PROJECT REPORT

Future energy supply
Ebensee Pumped Storage Power Station

Data and facts

Company	PORR Bau GmbH
Type	Power plant construction and plant engineering, Tunneling, Earthworks
Runtime	10.2023 - 02.2028
Principal	Energie AG Oberösterreich Erzeugung GmbH

Project report online

www.porr.at

Key project for the energy transition

PORR Bau GmbH has been commissioned by Energie AG Oberösterreich Erzeugung GmbH to construct the Ebensee pumped-storage power station. The project will be carried out from October 2023 to February 2028 and combines challenging work in the fields of power station construction, tunnelling and earthworks. With a contract value of around 167 million euros, the construction project is one of the largest current infrastructure projects in the energy sector in Austria.

Complex power station construction inside the mountain

The new pumped-storage power station will be built as a modern cavern power station and makes optimal use of the natural topographical features of the Ebensee site. At the heart of the plant is the underground power station cavern, which poses the highest demands in terms of planning, tunnelling and structural engineering. The construction work involves extensive excavation, support and concrete works, as well as the creation of the necessary infrastructure for the power station's future operation.

Once completed, the power station will have a capacity of 170 megawatts, thereby making a significant contribution to stabilising the electricity grid. The reservoir will have a capacity of around 1.32 million cubic metres of water. This will enable the plant to generate electricity at full load for a period of approximately ten hours and to respond flexibly to fluctuations in energy generation.

With a gross head of 491 metres, the pumped-storage power station utilises the potential energy of the water particularly efficiently. Surplus energy from renewable sources such as wind and hydro power can be stored and, , fed back into the grid when electricity demand is high. The plant will thus play a central role in the future in storing and supplying sustainable energy.

Infrastructure for a sustainable energy future

The energy transition requires high-performance storage solutions to balance the increasing feed-in of renewable energy. Pumped-storage power stations are regarded as one of the most efficient and tried-and-tested technologies for large-scale energy storage. With the project in Ebensee, Energie AG Oberösterreich is laying the foundations for a secure and sustainable electricity supply in the long term.

PORR is contributing its extensive expertise in power station construction, tunnelling and specialist civil engineering to this major project. Through a combination of technical know-how, innovative construction methods and many years' experience in complex infrastructure projects, a forward-looking structure is being created in Ebensee that will strengthen the region's energy supply in the long term.

Impressions

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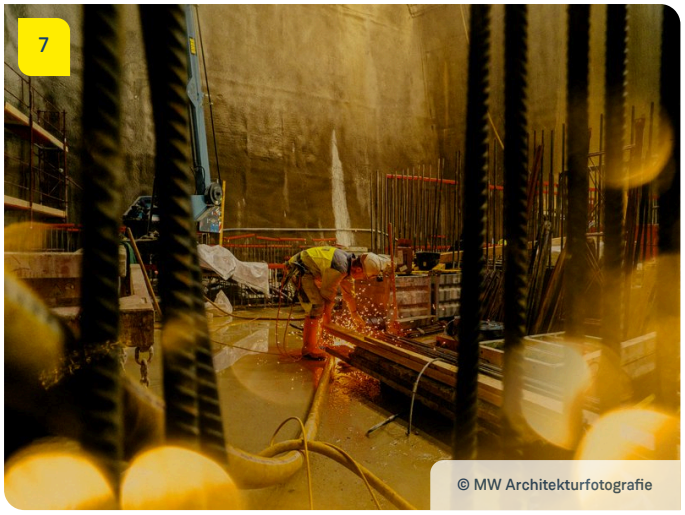

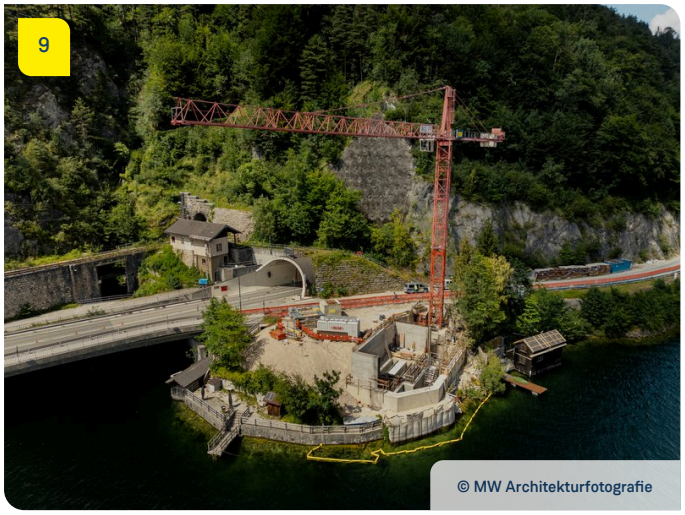

Image notes

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Construction site for the upper reservoir of the Ebensee pumped-storage power station

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Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

PORR Bau GmbH
Absberggasse 47
1100 Vienna
T +43 50 626-0
E-Mail: office@porr.at