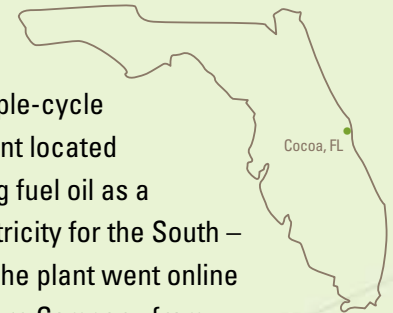




Plant Oleander

Combustion Turbine Plant



Plant Oleander is a natural gas-fueled, simple-cycle combustion turbine electric-generating plant located near Cocoa, FL. 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 went online in June 2002 and was purchased by Southern Company from Constellation Energy in the spring of 2005.

Location

Cocoa, FL

Current Capacity

800 megawatts

Ownership

Southern Power

Primary Fuel

Natural Gas

Size

The plant consists of five combustion turbine units at 160 megawatts each with a combined capacity of 800 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 first four combustion turbines produce electricity at 18,000 volts before being “stepped up” in a transformer to 230,000 volts for transmission, while the 5th combustion turbine produces electricity at 18,000 volts before being “stepped up” in a transformer to 138,000 volts for transmission.

Economic Impact

Plant Oleander provides millions of dollars in economic benefits to the city of Cocoa, Brevard County, and the surrounding, growing Florida market. Nearby counties and the entire state also benefit by job availability and the economic development boost created by having immediate access to a reliable source of electric power.

Plant Oleander is owned and operated by Southern Power, Southern Company's fast-growing competitive generation company. Southern Power — a subsidiary of Southern Company — acquires, builds, manages and owns generation assets that have been constructed for the wholesale market. Southern Power is the largest wholesale energy provider in the Southeast, meeting the electricity needs of municipalities, electric cooperatives and investor-owned utilities in one of the fastest growing regions of the country. Southern Power currently owns and operates more than 6,700 megawatts of generation assets in Alabama, Georgia, Florida, and North Carolina.

Atlanta-based Southern Company is the premier energy company serving the Southeast and a leading U.S. producer of electricity. With 4.3 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.

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