



## SUCCESS STORIES PAYNE CREEK

### COMBINED CYCLE POWER PLANT, 500 MW

LOCATION WACHULA, FL, U.S.A.  
CUSTOMER SIEMENS WESTINGHOUSE POWER CORPORATION  
END USER SEMINOLE ELECTRIC COOPERATIVE

#### PROJECT OVERVIEW

##### Gas Turbine

- + Supplier: Siemens Westinghouse
- + Type: 501F(D)
- + Main Fuel: Natural Gas
- + Backup Fuel: Light Oil No. 2

##### HRSG

- + No. of Units: 2
- + Type: Horizontal gas path Natural Circulation, 3 Pressure Levels + Reheat Unfired

	ENGLISH	METRIC
HP Steam Flow	410,000 lbs/hr	51.66 kg/s
HP Steam Pressure	1,800 psig	124.1 barg
HP Steam Temperature	1,055°F	568.3°C
Reheat Steam Flow	490,000 lbs/hr	61.74 kg/s
Reheat Steam Pressure	450 psig	31.0 barg
Reheat Steam Temperature	1,055°F	568.3°C
IP Steam Flow	80,000 lbs/hr	10.08 kg/s
IP Steam Pressure	460 psig	31.7 barg
IP Steam Temperature	620°F	326.7°C
LP Steam Flow	85,000 lbs/hr	10.71 kg/s
LP Steam Pressure	75 psig	5.2 barg
LP Steam Temperature	600°F	315.6°C



#### VOGT POWER SOLUTION

- + HRSGs are of the horizontal gas path natural circulation type and feature three pressure levels plus reheat
- + Heat transfer surfaces were supplied in "bundles" that, after delivery to the site, were lifted into position and then welded to their casings and structural steel framework

#### PERFORMANCE RESULTS

- + Meets the growing electricity needs and the overall power demand in Florida.

