

SUCCESS STORIES

WAYNE COUNTY PLANT: NORTH CAROLINA

COMBINED CYCLE POWER PLANT

LOCATION GOLDSBORO, NC, U.S.A.
CAPACITY 965 MW OUTPUT
START-UP 2011

PERFORMANCE MEASUREMENTS

	ENGLISH	METRIC
HP Steam Flow	765,809 lb/h	347,371 kg/h
HP Steam Pressure	2411 psig	166 barg
HP Steam Temperature	1058°F	570°C
RH Steam Flow	791,445 lb/h	358,999 kg/h
RH Steam Pressure	510 psig	35 barg
RH Steam Temperature	1055°F	568°C
IP Steam Flow	90,514 lb/h	41,057 kg/h
IP Steam Pressure	571 psig	39 barg
IP Steam Temperature	650°F	343°C
LP Steam Flow	72,019 lb/h	32,668 kg/h
LP Steam Pressure	118 psig	8 barg
LP Steam Temperature	679°F	359°C



PROJECT OVERVIEW

- + Project name: Wayne County Plant
- + Plant type: Combined Cycle Power Plant
- + Customer: Duke Energy
- + End user: Duke Energy
- + Year ordered: 2009
- + Operational: 2011
- + Gas turbine supplier: Siemens
- + Type: SGT6-5000F (FD4)
- + Main fuel: Natural gas
- + Alternate fuel: Fuel oil
- + Number of HRSGs: 2

HRSG Attributes:

- + Horizontal, natural circulation
- + SMART design
- + Three pressure levels + Reheat
- + Fired