

ABB Power Systems

Applications for Gas Insulated Turnkey Substations



Copacabana & Leblon, Brazil, Rio Light



Customer's need

- Rio Light had two old AIS Substations operating in very expensive locations (m² prices!). They either wanted to maintain the existing S/S or to build new S/S

ABB's response

- ABB offered two 138/13,8 kV turnkey GIS Substations, with 12 HV GIS Bays and 88 MV GIS bays
- ABB optimized the space requirements for the S/S, enabling the saved area to be sold

Customer's benefits

- Rio Light received two new S/S and the costs were covered by the sales revenues of the additional area

E8, Abu Dhabi - ADWEA



Customer's need

- ADWEA needed a reliable partner to supply a cost effective 132 kV substation on a space constrained site

ABB's response

- 8 bays 132 kV SF6 GIS ELK-04
- 51 panels 11 kV ZV2 (SF6)
- 4 transformers 40 MVA 132/11 kV
- Auxiliary equipment
- Substation Automation

Customer's benefits

- Optimized arrangement in a small building in the center of the city
- Environmentally friendly, low noise
- Aesthetic view



Zapote, Philippines, MERALCO



Customer's need

- MERALCO required a highly reliable GIS 115 kV Substation from a European contractor

ABB's response

- 115 kV GIS ELK-04 including:
 - 3 incoming, 5 outgoing, 3 transformer, 1 sectionalizer, 1 metering bay
- Cable connection 115kV from GIS to transformer
- Control & Protection

Customer's benefits

- GIS SS with a compact Design
- Outdoor application along seacoast area



Kobba, Cairo – Egyptian Electricity Transmission Co.



Customer's need

- A reliable partner to supply a cost effective 66 kV substation building designed to fit in existing road arrangement

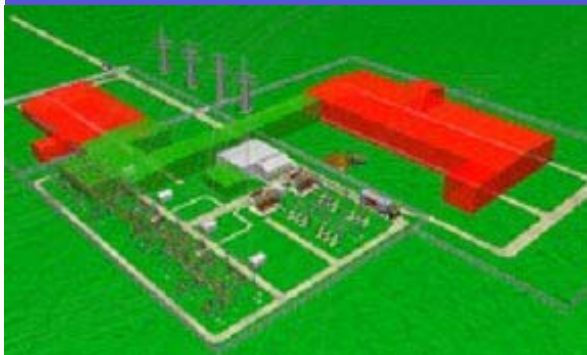
ABB's response

- 7 bays 66 kV SF6 GIS ELK-04
- 17 panels 11 kV switchgear
- 2 transformers 25 MVA 66/11 kV
- Auxiliary equipment, control & protection
- Civil works

Customer's benefits

- Full turnkey installation
- MV, LV, control & protection panels assembled in a local ABB factory





Customer's need

- Rehabilitation of a more than 40 year old 220/110kV AIS substation
- First turn-key project on transmission level
- The power transfer Russia - Europe requires the re-enforcement of the 400kV grid with a maximum degree of availability and economy

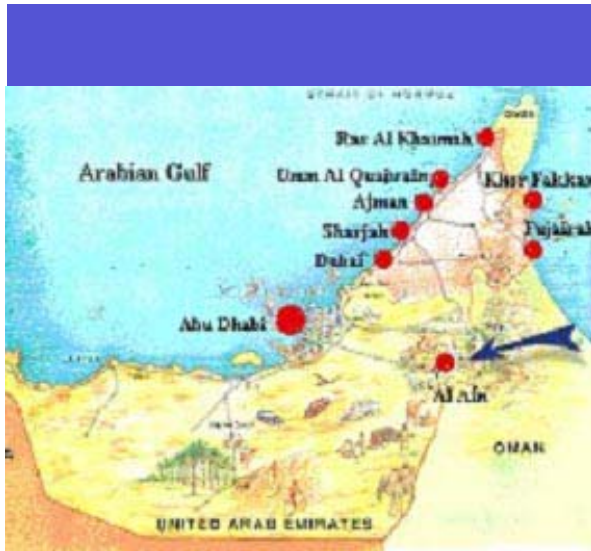
ABB's response

- Turnkey 220kV GIS and 110kV PASS substation expandable to 400kV
- State of the Art equipment fulfilling all specified requirements and beyond!

Customer's benefits

- One competent partner until completion
- Rehabilitation without interruption of power!





Customer's need

- Very high load growth in Al Ain area required urgent 220/33kV grid system re-enforcement
- The link to the Omani 220kV network required maximum degree of reliability and economy

ABB's response

- Turnkey 220/33kV GIS substations
- State of the Art equipment fulfilling all specified requirements and beyond!

Customer's benefits

- One competent partner until completion
- Maintenance free and easy to operate!





A global leader
in power and automation technologies
that enable utility and industry customers
to improve their performance
while lowering environmental impact