

## CASE STUDY

# CANDELARIA - Guatemala, Central America



### KEY STATISTICS

**Customer:** Hidroeléctricas Candelaria y Secacao

**Location:** Guatemala

**Net Head:** 129.45m

**Flow:** 3.79 M<sup>3</sup>/Sec

**Turbine type:** Francis G150

**Output power:** 4.456MW

**Mean Runner Diameter:** 800

**Speed:** 720rpm

**Project Commissioned:** 2006

Based in the North Central area of Guatemala, this project generates clean energy through the construction of a 4.456MW hydro power plant. This run-of-river facility uses the water from the Trece Aguas River, reducing CO2 emissions by displacing electricity from fossil fuel fired power plants.

The scope of supply for the project by Gilkes includes a Francis turbine, inlet pipework and main inlet valve, synchronous generator, neutral cubicle and excitation control system, control and switchgear equipment, plant auxiliary equipment, main transformer and sub-station, house transformer and emergency diesel generator, control and communications SCADA system, installation services and commissioning services.

Having secured the contract for the supply of the above equipment, it was manufactured, assembled and tested in our factory in the UK.

In order to minimize installation costs, Gilkes offer experienced engineers to oversee the installation, allowing local labour to be utilised. Full manpower installation service is also offered. Although this project did not include for the provision of civil design, this is a service offered by Gilkes.

John J. "Jack" Snyder, PE, P. Eng served as the Engineering Project Manager for Candelaria and concluded that "It is my opinion that the Candelaria project really benefited from choosing Gilkes as the M&E equipment supplier. The quality and performance of the equipment, level of service and support, attention to detail, and installation and commissioning professionalism were all to a very high standard."

### CONTACT

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