Hydro power plant at Vatnsfell

The power plant uses the height difference between Thorisvatn and the reservoir for the power plant at Sigalda. This power plant is unique for that it is only in operation during the winter months, when water is being directed from Thorisvatn to Krokslon.

Main quantities:
- Excavation 2.000.000 m^3
- Backfill 500.000 m^3
- Concrete 37.000 m^3

Dams:
- Total length 1130 m
- Main dam length 750 m
- Max height of main dam 30 m

Power and energy:
- Design height of water fall 64,6 m
- Power: 2 x 45 MW, Francis
- Energy 430 GWhr/Yr

IAV built the powerhouse, switch gear building, structure for water inlet and control, the water canal, the overflow structure and the dams.

Customer
Landsvirkjun

Project start
July 1999

Project manager
Johann G. Bergthorsson

Structural and mechanical engineering
Honnun now Mannvit engineering

Mechanical and electrical engineering
GE Hydro & Clemessy

Architects
Glama-Kim

Project finish
Sommer 2002

Site managers
Agnar Strandberg
Jon Levi Hilmarsson
Adalsteinn Hallgrimsson

Electrical engineering
Rafhonnun now Mannvit

Project supervision
Lahmeyer International
VSO consulting
Almenna consulting Engineers

IAV, Hofdabakki 9, 110 Reykjavik, Iceland - Tel: +354 530 4200