

**Media release**  
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## **Niederwil – Obfelden grid project**

### **Swissgrid starts the construction project for the 380 kV line in the Reuss valley**

**The supply of electricity in the consumer centres in and around Aargau, Zurich and Lucerne is to be improved and ensured in the long term. On 31 August 2022, the Federal Council defined the planning corridor for constructing a new transmission line with a voltage of 380 kilovolts (kV) between Niederwil (AG) and Obfelden (ZH). The new line is to be implemented as an overhead line with an underground section in the protected Reuss landscape area. As the operator of the Swiss transmission system, Swissgrid is now starting work on the construction project.**

Swissgrid is planning to replace the existing 220 kV line section, which stretches around 17 kilometres from Niederwil (AG) to Obfelden (ZH), with a 380 kV line. This line is part of the Beznau – Mettlen expansion programme in Swissgrid's «Strategic Grid 2025». The upgrade of the entire transmission line between the substations of Beznau (AG) and Mettlen (municipality of Eschenbach, LU) to a voltage of 380 kV will significantly increase the security of supply in the cantons of Aargau, Zurich and Lucerne.

#### **The Federal Council determines the planning corridor and technology**

At the end of August 2016, the Federal Council designated the planning area for the Niederwil – Obfelden line section as part of the sectoral planning process for transmission lines (SÜL). Within the planning area specified by the Federal Council, Swissgrid drew up possible corridor variants, which were examined by a monitoring group appointed by the Swiss Federal Office of Energy (SFOE). The experts assessed the corridor variants according to the criteria set out in the transmission line evaluation scheme (regional planning, technology, environment and economic efficiency) before submitting a recommendation to the Federal Council. The solution envisaged consisted of an overhead line with almost four kilometres of underground cabling on the section crossing the protected Reuss landscape area between Besenbüren and Jonen (AG). The next stage was to consult the cantons of Aargau and Zurich and to hold a public consultation procedure, during which above all the proposed transmission technology was questioned.

The Federal Council supported the variant proposed by the monitoring group and defined the planning corridor and transmission technology at the end of August 2022. ([Federal Council press release \(in German\)](#))

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**Next steps in project planning**

Swissgrid is now preparing the construction project on this basis. Among other things, it will determine the specific line routing and the locations of the transitional structures for the underground cable section, as well as defining deadlines and costs and holding negotiations on transit rights. In drawing up the detailed plans, Swissgrid attaches great importance to routing the lines in a way that is as compatible with residential areas and as gentle on the landscape as possible. The corridor allows for a line routing that is far enough from residential areas to significantly reduce the visual impact thanks to the dismantling of the existing 220 kV line. In addition, Swissgrid is examining options for bundling its 380 kV line with Axpo's 110 kV line along two sections of the planning corridor. The construction project should meet the requirements of regional planning as well as landscape and environmental protection, and take into account the concerns of the local population as far as possible, whilst being both technically feasible and economically justifiable.

Swissgrid is responsible for drawing up the construction project on the basis of the planning corridor defined by the Federal Council. During the construction project phase, Swissgrid will regularly exchange information with the affected communities in the Reuss Valley, local and regional interest groups, environmental associations and cantons about the current status of the plans and the next steps. The aim is to find the best possible compromise to take into account the numerous demands on the project.

**Schedule for the Niederwil – Obfelden grid project**

Once the construction project has been drawn up, probably in 2024, Swissgrid will submit the planning approval application with all the necessary documents to the competent approval authority (Federal Inspectorate for Heavy Current Installations, ESTI). This application will then be made public. Once the legally binding planning approval decision has been obtained, the line can be built, which will take about four years. After the commissioning of the new 380 kV line, the dismantling of the existing 220 kV line will begin. In the event of appeals and legal proceedings, commissioning may be delayed by several years. Further information and the project schedule can be found here: [www.swissgrid.ch/niederwil-obfelden](http://www.swissgrid.ch/niederwil-obfelden)

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**Niederwil substation**

Substations are among the most important elements in the extra-high-voltage grid because they represent the nodes of the grid. One such node is located in Niederwil (AG). The current 220 kV outdoor switchgear was built in 1970 and has now reached the end of its service life. Swissgrid is replacing it with modern, gas-insulated switchgear housed inside an operating building. GIS systems, i.e. encapsulated, gas-insulated switchgear, have advantages such as reduced space and maintenance requirements. They are also better protected against external influences such as storm damage or weathering.

The preliminary project for the renewal of the Niederwil substation has already been completed. Swissgrid is currently working on the construction project and plans to submit the planning approval application in January 2023. The public disclosure of the project is expected to take place in the second quarter of 2023. Commissioning is planned for mid-2026.

For more information, visit [media@swissgrid.ch](mailto: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.