Design & Consultancy

Innovating Solutions

With EPESOL's Design & Consultancy services you experience nifty and sterling solutions and that too in time and budget. We work closely with our customers to define and innovate magnificent and memorable experiences that endow their customers across all avenues, we understand people, businesses, designs and technologies. Starting from trip event analyses & coordinating system relays we enable you to conclude commissioning of your Substation or Power Plant by providing complete protection and control solutions in minimum time and cost. A satisfied customer is all what a good design gives, and EPESOL has a tremendous annals of this practice. Your satisfaction is our pride.

Design is not just an effort...
It is making things alive!

EPESOL

Pvt. Ltd.

Power System Design Services

SubStation Engineering !

'Cause We Know the Best

Secondary Engineering

- Relaying & Metering One Line Diagrams
- SCADA One Line Diagrams
- Interlock Logic Diagrams (GIS, ABTS, ACCS)
- Three Line Diagrams
- Cable Interconnection Diagrams
- CT Sizing Calculations
- VT Sizing Calculations
- Relay Setting Calculations
- I/O Signal Lists (SCADA, SAS, TFR, ANN, SOE)
- Control Cable Schedules
- Panel Engineering
  - AC / DC Schematics
  - Control Schemes
  - Panel Wiring Schedules

Primary Engineering

- Main One Line Diagram
- Overall Equipment Layout
- Indoor Equipment Layout
- Outdoor Equipment Layout
- Grounding System Design
- Shielding System Design
- Lighting System Design
- LV Cable Sizing Calculations
- LV AC/DC Breaker Sizing Calculations
- AC Aux. System Design
- DC Aux. System Design

Design Consultancy !

Your One-Stop Complete Soltuion

System Studies

- Load Flow Study
- Short-Circuit Study (IEC / ANSI)
- Reactive Compensation Study / PFI
- Harmonic Study
- Insulation Coordination Study
- Protection / Relay Coordination Study
- Motor Starting Study
- Dynamic/Transient stability

System-Wide Analysis

- Protection / Relay Coordination Issues:
  - Selectivity
  - Speed
  - Sequence of Operation
  - Time Grading
  - Current Grading
- Nuisance Tripping
- Energy Audit
- Load Shedding Schemes
- Retrofit Design Solutions

Our Signature Design Projects

Panel Engineering

- 2005 Protection System Design for NTDC, WAPDA (Local Utility)
- 2006 132kV Protection System Design for LESCO, FESCO, MEPCO, IESCO (Local Distribution Utility)
- Protection & Control Design for Rousing Engineering
- 220kV Protection System Design for NTDC Kala Shah Kaku (Local Utility)
- 500kV Control Panel Modification Work for NTDC Rewat (Local Utility)
- 220kV Control Panel Modification Work for NTDC Lahore (Local Utility)
- 2007 AC/DC Auxiliary Supply Distribution Panels for NTDC, WAPDA (Local Utility)
- 2008 132kV, 220kV and 500kV Relay, Control, Marshalling Kiosk, AC/DC, Event Recorder, Fault Recorder and P&V Recorder Panels for NTDC (Local Utility)
- 2011 Modification of Control Desk at 500kV Terbela for NTDC (Local Utility)
- 2012 220kV Synchronizing Panel (type C7) for M/s Chint Electric and NTDC (Local Utility)
- 220kV Interface Cabinets (Okara, TT Singh, Shalamar SS) for M/s ABB Pakistan
- 132kV Event and Fault Recorder Panels for M/s Alstom Grid Pakistan
- 132kV Metering Panels for M/s ABB Pakistan
- 2013 132kV Relay, Control & AC/DC Panels for M/s ABB Pakistan
- AC/DC Auxiliary Supply Distribution Panels for M/s TBEA
- 132kV Protection Relay Panels for MEPCO (Distribution Utility)
- AC/DC Auxiliary Supply Distribution Panels for M/s ABB Pakistan

Sub Station Eng.

- 2004 Design of Lahore 500kV Utility Substation Extension Project, Pakistan
- 2008 Substation Schematic Drawings for 500kV Gatti SS for NTDC (Local Utility)
- Substation Schematic Drawings for 220kV New Kot Lakhpat SS for NTDC (Local Utility)
- 2009 Substation Schematic Drawings for 220kV Ludewala, Yousafwala, Bannu, Bahawalpur, Hyderabad SS for NTDC (Local Utility)
- 2010 Substation Schematic Drawings for 220kV New Multan and GIS Wapda Town SS for NTDC (Local Utility)
- 2011 Substation Schematic Drawings for 500kV Terbela SS for NTDC (Local Utility)
- Substation Schematic Drawings for Augmentation Work at 220kV Burhan SS for NTDC (Local Utility)
- 2012 Substation Schematic Drawings for 220kV GIS Bandala SS for NTDC (Local Utility)
- Substation Schematic Drawings for 220kV AIS Rohri SS for NTDC (Local Utility)
- 2013 Substation Schematic Drawings for 500kV Sheikh Muhammadi SS for NTDC (Local Utility)

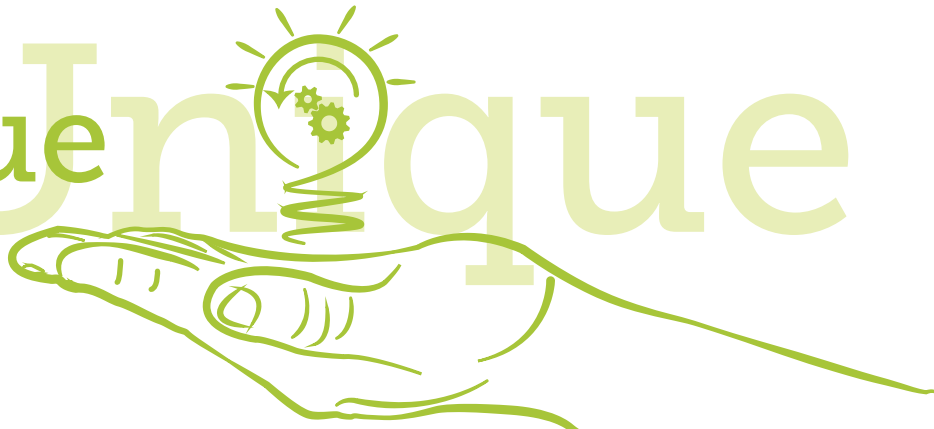
System Studies

- 2004 Study & Analysis of Protection System (Line, Trafo, BB) at HCPC, Pakistan
- 2005 Study & Analysis of Distance Protection System at UCH Power Plant, Pakistan
- Study & Analysis of OC & EF Relays Coordination at Saba Power Plant, Pakistan
- 2007 Study & Analysis of Protection Settings at AES Lalpir Power Plant, Pakistan
- Study & Analysis of Frequency Protection Scheme at HCPC, Pakistan
- Electrical System Reliability Study for Kadanwari Gas Field, Pakistan
- 2009 Relay Setting Calculations & Coordination Study of 132kV Saif CCPP for M/s CMEC China
- 2012 Relay Setting Calculations & Coordination Study of FFC Wind Farm for M/s Alstom Grid Pakistan
- Relay Setting Calculations for 132kV Saif CCPP
- 2013 Load Flow and Short-Circuit Study of Zorlu Wind Farm, Pakistan for M/s Alstom Grid Pakistan
- Relay Setting Calculations & Coordination Study of Zorlu Wind Farm for M/s Alstom Grid Pakistan
- Load Flow Study, Short-Circuit Study, Reactive Compensation Study and Relay Setting Calculations & Coordination Study of Peoples Steel Mills Complex Karachi for M/s Alstom Grid Pakistan

International

- 2011 CT/VT Adequacy Calculation of Complete Medium Voltage Swgr of Mattex Factory, Jubail, for M/s ABB, KSA
- Substation Secondary Engineering of 04 No. SS (110/13.8kV GIS Service Building SS) for M/s SSEM & M/s AJECK, Makkah, KSA
- 2012 Substation Secondary Engineering of 04 No. SS (110/13.8kV Security Building SS) for M/s SSEM & M/s AJECK, Makkah, KSA
- Substation Secondary Engineering of 04 No. SS (110/13.8kV Bus Stand SS) for M/s SSEM & M/s AJECK, Makkah, KSA
- 13.8kV Relay Setting Coordination of Iffco Edible Oil Plant, KSA
- 2013 Substation Secondary Engineering of 04 No. SS (110/13.8kV Library SS) for M/s SSEM & M/s AJECK, Makkah, KSA
- Substation Secondary Engineering of 115kV GIS Marafiq SWRO SS for M/s SSEM & M/s AJEC, KSA

Our Unique



Quality Assurance Program:

Customer Satisfaction Channel:

Since the inception of EPESOL, customer satisfaction has been fundamental to our core values and success. With our clients spanning worldwide the only key to make ourselves meet their marks is our unique and pragmatic Customer Satisfaction Channel or we call it CSC!

Our CSC along with Quality Assurance Program sums up the success of EPESOL.

Partner
GE Energy

+92 423 588 4232
+92 423 588 6157
epesol.pk
www.epesol.com
71-B Garden Block, New Garden Town, Lahore, PK