

Mühleberg Substation

Less noise, more energy for the region

G+H has implemented noise control measures in the new transformer station at the Mühleberg Substation (greater Bern area, Switzerland) and has been able to more than halve noise emissions.



Insulation

Fire Protection

Noise Control

A new transformer station, intended to support energy transmission to the Swiss Midlands and to strengthen the link to the European transmission network, has been constructed at the Mühleberg Substation. G+H NOISE CONTROL implemented the noise control measures: their experts reduced noise emissions by a half to 33 db(A), thus ensuring that adjacent areas will not be disturbed.

CUSTOMER

Swissgrid AG, Switzerland

PROJECT

Sound insulation work on transformer plant

CONSTRUCTION PERIOD

09/2018 – 12/2019

SCOPE OF THE INSTALLATIONS

Approx. 1,500 m² wall cladding
4 acoustic doors
2 lightning protection masts
16 craneable stoplogs
Consoles for fire extinguishing systems



The transformers are housed in four cells, on whose walls the experts from G+H have installed the SONEX® W sound absorbing wall lining with an insulating thickness of 100 mm and a wall clearance of 50 mm. They have also fitted four acoustic doors to provide access. The cells are closed from the front with craneable stoplogs. These can be removed if necessary so as to permit access to the transformers when, for example, maintenance work

is necessary or if replacement is required. The stoplogs are made of tubular frames that are fitted with the SONEX® K sound insulating wall element. In addition, the G+H team has erected two lightning protection masts, each with a weight of 6,000 kg and a height of 25 meters, to the right and left of the station. As a result of these measures, the projected noise emission is reduced from 68 db(A) to 33 db(A).

TASK

- Sound insulation over a total area of 1,500 m²
- Reduction of noise emissions to the required value
- Perfectly tailored wall lining work

SOLUTION

- Fitting the customised Sonex® W sound absorbing wall lining
- Installation of acoustic doors
- Lining the stoplogs with Sonex® K

ADVANTAGES

- Noise reduction by more than half to 33 dB(A)
- No noise disturbance for adjacent areas
- Robust and highly efficient noise control solutions