

ENERGY

anytime...

Complete solutions for power generation



Owner:



Petrobras Energia S.A. & Ecuador TLC S.A.

EPC Contractor:

Energy International Corp.

Main Equipment:

2 water tube boilers superheated system.

2 steam turbine generators condensing type.

2 surface condensers.

1 mechanical draft cooling tower.

1 Cat® 12CM32 generator set.

Location:

Palo Azul, Block 18, Ecuador

Application:

Hybrid Plant (burning associated gas & crude oil) for Electric Power Generation required by the CPF.

Technical Data:

2 x 6 MW + 1 x 5.6 MW = 17.6 MW @ 13.8 kV / 60 Hz





Petrobras Ecuador

Fuel:

This plant is able to burn associated gas of low calorific value and crude oil of high viscosity as supplementary fuel, in steam generating boilers

Generators:

2 x 6.0 MW Shin Nippon machinery steam turbine generators @ 60 Hz, 13.8 kV.
1 x 5.6 MW Cat[®] reciprocating generator set @ 60 Hz, 13.8 kV.

Distribution & Control:

Switchgear and control system providing plant protection, SCADA control and monitoring.

Turnkey Responsibility:

Energy International

O&M Contractor/Term:

Energy International /5 Year Term

Commercial Operation:

Februray 2008



Customer Benefits

Power generation in a remote and non-interconnected area

The customer needed a primary power source in this remote region to support the Central Processing Facility CPF for their oil production. Energy International built a hybrid dual fuel power plant which consists of 2 x Steam Boilers, 2 x Steam Turbine Generator Sets and 1x generator set burning associated gas of low calorific value, crude oil and diesel for electric power generation.

Scope

Energy international's scope of supply includes the complete power plant with all required systems and auxiliaries; basic, system and detailed engineering; project management, other engineering services; civil works; mechanical and electrical installation; commissioning; and start up.

This project was presented at the 1st International Energy Forum of Petrobras and won an award for energy efficiency.