on the site. Additional controls may be established during construction as addressed in Appendix 13AA, Subsection 13AA.1.1.1.1.8.

3. COLA Part 2, FSAR Chapter 13, Appendix 13AA, Subsection 13AA.1.1.1.1.8, will be revised to add a new last paragraph to read:

Periodic assessment involving both the construction and operations organizations continues to identify SSCs that could reasonably be expected to be impacted by scheduled construction activities. Appropriate administrative and managerial controls are then established as necessary. Specific hazards, impacted SSCs, and managerial and administrative controls are reviewed on a recurring basis and, if necessary, controls are revised/developed and implemented and maintained current as work progresses on site. For example, prior to construction activities that involve the use of large construction equipment such as cranes, managerial and administrative controls are in place to prevent adverse impacts on any operating unit(s) overhead power lines, switchyard, security boundary, etc., by providing the necessary restrictions on the use of large construction equipment.

4. COLA Part 2, FSAR Chapter 1, Subsection 1.10, Table 1.10-202, will be revised to include the following new item:

Impact of Local Flooding

- Safety-related structures, systems, and components (SSCs)

5. COLA Part 2, FSAR Chapter 1, Subsection 1.10, Table 1.10-202, will be revised from:

Equipment and Material
Laydown, Storage,
Warehousing

- Releases of Stored Flammable, Hazardous or Toxic Materials

To read:

Equipment and Material
Laydown, Storage,
Warehousing

- Releases of Flammable, Hazardous or Toxic Materials

6. COLA Part 2, FSAR Chapter 1, Subsection 1.10, Table 1.10-203, will be revised to include the following new item:

Impact of Local Flooding

- Site grading and drainage provisions consider potential flooding impacts from local intense precipitation

7. COLA Part 2, FSAR Chapter 1, Subsection 1.10, Table 1.10-203, will be revised to include the following new item:

Impact of Site Groundwater
Dewatering

- Administrative controls address groundwater level monitoring