

ELCOM d.o.o. is specialized for construction/reconstruction of substations from 0,4kV to 110 kV. That include detail design of construction and electrical works, complete construction and electrical works with testing and commissioning.



Reconstruction of TS 110/35/10(20) kV HAK

Customer: Elektroprenos-Elektroprijenos BiH



Project description

With 110/35/6 kV HAK was used exclusively for powering the HAK complex and was commissioned in 1976.

The realization of this project solved the problem of power supply to the city of Tuzla. The city is currently powered by only two nodes, the TS Tuzla Center and the Tuzla Thermal Power Plant, and over 35 kV lines from the network transformer used to power their own consumption of TPP Tuzla.

However, by placing outside the function of generators G1 and G2 in TE Tuzla, the available power at 35 kV busbars for 32 MW was reduced, and then another 10 MVA from the transformer TM1 110/35 kV, 40 MVA, since the equipment in the transformer field is dimensioned to only 30 MVA.

Since 2006, a reduction in available power has been announced for another 10 MW, in order to meet additional, increased needs of TE Tuzla's own consumption. Analyses conducted by ED Tuzla showed that, in the case of a serious failure in TS Tuzla Center, a reduction in consumption in the city of Tuzla should be introduced. Also from TPP Tuzla, further reduction of the available power from 35 kV bus in TPP Tuzla was announced, which makes the situation more complicated. Due to the capital investments for the construction of Unit 7 TPP Tuzla, it is planned to relocate

35 kV plants from TPP Tuzla to TS 110/35/6 kV Hak. The expansion of the industrial consumption is also included, the new consumption is planned at 20 kV voltage.

Scope of reconstruction

- Detail civil and electrical design
- Removal of existing buildings
- Dismantling of old equipment
- Construction of a command/control building
- Installation of new equipment
- Installation of a new power transformer
- Testing and commissioning

Equipment

- New power transformer 40 MVA Hyundai
- 110 kV disconnectors - Alstom
- 110 kV SF6 circuit breakers - ABB
- 110 kV current transformers - Končar
- 110 kV voltage transformers - Končar
- 35 kV switchgears - ABB
- 10(20) kV switchgears - ABB
- SCADA system - Siemens
- Protection relays - Siemens



Information about the Siemens Solution Partner Program

Under the Siemens Solution Partner Automation and Power Distribution Program, we join forces with our Solution Partner. By merging our product and systems expertise with the application and industry knowledge of our partners, we have created a common basis for the fast, smooth and highly efficient implementation of your requirement – customized solutions for your competitive advantage.

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ELCOM d.o.o.

M.M.Dizdara-Stupine B-2
75 000 Tuzla
Bosnia and Herzegovina
Phone: +387 35 305-700
Fax: +387 35 305-710

www.elcom.ba
info@elcom.ba

