Client:	Krefeld municipal utilities
Voltage range:	110 kV / 10 kV
Rated current:	1,600 A / 2,500 A
Short circuit current:	40 kA / 31.5 kA
Work areas:	Engineering – Project management – Assembly – Commissioning
Challenge:	Parallel operation of old and new secondary technology

Retrofit: Extend life cycles by upgrading of the secondary technology

Stadtwerke Krefeld (Krefeld municipal utilities), retrofit in a 110-/10-kV substation

Stadtwerke Krefeld placed an order at GSB to carry out the retrofit of the secondary technology of the Obergath power substation. The renovation work had to be performed during ongoing operation.

In an power substation, the voltage of the electrical energy is transformed from the level of the transmission grid to the level of the distribution grid. Since the secondary technology has shorter life cycles than the primary technology, single components need to be replaced. This retrofit – i.e., the upgrading of energy transmission or distribution systems using state of the art components – is usually economically sensible. Retrofitting meets high safety standards, ensures high availabilities and requires a reduced cost effort compared to a full reinstallation.

GSB's work on the power substation was carried out in close cooperation with the operator and the supplier of the protection and control technology, on whose behalf the on-site commissioning tests were also carried out. Thanks to GSB's convincing performance, Stadtwerke Krefeld then also commissioned them to replace the secondary technology at another power substation.