

# ELECTRICAL COURSES

## POWER SYSTEM OPERATION (E26A)

**OBJECTIVE:**

This seminar stresses on basic principles rather than specific technologies. It explains how electric power systems function and the effect of the various control action both automatically and by operators.

**WHO SHOULD ATTEND?**

This course is targeted at dispatchers technicians and operator personnel who wish to improve their understanding of requirement and conditions of the power system.

**COURSE CONTENT:**

- Work Authorizations
- High Voltage Hazards
- Safety in Electrical Maintenance
- Basic Principles
- Transfer of Energy in Power Systems
- Var Flows
- Economic Operation of Power Systems
- Power System Control
- Energy Accounting in Interconnected Operation
- Telemetry Methods
- Supervisory Control and Data Acquisition Systems
- Power System Reliability Factors
- Power System Protection
- Power System Stability
- EHV Operation

**Practical Tasks:**

- Video tapes/CDs

**Duration: 5 Days**

Date:	Venue:	Cost:
Jun 14 – 18	Dammam	SR6,000
Nov 1 – 5	Abha	SR7,000
Dec 27 – 31	Dammam	SR6,000

## POWER FACTOR CORRECTION (E49AE)

**OBJECTIVE:**

This course is designed to provide the participants with the basics of practical understanding and knowledge on the methods of improving power factor and load control.

**WHO SHOULD ATTEND?**

This course is recommended for electrical engineers with basic experience of generation, transmission or distribution systems and who need to get advanced knowledge in selection, maintenance, inspection and testing of capacitor bank for improving power factor

**COURSE CONTENT:**

- Power Factor Mathematics
- How Capacitor Improve Power Factor
- Methods of Improving Power Factor
- Power Compensation in Transmission System
- Type of Reactive Power Compensation and protection
- Special Capacitor Applications
- Power Factor Capacitor Rating and Tests
- Capacitor Application on Distribution Lines
- Periodic Inspection, Measurement and Maintenance of capacitor banks
- Measuring the Power Factor
- Energization of Back to Back Capacitor Banks and De-Energization
- Power Factor Harmonics Interactions

**PRACTICAL TASKS:**

- Improving power factors with various capacitor ratings

**Duration: 5 Days**

Date:	Venue:	Cost:
Feb 16 – 20	Jubail	SR7,000
Feb 23 – 27	Dubai	SR8,000
Jul 19 – 23	Sharm El-Shaikh	SR8,000
Nov 22 – 26	Qatar	SR8,000