

Refaat Kamal Yahia Zakaria

Senior Electrical Team Leader

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Transferable Iqama | Saudi Driving License

Career Summary

Accomplished Field Manager and Senior Electrical Engineer with 18 years of hands-on experience managing electrical engineering teams and projects across Egypt and Saudi Arabia. Adept at leading complex electrical installations, managing on-site teams, and overseeing the execution of electrical systems in high-profile projects. With deep technical knowledge in power distribution, lighting, automation, and control systems, I have consistently ensured project compliance with industry standards and safety regulations.

Throughout my career, I have successfully led multidisciplinary teams, coordinating electrical work for large-scale projects, including infrastructure developments, commercial complexes, and industrial plants. My leadership as a Senior Electrical Team Leader has driven project efficiency, improved operational workflows, and delivered projects on time and within budget. I excel in troubleshooting, problem-solving, and implementing innovative solutions that enhance system reliability and performance.

Now, as an experienced consultant and team leader, I am looking to leverage my vast technical and managerial expertise in a dynamic organization. My goal is to continue delivering excellence in electrical engineering, drive team success, and contribute to the growth of ambitious projects in the Middle East and beyond.

Skills

Technical and Hard Skills (Core Competencies)

- **Leadership:** Experience in leading and mentoring project teams.
- **Hard Skills:** Electrical system, load calculation & analysis, AutoCAD for electrical drafting, Revit for electrical modeling, electrical code compliance (NEC, IEC, BS), power distribution & protection systems, project management software, fault analysis & troubleshooting, energy efficiency & sustainability practices, electrical equipment selection & specification, quality control & assurance, electrical testing & commissioning.
- **Technical Skills: Software:** Revit, Build Autodesk, AutoCAD, Microsoft Office Application, Internet Applications

Personal Skills

- **Project Management:** Proven ability to manage projects from initiation to completion within scope, budget, and timelines.
- **Analytical Skills:** Strong problem-solving and analytical abilities.
- **Communication:** Excellent written and verbal communication skills, with the ability to engage effectively with clients and internal teams.

Languages Skills

- **Arabic:** Native Language
- **English: Good** in writing and speaking

Work Experience

Electrical Construction Manager, SIAC HOLDING

2019 | Saudi Arabia

- **Mostakbal City:** Led installation and maintenance of electrical systems for water and irrigation tanks, medium voltage pump stations, and low voltage water tanks.
- Supervised **Medium Voltage Pump Stations** and oversaw critical systems like fire alarms, telephones, earthing, PLC control, lighting, and power, ensuring optimal functionality.
- Managed the **Al-Hammam Canal Water Lift Stations (No 6 & 7)**, with 14 medium voltage pumps, each rated at 2300 kW, and low voltage systems including overhead cranes, lighting, and trash machines.
- Implemented **PLC and SCADA control systems** for automated operations, improving efficiency by 20% in the water management process.
- Directed the installation of **infra medium voltage transmission lines** (OHTL, cables, transformers, and circuit breakers) in the **Mostakbal Misr Reclamation Project (400 acres)**.
- Oversaw construction of low voltage systems for water lift stations, including power, lighting, and control systems for various facilities.
- Led **Zone 5 Project** at **AMAALA RSG**, responsible for low voltage and low current systems (Fire Alarm, Data, CCTV, ICT, BMS), delivering the project within strict timelines.
- Coordinated teams to complete power and lighting installations for the **Staff Village** at **AMAALA**, servicing over 1,000 residential units.
- Conducted detailed testing and commissioning of systems, reducing downtime and ensuring 100% compliance with safety regulations.

Consultant Engineer, Sabbour Office Engineering Consultants

2018 – 2019 | Egypt

- Managed electrical systems for the **New Capital (Ministry of Defense)**, including lighting, power, and HVAC systems.
- Designed and oversaw low current systems such as fire alarms, data networks, public address systems, and earthing solutions for key government projects.
- Provided technical expertise in coordinating between electrical teams and other engineering departments for seamless project execution.
- Implemented energy-saving solutions that reduced power consumption by **10%** on the Ministry of Defense project.
- Reviewed and approved contractor submittals and shop drawings for compliance with project specifications.
- Conducted site inspections to ensure all electrical systems met safety standards and were aligned with regulatory requirements.

- Collaborated with stakeholders to address any design changes or modifications.
- Developed and updated project documentation, including electrical design reports and progress updates.
- Supported troubleshooting and issue resolution, minimizing delays and ensuring high-quality project outcomes.

Consultant Engineer, Assaf Office Engineering Consultants

2017 – 2017 | Saudi Arabia

- Provided expert consultancy for electrical installations in a **Private Palace, Riyadh**, including power, lighting, HVAC, and low current systems.
- Supervised the design and installation of fire alarms, data networks, public address systems, telephone systems, lightning protection, and earthing systems.
- Ensured all electrical designs adhered to Saudi Arabian regulations and project specifications.
- Oversaw the integration of luxury electrical systems within the palace, ensuring reliability and efficiency.
- Monitored the quality of electrical installations to ensure they met both aesthetic and technical requirements.
- Conducted comprehensive testing and commissioning of all electrical systems before handover.
- Provided ongoing consultancy to troubleshoot and resolve any emerging electrical issues post-installation.
- Coordinated with contractors to manage project timelines and electrical resources efficiently.
- Conducted site visits to ensure the electrical layout aligned with architectural and structural designs.

Consultant Engineer, Engineering Bases Office Engineering Consultants

2015 – 2016 | Saudi Arabia

- Led electrical consultancy for **Ministry of Agriculture** branches in Beqaa-Hail and Alola-Medina, managing lighting, power, and HVAC systems.
- Designed and implemented low current systems including fire alarms, public address systems, telephone systems, and lightning protection.
- Conducted site visits to ensure electrical works were completed to specifications and safety standards.
- Managed the coordination of electrical systems with civil and mechanical teams, ensuring smooth integration.
- Facilitated meetings with stakeholders to ensure project expectations were met and design changes were implemented efficiently.
- Assisted in troubleshooting and resolving electrical installation challenges during construction.
- Reviewed contractor submittals and provided feedback to align with project goals and local regulations.
- Successfully handed over the projects with minimal snag lists, ensuring smooth operations post-completion.

Field Manager,

2010 – 2015 | Egypt

International Development and Environment Associates (IDEA Egypt)

- Managed the **Egyptian Brick Factory GHG Reduction Project** under the **United Nations CDM**, overseeing the electrical systems to reduce emissions.
- Led on-site electrical engineering activities for multiple brick factory installations.
- Developed strategies to optimize electrical usage, contributing to a **12%** decrease in operational costs.
- Conducted training sessions for local teams on energy-saving techniques and equipment maintenance.
- Coordinated with environmental specialists to align project goals with sustainability objectives.
- Monitored electrical consumption and adjusted systems to meet the UN's GHG reduction targets.
- Created comprehensive reports on energy savings and presented findings to stakeholders.
- Ensured all electrical installations complied with environmental regulations and safety standards.
- Played a key role in achieving the UN certification for GHG reductions for the brick factories.

Executive Engineer, UBC Integration Systems

2009 – 2009 | Egypt

- Spearheaded electrical installations for critical data centers, including **National Investment Bank** and **EGAS**, ensuring minimal downtime during implementation.
- Delivered high-quality electrical infrastructure solutions for **S Building at Cairo Airport** and **Nile University**, meeting stringent deadlines and safety standards.
- Managed electrical installations for **data center projects** at key locations including National Investment Bank, EGAS, and Nile University.
- Designed electrical layouts to ensure reliable power distribution and redundancy for critical data operations.
- Coordinated with IT and mechanical teams to ensure seamless integration of electrical systems with HVAC and network infrastructures.
- Implemented uninterruptible power supplies (UPS) and backup generators for data centers to guarantee **99.9%** uptime.

Field Engineer,

2006 – 2009 | Egypt

International Development and Environment Associates (IDEA Egypt)

- Supported the **Egyptian Brick Factory GHG Reduction Project**, focusing on optimizing electrical consumption for sustainable operations.

Membership

Member, Egyptian Syndicate of Engineers

Member, Saudi Council of Engineers

RED SEA Approved

Education

Modern Academy for Engineering and Technology (Maadi), Egypt 2001-2006

- Bachelor in Electronics Engineering and Communication Technology
- Graduation Project: Automation Building (Security systems, fire alarm systems, water tank control, power saving) using PLC | Grade: Excellent