Electrical Design Engineering

The fortunes of the heavy electrical industry have been closely linked to the development of the power sector in India. The heavy electrical industry has under its purview power generation, transmission, distribution and utilisation equipments. These include turbo generators, boilers, turbines, transformers, switchgears and other allied items. These electrical equipments (transformers, switchgears, etc) are used by almost all the sectors. Some of the major areas where these are used include power generation projects, petrochemical, refineries , chemical plants, integrated steel plants, non-ferrous metal units, etc.

The design, engineering and construction of industrial plants involves a multi disciplinary team effort. The goal is to design safe and dependable processing facilities in a cost effective manner. The fact is that there are very few formal training programs that focus on design and engineering of Electrical systems of such big plants. Therefore, most of the required skills are acquired while on the job, reducing productivity and efficiency.

The objective of this course is to provide the delegates the basic knowledge and skills in this discipline to facilitate faster learning curves while on the job.

Topics to be Covered in Workshop

- Introduction to EPC Sector
- Design task and introduction to various phases of project
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- Basics of electrical engineering
- Preparations of electrical load schedule
- Preparations of single line diagram
- Preparation of control schematics
- Equipment sizing, selection, protection, specification, data-sheet, vendor

data review and testing Generators, Transformers, Motors, Switchgears, Power capacitor banks Power reactor, Busduct, Dc-ups, Ac-ups, Instrument transformers etc

- System studies
- Load flow study
- Short circuit analysis
- Motor acceleration analysis
- Transformer sizing
- Hazardous area clasfication
- Scada / enmcs/ pms
- Lighting design Earthing /grounding design
- Cableing system
- Substation/switchyard design
- Fire alarm system
- Cctv system
- Pa/ga system
- Telephone and LAN system
- Radio system
- 2D/ 3D Modeling
- Design Management
- Project Management

Duration: The duration of this workshop will be two consecutive days, with eight hour session each day in a total of sixteen hours properly divided into theory and hands on sessions.

Eligibility: This workshop is best suited for Electrical Engineering branch. It\'s a basic level workshop so there are no prerequisites. Any one interested, can join this workshop.

Fee: Rs. 1200/-(inclusive of all Taxes) per participant.