

# BANGPA-IN COGENERATION PLANT 1 (BIC1)

## COMBINED CYCLE

LOCATION: PHRA NAKORN SI AYUDHAYA, THAILAND

CUSTOMER: THAI SHINYRO CORPORATION

END USER: C.H. KARNCHANG PUBLIC CO. LTD.

YEAR: 2011

## PROJECT OVERVIEW

### Gas Turbine

Type: GE LM6000 Sprint

Main Fuel: Natural Gas

### HRSG

No. of Units: 2

Cycle Description: 2x2 cogeneration

Design: Single Wide MSG

Pressure Levels: 2 HP, LP

### Auxiliary Components Provided by Vogt Power International

Attemperators – Interstage with 430°C Set Point

Recirculation System

Blowdown Tank



## BABCOCK POWER SOLUTION

Two reactors per boiler —  
55'-0" L x 58'-8" W

Four layer reactor — designed for  
2 x 2 original loading with two  
layers of honeycomb catalyst  
per reactor/unit

Initial loading changed to one layer  
COMET catalyst per reactor/unit

136 catalyst modules per layer in an  
8 x 17 arrangement

Total duct/reactor weight —  
3.5 million pounds per unit

## PERFORMANCE RESULTS

NRG Conemaugh SCRs were designed and supplied ahead of schedule and under budget. Babcock Power was able to work dynamically with the client to change catalyst scope mid-project with no overall impact to quality or schedule.

	ENGLISH	METRIC
<b>Lowfired</b>		
HP Steam Flow	47.6 tons/hr	43.2 mtons/hr
HP Steam Pressure	754.2 psi	52.0 bara
HP Steam Temp	806°F	430°C
LP Steam Flow	15.7 tons/hr	14.2 mtons/hr
LP Steam Pressure	79.8 psi	5.5 bara
LP Steam Temp	505.4°F	263°C

