



## Cleveland County Generating Facility

Combustion Turbine Plant



The immediate plans for the Cleveland County Generating Facility will include a natural gas-fueled, simple cycle combustion turbine electric-generating plant located near Grover in Cleveland County, North Carolina. The plant will be used to serve the growing electricity needs in the Carolinas and elsewhere in the Southeast. The plant's four generating units are scheduled to begin commercial operation in late 2012.

### Location

Cleveland County, NC

### Current Capacity

720 megawatts

### Ownership

Southern Power

### Primary Fuel

Natural Gas

### Size

The plant will consist of four combustion turbine units, with a combined capacity of 720 megawatts.

### Technology

Simple-cycle technology is an efficient and environmentally-sensitive method of generating electricity. In a simple-cycle combustion turbine, an electric motor turns a turbine shaft causing air to flow through the inlet air filter. After the air is compressed, it is mixed with fuel in combustion chambers and is burned. The expanding burned fuel is directed through turbine blades, forcing them to turn. The turbine is directly coupled to the generator and jointly turns at 3,600 RPM. The combustion turbine produces electricity at 13,800 volts before being "stepped up" in a transformer to 230,000 volts for transmission.

Once completed the Cleveland County Generating Facility will be owned and operated by Southern Power, the subsidiary of Southern Company that acquires, builds, manages and owns generation assets that have been constructed for the wholesale market. Southern Power is among the largest wholesale energy providers in the Southeast, meeting the electricity needs of municipalities, electric cooperatives and investor-owned utilities. The company owns and operates more than 7,500 megawatts with facilities in Alabama, Florida, Georgia and North Carolina and has an additional 820 megawatts committed to construction in North Carolina and Texas.

### Economic Impact

The Cleveland County Generating Facility is expected to produce millions of dollars in economic benefits through job creation and property taxes for Cleveland County and the surrounding, growing market of the Carolinas.

Atlanta-based Southern Company is the premier energy company serving the Southeast and a leading U.S. producer of electricity. With 4.4 million customers and more than 42,000 megawatts of generating capacity, Southern Company owns electric utilities in four states and a growing competitive generation company, as well as fiber optics and wireless communications.

### Southern Power

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