

Water pumping and power generation facility, Goldisthal



project: New construction facility with 12 mill. m³ of upper storage and 4 power generation units

location: Goldisthal, Germany

services of SMV: Scheduling, Schedule Controlling, Claim Management

client: VEAG, Vereinigte Energiewerke AG, Berlin

architects: Lahmeyer International

building costs: ca. 128 Mio. EUR (Lose I, B1 und B2)

duration: 1997 - 2003

responsible: Dr.-Ing. Rainer Schofer

project description: The VEAG has built the water pumping and power generation facility „Goldisthal“ with the power of 1.060 mega watts near the borough of Goldisthal in the eastern Thuringian Forest. The facility is used for industrial energy storage and the short-term provision of electrical energy. It is one of the biggest facilities in Europe. For the erection of this facility it was necessary to quarry out caverns of 137 and 122 m as well as galleries up to 10m diameters from the rock mass.

benefits for the client: As a result of the preparation of the claim for the extension of the construction period and the following additional costs it was established that VEAG was only partially responsible. Therefore the extension of construction period not only resulted from the modifications made by VEAG and the following breakdowns. The claims for additional charge by ARGE could therefore be reduced remarkably. The new determined completion date was kept.

object features::

upper basin (volume): 12 Mio. m³

lower basin (volume): 18,9 Mio. m³

nominal head: 301,65 m

cavern (L/W/H): 137,60 m / 26,10 m / 49,48 m

transformer cavern (L/W/H): 122,40 m / 15,30 m / 17,35 m

upper water gallery: 2 pieces of ca. 820 m length und Ø 6,20 m

lower water gallery:
power:

2 pieces of ca. 275 m length und \varnothing 8,20 m
4 machines per 265 MW

