



# **CUSTOMER**

Elektroprenos-Elektroprijenos BiH a.d. Banja Luka is an electric power transmission company in Bosnia and Herzegovina. Over 65 years, the company has built more than 6,000 km of network, 300 transmission lines and 150 substations. Over 80 million euros are now being invested in this infrastructure to improve electric power transmission services. In 2016, this initiative led to COPA-DATA's zenon energy automation system being implemented at the 110/35/20 kV Kotor Varoš substation and a new 110/20/10 kV substation at Šipovo.

## **CHALLENGES**

The obsolete equipment at Kotor Varoš substation was more than 50 years old and required expansion. Upgrade to the substation and two 110 kV transmission lines was required, plus double-sided power supply to three substations. The existing substation had to remain fully functional during the project, creating additional pressure. To meet this challenge, Elektroprenos-Elektroprijenos BiH provided a mobile substation for step-by-step replacement of the worn out equipment. zenon's ease of use and the early involvement of Saturn Electric were key to success.

### **SOLUTION**

The system integrator's highly efficient configuration of zenon delivered a new

graphical environment which fully met enduser expectations and corporate standards, while preserving the system functionality and appearance to which operators are accustomed. This intuitive interface was paired with the highest level of security and functionality. During the reconstruction project at Kotor Varoš, Saturn Electric created a database and symbol library in zenon to meet the requirements of the end user. The library was then available for easy use in the new Šipovo substation and for reuse in other Elektroprenos-Elektroprijenos BiH a.d. Banja Luka projects.

## **TECHNOLOGY**

Both Kotor Varoš and Šipovo use equipment from a variety of manufacturers – no problem for zenon, thanks to its open compatibility. zenon fully supports the IEC 61850 and IEC 60870-5-101/104 standards, used for communication with IED devices in the field and the control centers. A final test of the system was conducted prior to commissioning with the goal of commissioning without any fault or active alarm. This is rare in practice but was quickly achieved in both projects.

#### **BENEFITS**

The solution delivers the highest standards and functionalities. zenon's compatibility, intuitive interface and adaptability has resulted in safer

operation, protected equipment, simplified control and, perhaps most significantly, complete system supervision. In this way, zenon has contributed to better failure detection and the improvement of end-user power supply.

Since the commissioning of both systems, there has been no system failure; delivering significant savings at an early stage of use. With no requirement for the team to perform on-site inspections, maintenance costs have reduced.

## **ELEKTROPRENOS** – **ELEKTROPIJENOS BIH** A.D. BANJA LUKA

www.elprenos.ba

#### **SYSTEM INTEGRATOR:**

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### **DISTRIBUTOR:**

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### **FURTHER INFORMATION:**

www.copadata.com/energy

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