

Plant Rowan

Location

Salisbury, North Carolina

Capacity

985 MW

Fuel Resource

Natural Gas

Ownership

Southern Power



Plant Rowan is a natural gas-fueled, simple-cycle combustion turbine electric generating and combined-cycle plant located in Salisbury, North Carolina. 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.

Size

The plant consists of three combustion turbine units and a combined-cycle unit with a combined capacity of 985 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, a subsidiary of Southern Company, is a leading U.S. wholesale energy provider meeting the electricity needs of municipalities, electric cooperatives, investor-owned utilities and other energy customers. Southern Power and its subsidiaries, some of which are owned in part with various partners, own or operate 50 facilities operating or under development in 13 states with more than 11,920 MW of generating capacity in Alabama, California, Delaware, Georgia, Kansas, Maine, Nevada, New Mexico, North Carolina, Oklahoma, Texas, Washington and West Virginia.

Southern Company (NYSE: SO) is a leading energy company serving 9 million customers through its subsidiaries. The company provides clean, safe, reliable and affordable energy through electric operating companies in three states, natural gas distribution companies in four states, a competitive generation company serving wholesale customers across America, a leading distributed energy infrastructure company, a fiber optics network and telecommunications services.

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