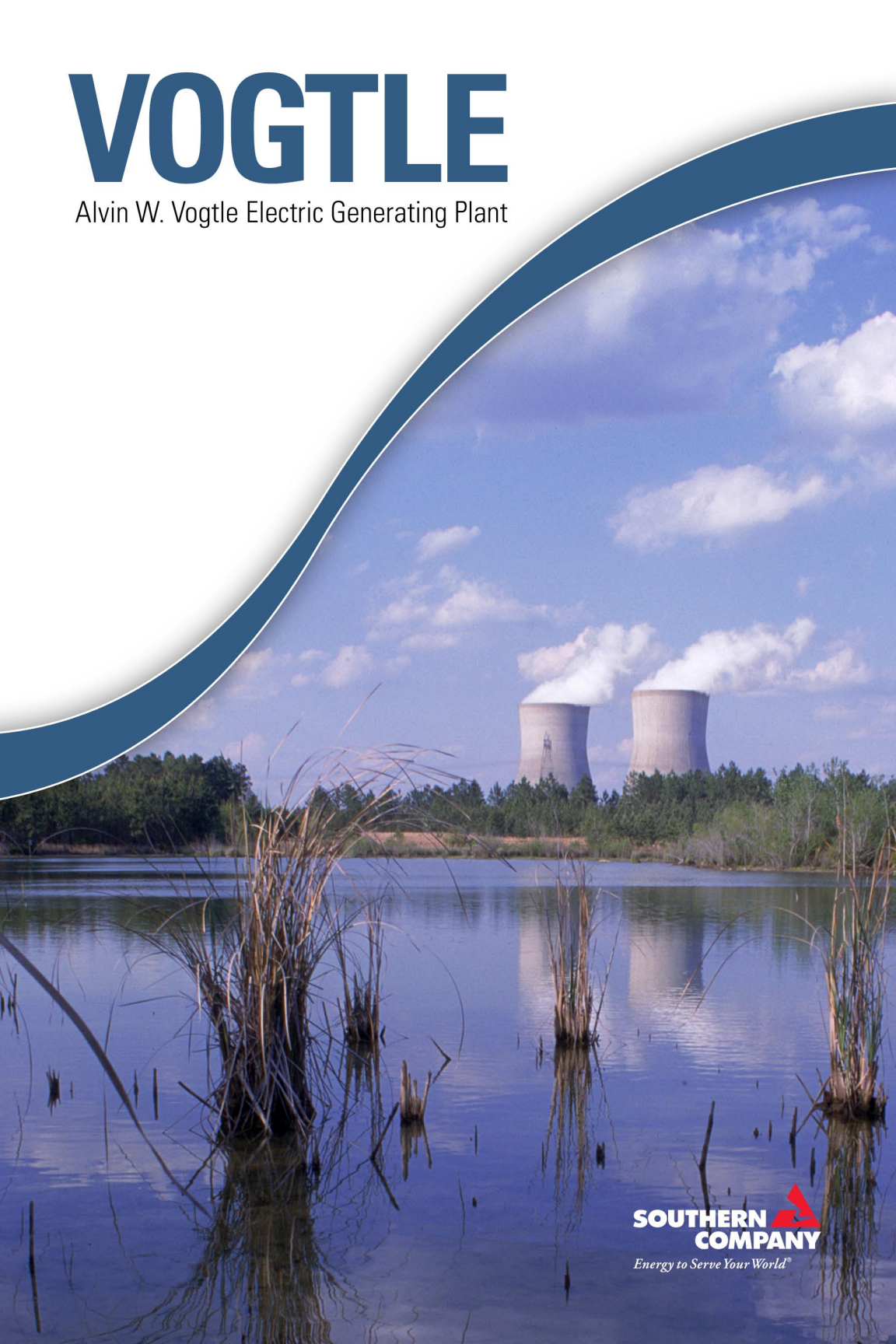
VOGTLE

Alvin W. Vogtle Electric Generating Plant



SOUTHERN COMPANY

Energy to Serve Your World®

Alvin W. Vogtle Electric Generating Plant

GEORGIA POWER
A SOUTHERN COMPANY

OglethorpePower

MEAGPOWER

Dalton
UTILITIES

About Plant Vogtle

The Alvin W. Vogtle Electric Generating Plant near Waynesboro, Ga., is the state's second nuclear power plant. Like its predecessor, the Edwin I. Hatch Nuclear Plant near Baxley, Ga., Plant Vogtle is jointly owned by Georgia Power, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and Dalton Utilities. The plant is named for Alvin W. Vogtle Jr., the chief executive officer of Southern Company, Georgia Power's parent firm, from 1969 through 1983.

Georgia Power began planning Plant Vogtle in 1971. Unit 1 began commercial operation in 1987, and Unit 2 began commercial operation in 1989. The plant's 3,100-acre site along the Savannah River became the largest construction project ever undertaken in Georgia. At the peak of construction, more than 14,000 people worked to build the two electric generating units at Plant Vogtle.

Approximately 800 people – including engineers, mechanics, control room operators, lab technicians, instrument and control technicians, electricians, security officers and others – oversee the plant's operation 24 hours a day, seven days a week. Full-time on-site inspectors from the U.S. Nuclear Regulatory Commission (NRC) monitor the plant to ensure it is maintained and operated safely, efficiently and in accordance with established nuclear operating procedures.

Plant Vogtle's massive containment buildings — with their four-foot-thick concrete walls — house, below ground level, two 355-ton reactor vessels on huge concrete slabs. The twin cooling towers, large structures that stand 548 feet above the surrounding landscape, release non-radioactive water vapor as part of the power plant's cooling process.

Like other electric generating plants, Plant Vogtle has large turbines and generators, a computerized control room, a chemistry lab and high-voltage switchyards. Plant Vogtle sends millions of kilowatts of electricity to destinations

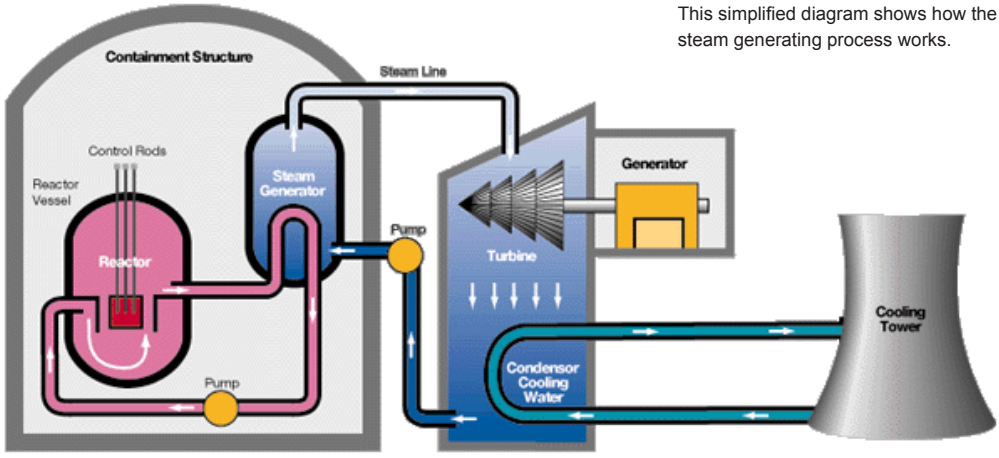
all across the region, providing enough energy to power approximately 600,000 homes, and we expect this number to increase.

As people move to the southeastern United States and use greater amounts of electricity, additional power plants using nuclear energy, such as Plant Vogtle, are needed.

How Nuclear Power Plants Operate

Most power plants generate electricity by heating water to produce steam. This steam fans the propeller-like blades of a turbine connected to the generator shaft. The electrical current from the generator is then fed to a network of wires (the electric grid) and delivered to consumers.

While fossil power plants generate steam by burning oil, gas or coal, nuclear power plants generate steam with the use of tons of ceramic pellets made from uranium or other fissionable elements. The cylindrical pellets, each about the size of the end of a finger, are arranged in long vertical tubes within the reactor. Inserted throughout bundles of these fuel tubes are many "control rods." These rods regulate a process that results in atoms invisibly flying apart, or fissioning. As the atomic pieces split and travel through the fuel pellets, they generate heat.



This simplified diagram shows how the steam generating process works.


Plant Vogtle

Operation of the reactor is controlled by varying the number of rods, the degree to which these rods are inserted or withdrawn from the core and by controlling other plant parameters.

The Water Cycles

Pressurized water reactors, such as the two at Plant Vogtle, use three separate water systems. To begin, water is pumped under high pressure through the reactor core where the nuclear chain reaction heats the water to a temperature of about 620 degrees Fahrenheit. Because the water in the reactor is kept under high pressure, it does not boil into steam. This hot water travels from the reactor to the four steam generators – all located inside the protective containment structure – before it is pumped back into the reactor.

In the steam generator, cooler water in a separate system surrounds the tubes filled with hot water from the reactor core, which heats the cooler water until it boils into steam. This water does not mix with the reactor water. The hot steam

passes to the turbine where it strikes the turbine blades, making the turbine spin much like a windmill when wind hits its blades. The turbine then spins an electric generator, producing electricity. After the steam is used, it is condensed into water to continue the cycle.

The condensers cool by circulating water from natural draft cooling towers using water from the Savannah River. This third, separate water system never comes in contact with the steam within the power plant or water in the reactor cycle.

Public Safety

Safety is the top priority of the U.S. nuclear energy industry. We take very seriously our obligation to protect the health and safety of our employees, the public and the environment.

Securing Our Facilities

Prior to Sept. 11, 2001, nuclear power plants were the most secure facilities of any industrial sites in the nation. Since Sept. 11, the nuclear power industry has taken a number of significant steps to reinforce and enhance our security measures, including increased personnel, training, technology and barriers – spending an additional $1.2 billion on security throughout all commercial nuclear power facilities in the United States.

Nuclear power plants are an important component of the nation's critical infrastructure and have been designed with multiple layers of protection, including structural strength, highly trained operators and proven emergency plans.

The Nuclear Regulatory Commission (NRC) holds nuclear power plants to the highest security standards of any American industry. And, of the 17 infrastructure categories currently under evaluation by the U.S. Department of Homeland Security, the agency has said that the nuclear power sector is by far the best protected. Furthermore, the nuclear power sector is referenced by Homeland Security as its security standard.

Emergency Planning

Comprehensive plans have been developed in accordance with federal requirements by the NRC and other oversight agencies to respond to an emergency at any of the Southern Nuclear-operated facilities.

Southern Nuclear Operating Company has overall responsibility for the emergency plan, which involves Southern Nuclear, Georgia Power and the various county, state and federal agencies.

The emergency plan specifies the procedures, personnel and equipment used to classify an emergency. This plan defines and assigns responsibilities and outlines an effective course of action for safeguarding personnel, property and the general public.

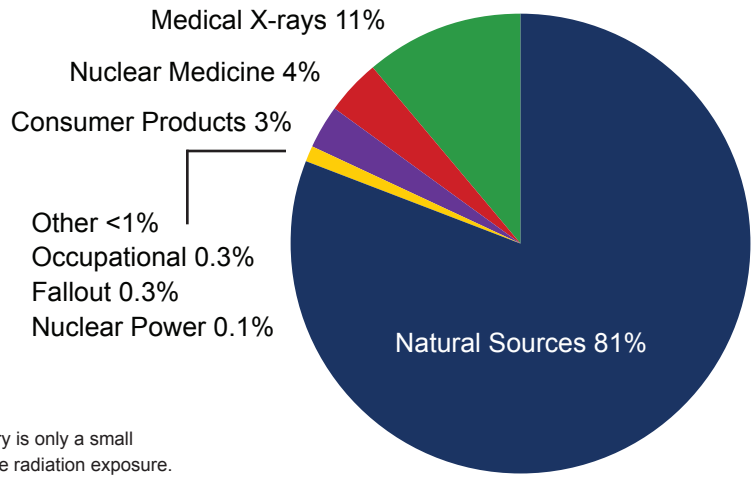
These plans are updated regularly and maintained at all times. Drills and exercises are conducted frequently to test these plans and to train and evaluate personnel on procedure adherence.

Should an emergency occur, one of the first steps would be to notify off-site authorities such as the Georgia Emergency Management Agency, the NRC and local county officials. Communication would be maintained with these agencies to keep them fully aware of the emergency status, including on-site and off-site radiological information.

Radiation

The combined effect of the structural, mechanical and human safety systems built into our nuclear plants means that a person living within a few miles of a plant receives less radiation from its presence than from watching a television.

Radiation to the human body is measured in millirem. The average "background" radiation from our natural environment (sunlight, food, rocks, soil) adds up to around 250 to 300 millirem a year, depending on where we live. Other man-made sources of low-level radiation add greatly to this total.



The nuclear power industry is only a small contributor to your average radiation exposure.

A typical chest X-ray is about 10 millirem of radiation; a jet airplane flight from New York to California and back again adds five millirem. Those living within a five-mile radius of a nuclear power plant will receive less than one millirem of radiation per year to an individual.

Federal regulatory agencies carefully set and enforce dose limits to protect the public, the environment and plant employees.

Defense in Depth

Nuclear power plants are designed with many redundant safety systems, sometimes called "defense in depth." Fuel pellets, which are between three and five percent fissionable U-235, are sealed in zircaloy tubes. The fuel assemblies are then contained in a reactor vessel, which has eight inch–thick steel walls and weighs approximately 500 tons including the weight of the reactor head. All of this is housed in a containment building. There are several redundant cooling systems to minimize the possibility of overheating the reactor core. A nuclear reactor operating at full power can be shut down in a few seconds by rapidly inserting the control rods to stop the fission process.

New Nuclear Plant Development

Southern Company currently is exploring opportunities for nuclear development to serve our customers' energy needs for the future. Southern Company's actions to again explore the nuclear energy option are part of our long-range

generation-planning process that seeks to identify the most cost-effective, reliable and environmentally responsible fuel sources to meet growing electricity demand in the areas we serve. Nuclear power is a proven technology that is a viable generating source.

Increased demand for energy is driving the need for new baseload capacity. The population of the southeastern United States continues to expand rapidly, and according to the U.S. Department of Energy, 40 percent of the U.S. population will live in the Southeast by 2030. The state of Georgia alone is expected to grow by 4 million people by 2030. During the next 15 years, electrical demand on the Georgia Power system is projected to grow 30 percent.

As energy needs grow in the Southeast, Southern Company intends to be on the forefront of exploring nuclear energy as an option for meeting rising electricity demand.

Nuclear power is a safe, reliable, cost-effective power source that has a low impact on the environment. It is a prudent business decision to preserve nuclear power as an option to meet our customers' needs.

This artist rendering depicts two new potential units at Plant Vogtle.

The Nuclear Advantage

Nuclear energy is a safe, reliable, cost-effective form of energy. Southern Company has operated nuclear plants safely and reliably for more than 30 years, and all three of our plants have operated at high levels of reliability. The average three-year capacity factor of our nuclear power plants is more than 90 percent. Capacity factor is the percent of time the unit is available to provide power to the electrical grid. Nuclear power has a low production cost compared with other fuel sources. Uranium is used as nuclear fuel, and it has less price volatility than other fuel sources, such as coal and natural gas.

Nuclear power adds diversity to our fuel mix. Twenty percent of the nation's electricity is supplied by nuclear power, and behind coal, it is the second leading source of electricity. The use of nuclear power increases our energy independence by decreasing our dependence on foreign oil.

Nuclear power produces no greenhouse gases, making it a sound, environmentally responsible fuel source. Nuclear power accounts for three-quarters of all emission-free electric generating capacity in this country.

Nuclear power will continue to play an important role in meeting the growing energy needs of Southern Company customers, as the southeastern U.S. continues to expand rapidly.

Protecting Our Environment

Plant Vogtle's Commitment to the Environment

In addition to the clean air features of nuclear power, Plant Vogtle has been a certified Wildlife Council site since 1993. More than 600 acres have been replanted with loblolly and native longleaf pines. Plant Vogtle also participates in bluebird nest monitoring and local environmental education programs.

Plant Vogtle has management programs that enhance the habitat for species such as bluebirds, wood ducks, wild turkey and the endangered Red-cockaded woodpecker. Land management efforts at Plant Vogtle contributed to Southern

Company's certification as a member of the National Wild Turkey Federation Energy for Wildlife.

Monitoring blue bird nests is one of the wildlife preservation programs Plant Vogtle supports.

Climate Change

Earth's temperature is a balance between heat entering the atmosphere from the sun and infrared radiation leaving the earth's atmosphere into space. When some of this infrared radiation re-enters space, it is absorbed by certain gases and particles concentrated in the lower atmosphere. This process is called the greenhouse effect. Greenhouse gases occur both naturally and from human activity. They include water vapor, carbon dioxide and other trace gases as well as man-made fluorocarbons.

There is evidence that greenhouse gases have increased because of human activities and other natural processes. Some scientists think this increase is the cause of more global warming. Although there is an increase in the concentration of greenhouse gases, there is still some debate on what future changes may occur. Despite these ongoing debates, Southern Company is committed to finding solutions that are technologically, environmentally and economically sensible, to reduce the production of greenhouse gas. Southern Company's consideration of new nuclear generation demonstrates that commitment. Permanent reductions require fundamental advances in the technologies we use to generate and use electricity. Our resources are devoted to a rational, long-term focus on technology development to address greenhouse gas emissions without forcing large, near-term emission reductions at a higher cost.

Storage of Used Fuel

Under the Nuclear Waste Policy Act of 1982, the U.S. Department of Energy (DOE) is the federal agency responsible for the disposal of high-level waste such as used nuclear fuel. After more than 20 years of exhaustive scientific

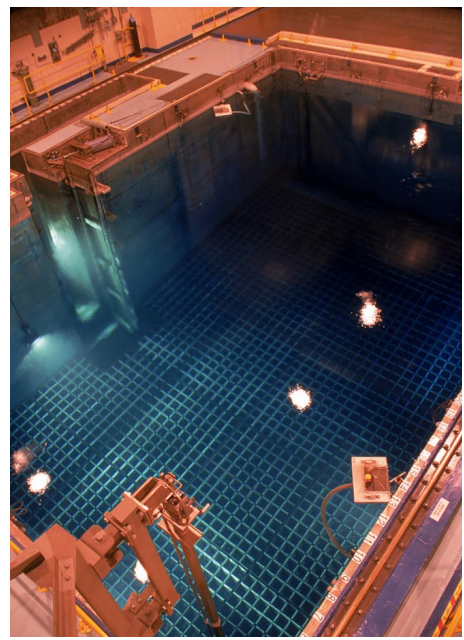
and engineering research, the President and Congress in 2002 approved Yucca Mountain, Nev. as the site of a deep, geological national repository for used nuclear fuel. Opponents of the Yucca Mountain project have attempted to delay or halt its development through a series of legal actions.

Disposing of used fuel at this remote desert site supports sound national energy, environmental and security policies. The world's leading scientists, the President, Congress and now the courts have agreed on this fundamental principle. DOE's work to implement this consensus will benefit current and future generations. As we wait for construction of the repository, nuclear plants are safely storing used nuclear fuel.

A solid material, used nuclear fuel is safely stored at nuclear power plant sites, either in steel-lined, concrete pools filled with water or in steel or steel-reinforced concrete containers with steel inner canisters. The first on-site storage method is referred to as the spent fuel pool. The second is called dry storage.

Spent Fuel Pool

When most of the U-235 has been used in the fission process, the fuel assemblies are removed from the reactor vessel and replaced with new fuel assemblies. At most plants, used fuel is stored in large, steel-lined, concrete pools filled with water. These pools are known as spent fuel pools. Both water and concrete are excellent radiation shields. In these spent fuel pools, the water acts as an absorber and prevents radiation from escaping the pool. The water also keeps the fuel cool while the fuel decays or becomes less radioactive over time. The water itself is completely contained inside the plant's concrete auxiliary building.



Spent fuel pools are used as one of the safety measures in Southern Company's nuclear plants.

Dry Storage

Dry storage at Plant Hatch

The government's delay in providing a permanent repository for used nuclear fuel means that nuclear plants must store more used fuel than expected and store it for longer than originally intended. Since 1986, dozens of U.S. nuclear plants have supplemented their storage capacity by building above-ground dry storage facilities. Other countries also have safely and successfully stored used fuel above ground since the mid-1970s.

Southern Nuclear uses dry storage at Plants Farley and Hatch. It is likely that dry storage will be needed at Plant Vogtle by 2014.

Dry storage containers are cylindrical containers constructed of steel or steel-reinforced concrete and lead, which serve as proven, effective radiation shields. These containers effectively shield the radiation as used fuel continues its cooling process. Once loaded with used fuel assemblies, the containers are either stored horizontally in a concrete vault, or they stand upright on a thick concrete pad.

Each dry storage container design must be approved by the NRC. The agency requires that dry storage containers be constantly monitored and relicensed every 20 years. The containers are designed and tested to prevent the release of radiation under the most extreme conditions – earthquakes, tornados, hurricanes, floods and sabotage – and they are naturally cooled and ventilated.

Spent fuel pools at nuclear plants were designed to store at least a decade's worth of used fuel. With dry storage, used fuel can be safely stored for much longer. The NRC has determined that used fuel can be safely stored at plant sites for at least 30 years beyond the licensed operating life of the plant. While used nuclear fuel can be safely stored on-site, Southern Company and the industry maintain that a permanent underground repository is the best, long-term solution.

These storage areas are well protected by a combination of sturdy plant construction, state-of-the-art surveillance and detection equipment, and armed, well-trained paramilitary security forces.

Owners and Operators

Southern Nuclear Operating Company, headquartered in Birmingham, Ala., operates Southern Company's six nuclear units at three locations: the Alvin W. Vogtle Electric Generating Plant near Waynesboro, Ga., the Joseph M. Farley Nuclear Plant near Dothan, Ala. and the Edwin I. Hatch Nuclear Plant near Baxley, Ga. Plant Farley was built and is owned by Alabama Power, and the plant generates approximately 19 percent of Alabama Power's electricity. Plants Vogtle and Hatch were built by and are co-owned by Georgia Power Company, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and Dalton Utilities. Together, these two nuclear power plants generate approximately 20 percent of Georgia Power's electricity.

Georgia Power is the largest subsidiary of Southern Company, one of the nation's largest generators of electricy. The company is an investor-owned, tax-paying utility, serving its 2.25 million customers in all but four of Georgia's 159 counties. Georgia Power's rates are below the national average. Visit Georgia Power's website at www.georgiapower.com.

Oglethorpe Power Corporation is a $4.9 billion power supply cooperative serving 38 Electric Membership Corporations (EMCs) in Georgia. These EMCs provide retail electric service to more than 4 million Georgians throughout the state. Oglethorpe Power is the nation's largest electric cooperative in terms of assets, annual kilowatt-hour sales and ultimate consumers served. Visit Oglethorpe Power's website at www.opc.com.

Municipal Electric Authority of Georgia (MEAG) Power is a public corporation providing power to 49 Georgia communities that in turn bring energy to approximately 600,000 citizens. In 2006 energy sales exceeded $721 million.

MEAG Power has assets of more than $4.9 billion, co-owns four generating plants with a generating capacity of 1,566 megawatts, and co-owns Georgia's Integrated Transmission System (ITS). Additionally, in June 2004 commercial operation began on our solely owned natural gas-fired generator known as the Wansley Combined Cycle Facility with a generating capacity of 503 megawatts. Visit the MEAG website at www.meagpower.org.

Dalton Utilities has operated as a public utility since 1889. Dalton Utilities provides potable water, electrical, natural gas and wastewater treatment services to the City of Dalton and portions of Whitfield, Murray, Gordon, Catoosa and Floyd counties. Dalton Utilities serves approximately 65,000 customers. Visit Dalton Utilities' website at www.dutil.com.

Southern Nuclear, Alabama Power and Georgia Power each are wholly owned subsidiaries of Southern Company. With 4.3 million customers and more than 42,000 megawatts of generating capacity, Atlanta-based Southern Company is the premier energy company serving the Southeast, one of America's fastest-growing regions. A leading U.S. producer of electricity, Southern Company owns electric utilities in four states and a growing competitive generation company, as well as fiber optics and wireless communications.
Southern Company brands are known for excellent customer service, high reliability and retail electric prices that are significantly below the national average. Southern Company has received the highest ranking in customer satisfaction among U.S. electric service providers for seven consecutive years by the American Customer Satisfaction Index (ACSI). You can access our website by visiting www.southerncompany.com.

Alvin W. Vogtle Visitors Center
7821 River Road
Waynesboro, GA 30830
706-826-3630
706-554-9407

SOUTHERN COMPANY
Energy to Serve Your World®