

Media release

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Swissgrid Media Service
Bleichemattstrasse 31
P.O. Box
5001 Aarau
Switzerland

T +41 58 580 31 00
media@swissgrid.ch
www.swissgrid.ch

The La Bâtiaz – Le Verney underground link is in service The Nant de Drance power plant is definitively connected to the extra-high-voltage grid

Swissgrid was commissioned to connect the Nant de Drance pumped storage power plant to the Swiss extra-high-voltage grid. This task has been complete since 1 April 2022. The underground cable link between the La Bâtiaz substation and Le Verney in Martigny is now operational. This completes the commissioning of the last of the three sections of the extra-high-voltage line which transports the energy produced by the Nant de Drance power plant, thereby helping to ensure Switzerland's security of supply.

Construction of the 380 kV line connecting the Nant de Drance power plant to the electricity grid began in 2015. Two of the three sections have been in operation since late November 2018: the underground cable link between the power plant and the Châtelard substation, and the overhead line connecting the Châtelard and La Bâtiaz substations. Following the commissioning on 1 April 2022 of the underground cable link between the La Bâtiaz substation and Le Verney in Martigny, where it was connected to the Chamoson – Romanel extra-high-voltage line, the hydroelectricity produced by the Nant de Drance pumped storage power plant can now flow through the grid.

La Bâtiaz – Le Verney: a technological feat

It took almost two years of work before the extra-high-voltage cables installed in the 2.5 m diameter underground gallery at La Bâtiaz – Le Verney could be put into service. 507 concrete tubes were needed to consolidate the 1.2 kilometres of tunnel, which was dug by mini tunnel-boring machine at a depth of between 12 and 20 metres. This technological feat was made possible thanks to the specific geological conditions present at this exact location in the Rhone plain. La Bâtiaz – Le Verney is the second underground line built by Swissgrid in Switzerland, but the first to be constructed at great depth over a length of more than a kilometre.

The power plant is now definitively connected to the extra-high-voltage grid

Mission accomplished for Swissgrid: up to now connected by a provisional line, the Nant de Drance pumped storage power plant, one of the most powerful in Europe with a storage capacity of 20 million kWh, is now definitively connected to the electricity transmission grid. Hydropower plays a major role in the energy revolution. Several projects for the construction and adaptation of extra-high-voltage lines are under way in the Valais in order to increase the capacity to transport the electrical energy produced by the Valais power plants to the country's major consumption centres. One of these projects is the 380 kV line Chamoson – Chippis which

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will be commissioned in fall 2022. As the backbone of a secure electricity supply, the extra-high-voltage grid makes an important contribution towards achieving the objectives of the federal government's Energy Strategy 2050.

The Nant de Drance connection in brief

The extra-high-voltage line connecting the Nant de Drance pumped storage power plant to the electricity transmission grid consists of three substations and three 380 kV line sections as follows:

- The Nant de Drance switching substation located inside the main cave, that has been in operation since 2018. Its role is to connect the power plant to the first section of the line that links it to the electricity transmission grid.
- The 6.5 km underground cable link in the access tunnel to the power plant between the Nant de Drance and Châtelard substations. This has been in service since 2018.
- The Châtelard substation, where a transformer has been installed in order to inject energy into the 220 kV Vallorcine line and connect the Nant de Drance – Châtelard underground cable link to the Châtelard – La Bâtiâz overhead line. This substation has been in service since 2018.
- The 12.5 km overhead line built in the Gorges du Trient that has been in operation since 2018 between the Châtelard and La Bâtiâz substations.
- The La Bâtiâz substation, which has been in service since 2018 and whose main role is to connect the Châtelard – La Bâtiâz overhead line to the La Bâtiâz – Le Verney underground cable link.
- The 1.2 km underground cable link between the La Bâtiâz substation and Le Verney, where it has been connected to the Chamoson – Romanel extra-high-voltage overhead line. This link was commissioned on 1 April 2022.
- The budgeted costs for the entire Nant de Drance connection amount to CHF 240 million. The sum of just under CHF 35 million was budgeted for the La Bâtiâz – Le Verney cable link.

For more information, visit media@swissgrid.ch or call +41 58 580 31 00.

Powering the future

Swissgrid is the national grid company. As the owner of Switzerland's extra-high-voltage grid, it is responsible for operating the grid safely and without discrimination and for maintaining, modernising and expanding the grid efficiently and with respect for the environment. Swissgrid has more than 600 highly qualified people from 28 countries at its sites in Aarau, Prilly, Castione, Landquart, Laufenburg, Ostermundigen and Uznach. As a member of the European Network of Transmission System Operators for Electricity (ENTSO-E), it is also responsible for grid planning, system management and market design in the European exchange of electricity. The majority of Swissgrid's share capital is jointly held by various Swiss electricity companies.