

REFERENCE

„Efacec Engenharia e Sistemas S.A.” issues the present Reference to verify that within the period 2012-2013 company **EL KONTROL EOOD** has implemented Contract U 243 dated 10.10.2012 for **Rehabilitation of Substation Kavarna 110/20 kV - Reconstruction and extension of 110 kV Switchyard and 20 kV Switchgear**. The Substation is situated in Kavarna, Municipality of Kavarna, Bulgaria.

Contract amounts at **577 127,58 Euro** and includes the following scope:

1. Extension and rehabilitation of 110 kV Switchyard:

- Construction of concrete foundations for electrical equipment and power transformers;
- Dismantle of reinforced concrete portals and tables;
- Erection of cable trays and foundations for control panels;
- Installation of steel structures – portals and tables for electrical equipment;
- Substitution of electrical equipment: circuit breakers, disconnectors, current transformers, voltage transformers, surge arresters, control panels, storage battery;
- Installation of tubular busbar system;
- Primary connection of the electrical equipment;
- Substitution of metering panels, control relay panels, AC/DC auxiliary panels, and outdoor control panels;
- Laying and connection of power and control cables;
- Installation of RTU system;
- Construction of grounding installation and lightning-protection installation;
- Installation of lighting system and video-surveillance installation;
- Construction of a new fence;
- Construction of local roads and approaches;
- Vertical planning.

2. Extension of 20 kV Switchgear:

- Construction of a new building for 20 kV Switchgear;
- Installation of lighting system;
- Installation of heating, ventilation and air-conditioning installation;
- Construction of grounding installation and lightning-protection installation;
- Vertical planning;
- Installation of distribution switchgears.

3. Control tests and commissioning of all the equipment installed.

Assigned works were properly executed in conformity with all technical specifications, normative regulations, and time-schedules agreed. Installed facilities are working at a normal operating mode.

We have excellent impressions from the workmanship of EL KONTROL EOOD and recommend the Company as a reliable business partner.

This reference is issued to be presented in tenders and procurement procedures.

Date: 17.10.2014

Project Manager.....
/Eng. Christian Gstrein/

