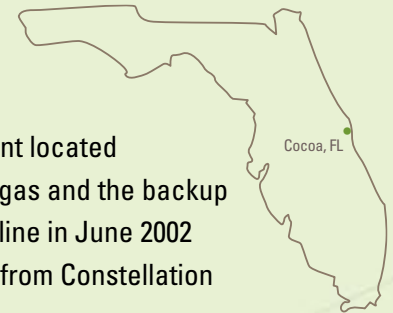




# Plant Oleander

Combustion Turbine Plant



Plant Oleander is a dual fuel, simple-cycle combustion turbine electric-generating plant located near Cocoa, FL. The primary fuel is natural gas and the backup fuel is distillate (fuel oil). 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

Plant Oleander 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 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.

### Southern Power

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