

OBJECTIVE

Seeking a position to utilize my skills and abilities in Oil and Gas Industry that offers professional growth.

CAREER SUMMARY

11+ years of experience in Electrical design & consultancy, Detail engineering for brown field and Green field EPCM projects, FEED and Project Management and Consultancy (PMC) and On-Site Construction support in Oil & gas, Fertilizers sector, Infrastructure and plant/non-plant buildings.

Experienced in Concept Design Development, Basic and Detailed Engineering, power system studies on ETAP, developing Various Electrical layouts, Schedules, Electrical Calculations for equipment selections, Enquiry documents for various electrical Equipment. Project deliverable planning, Interdisciplinary coordination for various engineering activities, leading the design team to achieve successful completion of the project till the handover of the facility to the end- user.

Handson experience for selection, procurement of MV/LV AIS, ECS system and Substation Automation System, Power and Distribution Transformers, emergency generators, motors, UPS system, Battery and Battery charger, Fire alarm system, PA system, VFDs, APFCs, Cables, thyristor-controlled electric heaters, electric heat tracing, solar power system etc.

Good knowledge of various Indian and International standards IEC, IEEE, NFPA, ANSI & BS etc.

SOFTWARE KNOWLEDGE

ETAP, NEPLAN, HOMER, PVSyst, Dialux, AutoCAD, SPEL, MATLAB, GAMS, MS Office

EXPERIENCE

Dec 2013 - Present Engineers India Limited, Gurgaon, Haryana

Jun 2013 – Dec 2013 Junior Research Fellow, National Institute of Technology, Kurukshetra

PROFESSIONAL EXPERIENCE

Basic Engineering:

- Design of Electrical System, Fault level calculations, load flow studies, motor start up studies, equipment sizing, substation sizing, cable sizing, lighting, earthing and lightning protection calculations.
- Preparation of single line diagrams, metering and protection diagrams, system architecture drawing, Hazardous area classification and selection of electrical equipment for hazardous area.
- Co-ordination with Client and process unit licensor (wherever applicable) for finalizing design basis and project specific requirements.

Detail Engineering & Interface/ Co-ordination:

- Preparation of engineering deliverables like ECS IO list, equipment list, LCS schedule, cable schedule, interconnection drawings, block diagram for FA/ PA/Telephone/ LAN.
- Engineering for layouts like Substation Equipment layout, cable, lighting, earthing, lightning protection, Fire Alarm System/ Public Address System/ Telephone/ LAN for buildings and process units.
- Co-ordination with Instrumentation for E&I interface, DCS, PLC and SCADA Interface for exchange of signals, UPS and Non-UPS power requirement, for procurement of signal and power cables, LCS.
- Co-ordination with Civil, Structural, Instrumentation, Piping for 3D modelling activities to minimize fouling/ clash of electrical facilities (i.e. cable trays, cable trenches, LCS, MCP, Field call station, lighting system) with aboveground and underground facilities.
- Co-ordination with Civil for substation and control room building, cable trench, cable trays.
- Co-ordination with Mechanical (Piping/mechanical) for electrical heat tracing, electrical heaters and other mechanical equipment, heat load for air conditioning.
- Co-ordination with construction team for resolution of site queries and fabrication drawings, wherever required.

Engineering for Procurement:

- Preparation of bidder qualification criteria for various electrical equipments
- Preparation of job specifications, scope of work, datasheets and interface document for tenders and FEED packages, preparation of Material Requisitions, Purchase Requisition and electrical inputs for package items and other departments requisitions and tenders.
- Bid Evaluation, TQ preparation and Preparation of Technical Bid analysis.
- Review of vendor drawings like Single Line Diagrams, GA drawings, datasheet, schematics and logic diagram.
- Review change orders and interface queries.

Miscellaneous Activities:

- Preparation of Man-hour estimates, MTO for costing estimate for proposal inputs.
- Preparation of drawing and document schedules, engineering deliverables, review of planning schedules, planning of activities and releasing monthly progress reports.
- Preparation of change order to clients and review of change order of contractors.
- Providing assistance in Vendor development activities and standardization/revision of specifications.
- Vendor enlistment for various electrical equipments

PROJECTS

REFINERY & PETROCHEMICAL PROJECTS
INTEGRATED REFINERY EXPANSION PROJECT (EPCM MODE), M/s BPCL, KOCHI

DHDT PROJECT OF NRL REFINERY (EPCM MODE), M/s NRL, ASSAM
PROPYLENE DERIVATIVE PETRO-CHEMICAL PROJECT (EPCM MODE), M/s BPCL, KOCHI
BS-VI MSBP (PMC & EPCM Mode), M/s BPCL, KOCHI
PANIPAT REFINERY EXPANSION PROJECT (EPCM MODE), M/s IOCL-PANIPAT
HPG-2, BUTENE-1 AND PSA UNITS (EPCM MODE), M/s BCPL, Assam
RO Plant at IOCL Gujarat Refinery (PMC MODE), M/s IOCL, Vadodara
PREBID ENGINEERING FOR SONAREF REFINERY PROJECT LOBITO, M/s SONANGOL, ANGOLA

OFFSHORE PROJECTS
PREBID ENGINEERING FOR NEELAM REDEVELOPMENT PROJECT OF ONGC, M/s AFCONS

EDUCATION

2016-2020	National Institute of Technology, Kurukshetra Ph.D (Power Systems) Topic: Investigation on Aspects of Voltage Management, Loss Minimization, and Energy Dispatch in Micro Grid Based Distribution System with Renewable Energy Sources
2011-2013	National Institute of Technology, Kurukshetra M.Tech (Power Systems) Topic: Distribution System Analysis with Distributed Generation and Capacitors Based on Sensitivity Methods with Time Variant Load Model
2006-2010	Jawaharlal Nehru Technological University, Anantapur B.Tech (Electrical and Electronics Engineering)

AWARDS/HONORS

- **Best Researcher Award World Top Scientist Award 2024.**
- **Young Scientist Award** in International Scientist Awards 2021, VDGGOOD Association, Pondicherry.
- **Tata Rao Award** by Institution of Engineers India, 2015.
- **POSOCO Power System Award** (PPSA-2014)-Best thesis award in M. Tech (All India Rank 1).
- **Gold Medalist** in M.Tech Topper (Power Systems), 2014, NIT Kurukshetra.
- **Best Paper Award** of ICETSGAI4.0 International Conference, 2019, BIT Mesra.
- **Best Paper Award** of Technical Paper Competition, 2014 & 2016, Engineers India Limited.
- **Best Paper Award** of ICAER IEEE Conference, 2013, UIET Punjab University Chandigarh.

RESEARCH PROFILE

Google Scholar Citations (Jan 2025)
<https://scholar.google.co.in/citations?user=EHAMp4UAAAAJ&hl=en>

Citation indices	All	Since 2020
Citations	1278	839
h-index	13	11
i10-index	16	13

Research Publications:

International Journal Papers: 16

International Book Chapters: 5

International Conference Papers: 7

National Conference Papers: 5

Research Skills:

- Distributed Energy Resources (DER) optimization for grid reliability and resilience.
- Voltage stability analysis distribution systems.
- Energy management and techno-economic analysis of microgrids with RES & DR
- Reactive power management
- Optimization models of DERs for ancillary services in distribution systems

Other Activities

Editorial Board Member

- American Journal of Electrical Power and Energy Systems
- Lattice Science Publication

Reviewer

- IET GTD, IET RPG
- IEEE Access
- IEEE Journal of Engineering
- Elsevier
- Taylor & Francis
- John Wiley Journals