

Institute of Hydraulic Engineering and Water Resources Management



Master's Thesis

Power waterway design for underground pumped hydro storage

Underground pumped hydro is the economical further development of the more than 100 years established pumped-storage technology to meet the needs of the climate and environmentally friendly energy age. The fully underground realization of pumpedstorage power plants comes along with many advantages for construction and operation.

Aim: Literature review and illustration of advantages of deep and short alignments in favourable rock mass conditions

Evaluation of different layouts and designs for the power waterway, especially for the pressure shaft, the headrace steel lined sections and the tailrace connection of the lower reservoir

Detailed calculation of an example

Start: Anytime

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