

# About Southern Nuclear



Southern Nuclear Operating Company, headquartered in Birmingham, Ala., operates Southern Company's six nuclear reactors at three locations: the Alvin W. Vogtle Electric Generating Plant near Waynesboro, Ga.; the Edwin I. Hatch Nuclear Plant near Baxley, Ga.; and the Joseph M. Farley Nuclear Plant near Dothan, Ala. Plant Vogtle and Plant Hatch were built and are co-owned by Georgia Power, Oglethorpe Power Company, the Municipal Electric Authority of Georgia and Dalton Utilities. Together, these two nuclear power plants generate approximately 18 percent of Georgia Power's electricity. Plant Farley was built and is owned by Alabama Power and generates approximately 19 percent of Alabama Power's electricity.

Southern Nuclear, Georgia Power and Alabama Power are each wholly owned subsidiaries of Southern Company.

## The Benefits of Nuclear Power

The benefits of nuclear power are many. First and foremost, nuclear power is a safe, reliable, cost-effective source of electricity. Nuclear power provides 17 percent of Southern Company's generation, and the company has been operating nuclear plants safely and reliably for more than 30 years.

Southern Company's six nuclear reactors have operated at high levels of reliability, with an average three-year fleet capacity factor of 90.7 percent for the years 2007-2009. A plant's capacity factor is the percentage of time it is available to provide power to the electrical power grid.

**Nuclear energy helps diversify our fuel mix**, both for Southern Company and for our country. Nuclear power is the nation's second largest source of energy and provides 20 percent of its electricity, making it a key element in a balanced fuel mix. Nuclear power increases America's energy independence by decreasing our dependence on foreign oil. Since nuclear fuel has less price volatility than other fuel sources such as natural gas and coal, nuclear power helps to relieve energy cost uncertainty. And compared with other fuel sources, nuclear power is among the least expensive to produce.

**Nuclear energy is a sound, environmentally responsible and safe fuel source.** Nuclear power accounts for three-quarters of the low-emission electric generating capacity in this country. And nuclear energy produces no greenhouse gases.

## Meeting Growing Energy Needs

Southern Nuclear is overseeing the licensing and construction of two new nuclear units at the Plant Vogtle site near Augusta, Ga. These will be among the first new nuclear plants built in America in more than 30 years. More than 1,000 workers are employed at the site, performing activities to support construction and operation of the new units. At the peak of construction in 2014, more than 3,000 workers will be needed for the construction project. About 800 permanent employees will be needed to staff the new units once they are put into service.

These new nuclear energy units will help meet growing energy needs in the Southeast. Electrical demand in the region is predicted to grow by about 30 percent in the next 15 years. By 2040, Georgia alone is projected to add about 5 million residents.

The new units have received certification from the Georgia Public Service Commission, and the Nuclear Regulatory Commission is reviewing the license application for the new units. The company anticipates receiving the license by early 2012. Unit 3 will be operational in 2016 and Unit 4 in 2017. Southern Company and Georgia Power have an agreement with the U.S. Department of Energy (DOE) for a conditional commitment for loan guarantees for construction of the new units. The loan guarantees would apply to future borrowings related to the construction. The DOE loan guarantees are expected to save Georgia Power's customers millions in financing costs annually over the expected life of any guaranteed borrowings, based on preliminary estimates. The actual amount of the savings will depend upon the final terms and the timing of the specific borrowings.

To find out more about Southern Nuclear and the Plant Vogtle 3 and 4 projects, visit our Web site at [www.southerncompany.com/nuclearenergy](http://www.southerncompany.com/nuclearenergy).

