

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

Relief for the villages and valley in Surses (GR) Swissgrid replaces extra-high-voltage line

Swissgrid submitted two different planning corridors to the Swiss Federal Office of Energy (SFOE) to replace the existing extra-high-voltage line between Marmorera and Tinzen. The line is used to carry energy from the hydroelectric power plants in Bregaglia.

The extra-high-voltage line stretches for 9.5 kilometres between Marmorera and Tinzen in the Albula region. It is now over 65 years old and no longer corresponds to the state of the art, so it needs to be replaced. The current voltage of 220 kilovolts (kV) will be maintained. The line plays an important role in carrying energy from the hydropower plants in Bregaglia to the consumer centres on the Swiss Central Plateau.

Sectoral plan process launch

In mid-December 2020, Swissgrid submitted an application to the Swiss Federal Office of Energy (SFOE) for the establishment of a planning corridor between Marmorera and Tinzen in the Federal Transmission Lines Sectoral Plan. As a first step, Swissgrid has drawn up various corridor variants. Corridors are geographic areas in which a route with a specific transmission technology – overhead line or underground cable – can be implemented once the project moves forward.

Next, a monitoring group appointed by the SFOE will discuss the proposed planning corridors and assess the effects on regional planning and the environment, as well as technology and costs. The monitoring group's recommendation then continues on to the public participation stage. The Federal Government is expected to reach a decision on the planning corridor and the transmission technology between Marmorera and Tinzen by mid-2022.

Viability of overhead line or partial cabling variant

Swissgrid has developed two corridor variants:

1. **«Overhead line» variant:** The majority of the overhead line corridor between Marmorera and Tinzen runs along the bottom of the valley. In the Rona section, there are proposals for two equivalent variants, West and East.
2. **«Partial underground cabling» variant:** The corridor runs as an underground cable to Mulegns. After that, the line will continue to Marmorera as an overhead line analogue to the overhead line variant.

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Both of the submitted variants have specific advantages and disadvantages with respect to regional planning, the environment, technology and economic viability. Overhead lines have advantages in terms of efficiency and repair time, while underground cables have advantages in terms of aesthetics, the landscape and acceptance. The technical challenges in the extra-high-voltage grid increase the higher the number of cable sections that are laid underground. Besides this, the costs of a line section are generally higher when underground cables are used.

Significant relief for the villages of Rona and Sur

Both the overhead line and the partial cabling variant provide relief for the villages in the Rona and Sur area. In some cases, the existing line runs very close to these villages, which restricts property development. By contrast, the new line will bypass the villages, irrespective of the transmission technology used. In addition, the new corridor frees up the space where the current line is located (on the valley floor near Rona, which is used for agriculture).

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 500 highly qualified people from 22 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.