

# Solutions for Power Distribution











## **ELCOM** is a **EPC company** and cooperate with largest equipment manufacturers:













### **Solutions for Power Distribution Systems**





## Finished Projects

Total 24 kV panels: 94 pcs Total 36 kV panels: 24 pcs

#### Substation 110/35/10 kV Konjic

- 16 Unigear ZS 1 24 kV panels

#### Substation 110/35/10 kV HAK

- 14 Unigear ZS 1 24 kV panels
- 13 Unigear ZS 2 36 kV panels

#### Substation 110/35/10 kV Zenica 2

- 4 Unigear ZS 1 24 kV panels Substation 110/35/10 kV Vitez

- 7 Unigear ZS 1 24 kV panels Substation 110/35/10 kV Čapljina

- 18 Unigear ZS 1 24 kV panels **Substation 110/35/10 kV Kupres** 

4 Unigear ZS 1 24 kV panels

#### **Substation 110/x kV Pazarić**

- 13 Unigear ZS 1 24 kV panels
- 4 Unigear ZS 2 36 kV panels

#### Substation 110/x kV Žepče

- 16 Unigear ZS 1 24 kV panels
- 8 Unigear ZS 2 36 kV panels

#### 7 Unigear ZS 2 36 kV panels Substation 110/x kV Sarajevo 1

18 Unigear ZS 1 24 kV panels





## **Solutions for Power Distribution Systems**

## Substations 110 kV











## Substation 110/35/10 kV Konjic

#### **Engineering**

- Detail Electrical design
- Detail Construction design
- Supervision
- Commisioning

#### **Procurement**

- MV switchgear
- SF6 circuit breakers
- Current transformers
- Disconnectors and Earthing Switches
- Transformer

#### Construction

- Dismantling of old equipment
- Installation of new equipment
- Building reconstruction





## **BEFORE**













## RECONSTRUCTION

Reconstruction needed to be done almost without no breaks in power distribution because of requests from distribution company and high demands for power from large industrial customers

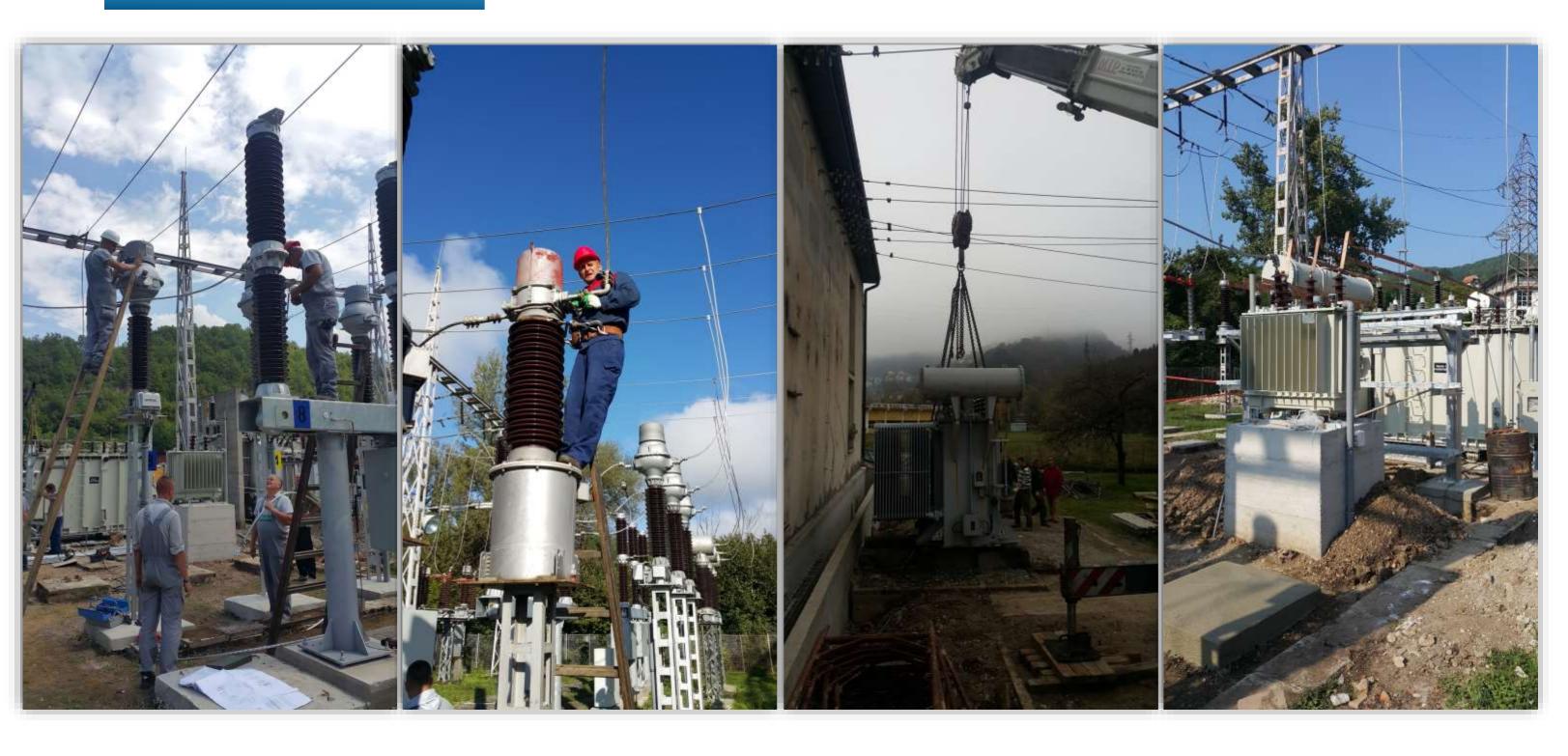








## RECONSTRUCTION 110 kV reconstruction





## After





































TS 110/35/10 MOSTAR 2, |BIH|

### **Engineering**

- Detail Electrical design
- Detail Construction design
- Supervision
- Commisioning

#### **Procurement**

- Power transformer
- SF6 circuit breakers
- Current transformers
- Disconnectors and Earthing Switches

#### Construction

- Dismantling of old equipment
- Installation of new equipment
- Building reconstruction

## Substation 110/35/10 kV Mostar 2









**Before of reconstruction** 



## Substation 110/35/10 kV HAK

### **Engineering**

- Detail Electrical design
- Detail Construction design
- Supervision
- Commisioning

#### Procurement

- Power transformer
- MV Switchgear
- SF6 circuit breakers
- Current transformers
- Disconnectors and Earthing Switches

#### Construction

- Dismantling of old equipment
- Installation of new equipment
- Building reconstruction





TS 110/35/10 HAK, Tuzla |BIH|

## BEFORE











TS 110/35/10 HAK, Tuzla |BIH|

### After installation

### New switchgear 35 kV and 10(20) kV ABB





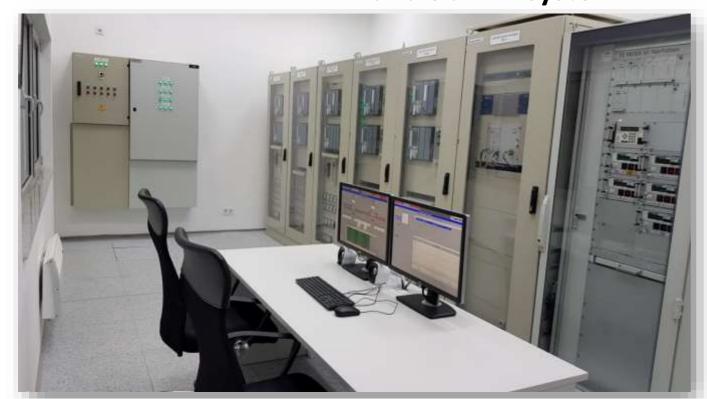




TS 110/35/10 HAK, Tuzla |BIH|

### Control room

## New AC/DC power supply, control and protection relays, tellecommunication and SCADA system











### **Engineering**

- Detail Electrical design
- Detail Construction design
- Supervision
- Commisioning

#### **Procurement**

- Power transformer
- MV Switchgear
- SF6 circuit breakers
- Current transformers
- Disconnectors and Earthing Switches

#### Construction

- Dismantling of old equipment
- Installation of new equipment
- Building reconstruction









Before reconstruction



### Substation 110/35/10 kV Žepče

### Engineering

- Detail Electrical design
- Detail Construction design
- Supervision
- Commissioning

#### **Procurement**

- Power transformer
- MV Switchgear
- SF6 circuit breakers
- Current transformers
- Disconnectors and Earthing Switches

#### Construction

- Dismantling of old equipment
- Installation of new equipment
- Building reconstruction

### **Scope of reconstruction**

- Detail civil and electrical design
- Dismantling of old equipment
- Installation of new equpiment
- Installation of a new power transformer
- Testing and commissioning

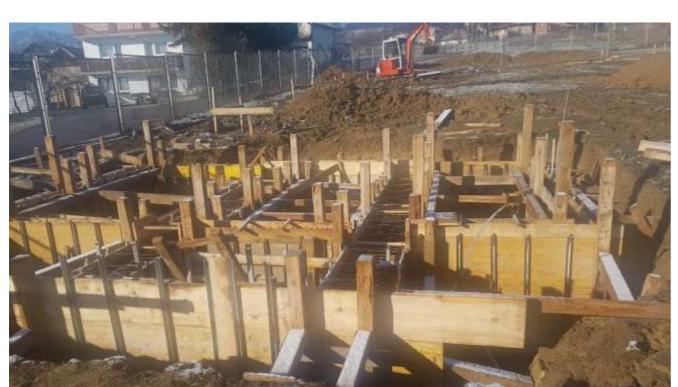
### **Equipment**

- New power transformer 20 MVA Končar
- 110 kV disconnectors Končar
- 110 kV SF6 circuit breakers Končar
- 110 kV current transformers Končar
- 110 kV voltage transformers Končar
- SCADA system Končar
- Protection relays Schneider Electric



### Civil works on 110 kV





## Substation 110/35/10 kV Žepče







New power transformer

## Substation 110/35/10 kV Žepče









## **After construction**

New power transformer

## Substation 110/35/10 kV Žepče







## **After construction**

## Substation 110/35/10 kV Žepče

New power transformer

New control cabinet, power suplier, SCADA system







### Substation 110/35/10 kV Pazarić

### **Engineering**

- Detail Electrical design
- Detail Construction design
- Supervision
- Commisioning

#### **Procurement**

- Power transformer
- MV Switchgear
- SF6 circuit breakers
- Current transformers
- Disconnectors and Earthing Switches

#### Construction

- Dismantling of old equipment
- Installation of new equipment
- Building reconstruction

#### **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 equpiment
- 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 swtichgears ABB
- 10(20) kV switchgears ABB
- SCADA system Siemens
- Protection relays Siemens



Civil works

### Substation 110/35/10 kV Pazarić









## **Projects after construction**

### Substation 110/35/10 kV Pazarić

Civil works



**Control cabinets** 



New power transformer 40 MVA





## **Projects after construction**

### Substation 110/35/10 kV Pazarić

**New transformers** 

New voltage transformers



