

Dürnten Substation

An Emergency Power Project That Is Truly Electrifying

Elektrizitätswerke des Kantons Zürich (EKZ) is a modern and reliable electricity supplier serving Switzerland's largest economic region.

ekz.ch



Status Quo

At the Dürnten Substation (UW) of Elektrizitätswerke des Kantons Zürich (EKZ), two existing emergency power systems – one operating at 48 V DC and one at 110 V DC – had to be completely replaced.

As part of the modernization project, the old systems were profes-

sionally dismantled and environmentally recycled.

Already during the planning phase, it was essential to ensure that the operational reliability of the substation would remain guaranteed throughout the conversion process and that no complete operational shutdown would occur in the event of a grid failure.

Our Approach

An Emergency Power System with Modular, Expandable and Replaceable Block Batteries – Flexible, Combinable and Scalable

The two battery systems were installed with nominal voltages of 48 V DC and 110 V DC respectively.

For the 48 V system, 8 OPzS 300 block batteries (each 6 V, 300 Ah – C10) were installed, providing a total energy capacity of 14.4 kWh. For the 110 V emergency power system, a total of 18 OPzS 300 block batteries were installed, providing an available energy capacity of 32.4 kWh. These specialized batteries offer: High reliability, Long service life, Excellent price-performance ratio.

The emergency power system in the substation serves as a backup power source during large-scale outages or grid interruptions.

In the event of disturbances or a complete failure of the public power grid, the system automatically takes over as an uninterruptible power supply (UPS) for critical operational equipment. This includes Control systems, Protection systems, Communication systems, Switching equipment, Additional safety-critical components

Austria

Banner GmbH
Business Unit Energy Solutions
 A-4600 Thalheim bei Wels
 Am Thalbach 21
 Tel. +43 732 38 88-0

Great Britain

Banner Batteries (GB) Ltd.
 Units 6-8 Canal View Business Park,
 Wheelhouse Road, Rugeley
 UK-W5151UQ Staffordshire
 Tel. +44 1889 57 11 00

Czech Republic

Banner Baterie ČR, spol. s r.o.
 Uhřetěves, Přátelství 1011
 CZ-10400 Praha 10
 Tel. +420 267 090-510

Poland

Banner Polska Sp. z o.o.
 ul. Gliwicka 234
 PL-40861 Katowice
 Tel. +48 32 203 72 45

Added Value & Benefits

Stand by Bull Flooded (OPzS Flooded Cell)



Stand by Bull OPzS block batteries ensure a stable and continuous power supply and are therefore ideally suited as energy storage systems in utility substations.

Their robust design makes them highly resistant and particularly suitable for deep and regular discharge cycles.



Suitable for high-current discharges



Maximum service life



Excellent price-performance ratio



Modular and scalable design

The Result

The most cost-efficient emergency power solution for the substation ensures safe and controlled operation even under significantly varying power demands.

The installation consists of:

Stand by Bull OPzS flooded batteries mounted on an earthquake-resistant special rack with an integrated acid containment tray.

The result is a reliable, economical, and future-proof emergency power supply system that guarantees uninterrupted operation of all critical infrastructure within the substation.



For more information about our products, services, and support solutions, visit: [bannerbatteries.com](https://www.bannerbatteries.com)

DC = Direct Current

C10 = Battery capacity at a discharge period of 10 hours

OPzS = Stationary tubular plate batteries

UW = Substation (Swiss terminology for an electrical substation)

#sparkthedifference