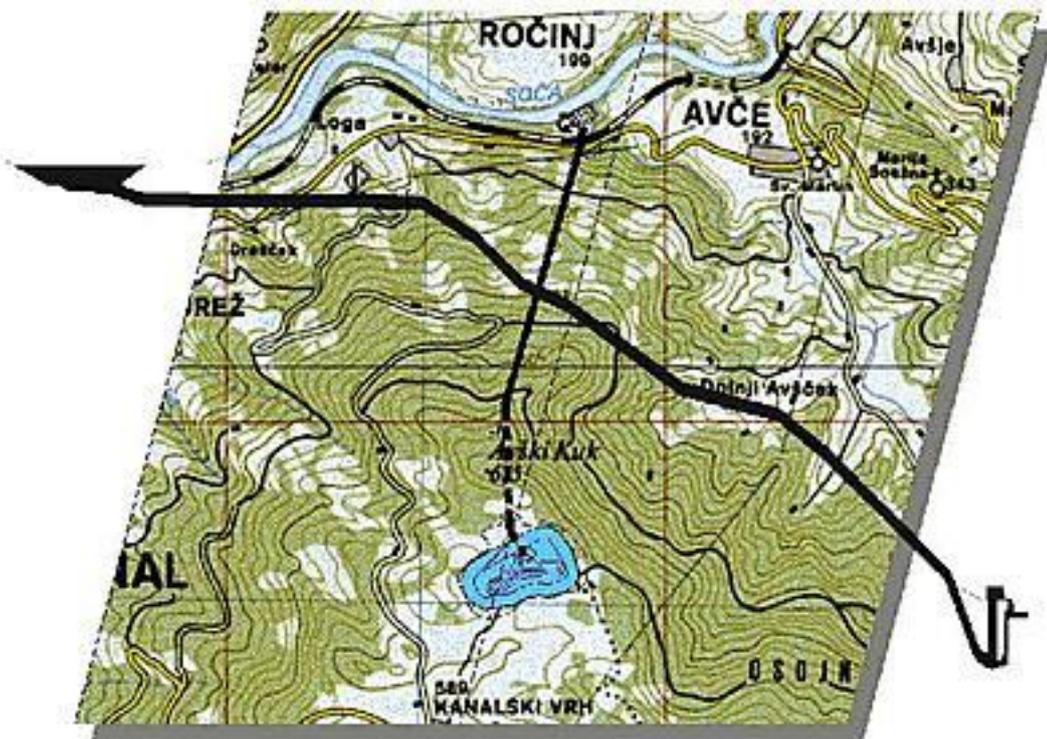


KORONA

AVČE PUMPED STORAGE HYDRO POWER PLANT

Elaboration of Project and Technical Documentation



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SCOPE OF WORK

Avče Pumped Storage Plant is the first power plant of its kind in Slovenia and represents the largest investment in Slovenian energy sector at the moment. According to the project plan of the Investor Soške Elektrarne Nova Gorica d.o.o., the commissioning of the plant is foreseen for the end of year 2008.

The Avče PSP is located on the Soča River, approximately 24 km north of Nova Gorica and 2,3 km upstreams of Ajba dam. The Ajba reservoir serves for downstream HPP Plave I and II and also as lower reservoir of Avče PSP. The upper reservoir is located in a natural depression on the hilltop near to the village Kanalski vrh, with a reservoir confining a water volume of some 2,2 mio m³. A 700 m long headrace tunnel, running underneath the ridge of Avški Kuk, and 1,3 km long steel penstock connect the reservoir with the powerhouse, located on the left bank of the Soča River. The maximum head of 521 m and the installed discharge of 40 m³/s enable the maximum power of 185 MW in turbine mode. The maximum power in pump mode is 180 MW at discharge of 32 m³/s.

During the off-load hours, the power plant will operate in pump/motor mode consuming the energy for pumping the water into the upper reservoir. During the peak-load hours the accumulated water will be used for production of electrical energy. The planned yearly consumption and production amounts to 563 GWh and 426 GWh, respectively. In spite of higher consumption compared to production, the price difference will result in high profitability of the power plant.

Besides covering a significant part of the daily peak-load in the Slovenian power system, Avče PSP will also provide additional services, such as system reserve, frequency control and voltage control.

In the frame of Avče PSP project, the Consortium of Korona Power Engineering (Ljubljana) and COLENCO Power Engineering Ltd. (Baden, Switzerland) elaborated the following documentation:

PROJECT DOCUMENTATION:

- Licensing Design
- Tender Documents
- Detailed Design

TECHNICAL DOCUMENTATION:

- As-Built Documentation
- Operation and Maintenance Manuals

