



**MANNVIT**  
ENGINEERING

Project example:

# Sigalda Hydroelectric Power Station

Construction of the Sigalda Hydroelectric Power Station began in 1973, and the station's three 50-MW turbines went online in 1977-78. The Sigalda Station is linked into the national grid with 220 kV transmission lines to the Sultartangi, Hrauneyjafoss and Vatnsfell Stations, as well as a 132-kV line to southeast Iceland.



## Technical data:

Client: The National Power Company – Landsvirkjun

Installed capacity: 150 MW

Turbines: 3 Francis units, vertical axis.

Gross head: 74 m

Harnessed discharge: 230 m<sup>3</sup>/s

Annual energy production: 650 GWh

Sigalda Dam: Length: 925 m; crest 42 m

Water reservoir: Krokslon Reservoir; 498 m.a.s.l.; storage capacity of 140 million m<sup>3</sup>.

Pressure shafts: 3 sloped pressure shafts;  $\varnothing$ 4.3 m; length 216 m

Headrace canal: 1000 m

Tailrace canal: 550 m

## Mannvit services:

Feasibility studies, site investigation, civil works design, structural and mechanical design including preliminary design and final design. The company also handled cost estimates, tender documents, contract documents, bid evaluation, project planning and assessment of harnessing choices.



## Additional information:

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