

MOHAMED SAYED ABOUBAKR

Senior Electrical Engineer / Electrical Manager | Project Management Professional PMP
Jeddah / Jubail, Saudi Arabia | +966 58 343 7119 | eng_moh_sayd@yahoo.com
LinkedIn: linkedin.com/in/mohamed-aboubakr-1a387250

PROFESSIONAL SUMMARY

Senior Electrical Engineer with 16+ years of experience in construction, operation, and maintenance of electrical systems, including 5 years at Saudi Aramco Research Center. PMP certified. Expert in MEP coordination, testing & commissioning, preventive maintenance for medium and low voltage systems. Proven record managing mega projects, ensuring compliance with Saudi Aramco, Royal Commission for Jubail and Yanbu, IEC, and NFPA standards. Skilled in switchgear, transformers, MCCs, RMU, MV/LV cables laying, power distribution, lighting control, UPS, generators, and infrastructure installations.

CORE COMPETENCIES

Project Management | MEP Coordination | Testing & Commissioning | Preventive Maintenance | Electrical Construction | Saudi Aramco Standards | IEC Standards | NFPA Standards | Switchgear | Power transformers | MCCs | RMU | Power Distribution | Lighting Control DALI | UPS Systems | Diesel Generators | ATS | Capacitor Banks | CCTV | Fire Alarm | Access Control | BMS | Shop Drawings | Cost Estimation | Tendering | Vendor Management | Risk Management.

PROFESSIONAL EXPERIENCE

Senior Electrical Engineer | Rezayat Construction Company | Jubail, Jeddah | Aug 2019 - Present

Senior Operation & Maintenance Engineer | Apr 2021 - Present

Aramco Research Center at KAUST, Client: Saudi Aramco

- Led preventive maintenance programs for 15+ electrical systems including 4 MVA power oil transformers, LV Switchgear, MCCs, RMU, UPS, Dry transformers, DC Chargers, power panels and Diesel Generator, achieving 99.8% system reliability
- Managed spare parts procurement and vendor coordination for Aramco Research Center, reducing downtime by 30% and optimizing maintenance costs
- Supervised testing & commissioning of DALI lighting control, Capacitor Banks, DC Chargers, ATS, Fire Alarm, CCTV, and Access Control systems per Aramco standards
- Coordinated with suppliers and service providers to smoothen the process of procurement of all spare parts and required services
- Prepared technical reports, JSA, and SOP documentation ensuring 100% compliance with Saudi Aramco work procedures
- Conduct root cause analysis of electrical systems failures and implement corrective and preventive measures
- Led the power system studies including Arc Flash analysis, load flow & voltage drop, short circuit analysis and protective devices coordination
- Supported lab scientists by ensuring the provision of specialized power requirements in full compliance with Saudi Aramco safety standards
- Participate in electrical safety inspections and implement hazard mitigation practices as per Aramco standards and best practices

Senior Technical & Estimation Engineer | Jan 2020 - Apr 2021

- Reviewed construction drawings, specifications, and contracts for Aramco projects ensuring full compliance with technical requirements
- Prepared shop drawings, method statements, and technical submittals, achieving 95% first-time approval rate from consultants
- Developed detailed cost estimates for materials, labor, and equipment on multi-million SAR tenders
- Identified value engineering opportunities saving 12% on average per project bid
- Supported bid/no-bid decisions and contract negotiations with accurate cost data and risk analysis

Senior Site Electrical Engineer | Aug 2019 - Jan 2020

Project: Construction of Administration Buildings, Aramco Berri Gas Plant, Jubail

- Review design documents, specifications and shop drawings to ensure technical accuracy and constructability
- Managed electrical, telecommunications, and instrumentation works for Aramco facility ensuring compliance with SoW, quality, and Aramco safety standards
- Coordinated MEP disciplines to eliminate clashes, reducing rework by 25% and achieving seamless project integration.
- Oversaw procurement and installation of lighting systems, power systems, dry transformers, fiber optic cables, earthing systems, gas alarm system and street lighting
- Validated site works and led testing & commissioning phase for all electrical systems
- Monitor Project progress, resources and deliverables against schedule
- Raising any issues that may affect progress ensuring that quality, benchmarks are maintained and always delivered

Electrical Project Engineer | Azmeel Construction Company | Jubail | Mar 2012 - Aug 2019

Electrical Project Engineer | Dec 2015 - Aug 2019

Project: Jubail University Student Dormitories | 750 million SAR | Client: Royal Commission | Consultant: Bechtel

- Managed electrical construction for 8x 7-story buildings, dining facilities, mosque, and parking structures ensuring completion of related tasks in accordance with approved drawings, quality plan, safety instructions, approved cost and time schedule
- Conducted regular site inspections to monitor progress, safety compliance and adherence to project requirements.
- Proactively estimate and forecast required resources number and qualifications to avoid manpower shortage
- Led technically shop drawings and material submittals and obtaining client approval
- Supervised Electrical infrastructure works including MV cables laying, splicing & termination, substations installations, LV network, street lighting and telecom network installations and testing
- Supervised low current systems: Fire alarm, CATV, CCTV, BMS, Public Address, Access Control, Structured Cabling, Fiber Optic cables installations
- Conducted Megger tests, continuity tests, breaker trip tests, and transformer tests IR, WR, TR, Hi-Pot per IEC and Royal Commission standards

- Prepared method statements and ensured 100% compliance with local and international electrical codes
- Supervised and coordinated the civil related works including duct banks, hand holes, concrete pads and manholes
- Coordinated with QC/QA team for initial RFI inspection prior to client final acceptance

Electrical Project Engineer | Mar 2012 - Dec 2015

Project: GOSI Residential Complex | 1 Billion SAR | Client: GOSI | Consultant: Sofcon

- Led electrical works for 418 villas, 18 apartments 8-story, 2 mosques, kindergarten, and 48 power substations
- Executed 48 power distribution substations, MV/LV cable laying, splicing, termination, and testing
- Managed laying of 5K+ meters MV cable loops with testing, termination & splicing, LV power distribution, 1000+ street lighting poles, 300+ telecom manholes, small power and lighting systems.
- Delivered project on schedule with zero safety incidents and full client satisfaction
- Validated the design to ensure smooth implementation and raising TQs if necessary
- Coordinated with consultant on obtaining approvals for shop drawings and technical submittals
- Coordinated with local authorities and utility companies to secure electrical connections and permits
- Coordinated infrastructure utilities (potable, sanitary, storm, MV cables, LV cables and telecom conduits) to eliminate clashes and reducing rework
- Guided the drafts men in performing the As-built drawings

Electrical Site Engineer | Misr Engineering | Egypt | Apr 2010 - Feb 2012

- Acting as site manager for electromechanical works managing resources, work execution, client coordination and final acceptance.
- Executed shop drawings, site electrical installations and supervised subcontractors per project specifications
- Conducted quality inspections and supported testing activities.

EDUCATION

Bachelor of Science in Electrical Engineering | Al-Azhar University, Cairo | Jul 2008

Specialization: Electrical and Telecommunications Engineering

CERTIFICATIONS

- Project Management Professional PMP | Project Management Institute

Technical Skills

Engineering Software:

- AutoCAD: Advanced
- DIALux: Intermediate
- ETAP: Basic knowledge of power system modeling and analysis

Computer Skills:

- Microsoft Office (Excel, Word, PowerPoint): Advanced

LANGUAGES

- Arabic: Native | English: Professional Working Proficiency