



**RICHARD J. MIDULLA  
GENERATING STATION  
HARDEE COUNTY, FLORIDA**

**WINNER LEADERSHIP AWARD,  
COUNCIL FOR SUSTAINABLE FLORIDA**

**SEMINOLE HEADQUARTERS**

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**RICHARD J. MIDULLA GENERATING STATION**

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**FOR MORE INFORMATION ON SEMINOLE**

visit Seminole's web site at

[www.seminole-electric.com](http://www.seminole-electric.com)

 **Seminole Electric**  
COOPERATIVE, INC.  
IN PARTNERSHIP WITH THOSE WE SERVE

# WELCOME TO SEMINOLE'S RICHARD J. MIDULLA GENERATING STATION

SEMINOLE ELECTRIC COOPERATIVE'S  
MIDULLA GENERATING STATION, IN  
HARDEE COUNTY, IS THE COOPERATIVE'S  
SECOND GENERATING PLANT.

SEMINOLE IS KNOWN AS A GENERATION AND TRANSMISSION COOPERATIVE – a G&T – because the Cooperative generates and transmits bulk supplies of electricity to 10 member distribution cooperatives that jointly own Seminole. Seminole and its members represent the third largest segment of electric consumers in Florida, serving more than 1.6 million individuals and businesses in portions of 46 counties.

Seminole's 810 megawatt Midulla Generating Station burns clean natural gas, with low sulfur fuel oil as a back up fuel. It's one resource in Seminole's diversified energy portfolio, assembled to ensure an economical, reliable power supply for our member systems.

Located on a 1,300 acre site on the Hardee/Polk county border, Midulla Generating Station's 500 megawatt combined cycle facility became available for commercial operation on January 1, 2002. It consists of two natural gas-fired combustion turbine/generators and one steam turbine to produce electricity. Fuel is burned in the combustion turbines. The resulting combustion gases power the turbine/generators to produce electricity. Hot exhaust gases from the combustion turbines are captured and routed through two heat recovery steam generators. These units create steam, which spins an additional turbine/generator and produces more electricity. Finally, the steam is discharged into a condenser, which returns the steam to purified water for reuse.

In December, 2006, Seminole added an additional 310 megawatts of peaking capacity, through five aeroderivative SwiftPac combustion turbine units. These peaking units can be started and brought on line in as few as eight minutes to meet state operating reserve requirements.



**GAS REGULATING STATION:** The plant site is served by two gas pipeline companies, Gulfstream Natural Gas and Florida Gas Transmission. The Regulating Station is used to control how much gas is taken from each pipeline. The station also is used to filter out impurities. It contains a dew point heater that is used to remove moisture from the gas and ensure a constant temperature. The gas leaves the regulating station through underground piping, fed to the combustion turbines and peaking units through meters that monitor gas consumption.



**FUEL OIL METERING/REGULATING STATION:** Low sulfur fuel oil is used as a back up fuel when natural gas is not available due to hurricanes, other natural disasters, or pipeline issues. Distillate oil is trucked in from the Port of Tampa and stored in three tanks with a combined capacity of five million gallons. This is enough fuel oil for 110 base load hours of burn. Oil is fed to the combustion turbines and peaking units through double-walled underground piping, which provides environmental safety. This "pipe within a pipe" will contain leakage in the event of a malfunction.



**COOLING POND:** One innovative feature of Midulla Generating Station is its use of a 570 acre reservoir, which provides water to cool steam used in the electricity making process. The reservoir was built on reclaimed phosphate mining land and is shared with the adjacent Hardee Power Station, eliminating the need for large cooling towers. The reservoir also provides an environmentally friendly home for numerous species of fish, birds, and aquatic fowl.



**CONTROL ROOM:** Midulla Generating Station operations are monitored in a control center which features sophisticated monitoring, operation management and data display equipment.



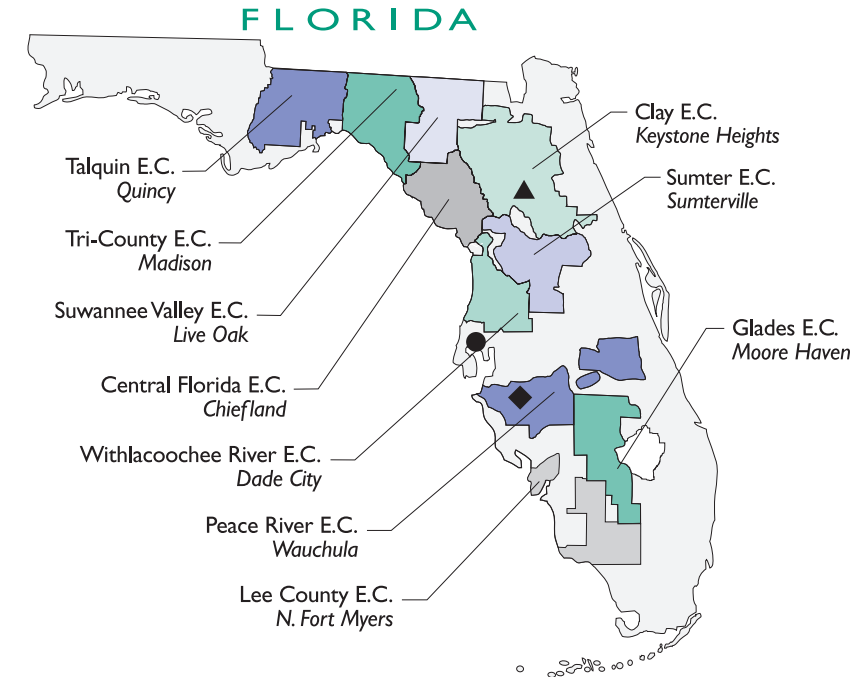
**TRANSFORMER YARD:** The electric generators at Midulla Generating Station produce energy at 18,000 volts which is fed via three horizontal circular tubes (Iso-Phase Busducts) to the transformer yard. Here, three transformers "step up" the energy to 230,000 volts for more efficient long distance transmission. This energy is then sent via the station switchyard to the Florida Grid System for transmission throughout the state.



**230,000 VOLT TRANSMISSION LINES:** Midulla Generating Station is connected to the Florida Electrical Transmission System, or Grid, by 230,000 volt transmission lines. These lines connect the Station to Progress Energy Florida, Florida Power and Light, and Tampa Electric facilities.

THESE FIVE PRATT & WHITNEY  
AERODERIVATIVE SWIFTPAC  
COMBUSTION TURBINE UNITS  
BECAME AVAILABLE FOR  
COMMERCIAL OPERATION IN  
DECEMBER 2006, ADDING AN  
ADDITIONAL 310 MEGAWATTS  
OF PEAKING CAPACITY.

## Seminole's Member Distribution Cooperatives



▲ SEMINOLE GENERATING STATION, PALATKA, FLORIDA

● SEMINOLE ELECTRIC COOPERATIVE HEADQUARTERS, TAMPA, FLORIDA

◆ RICHARD J. MIDULLA GENERATING STATION, HARDEE COUNTY, FLORIDA

### OUR MISSION

To be the preferred provider of wholesale energy services for our members.

### OUR VISION

To be a leading competitor in the Florida energy market, trusted and respected by our members, employees, business partners, and community.

To provide our employees a safe, challenging and rewarding work environment, where pride and commitment are the hallmark of our operations.

### OUR VALUES

We uphold the highest ethical and professional standards.

We believe the Cooperative ownership and principles are the cornerstone of our success.

We affirm that innovation, communication, accountability, and teamwork are essential ingredients to achieve member satisfaction.

We are committed to improving the quality of life in our communities.

We are responsible stewards of our environment.