

RAPUNI SMALL HYDRO POWER PLANT

Client:

C&S Construction Sh.p.k.

Country:

Albania

Duration:

from January 2008 to March 2009

Services:

- Design for statutory procedures
- Tender design
- Tendering
- Tendering consultancy
- Design civil structures
- Design penstock
- Design of service road

Project objectives

Detailed Design and Tendering of a Small Hydro Power Plant in Albania

Project description

At a few kilometers distance from Librazhd, Albania, a two-step cascade of diversion power plants shall be constructed. Waters of Rapuni River and tributary rivers is collected in the powerhouse.

Project data

1st penstock: 5.3m/s flow rate; head = 100m; buried GRP pipe

1st powerhouse 6.6 cbmm/s flow rate in second section, 2 francis turbines in parallel, rated output 4.1. MWel

2nd penstock: length 6.5 km, head = 75 m

2nd powerhouse: 2 francis turbines in parallel, rated output 4.1. MWel

Project specifics

The design of such small hydropower plants has to be performed with special care as it is very cost sensitive, and the most economic and environmental friendly solution has to be found with least impact on the environment and lowest investment costs. Therefore also the carefully evaluation of the hydraulic data and the optimized sizing of the plant is crucial for the success of the project

Services

The service of iC reaches from various site visits, verifications of the land survey, preparation of documentation for the authorities to get the construction and installation license, preparation of tender documentation for the penstock, the electromechanical equipment, the civil works and for the hydraulic steel construction, tender consultancy.

