


# ENERGY

## anytime...

**Complete solutions for power generation**



<b>Owner:</b>	 Petrobras
<b>Contractor:</b>	Energy International Corp., Gecolsa S.A., HVM Engineers
<b>Turbines:</b>	2 x Taurus™ 60 Gas Generator Packages from Solar® Turbines
<b>Location:</b>	Guando, Colombia
<b>Application:</b>	Generation of power for all of the electrical requirements at this oil field.
<b>Technical Data:</b>	Electrical output: 2 x 5,200 kW

Energy International offers integrated energy solutions with the highest quality engineering, procurement, project management and construction services in the industry. We partner with HVM Engineers to provide state-of-the-art engineering.



To meet customer objectives, Energy International utilizes Solar® Industrial Gas Turbines for gas turbine-powered plant projects. Solar and Taurus are registered trademarks of Solar Turbines Incorporated.



**Dual Fuel:**  
Natural Gas, Diesel

**Generator:**  
3 phase synchronous generator  
5,200 kW, 416 kV, 60 Hertz

**Turnkey Responsibility:**  
Energy International, Gecolsa S.A.

**Erection/Civil Works:**  
HVM Engineers, Gecolsa S.A.,

**Commenced Operations:**  
December 2003



## Customer Benefits

### Power Production:

The client was looking for ways to reduce operating costs for their Colombian company.

One aspect of their plan was to source a power plant that could be installed quickly and operated remotely. Energy International was able to supply such a package utilizing two Taurus™ 60 Gas Generator Packages from Solar® Turbines burning Natural Gas and built for continuous duty. The units permitted a dual fuel option burning either natural gas or diesel. The Taurus 60s gas turbine uses

SoLoNOx™ a dry, "lean-premixed combustion technology" for pollution prevention.

This power plant supplies 8.8MW of power @ 4,160 kV varying load based on the requirements of the client's water injection program.

### Oil Production Capacity

The power generated by the plant is being used to replace the high speed reciprocating, diesel fired, generator sets powering water re-injection pumps. Under this program, crude oil production increased by 10,000 barrels of oil per day.