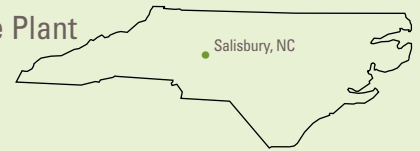




## Plant Rowan

Combustion Turbine and Combined-Cycle Plant



Plant Rowan is a natural gas-fueled, simple-cycle combustion turbine electric generating and combined-cycle plant located in Salisbury, NC. It is also capable of burning fuel oil as a backup. The plant is used to generate electricity for the South – the fastest growing region in the country. The plant was purchased by Southern Company from Progress Ventures in the summer of 2006. The combustion turbines went online in 2001, and the combined cycle in 2003.

### Location

Salisbury, NC

### Current Capacity

925 megawatts

### Ownership

Southern Power

### Primary Fuel

Natural Gas

Plant Rowan is 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.

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.

### Size

The plant consists of three combustion turbine units and a combined-cycle unit with a combined capacity of 925 megawatts. The plant site has expansion possibilities.

### 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 18,000 volts before being “stepped up” in a transformer to 230,000 volts for transmission.

Combined-cycle technology is one of the cleanest and most efficient methods of producing electricity. With this technology, the power plant’s combustion turbines make electricity by burning natural gas. Waste heat from the turbines is captured and reused to drive a separate steam turbine that produces additional electricity. Combined-cycle power plants produce high power outputs at high efficiencies and with low emissions. The combustion turbine produces electricity at 18,000 volts and the steam turbine produces electricity at 21,000 volts before being “stepped up” in a transformer to 230,000 volts for transmission.

### Economic Impact

Plant Rowan provides million of dollars of positive economic impact to the city of Salisbury, Rowan County and the surrounding, growing North Carolina market.

### Southern Power

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