

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE SECRETARY

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In the Matter of	)	
	)	
Southern Nuclear Operating Company, Inc.	)	Docket Nos. 52-025 and 52-026
	)	
Combined License for Vogtle Electric	)	
Generating Plant Units 3 and 4	)	

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**PETITION FOR INTERVENTION**

**I. INTRODUCTION**

Pursuant to 10 C.F.R. § 2.309, 10 C.F.R. § 52.85, and a notice published by the Nuclear Regulatory Commission (the “NRC”) at 73 Fed. Reg. 53446-02 (September 16, 2008), petitioners, Atlanta Women’s Action for New Directions (“Atlanta WAND”), Blue Ridge Environmental Defense League (“BREDL”)<sup>1</sup>, Center for a Sustainable Coast (“CSC”), Savannah Riverkeeper, and Southern Alliance for Clean Energy (“SACE”), hereby submit their contentions regarding the application of Southern Nuclear Operating Company, Inc. (“SNC”), acting on behalf of itself and Georgia Power Company, Oglethorpe Power Corporation (an Electric Membership Corporation), Municipal Electric Authority of Georgia, and the City of Dalton, Georgia, an incorporated municipality in the State of Georgia acting by and through its Board of Water, Light and Sinking Fund Commissioners (Dalton Utilities), for a Combined License (“COL”) that would allow SNC to build and operate two new nuclear reactors (“VEGP Units 3 and 4”) on the site of the Vogtle Electric Generating Plant (the “VEGP Site”). As demonstrated

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<sup>1</sup> Atlanta WAND, BREDL, CSC, Savannah Riverkeeper, and SACE, are herein collectively referred to as “Petitioners”.

below, these contentions should be admitted because they satisfy the NRC's admissibility requirements set forth in 10 C.F.R. § 2.309.

### **Description of the Proceeding**

This proceeding concerns an application by SNC for a COL for construction and operation of VEGP Units 3 and 4 at the VEGP Site in Burke County, Georgia. SNC submitted its COL application (the "COLA") on March 31, 2008. Notice of Receipt and Availability of the Application was published in 73 Fed.Reg. 24616-02 (May 5, 2008). The COLA was accepted for docketing on May 30, 2008, and such acceptance was published in 73 Fed.Reg. 33118-03 (June 11, 2008). The Notice of Hearing and Opportunity to Petition to Leave to Intervene was published in 73 Fed. Reg. 53446-02 (September 16, 2008) (the "Federal Register Notice").

### **Description of Petitioners**

Atlanta WAND is a non-profit, membership organization incorporated in the State of Georgia. It is also a chapter of a national organization, Women's Action for New Directions. Atlanta WAND's mission is to act politically to reduce violence, and to redirect excessive military resources toward unmet human and environmental needs. Atlanta WAND also works on issues surrounding health and social justice.

BREDL is a regional, community-based, non-profit environmental organization whose founding principles are earth stewardship, environmental democracy, social justice, and community empowerment. BREDL encourages government agencies and citizens to take responsibility for conserving and protecting natural resources. BREDL advocates grassroots involvement to empower whole communities in environmental issues. BREDL also functions as a "watchdog" of the environment, monitoring issues and holding government officials accountable for their actions.

CSC is a non-profit, membership-supported organization defending the public interest in issues related to coastal Georgia's growth, the economy, and the environment. CSC combines education, advocacy, technical assistance, and legal action to implement its comprehensive mission, which is the conservation and sustainable use of the region's resources – natural, historic, and economic.

Savannah Riverkeeper is a private, non-profit advocacy group dedicated to preserving, protecting, and restoring the Savannah River. Savannah Riverkeeper's mission is to protect the water quality of the Savannah River and the integrity of its watershed. Savannah Riverkeeper has approximately 100 members, with an additional 400-500 volunteers.

SACE is a non-profit, non-partisan, membership organization that promotes responsible energy choices that solve global warming problems and ensure clean, safe, and healthy communities throughout the Southeast. SACE has staff and members throughout the Southeast, including offices in Atlanta and Savannah, Georgia.

## **Standing**

Pursuant to 10 CFR § 2.309, a request for hearing must:

Set forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, including the reasons why the petitioner should be permitted to intervene with particular reference to the factors set forth in [10 CFR § 2.309 (d)(1)]<sup>2</sup>, and the specific aspect or aspects of the subject matter of the proceeding as to which the petitioner wishes to intervene.

*In the Matter of Pacific Gas & Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 426 (2002) (“Diablo Canyon”).

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<sup>2</sup> Diablo Canyon cites 10 CFR § 2.714(d)(1) which was replaced by 10 CFR § 2.309(d)(1) when the hearing regulations were amended in 2004. [69 Fed Reg 2236](#) (Jan. 14, 2004).

Thus, amongst other things, the request for hearing must address: (1) the nature of the petitioner's right under the Atomic Energy Act to be made a party to the proceeding, (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding, and (3) the possible effect of any order that may be entered in the proceeding on the petitioner's interest. 10 CFR § 2.309(d)(1).

The Atomic Safety and Licensing Board (the "Board") summarized these standing requirements as follows:

In determining whether a petitioner has sufficient interest to intervene in a proceeding, the Commission has traditionally applied judicial concepts of standing. *See Metropolitan Edison Co.* (Three Mile Island Nuclear station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983) (citing *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610 (1976)). Contemporaneous judicial standards for standing require a petitioner to demonstrate that (1) it has suffered or will suffer a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury can be fairly traced to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. *See Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29 (1999). An organization that wishes to intervene in a proceeding may do so either in its own right by demonstrating harm to its organizational interests, or in a representational capacity by demonstrating harm to its members. *See Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 271 (1998). To intervene in a representational capacity, an organization must show not only that at least one of its members would fulfill the standing requirements, but also that he or she has authorized the organization to represent his or her interests. *See Private Fuel 3 Storage, L. L. C.* (Independent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 168, *aff'd on other grounds*, CLI-98-13, 48 NRC 26 (1998).

*Diablo Canyon, supra*, 56 NRC at 426. *See also, Southern Nuclear Operating Company* (Vogtle Electric Generating Plant), 52-011-ESP, Board Memorandum and Order (March 12, 2007) (Ruling on Standing and Contentions) at 5-6.

Petitioners' standing to participate in this proceeding is demonstrated by the attached declarations of the following members of Petitioners, who have authorized Petitioners to represent their interests in this proceeding. *See, Diablo Canyon*, 56 NRC at 426.

Terence Alton Dicks, Atlanta WAND member  
Annie Laura Stephens, Atlanta WAND member  
Shahid Abdul-Jabba, BREDL member  
Jeffrey Alston, BREDL member  
Martha Argyle, BREDL member  
Melvin Lee Avery, BREDL member  
Darry L. Brown, Sr., BREDL member  
Kathryn P. Capizzi, BREDL member  
Shirley Coleman, BREDL member  
Charles Cooper, BREDL member  
Victoria Davis, BREDL member  
Sherry Dixon, BREDL member  
Harvie Dixon, Jr., BREDL member  
David A. Dorch, BREDL member  
Gregory L Douse, Sr., BREDL member  
Derbianna Frank, BREDL member  
Evelyn Fulton, BREDL member  
Beatrice W. Holiday, BREDL member  
Wykeshia Hughes, BREDL member  
Ben Jackson, BREDL member  
Sheila Jackson, BREDL member  
Wayne Jackson, BREDL member  
Cheryl Johnson, BREDL member  
Ethel Jones, BREDL member  
Eunice Jordan, BREDL member  
Cicero Luke, BREDL member  
Holicc McClain, BREDL member  
Johnnie McGhee, BREDL member  
George Mitchell, BREDL member  
Cora L. Moore, BREDL member  
Hayward C. Nipper, BREDL member  
Andre Samuels, BREDL member  
Lowell Spurgeon, BREDL member  
Melvin Stewart, BREDL member  
Nelson Stokes, BREDL member  
J. Toombs, BREDL member  
Anthony Utley, BREDL member  
Eula Utley, BREDL member  
Brenda A. Utley, BREDL member  
Demetria Utley, BREDL member

Lee Alice Walker, BREDL member  
Michael Walker, BREDL member  
Mildred Walker, BREDL member  
Kiffiny Ward, BREDL member  
Kimberly Wesby, BREDL member  
Sam Booher, CSC member  
Stephen N. Willis, CSC member  
Susan Bloomfield, SACE member  
William J. Mareska, SACE member  
David J. Matos, SACE member  
Judith E. Gordon, Savannah Riverkeeper member  
Charles N. Utley, Savannah Riverkeeper member

The attached declarations demonstrate that Petitioners' members live near the VEGP Site, usually within 50 miles. Therefore, most of Petitioners' members have presumptive standing by virtue of their proximity to proposed VEGP Units 3 and 4 that may be constructed on this site. *Diablo Canyon, supra*, 56 NRC at 426-27, citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146, *aff'd*, CLI-01-17, 54 NRC 3 (2001) (noting that petitioners who live within 50 miles of a proposed nuclear power plant are presumed to have standing in reactor construction permit and operating license cases because there is an "obvious potential for offsite consequences" within that distance). Moreover, the declarations of each of Petitioners' members (including those who live outside of the 50 mile radius) demonstrate that (1) each has suffered or will suffer a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury can be fairly traced to the challenged action; and (3) the injury is likely to be redressed by a favorable decision.

Petitioners seek to protect their members' health, safety, and lives, as well as the health and safety of the general public and the environment by opposing construction and/or operation of any new nuclear reactors at the VEGP Site through intervention in the Vogtle COL

proceeding. Petitioners seek to ensure that no COL is issued by the NRC unless SNC demonstrates full compliance with the Atomic Energy Act, the National Environmental Policy Act, the Endangered Species Act, as well as with other applicable federal and Georgia state laws.

### **Specific Aspects of the Subject Matter As To Which Petitioners Seek to Intervene**

As required by 10 CFR § 2.309 and the Federal Register Notice, Petitioners set forth below the specific aspects of the subject matter of this proceeding as to which they wish to intervene:

1. Technical Contention 1 (TC1): SNC's COLA is incomplete because many of the major safety components and operational procedures of the proposed VEGP Units 3 and 4 either (1) have been omitted altogether or (2) are conditional at this time and will be for the indefinite future. Modifications to such safety components or operational procedures could cause substantial changes to the COLA. Regardless of whether the design of VEGP Units 3 and 4 is certified or not, a meaningful technical and safety review of the COLA cannot be conducted without the full disclosure of the final and complete reactor design.
2. Technical Contention 2 (TC2): SNC's COLA is incomplete because many of the major safety components and procedures at the proposed VEGP Units 3 and 4 either (1) have been omitted altogether or (2) are conditional at this time and will be for the indefinite future. Moreover, in connection with Westinghouse's submission of AP 1000 Revision 17 ("Revision 17"), SNC is now required to either adopt Revision 17 or resubmit its COLA as a plant-specific design. Either course of action will require substantial changes to the COLA, which as currently drafted incorporates AP 1000 Revision 16 ("Revision 16") – a revision no longer being reviewed by the NRC Staff. Regardless of whether the design of VEGP Units 3 and 4 is certified or not, a meaningful technical and safety review of the COLA cannot be conducted without the full disclosure of the final and complete reactor design.
3. Safety Contention 1 (SC1): SNC's COLA is incomplete because the Final Safety Analysis Report (the "FSAR") fails to consider how SNC will comply with NRC regulations governing storage and disposal of Low Level Radioactive Waste ("LLRW") in the event an off-site waste disposal facility remains unavailable when VEGP Units 3 and 4 begin operations.

Petitioners demonstrate below that the proposed contentions meet the standard admissibility requirements of 10 C.F.R. § 2.309. Each contention asserts that the COLA is incomplete because it does not contain certain information required by 10 C.F.R. § 50.34.

## II. CONTENTIONS

TC1 (AP 1000 Revision 16): SNC's COLA is incomplete because many of the major safety components and operational procedures of the proposed VEGP Units 3 and 4 either (1) have been omitted altogether or (2) are conditional at this time and will be for the indefinite future. Modifications to such safety components or operational procedures could cause substantial changes to the COLA. Regardless of whether the design of VEGP Units 3 and 4 is certified or not, a meaningful technical and safety review of the COLA cannot be conducted without the full disclosure of the final and complete reactor design.

Support for contention. The Design Control Document ("DCD") for Revision 16 has been adopted by reference for the proposed VEGP Units 3 and 4 and is, as such, part of the COLA. Appendix D to 10 C.F.R. Part 52 and the AP1000 DCD Revision 16. As further explained below, this DCD is neither final nor complete. Petitioners cannot conduct a meaningful technical and safety review of the COLA without knowing the final and complete design of the reactors as they would be constructed by SNC.<sup>3</sup>

The NRC has directly contemplated this situation. In a proceeding for licensing of Shearon Harris Nuclear Power Plant Units 2 and 3 (which incorporated Revision 16), the NRC stated that "[i]f the Petitioners believe the [COLA] is incomplete in some way, they may file a contention to that effect. Indeed, the very purpose of NRC adjudicatory hearings is to consider claims of deficiencies in a license application; such contentions are commonplace at the outset of NRC adjudications." *Progressive Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant), Memorandum and Order, CLI-08-15 (July 23, 2008); see also *Progressive Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant), Board Memorandum and Order (Ruling on Standing

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<sup>3</sup> This Contention is challenging neither the AP1000 design review process, nor a design matter related to the AP1000 DCD to the extent previously certified. Rather, it is a challenge to the adequacy of the COLA itself. Moreover, the validity of this contention does not depend on whether the ultimate design of the proposed VEGP Units 3 and 4 is certified or not; the design, safety components, and operational procedures of the new reactors are incomplete and therefore the COLA cannot be effectively reviewed by Petitioners.

and Contention Admissibility) (October 30, 2008) (admitting a contention related to the omission of certain reactor design components from the COL application).

On its face, the DCD (and thus the COLA) is incomplete. Even after the December 2005 certification of several Tier 1 design components,<sup>4</sup> there remain a number of serious inadequacies in the Revision 16 design that have not been satisfactorily addressed, including those relating to safety. For example, in the January 18, 2008, letter to Westinghouse docketing Revision 16, there was discussion of an incomplete recirculation screen design (i.e., the “sump problem”), a necessary component to the emergency cooling system that will affect the design for the proposed VEGP Units 3 and 4.<sup>5</sup> ADAMS Accession No. ML073600743. Additionally, the DCD (and thus the COLA) omits the following components and procedures which are crucial in assessing the safety and impacts of the proposed reactors:

- a. The final design of the reactor containment.
- b. The control room set up and operator decision-making procedures.
- c. Seismic qualifications for various components of the AP1000 reactors.
- d. The establishment of fire protection areas.
- e. Technology requirements for heat removal.
- f. Human factors engineering design throughout the plant.
- g. Plant personnel requirements.
- h. Alarm systems throughout the plant.

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<sup>4</sup> Tier 1 information includes components of the design that have been certified and Tier 2 information includes components that have not been certified as complying with Appendix D to 10 C.F.R. Part 52. The AP-1000 Final Design Certification Rule. Available at <http://www.nrc.gov/reactors/new-reactors/design-cert/amended-ap1000.html>

<sup>5</sup> See, Union of Concerned Scientists, “Regulatory Malpractice: The NRC’s Handling of the PWR Containment Sump Problem,” October 2003. Available at [http://www.ucsusa.org/nuclear\\_power/nuclear\\_power\\_risk/safety/regulatory-malpractice-nrcs.html](http://www.ucsusa.org/nuclear_power/nuclear_power_risk/safety/regulatory-malpractice-nrcs.html)

i. Plant-wide requirements for pipes and conduits.

Revision 16 currently lists 172 separate sections concerning various aspects of the AP1000 reactor, totaling more than 6,500 pages. However, only 21 of the sections appear to have been certified by the NRC over the last two years of review. These certified sections contain Tier 1 information. Importantly, the Tier 1 design descriptions, interface requirements, and site parameters are derived from the Tier 2 information. AP1000 DCD Revision 16, Introduction, ¶ 1.3. In other words, not even the so-called “certified” components have been fully approved as they depend on the interaction with non-certified components.

The Tier 2 components are not trivial, but run the gamut of containment, control room set up, seismic qualifications, fire areas, heat removal, human factors engineering design, plant personnel requirements, operator decision-making, alarms and piping. These non-certified components interact with Tier 1 components and each other to a significant degree. During the certification process, any or all of these may be modified by the NRC, and as a result, would require SNC to modify its COLA.

Thus, the reactor design is far from finalized. Westinghouse submitted its AP1000 Revision 15 to the NRC in March 2002.<sup>6</sup> Shortly after the NRC issued a final design control rule in the Federal Register for Revision 15, Westinghouse submitted Revision 16.<sup>7</sup> Six years after Revision 15 was submitted, the bulk of the reactor design problems have only recently been revealed. Petitioners have no confidence that these fundamental design issues will be resolved. Even the basic designs for the steam generators and pressurizers are currently being revised.<sup>8</sup>

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<sup>6</sup> <http://www.nrc.gov/reactors/new-reactors/design-cert/ap1000.html> (November 14, 2008)

<sup>7</sup> <http://www.nrc.gov/reactors/new-reactors/design-cert/amended-ap1000.html> (November 14, 2008)

The expected completion date of the certification process will in all likelihood continue to be delayed past its current estimation of mid-2011.<sup>9</sup>

Because the final configuration, design, and operating procedures of VEGP Units 3 and 4 are not described in the COLA, the requisite risk assessment cannot be conducted and the Safety Accident Mitigation Alternatives cannot be determined. Moreover, until major components are incorporated into the COLA for a full review, the safety consequences of interaction between the various components cannot be assessed.

Conclusion. The deficiencies in the COLA are fatal. The lack of information about the basic design and operating requirements for the AP1000 Revision 16 does not allow Petitioners to conduct a full and meaningful technical and safety review of VEGP Units 3 and 4.

TC2 (AP 1000 Revision 17): SNC's COLA is incomplete because many of the major safety components and procedures at the proposed VEGP Units 3 and 4 either (1) have been omitted altogether or (2) are conditional at this time and will be for the indefinite future. Moreover, in connection with Westinghouse's submission of Revision 17, SNC is now required to either adopt Revision 17 or resubmit its COLA as a plant-specific design. Either course of action will require substantial changes to the COLA, which as currently drafted incorporates Revision 16 – a revision no longer being reviewed by the NRC Staff. Regardless of whether the design of VEGP Units 3 and 4 is certified or not, a meaningful technical and safety review of the COLA cannot be conducted without the full disclosure of the final and complete reactor design.

Support for Contention. The DCD for Revision 16 has been adopted by reference for the proposed VEGP Units 3 and 4 and is, as such, part of the COLA. Accordingly the deficiencies in Revision 16 addressed in contention TC1 above are relevant to this contention, and are incorporated herein by reference. As further explained below, Revision 17 has now been submitted. As a result, SNC is required to either adopt the new Revision 17 by reference or

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<sup>8</sup> On September 22, 2008, Westinghouse submitted AP1000 Revision 17. Although the NRC has yet to make the substantive details of Revision 17 available to the public, Revision 17 will likely incorporate various new changes. As a result, many of the components in Revision 16 may no longer be reviewed or certified by the NRC Staff. *See generally*, contention TC2 below.

<sup>9</sup> [www.nrc.gov/reactors/new-licensing/new-licensing-files/new-rx-licensing-app-legend.pdf](http://www.nrc.gov/reactors/new-licensing/new-licensing-files/new-rx-licensing-app-legend.pdf) (November 14, 2008)

resubmit its COLA as a plant-specific design. Petitioners cannot conduct a meaningful technical and safety review of the COLA without knowing whether SNC will adopt the new Revision 17.

Westinghouse submitted its AP1000 DCD Revision 15 to the NRC in March 2002, and the NRC issued a final rule “certifying” this design in January 2006.<sup>10</sup> Shortly thereafter, Westinghouse submitted Revision 16. The NRC Staff then set the completion date for certification of Revision 16 around mid-2011.<sup>11</sup> In the midst of the NRC Staff’s review process, on September 22, 2008, Westinghouse submitted Revision 17.<sup>12</sup> While the proposed VEGP Units 3 and 4 remain tied to Revision 16, the certification of components in Revision 16 will no longer be reviewed by the NRC Staff in Docket No. 52-006. Instead, the NRC Staff will begin to review Revision 17. Thus, SNC’s COLA, which adopts Revision 16, is incomplete. Petitioners are unable to review an application that references a “certified” design that will not be reviewed by NRC Staff.

In the event Revision 17 is adopted, Petitioners’ review will be further hindered. Regrettably, the complete Revision 17 application has not been made available to the public.<sup>13</sup> The limited documents regarding Revision 17 that are available to the public show that, similar to Revision 16, Revision 17 is neither final nor complete – with numerous design and operational procedures still in a state of flux. Moreover, there is no set date for certification of Revision 17. Regardless of whether the design of VEGP Units 3 and 4 is certified or not, Petitioners cannot

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<sup>10</sup> <http://www.nrc.gov/reactors/new-reactors/design-cert/ap1000.html>

<sup>11</sup> [www.nrc.gov/reactors/new-licensing/new-licensing-files/new-rx-licensing-app-legend.pdf](http://www.nrc.gov/reactors/new-licensing/new-licensing-files/new-rx-licensing-app-legend.pdf) (November 14, 2008)

<sup>12</sup> <http://www.nrc.gov/reactors/new-reactors/design-cert/amended-ap1000.html> (November 14, 2008)

<sup>13</sup> *Id.* The NRC website states that the public version of Revision 17 is expected to be available for public access through NRC’s ADAMS in “the very near future.”

conduct a meaningful technical and safety review of the COLA without knowing the final and complete design of the reactors as they would be constructed by SNC.

On its face, Revision 17 (and thus the COLA) is incomplete, as there remains a number of serious safety inadequacies in the AP1000 design that have not been satisfactorily addressed. In addition to the still unresolved issues and uncertified components in Revision 16 set forth in contention TC1,<sup>14</sup> the uncertified components specifically addressed in Revision 17 include the turbine design changes, physical security, human factors engineering, responses to seismic activities and adverse weather conditions, radiation protection measures, technical specifications for valves and piping, accident analyses, and aircraft impact. Westinghouse PowerPoint “AP1000 Design Control Document REV17 Submittal Overview,” September 17, 2008; ADAMS Accession No. ML082660365. These uncertified components interact with Tier 1 components and each other to a significant degree. During the Revision 17 certification process, any or all of these may be modified by NRC, and as a result, require SNC to revise its COLA.

Because the final configuration, design, and operating procedures of VEGP Units 3 and 4 are not fully described in the portion of Revision 17 (and thus the COLA) made available to the public, the requisite risk assessment cannot be conducted and the Safety Accident Mitigation Alternatives cannot be determined. Moreover, until all the major components are incorporated in the COLA for a full review, the safety consequences of interaction between the various components cannot be assessed.

Conclusion. The deficiencies in the COLA are many and varied, with much of the technical descriptions of major components of the plant subject to change. The unresolved

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<sup>14</sup> The unresolved issues in Revision 16 include containment, control room set up, operating decision-making, seismic qualifications, fire protection areas, heat removal, human factors engineering design, plant personnel requirements, alarm systems, and pipe and conduit requirements.

issues in basic design and operating requirements for the AP1000 reactor found in Revision 16 have been pushed into Revision 17. To date, there is no timetable for the certification of the new revision. Regardless of whether the reactor components would be certified or not at some time in the future, the COLA does not contain information about major design and operational components necessary to permit Petitioners to conduct a full and meaningful technical and safety review of VEGP Units 3 and 4.

SC1 (Disposal of LLWR): SNC's COLA is incomplete because the FSAR fails to consider how SNC will comply with NRC regulations governing storage and disposal of LLRW in the event an off-site waste disposal facility remains unavailable when VEGP Units 3 and 4 begin operations.

Support for Contention. As of the June 30, 2008, partial closure of the Barnwell disposal facility, no facility in the United States has been licensed and able to accept for disposal Class B or C radioactive waste from Plant Vogtle nuclear power reactors. The FSAR, however, contains no explanation of the specific waste management actions SNC will take if there is still no waste disposal facility available for Class B and C waste when VEGP Units 3 and 4 begin operations. Moreover, in the event such a waste disposal facility is unavailable, the FSAR fails to demonstrate how SNC can comply with the NRC regulations regarding LLRW *disposal* using only the existing *storage* facilities (designated for VEGP Units 1 and 2).<sup>15</sup>

An Atomic Safety Licensing Board has directly contemplated this situation. In the proceeding for licensing of North Anna Unit 3, the board admitted a contention alleging that the "FSAR should have explained [the nuclear operating company's] plan for complying with NRC regulations governing the management of LLRW in the absence of an off-site disposal facility."

*Virginia Electric and Power Company d/b/a Dominion Virginia Power and Old Dominion*

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<sup>15</sup> As a contention of omission, Petitioners need only show the facts necessary to establish that the COLA omits information that should have been included. *Pa'ina Hawaii, LLC (Material License Application)*, LBP-06-12, 63 NRC 403, 413 (2006).

*Electric Cooperative*, ASLBP No. 08-863-01-COL, Memorandum and Order (Ruling on Petitioners' Standing and Contentions)(August 15, 2008) at 21; see also *Tennessee Valley Authority*, ASLBP No. 08-864-02-COL-BD01, Memorandum and Order (Ruling on Standing and Contention Admissibility)(September 12, 2008) at 57-60, admitting a similar contention.

Like the North Anna FSAR, Section 11.4.6 of the Plant Vogtle FSAR offers merely a cursory discussion of the purpose of a "process control program" (the "PCP") for radioactive waste management. Specifically:

Its purpose is to provide the necessary controls such that the final disposal waste product meets applicable federal regulations (10 CFR Parts 20,50,61,71 and 49 CFR Part 173), state regulations, and disposal site waste form requirements for burial at a low level waste (LLW) disposal site that is licensed in accordance with 10 CFR Part 61. FSAR (Revision 0), Section 11.4.6 at 11.4-1.

Notably, no explanation is offered for how this PCP will be followed in the absence of a licensed disposal site. The extent of the FSAR's discussion of potential alternatives in the event of this contingency is limited to the provision, "should disposal facilities not be available, the planned VEGP Units 1 and 2 Low Level Radwaste Storage Facility will be available to provide *storage* for VEGP Units 3 and 4." FSAR at 11.4-2 [emphasis added]. This proposed storage, which is inherently temporary in nature, does not equate to the definitive nature of "disposal" as such term is employed in Section 11.4.6 of the FSAR.

In fact, SNC relies solely upon the assumption that off-site disposal will be available. SNC omits any discussion in the FSAR for disposal procedures without such an off-site location and omits procedures for managing disposal until an off-site location becomes available again. Without an appropriate discussion of disposal procedure, the FSAR is insufficient.<sup>16</sup>

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<sup>16</sup> As no offsite licensed disposal is available, serious consideration must be given to licensing the site under 10 CFR Part 61 for on-site disposals.

Moreover, while the FSAR states that the Low Level Radwaste Storage Facility of VEGP Units 1 and 2 will be available to store LLWR when off-site disposal does not exist, the FSAR does not address long term storage procedures or realistically consider the size and space limitations of the existing storage facilities. The FSAR also fails to explain how, absent access to an off-site land disposal site, SNC can comply with NRC regulations using only its existing facilities for storage.<sup>17</sup>

Likewise, the FSAR omits a discussion of the health impacts on SNC employees from the additional LLRW storage. The increase in on-site LLRW will increase health and safety risks for SNC employees who must handle, package, and inspect the materials during storage. Safety and security issues of extended on-site storage and potential on-site disposal must therefore be addressed in the FSAR.

Conclusion. The COLA is incomplete because the FSAR fails to address certain LLWR disposal and storage mechanisms. The FSAR does not even contemplate disposal mechanisms in the event an adequate off-site disposal facility for Class B and C waste is not available when VEGP Units 3 and 4 begin operations. Additionally, the FSAR discussion on storage fails to consider the limited space available and the increased safety risks that arise from storing LLWR from VEGP Units 3 and 4 on-site.

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<sup>17</sup> See also Vogtle Early Site Permit Application, Environmental Report (Revision 2), April 2007 at pg 3.5-10, "All AP1000 radwaste which is packaged and stored will be shipped for disposal. The AP1000 has no provisions for permanent storage of radwaste."

## Conclusion

For the foregoing reasons, the petition and contentions should be admitted.

Respectfully submitted this 17<sup>th</sup> day of November, 2008.

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE SECRETARY

\_\_\_\_\_)  
In the Matter of )  
Southern Nuclear Operating Company, Inc. ) Docket Nos. 52-025 and 52-026  
Combined License for Vogtle Electric )  
Generating Plant Units 3 and 4 )  
\_\_\_\_\_)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing PETITION FOR INTERVENTION were served upon the following persons by Electronic Information Exchange and/or electronic mail.

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Secretary of the Commission  
Rulemaking and Adjudications Staff  
United States Regulatory Commission  
Washington, DC 20555-0001

Office of General Counsel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Office of the Secretary  
Sixteenth Floor  
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11555 Rockville Pike  
Rockville, Maryland 20852

Dated: November 17, 2008

\_\_\_\_\_/signed (electronically) by/\_\_\_\_\_  
Lawrence D. Sanders, Esq.  
Turner Environmental Law Clinic  
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Southern Nuclear Operating Company, Inc. ) Docket Nos. 52-025 and 52-026  
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Generating Plant Units 3 and 4 )  
\_\_\_\_\_)

NOTICE OF APPEARANCE FOR LAWRENCE D. SANDERS, ESQ.

Notice is hereby given that the undersigned attorney herewith enters an appearance in the above-captioned matter. In accordance with 10 C.F.R. § 2.314(b), the following information is provided:

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Admissions: Georgia and California

Name of Party: Center for a Sustainable Coast, Savannah Riverkeeper,  
Southern Alliance for Clean Energy, Atlanta Women's  
Action for New Directions, and Blue Ridge Environmental  
Defense League

Dated: November 17, 2008

Respectfully submitted,

\_\_\_\_\_/signed (electronically) by/\_\_\_\_\_

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE SECRETARY

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In the Matter of )  
Southern Nuclear Operating Company, Inc. ) Docket Nos. 52-025 and 52-026  
Combined License for Vogtle Electric )  
Generating Plant Units 3 and 4 )

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NOTICE OF APPEARANCE FOR MINDY GOLDSTEIN, ESQ.

Notice is hereby given that the undersigned attorney herewith enters an appearance in the above-captioned matter. In accordance with 10 C.F.R. § 2.314(b), the following information is provided:

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Admissions: Georgia

Name of Party: Center for a Sustainable Coast, Savannah Riverkeeper,  
Southern Alliance for Clean Energy, Atlanta Women's  
Action for New Directions, and Blue Ridge Environmental  
Defense League

Dated: November 17, 2008

Respectfully submitted,

\_\_\_\_\_/signed (electronically) by/\_\_\_\_\_

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STANDING DECLARATIONS

[Attached.]