

**SOUTHERN NUCLEAR OPERATING COMPANY**

**VOGTLE EARLY SITE PERMIT APPLICATION**

**Revision 2**

**April 2007**

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## **Table of Contents**

- Part 1 – Administrative Information
- Part 2 – Site Safety Analysis Report
- Part 3 – Environmental Report
- Part 4 – Site Redress Plan
- Part 5 – Emergency Plan

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## Revision Summary

This revision summary indicates the revision status for the identified chapter/section/appendix of the application.

<b>Part 1 – Administrative Information</b>	
Chapter	Revision
1	0
2	1
3	2

<b>Part 2 – Site Safety Analysis Report</b>		
Chapter/Section	Text Revision	All Figures Remain as Revision 0 Except Figures:
1	2	1-4 (Rev. 2) and 1-5 (Rev. 1)
2.1	2	2.1-10 through -15 and 2.1-17 (Rev. 2)
2.2	2	2.2-1 through -3 (Rev. 1) and 2.2-4 (Rev. 2)
2.3	2	2.3-1 through -13 (Sh. 12 of 12) (Rev. 2)
2.4.1	2	2.4.1-1 through -3 (Rev. 2)
2.4.2	0	-
2.4.3	0	-
2.4.4	2	2.4.4-7 through -13 (Rev. 2)
2.4.5	0	-
2.4.6	0	-
2.4.7	2	-
2.4.8	0	-
2.4.9	0	-
2.4.10	2	-
2.4.11	2	2.4.11-3 through -6 and 2.4.11-8 (Rev. 2)
2.4.12	2	2.4.12-3 through -11, 2.4.12-13 through -19, and 2.4.12-21 through -27 (Rev. 2)
2.4.13	2	-
2.4A	0	-
2.5.1	2	2.5.1-31 and -42 (Rev. 1) 2.5.1-3, 2.5.1-10 through -14, 2.5.1-16, 2.5.1-17 (Rev. 2) 2.5.1-24 through -26, 2.5.1-28, 2.5.1-29 (Rev. 2) 2.5.1-32, 2.5.1-34, 2.5.1-44 (Rev. 2)
2.5.2	2	2.5.2-1 through -6 (Rev. 2) 2.5.2-7 through -11 (Rev. 1) 2.5.2-12 and 2.5.2-12a (Rev. 2) 2.5.2-13 through -31 (Rev. 1) 2.5.2-32 and 2.5.2-33 (Rev. 2) 2.5.2-34 through 2.5.2-47 (Rev. 1)
2.5.3	2	2.5.3-3 (Rev. 2)-
2.5.4	2	2.5.4-1 and 2.5.4-9 through -12 (Rev. 2)
2.5.5	2	-
2.5.6	0	-
2.5A	0	-
2.5B	0	-

### Revision Summary (cont'd)

<b>Part 2 – Site Safety Analysis Report (cont'd)</b>		
Chapter/Section	Text Revision	All Figures Remain as Revision 0 Except Figures:
3.5	2	-
11.2	2	-
11.3	2	-
13.3	2	13.3-2 (Rev. 2)
13.6	0	-
15	2	-
17.1	0	-
17.1A	2	-
<b>Part 3 – Environmental Report</b>		
Section	Text Revision	All Figures Remain as Revision 0 Except Figures:
1.1	2	-
1.2	2	-
1.3	2	-
1.4	2	-
2.0	0	-
2.1	2	-
2.2	2	-
2.3.1	2	2.3.1-1, 2.3.1-3 through 2.3.1-6, 2.3.1-12 through 2.3.1-20, and 2.3.1-22 through 2.3.1-35 (Rev. 2)
2.3.2	2	2.3.2-9 (Rev. 2)
2.3.3	2	-
2.4	2	-
2.5	2	-
2.6	1	2.6-3 (Rev.1)
2.7	2	2.7-1 through 2.7-13 (Sh. 12 of 12 ) (Rev. 2)
2.8	1	-
2.9	2	-
3.0	2	-
3.1	1	3.1-2 (Rev. 1) and 3.1-3 (Rev. 2)
3.2	0	-
3.3	0	-
3.4	2	3.4-2 and 3.4-3 (Rev. 2)
3.5	2	-
3.6	2	-
3.7	2	-
3.8	0	-
3.9	2	-
3.10	0	-
4.0	0	-
4.1	2	-
4.2	2	-
4.3	2	-

**Revision Summary (cont'd)**

<b>Part 3 – Environmental Report (cont'd)</b>		
Section	Text Revision	All Figures Remain as Revision 0 Except Figures:
4.4	2	-
4.5	2	-
4.6	0	-
4.7	2	-
5.0	0	-
5.1	2	-
5.2	2	-
5.3	2	-
5.4	2	-
5.5	0	-
5.6	2	-
5.7	2	-
5.8	2	5.8-1 through 5.8-4 (Rev. 1)
5.9	0	-
5.10	2	-
5.11	2	-
5.12	2	-
6.0	0	-
6.1	0	-
6.2	2	-
6.3	2	-
6.4	2	-
6.5	2	-
6.6	2	-
6.7	0	-
7.1	2	-
7.2	2	-
7.3	0	-
7.4	0	-
8.0	0	-
8.1	2	-
8.2	0	-
8.3	2	-
8.4	0	-
8.5	0	-
9.0	2	-
9.1	2	-
9.2	2	-
9.3	2	-
9.4	0	-
10.1	2	-
10.2	2	-
10.3	0	-

### Revision Summary (cont'd)

<b>Part 3 – Environmental Report (cont'd)</b>		
Section	Text Revision	All Figures Remain as Revision 0 Except Figures:
10.4	2	-
10.5	2	-
A	0	-
B	0	-
C	0	-

<b>Part 4 – Site Redress Plan</b>	
Chapter	Revision
1	0

<b>Part 5 – Emergency Plan<sup>1</sup></b>	
Section	Text Revision
<b>Base Plan:</b>	
All Sections	2
<b>Annex V1:</b>	
All Sections	0
<b>Annex V2:</b>	
All Sections	2

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<sup>1</sup> Since the Emergency Plan (EP) is a document issued separate from the ESP application (Refer to Part 1, Section 2.2 of the application), figures in the EP do not follow the revision level requirements specified in Part 1, Section 2.2.5. EP figure revision levels are the same as the revision level of the EP section that they are part of. Revision bars on the EP figures designate whether they have changed since the previous ESP application revision. Therefore, a table column specifying the revision levels of EP figures is not provided.



# **Southern Nuclear Operating Company**

## **Vogtle Early Site Permit Application**

### **Part 1 Administrative Information**

**Revision 2**

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## **Part 1 ADMINISTRATIVE INFORMATION**

### **Chapter 1 Introduction**

#### **1.1 Introduction**

Southern Nuclear Operating Company (Southern Nuclear or SNC), acting on behalf of itself and the owners of the Vogtle Electric Generating Plant (VEGP) site, identified below, hereby submits this application for an Early Site Permit (ESP) for two additional reactors at the VEGP site near Waynesboro, Georgia. This application is submitted in accordance with Title 10 of the Code of Federal Regulations, Part 52 (10 CFR 52), Subpart A – Early Site Permits. SNC requests that the NRC issue an ESP for the VEGP site described in this application for a period of 20 years from the date of issuance. The information presented in this application supports issuance of this permit.

The 3,169-acre VEGP site is located on a coastal plain bluff on the southwest side of the Savannah River in eastern Burke County Georgia. The site is approximately 30 river miles above the U.S. 301 bridge and directly across the river from the Department of Energy's Savannah River Site (Barnwell County, South Carolina). The VEGP site is owned by Georgia Power Company, Oglethorpe Power 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'). These VEGP site owners are herein referred to as the owners.

ESP application, Part 2, Chapter 1 provides a more detailed description of the VEGP site.

Locating proposed additional nuclear units on an existing nuclear plant site will be beneficial because this existing site already has an infrastructure in-place to support nuclear power generation. Other key advantages of locating additional nuclear units at the VEGP site are as follows:

- Existing VEGP Units 1 and 2 site related analysis and operating records were available as inputs for development of various sections of this ESP application.
- The VEGP site and its exclusion area previously underwent a screening and evaluation process establishing its suitability, including a National Environmental Policy Act (NEPA) evaluation of alternatives. The proposed additional nuclear units are located within the existing VEGP site exclusion area boundary (site property boundary).

- Programs, procedures, and arrangements have been established, and are in-place, with State and local government agencies, covering emergency planning, discharge permits, etc.
- Liaisons with the local community are already established.

SNC is the licensed operator of the existing generating facilities at the VEGP site, with control of the existing facilities, including complete authority to regulate any and all access and activity within the plant exclusion area boundary, and authority to act as the agent of the site owners. SNC has been authorized by GPC, acting as agent for the other owners (also known as co-owners) of the existing VEGP, to apply for an ESP for the VEGP site.

## **1.2 Purpose of an Early Site Permit Application**

Obtaining a license for a nuclear power plant in the United States has traditionally been a two-step process as set forth in Title 10 of the Code of Federal Regulations, Part 50 (10 CFR 50), Domestic licensing of production and utilization facilities, which requires the NRC to first issue a construction permit, and later, an operating license. In 1989, the NRC established an alternative licensing process which combines the construction permit and operating license, with certain conditions, into a single combined license (or “COL”). This new process is set forth in 10 CFR 52. Other provisions of 10 CFR 52 include the ESP, which allows an applicant to obtain approval for a site for a nuclear power plant, prior to a decision to construct, and “bank” it for future use, and the certified standard plant design, which can be used by an applicant as an “off-the-shelf” power plant design pre-approved by the NRC.

Under 10 CFR 52, an ESP application can be approved separate from any other NRC licensing action. Such permits are typically valid for a period of ten to twenty years with provisions for renewal.

Site safety issues, environmental issues, and certain aspects of emergency preparedness are addressed as part of the ESP process. ESP licensing issues are resolved with finality during the ESP review process and are not re-examined in any subsequent licensing action involving the permitted site, absent any information meeting certain standards established by the NRC.

### **1.3 Contact Information**

Any notices, questions, or correspondence in connection with this filing should be directed to:

Mr. J. A. “Buzz” Miller  
Senior Vice President – Nuclear Development  
Southern Nuclear Operating Company  
40 Inverness Center Parkway  
P. O. Box 1295  
Birmingham, AL 35201-1295, with copies to:

Mr. O. C. Harper IV  
Vice President - Resource Planning and Nuclear Development  
Georgia Power Company  
241 Ralph McGill Boulevard  
Atlanta, GA 30308

Mr. Stanford M. Blanton, esq.  
Balch and Bingham  
P. O. Box 306  
Birmingham, AL 35201

Mr. C. R. Pierce  
Southern Nuclear Operating Company  
40 Inverness Center Parkway  
P. O. Box 1295  
Birmingham, AL 35201-1295



## **Chapter 2 Early Site Permit Application Format and Content**

### **2.1 Format and Content**

This application contains the information required by 10 CFR Part 52.17, Contents of applications, for an ESP, and is submitted in accordance with NRC guidance on electronic submittals.

The application is organized as follows:

**Part 1 – Administrative Information.** This part contains an overview of the ESP application and general corporate information, including ownership, management, and boards of directors, as required by 10 CFR 50.33(a) through (d).

**Part 2 – Site Safety Analysis Report (SSAR).** This part contains information about site safety, emergency preparedness, and quality assurance. The site safety section includes a description of the VEGP site and proposed facilities, as required by 10 CFR 52.17(a)(1)(i) through (viii), an assessment of the site features affecting the facility design (e.g., major structures, systems, and components that bear significantly on site acceptability under the radiological consequence evaluation factors of 10 CFR 50.34(a)(1)), and meteorological, hydrologic, geologic, and seismic characteristics of the site. The described seismic characteristics demonstrate site compliance with the earthquake engineering criteria of 10 CFR 50, Appendix S, as required by 10 CFR 50.34(a)(12) and (b)(10). Also included is a demonstration of site compliance with 10 CFR 100, Reactor Site Criteria, requirements for site suitability. Regarding the description of the facilities for which the proposed site may be used, SNC has selected two Westinghouse Electric Company, LLC (Westinghouse) AP1000 standard reactors as the proposed design for the VEGP site. This part also discusses the capability of the facilities to withstand the natural and man-made environmental hazards of the site. The emergency preparedness information includes an assessment of any impediments to implementing an emergency plan at the ESP site, as required by 10 CFR 52.17(b)(1), and includes a complete and integrated emergency plan, as required by 10 CFR 52.17(b)(2), with inspections, tests, and acceptance criteria (ITAAC). The quality assurance program under which ESP-related activities have been performed is also provided. Where possible, the SSAR section numbers correspond to the section numbers identified in NRC Review Standard RS-002, *Processing Applications for Early Site Permits* guidance. Consistent with that guidance, there are some gaps in the numbering sequence. This is intentional. Also, in a few instances, information has been located elsewhere in the application because it was deemed more appropriate for ESP purposes. However, to the extent practical, the numbering sequence in this ESP application has been maintained

consistent with NRC guidance. This approach is intended to facilitate any subsequent integration of the information in this ESP application with the Westinghouse AP1000 design certification in the COL application, in which the complete numbering sequence would be used.

The regulatory bases for the SSAR include consideration of the following:

- NRC Regulations – 10 CFR 50, 10 CFR 52 and 10 CFR 100.
- NRC Regulatory Guide 1.70, *Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants*.
- NUREG-0800, *Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants*

The following briefly describes the individual chapters of the SSAR:

- Chapter 1, Introduction and Description of Proposed Facility, includes an overview of the site and a discussion of development of the SNC Site Characteristic – Design Parameter Approach for the Westinghouse AP1000 standard reactor design.
- Chapter 2, Site Characteristics, includes geography and demography; nearby industrial, transportation, and military facilities; meteorology; hydrology engineering; and geology, seismology and geotechnical engineering.
- Chapter 13, Emergency Planning & Industrial Security, includes an overview of emergency planning for the site and surrounding area in case of plant accidents, and of the physical security provided for the site and plant sensitive areas.
- Chapter 15, Site Safety Assessment, includes a discussion of radiological consequences of plant accidents, and conformance with applicable 10 CFR 100 siting criteria.
- Chapter 17, Nuclear Development Quality Assurance Program, includes a description of the 10 CFR 50, Appendix B Quality Assurance Program applicable to the development of materials for the ESP application.

**Part 3 – Environmental Report (ER).** This part contains information about site environmental issues, as required by 10 CFR 51.45 and 51.50. This part also satisfies the application content requirement of 10 CFR 52.17(a)(2). It focuses on the environmental impacts to the VEGP site from the construction and operation of two Westinghouse AP1000 (AP1000) standard reactor plants having characteristics identified in the ER.

This ESP application is premised on the assumption that SNC ultimately seeks a COL to construct and operate the new AP1000 units at the VEGP site. The ER discusses the existing

environment surrounding the VEGP site and in the vicinity of the site; postulates environmental impacts of construction and operation, and considers appropriate mitigation measures; reviews the impacts of design basis and severe accidents; and reviews similar alternative sites.

For evaluation purposes, the following categories of information regarding interfaces of the proposed site and facilities are reviewed:

- Comparison of the functional operational needs of the facility as they relate to the site's natural and environmental resources.
- Impact of the facility on the site's natural and environmental resources.

Input to the ER includes:

- National Environmental Policy Act.
- NRC Regulations – 10 CFR 51 and 10 CFR 52.
- NRC Regulatory Guide 4.2, *Preparation of Environmental Reports for Nuclear Power Stations*.
- NUREG-1555, *Standard Review Plans for Environmental Reviews of Nuclear Power Plants*.
- State environmental statutes, as applicable.

The following briefly describes the sections of the ER:

- Chapter 1, Introduction to the Environmental Report, includes a discussion of the proposed project and SNC's purpose for the permit.
- Chapter 2, Environmental Description, examines the existing use of the site for the VEGP Units 1 and 2 facilities, describes the current site and surrounding area, physical and ecological environment, and provides current socioeconomic, demographic, historic, and community characteristics.
- Chapter 3, Plant Description, describes the new AP1000 facilities proposed for the site and related construction activities.
- Chapter 4, Environmental Impacts of Construction, describes the potential impacts on the surrounding environment for construction of the proposed facilities.
- Chapter 5, Environmental Impacts of Station Operation, describes the potential impacts of operating the proposed facilities at the site.

- Chapter 6, Environmental Measurements and Monitoring Programs, describes the programs that will be utilized to monitor the environmental impacts of the construction and operation of the proposed facility.
- Chapter 7, Environmental Impacts of Postulated Accidents Involving Radioactive Materials, describes the potential radiological consequences, associated with operating the proposed AP1000 facilities at the VEGP site, due to design basis accidents and other severe accidents.
- Chapter 8, Need for Power, provides a need for power evaluation based on the State of Georgia Integrated Resource Plan.
- Chapter 9, Alternatives to the Proposed Action, reviews potential alternatives (including alternative energy sources and sites) and supports the decision for co-locating the proposed AP1000 units at the VEGP site.
- Chapter 10, Environmental Consequences of the Proposed Action, analyzes unavoidable adverse environmental impacts, irreversible commitments of environmental resources, cumulative impacts, and costs and benefits associated with construction and operation of the proposed AP1000 units at the VEGP site.

**Part 4 – Site Redress Plan.** This part contains information regarding site redress as required by 10 CFR 52.17(c). Site redress describes the actions that would be taken by SNC to ensure that the VEGP site is restored to an environmentally stable and aesthetically acceptable condition if certain limited pre-construction activities are conducted and the ESP expires before it is referenced in an application for a COL.

**Part 5 – Emergency Plan (EP).** This part contains information about the VEGP Emergency Plan. This emergency plan is applicable to existing VEGP Units 1 and 2, as well as to the proposed new AP1000 units. The VEGP Emergency Plan is designed to be compliant with 10 CFR 50.47, *Emergency plans* and 10 CFR 50 Appendix E, *Emergency Planning and Preparedness for Production and Utilization Facilities*. It is based on the guidance contained in NUREG 0654, Revision 1, *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*, with the exception of emergency action levels which are based on Nuclear Energy Institute (NEI) guidance (**NEI 2003**). In addition, for the new AP1000 units, the VEGP Emergency Plan is designed to be compliant with 10 CFR 52.17(b)(1), 10 CFR 52.17(b)(2)(ii), and 10 CFR 52.17(b)(3). NUREG 0654, Supplement 2 is also used as guidance for the development of the VEGP Emergency Plan pertaining to the new AP1000 units for the ESP process.

In summary, each part of the application is intended to stand alone to the extent practical. That

is, information appearing within one part may be referenced elsewhere within the same part to minimize duplication. However, if the same information is used in more than one part, that information may be replicated so that each part may be used without reliance on another part.

## **2.2 Labeling Conventions**

Each page of this application, except pages in the application title sheet, individual Part title sheets, Revision Summary, overall application Table of Contents and application Appendices, has a header and footer that identifies the Part of this application to which it belongs and the current revision. Other content identity is established as described in the following sections. However, since the Quality Assurance Program (Part 2 – Chapter 17) and the Emergency Plan (Part 5) are controlled documents issued separately from the application, these portions of the application do not fully adhere to the following content requirements.

### **2.2.1 Pagination**

Content pages are numbered to indicate their Chapter and Section, and page within a section. For example, page 3.2-36 is the 36th page in Chapter 3, Section 3.2. Tables and figures located at the end of a Section are similarly numbered with Section page numbers. In addition, each ESP application Part contains a Table of Contents. Table of Contents page numbers are sequentially numbered i, ii, etc. Page numbers are located in the footer of page.

### **2.2.2 Paragraph Numbering**

Within each Part, chapters are numbered sequentially. Subtier content is numbered based on the chapter number. For example, Chapter 2, Section 2.1, Section 2.1.1, etc. References to sections are within a Part unless otherwise specified. Section, and subsection numbers of three or less, are indicated in the Table of Contents for the application Part.

### **2.2.3 References**

Reference lists appear at the end of each Section (i.e., the first subdivision within chapters). For example, the References list for Part 3, Section 2.5 appears at the end of Section 2.5. Some chapters with small sections may include the references at the end of the chapter as a separate heading with each sections references noted. In general NRC Regulations (i.e., Code of Federal Regulations, NUREGs, Regulatory Guides, etc.) are not included in the reference list.

### **2.2.4 Tables and Figures**

Table and figure numbers consist of the Section number, and a sequential number. For example, Figure 2.3-10 is the 10th figure for Section 2.3. Tables (generally) and Figures are

located at the end of the associated Section. However, small tables less than one-third of a page may be placed within the text portion of the Section.

### **2.2.5 Document Revision Level**

The application's current revision level is denoted on the overall application title page (i.e., first page of the application). Information in Chapters, Sections, or Appendices that has been revised for the current revision is identified by change bars. The revision level in a page's footer indicates the most recent revision for the corresponding Chapter, Section, or Appendix. Footer revision levels only change if a revision to the text or figures is made in a Chapter, Section, or Appendices that the page numbers are linked with. Application figure revision levels are specific to each individual figure.

**Chapter 2 Reference:**

**(NEI 2003)** NEI 99-01, *Methodology for Development of Emergency Action Levels*, Revision 4, Nuclear Energy Institute, January 2003.



## **Chapter 3 General Information – 10 CFR 50.33**

### **3.1 Names of Applicant and Owners**

SNC, as authorized by Georgia Power Company, submits this application individually, and for the owner licensees to be named on the ESP. The names of the applicant and owner licensees are as follows:

- Georgia Power Company
- Oglethorpe Power Corporation (An Electric Membership Corporation)
- Municipal Electric Authority of Georgia
- 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')
- Southern Nuclear Operating Company, Inc. (non-owner applicant)

### **3.2 Addresses of Applicant and Owners**

Southern Nuclear Operating Company, Inc.  
40 Inverness Center Parkway  
P. O. Box 1295  
Birmingham, AL 35201-1295

Georgia Power Company  
241 Ralph McGill Boulevard  
Atlanta, GA 30308

Oglethorpe Power Corporation (An Electric Membership Corporation)  
2100 East Exchange Place  
Tucker, GA 30084-5336

Municipal Electric Authority of Georgia  
1470 Riveredge Parkway  
Atlanta, GA 30328

Dalton Utilities  
1200 V. D. Parrott, Jr. Parkway  
Dalton, GA 30720

### **3.3 Descriptions of Business or Occupation of Applicant and Owners**

#### ***Southern Nuclear Operating Company, Inc.***

SNC is engaged in the operation of nuclear power plants. SNC operates the Edwin I. Hatch Nuclear Plant (HNP), Units 1 and 2, and the Vogtle Electric Generating Plant (VEGP), Units 1 and 2, for Georgia Power Company (GPC), Oglethorpe Power Corporation (OPC), the Municipal Electric Authority of Georgia (MEAG), and the City of Dalton Georgia (i.e., Dalton Utilities) (the owners); and the Joseph M. Farley Nuclear Plant (FNP) for Alabama Power Company. The combined electric generation of the three plants is in excess of 5,900 MW.

Should a nuclear facility be constructed at the site proposed by this application, SNC is expected to be the exclusive licensed operator of the facility.

#### ***Georgia Power Company***

GPC is engaged in the generation and transmission of electricity and the distribution and sale of such electricity within the State of Georgia. GPC serves more than two million customers in a service area of approximately 57,000 square miles of the State of Georgia's land area. With a rated capability of approximately 14,000 megawatts (MWs), GPC currently provides retail electric service in all but 6 of Georgia's 159 counties. Should a nuclear facility be constructed at the site proposed by this application, GPC is expected to be named on the operating license as an owner<sup>[crp1]</sup>.

#### ***Oglethorpe Power Corporation***

Oglethorpe Power Corporation (An Electric Membership Corporation) (OPC), supplies electricity at wholesale to 38 Electric Membership Corporations (EMCs) in the State of Georgia, which in turn distribute this electricity at retail to their residential, commercial and industrial customers. The EMCs serve approximately 1.5 million electric consumers (meters) representing approximately 3.7 million people of the nine million total residents in the State of Georgia. The EMCs serve consumers in 150 of the 159 counties in Georgia. Should a nuclear facility be constructed at the site proposed by this application, OPC is expected to be named on the operating license as an owner.

#### ***Municipal Electric Authority of Georgia***

Municipal Electric Authority of Georgia (MEAG) is an electric generation and transmission public corporation, which provides wholesale power to 49 communities in the State of Georgia and other wholesale customers. These communities, in turn, supply electricity to more than 675,000 retail consumers, representing approximately 10 percent of Georgia's population, in their

respective service areas across the state. Should a nuclear facility be constructed at the site proposed by this application, MEAG is expected to be named on the operating license as an owner.

***City of Dalton***

The City of Dalton (Dalton) is a municipality within the State of Georgia. Acting by and through its Board of Water, Light and Sinking Fund Commissioners, doing business as Dalton Utilities, Dalton owns electric generation capacity, transmission capacity and a distribution system. Dalton is a duly incorporated municipality under the laws of the State of Georgia. Should a nuclear facility be constructed at the site proposed by this application, Dalton is expected to be named on the operating license as an owner.

### 3.4 Descriptions of Organization and Management of Applicant and Owners

#### **Southern Nuclear Operating Company, Inc.**

SNC is a wholly-owned subsidiary of Southern Company, a Delaware corporation registered under the Public Utility Holding Company Act of 1935, having its principal place of business in Atlanta, Georgia. SNC was formed for the purpose of operating nuclear facilities owned by its subsidiaries. Traditional operating companies that are subsidiaries of Southern Company are Georgia Power Company, Alabama Power Company, Gulf Power Company, Mississippi Power Company, and Southern Company Gas. Other subsidiaries of the Southern Company system are Southern Company Services, Inc. a wholly-owned system service organization; Southern LINC, a wholly-owned company providing wireless communications to the Southern Company system and to other businesses in Southern Company's service area; and Southern Telecom, Inc, a wholly-owned company providing fiber optic communications to the Southern Company system and to other businesses in Southern Company's service area.

The traditional service area of Southern Company includes Alabama, Georgia, and significant areas of Mississippi and Florida. Southern Company power plants have a total installed generating capacity of nearly 40,000 MW as of January 1, 2006.

Neither SNC, nor its parent, Southern Company, is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. SNC files this application on its own behalf and as agent of the owners.

The names and business addresses of SNC's directors and principal officers, all of whom are citizens of the United States, are as follows:

#### **SNC Directors**

D. M. Ratcliffe  
President and Chief Operating Officer  
Southern Company  
270 Peachtree Street  
Atlanta, GA 30303

M. D. Garrett  
President and Chief Executive Officer  
Georgia Power Company  
241 Ralph McGill Boulevard  
Atlanta, GA 30308

**SNC Directors (cont'd)**

C. D. McCrary  
President and Chief Executive Officer  
Alabama Power Company  
600 North 18<sup>th</sup> Street  
Birmingham, AL 35202

J. B. Beasley, Jr.  
President and Chief Executive Officer  
Southern Nuclear Operating Company, Inc.  
40 Inverness Center Parkway  
P. O. Box 1295  
Birmingham, AL 35201

**SNC Principal Officers** (All addressed at SNC Headquarters in Birmingham, Alabama except the Site Vice Presidents)

J. B. Beasley, Jr.  
President and Chief Executive Officer

J. T. Gasser  
Executive Vice President

J. A. "Buzz" Miller  
Senior Vice President, Nuclear Development

L. M. Stinson  
Vice President, Fleet Operations Support

M. M. Caston  
Vice President and Corporate Counsel

K. S. King  
Chief Financial Officer and Vice President, Corporate Services

D. H. Jones  
Vice President, Engineering

**SNC Principal Officers (cont'd)**

T. E. Tynan  
Vice President – Vogtle  
Vogtle Electric Generating Plant  
7821 River Road  
Waynesboro, GA 30830

J. R. “Randy” Johnson  
Vice President - Farley  
Farley Nuclear Plant  
P.O. Drawer 470  
Ashford, AL 36312

D. R. Madison  
Vice President – Hatch  
Southern Nuclear Operating Company, Inc.  
11028 Hatch Parkway, North  
Baxley, GA 31513

**Georgia Power Company**

GPC is a Georgia corporation with its principal office in Atlanta, Georgia. GPC is a wholly owned subsidiary of Southern Company, a Delaware corporation with its principal office in Atlanta, Georgia.

Neither GPC nor its corporate parent, Southern Company, is owned, controlled, or dominated by an alien, foreign corporation, or foreign government.

The names and business addresses of Georgia Power Company's directors and principal officers, all of whom are citizens of the United States, are as follows:

**GPC Directors**

Gus H. Bell III  
329 Commercial Drive, Suite 200  
Savannah, GA 31406

Robert L. Brown, Jr.  
250 East Ponce De Leon Avenue  
Decatur, GA 30030

Ronald D. Brown  
100 Auburn Avenue Northeast  
Atlanta, GA 30303

Anna R. Cablik  
1513 Johnson Ferry Road, Suite T-20  
Marietta, GA 30062

Michael D. Garrett  
241 Ralph McGill Boulevard  
Atlanta, GA 30308

David M. Ratcliffe  
30 Ivan Allen Jr. Blvd NW  
Atlanta, GA 30308



**GPC Directors (cont'd)**

D. Gary Thompson  
Unit 5  
95021 Barclay Place  
Amelia Island, FL 32034

Richard W. Ussery  
P. O. Box 1755  
Columbus, GA 31902-1755

William Jerry Vereen  
301 Riverside Drive  
Moultrie, GA 31768-8603

E. Jenner Wood, III  
50 Edgewood Avenue  
Atlanta, GA 30308

**GPC Principal Officers** (All addressed at GPC Headquarters in Atlanta, Georgia)

Michael D. Garrett  
President and Chief Executive Officer

Cliff S. Thrasher  
Executive Vice President, Treasurer and Chief Financial Officer

Ann P. Daiss  
Vice President, Comptroller and Chief Accounting Officer

Chris C. Womack  
Executive Vice President, External Affairs

Mickey A. Brown  
Executive Vice President, Customer Service Organization

James H. Miller III  
Senior Vice President and General Counsel

**GPC Principal Officers (cont'd)**

Judy M. Anderson  
Senior Vice President, Charitable Giving

Douglas E. Jones  
Senior Vice President, Fossil & Hydro Generation

Oscar C. Harper IV  
Vice President, Resource Planning and Nuclear Development

**Oglethorpe Power Corporation**

Oglethorpe Power Corporation (An Electric Membership Corporation) (OPC) was organized under the Georgia Electric Membership Corporation Act (Official Code of Georgia Annotated, Title 46, Chapter 3, Article 4) and operates on a not-for-profit basis.

OPC is neither owned, controlled nor dominated by an alien, foreign corporation or foreign government.

The names and addresses of OPC's principal officers and the members of its governing body, all of whom are citizens of the United States, are as follows:

**OPC Directors** (All addressed at OPC Headquarters in Tucker, Georgia)

Benny W. Denham  
Chairman  
Southwest Region

Sam Rabun  
Vice Chairman  
Central Region

Marshall S. Millwood  
Northeast Region

Larry N. Chadwick  
Northwest Region

M. Anthony Ham  
Southeast Region

H. B. "Bud" Wiley Jr.  
Member At-Large

Gary A. Miller  
Managing Director

Jeffrey W. Murphy  
Managing Director

**OPC Directors (cont'd)**

C. Hill Bentley  
Managing Director

Gary W. Wyatt  
Managing Director

Robert E. Rentfrow  
Managing Director

Wm. Ronald Duffey  
Outside Director

John (Jack) S. Ranson  
Outside Director

**OPC Principal Officers** (All addressed at OPC Headquarters in Tucker, Georgia)

T. A. Smith  
President and CEO

Michael W. Price  
Chief Operating Officer

Elizabeth Bush Higgins  
Chief Financial Officer

W. Clayton Robbins  
Senior Vice President, Government Relations and Chief Administrative Officer

Billy Ussery  
Senior Vice President, Member and External Relations

Jami G. Reusch  
Vice President, Human Resources

**Municipal Electric Authority of Georgia**

MEAG is a public corporation and an instrumentality of the State of Georgia, a body corporate and politic, created by the General Assembly of the State of Georgia in its 1975 Session (Official Code of Georgia Annotated, Title 46, Chapter 3, Article 3).

MEAG is neither owned, controlled nor dominated by an alien, foreign corporation or foreign government.

The names and addresses of MEAG's principal officers and the members of its governing body, all of whom are citizens of the United States, are as follows:

**MEAG Directors**

Patrick C. Bowie, Jr., Chairman  
200 Ridley Avenue  
LaGrange, GA 30241

L. Keith Brady, Vice-Chairman  
25 LaGrange Street  
Newnan, GA 30263

Kelly E. Cornwell, Board Member  
P. O. Box 248  
Calhoun, GA 30703-0248

John H. Flythe, Board Member  
P. O. Box 218  
805 S. Grant Street  
Fitzgerald, GA 31750

Robert. W. Lewis, Board Member  
675 N. Marietta Pkwy  
Marietta, GA 30060-1528

Steve A. Rentfrow, Board Member  
P. O. Box1218  
Cordele, GA 31010-1218

**MEAG Directors (cont'd)**

Robert C. Sosebee, Board Member  
1953 Homer Road  
Commerce, GA 30529

Roland C. Stubbs, Jr., Secretary-Treasurer  
115 Mims Road  
Sylvania, GA 30467

Kerry S. Waldron, Board Member  
106 S. Hutchinson Ave.  
Adel, GA 31620

**MEAG Principal Officers** (All addressed at MEAG Headquarters in Atlanta, Georgia)

Robert P. Johnston  
President and Chief Executive Officer

Charles B. Manning, Jr.  
Senior Vice President, Participant and Corporate Affairs

Mary G. Jackson  
Senior Vice President and Chief Accounting Officer

James E. Fuller  
Senior Vice President and Chief Financial Officer

Steven M. Jackson  
Vice President, Power Supply

Gary M. Schaeff  
Vice President, Transmission

**City of Dalton**

Dalton Utilities is neither owned, controlled, or dominated by an alien, foreign corporation, or foreign government.

The names and addresses of Dalton's governing body (Councilmen) and principal officers (Mayor, City Administrator and Clerk) and the names and addresses of Dalton Utilities' governing body (Commissioners) and principal officers (Chairman, President/Chief Executive Officer and Secretary), all of whom are citizens of the United States, are as follows:

**City of Dalton Councilmen**

Bobby Joe Grant  
2204 Rocky Face Circle  
Dalton, GA 30720

Terry Christie  
402 S. Thornton Ave. #10  
Dalton, GA 30720

Dick Lowery  
113 N. Castle Road  
Dalton, GA 30720

Charles Bethel  
c/o J&J Industries, Inc.  
P.O. Box 1287  
Dalton, GA 30722-1287

**City of Dalton Principal Officers** (All addressed at P.O. Box 1205, Dalton, Georgia 30722)

Ray Elrod  
Mayor

Butch Sanders  
City Administrator

Bernadette Chattam  
City Clerk

**Dalton Utilities Commissioners**

James Gamblin, Chairman  
1610 Beverly Drive  
Dalton, GA 30720

Norman Burkett, Vice Chairman  
2209 Rocky Face Circle  
Dalton, GA 30720

Lamar Hennon, Secretary  
c/o Carpets of Dalton/Home Show Place  
3010 Old Dug Gap Road  
Dalton, GA 30720

George Mitchell  
1918 Tiffany Lane  
Dalton, GA 30720

Smith Foster  
c/o Plantex Machinery, Inc.  
P. O. Box 1761  
Dalton, GA 30722-1761

**Dalton Utilities Officers** (All addressed at Dalton Utilities office identified in Section 3.2)

James Gamblin  
Chairman

Don Cope  
President and Chief Executive Officer

Lamar Hennon  
Secretary