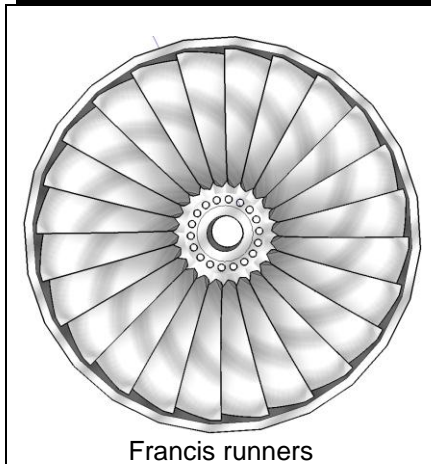


Los Alpes Hydro Power Plant

Case History



Francis runners

Los Alpes Hydro Power Plant Tucurú, Alta Verapaz, Guatemala

Project owner
Fuerza de Gravedad SA



Status:

- Conceptual design
- Local agreement 15%
- Environmental study submitted

Key Figures:

- Head: 80 m
- Qm wet season 19,0 m³/s
- Qm dry season 9,6 m³/s
- Qt : 30,0 m³/s
- Waterway 5 km channel
- Turbine 20 MW (2 * 10 MW)
- Annual generation : 90 GWh
- Estimated cost – 50 mUSD
- Specific cost 0,55 USd/GWh

Construction time:

Abt. 30 months

Year :

2016 – 2018/12

Commissioning:

Dec. 2018



Rio Pocoloc



Local population at site

Brief project description

This project is agreed with a 15 % share to the land owner. No negotiations with the local villagers yet, but they will most likely be compensated through the landowner's share.

This project will be developed on one large farm. There are indigenous settlements further up in the mountain, basically Q'eqchi' speaking, but none in the area that will be developed, because of the poverty of the soil. Some coffee and maize plantation will be affected.

This is a Run-of-the River project which includes a combined intake and dam construction in concrete. The intake site has solid rock on both sides of the river. The gravity dam will be about 5-6 m high and 40 m long. It is not regarded any possibilities for day-pond regulation due to the large turbine capacity.

There will be a transfer channel of about 5 km, feeding into the penstock with about 80 m pressure at the power plant.

There are high voltage power lines two kilometers away but no details are planned here so far.



Location of Los Alpes

Project team:

Project director
Civil Engineer
Mechanical engineer
Electrical engineer

Einar Sofienlund,
Alf V. Adeler
Bjorn Undrum,
Einar Sofienlund,

EPC contractor civil works:

Detail design and engineering
Project manager and Site engineer

Technohidros, Guatemala
Ricardo Bonilla, Guatemala

EPC contractor electro-mechanical works:

Detail design and manufacturing

Not decided yet