



HELIOS POWER



PROJECT

MINI HYDROPOWER PLANT LOPUSHNA

The Mini Hydropower Plant Lopushna, for production of electricity via water is situated near Georgy Damyanovo village, region Montana.

MHPP Lopushna is built in 1962. In 2012 is made a basic renovation of the complex managing system and it is put into exploitation on 29.06.2012.

THE LOCATION IS AT LAT: WGS84, N - 43°22'35.7", E - 23°1'22.3", Z = 250.000 m., Altitude 850 m.

DESCRIPTION OF THE MAIN PROCESSES:

WATER INTAKE AND PRESSURE PIPELINE:

HPP LOPUSHNA uses the water from Dalgodelska Ogosta River. At the point of water intake the water quantity is 2,06 m³/sec long-term mean flow and 1,3 m³/sec. with security of 95%.

WATER INTAKE: Alpine type

THE BUILDING: The built-up area is 393 m² consisting of two halls divided into three parts: turbine hall, control room and switchgear 20 / 7.5 / 0.4 kV.

THE MAIN TURBINE EQUIPMENT IN THE TURBINE HALL IS:

- Hydro group 1 - water turbine type "Francis" with capacity 1.5 m³ /sec, 500 kW at 750 rev / min and a generator with nominal voltage 7.5 kV and nominal power of 650 kVA;
- Hydro group 2 - water turbine type "Francis" with capacity 3 m³/sec, power 1200 kW at 750 rev / min and a generator with nominal voltage 7.5 kV and nominal power of 1500 kVA;
- Pressure pipeline 1 - 1300 mm diameter
- Pressure pipeline 2 - 900 mm diameter

HPP is connected to the grid thru switchgear to 20 kV OHL, owned by distribution company CEZ.

Permission №11140152 / 10.12.2013 for abstraction of surface water issued by Basin Directorate for water management Pleven till 27.09.2021;

Contract for the purchase of electricity with "CEZ Electro Bulgaria" till 29.06.2027, price - BGN 186.60/ MWh;

Contract with "Irrigation systems", EAD for the supply of water for power generation.