

COMPANY PROFILE



FISSION GRID ELECTROMECHANICAL SERVICES L.L.C

**Powering Reliability, Delivering
Precision**



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Executive Summary

Fission Grid is a forward-thinking energy solutions provider based in the UAE, specializing in scalable, decentralized microgrid systems that integrate cutting-edge technology, sustainable engineering, and a people-first approach to deliver reliable, efficient power for communities and industries in challenging environments.

Vision and Mission: The company aims to lead as the premier electromechanical service provider in the UAE and surrounding regions, emphasizing technical integrity, reliability, and end-to-end solutions for sustainable infrastructure. Its mission focuses on delivering comprehensive, high-quality services from equipment supply and installation to testing, commissioning, and maintenance, driven by innovation, safety, efficiency, and client-centric values.

Core Values and Strengths: Sustainability, precision, open collaboration, design-first usability, and ethical leadership form the foundation. Strengths include a skilled multidisciplinary team, modular future-proof designs, data-powered smart monitoring, rapid deployment with customization, and proven performance in industrial and remote settings.

Key Services: Fission Grid offers a wide range of electromechanical solutions, including:

- **Transformers and Switchgear:** Supply, installation, testing (e.g., BDV, DGA, SFRA, IR), commissioning, and maintenance with diagnostic support.
- **Circuit Breakers (ACB/VCB):** Comprehensive testing for insulation, timing, mechanical integrity, and protection systems.
- **Distribution Boards, Cables, and Earthing Systems:** Installation, wiring, testing (e.g., Megger, HiPot, Tan Delta), and compliance verification up to 400kV.
- **Capacitor Banks and Power Quality:** PFC panel services, harmonic analysis, and detailed reporting for efficiency and compliance.
- **Specialized Analyses:** Thermography for hotspot detection, power quality assessments (e.g., harmonics, sags), line impedance/step/touch voltage measurements, and solo run testing for motors.
- **Engineering and Projects:** ETAP studies for system design, EPC for solar projects up to 1MW, substation commissioning and MEP works for buildings, .

Overall, Fission Grid commits to "Energy with Intelligence," ensuring intelligent, maintainable networks backed by ethical practices, quality control, and regulatory compliance (e.g., IEEE, IEC, UAE standards), positioning it as a pioneer in decentralized, green energy infrastructure.

Our Company History

Founded in 2024, Fission Grid Electromechanical Services L.L.C. was established as a dynamic startup in the UAE, poised to redefine energy infrastructure through innovative, scalable, and sustainable power solutions. The company was founded by a team of accomplished leaders with over 35 years of collective experience in the power, oil and gas, and MEP (Mechanical, Electrical, and Plumbing) sectors. These industry veterans, who have held pivotal roles such as Commissioning Manager and Project Manager, brought a wealth of expertise from working with globally esteemed organizations, including Saudi Electricity Company (SEC), Dubai Electricity and Water Authority (DEWA), Sharjah Waste-to-Energy (SWTE), Aramco and Qatar petroleum

The genesis of Fission Grid was fueled by a vision to meet the rising demand for intelligent, reliable, and environmentally responsible energy systems. The founding team's distinguished portfolio includes managing and delivering high-impact projects such as Saudi Arabia's Riyadh Power Plants 7-12, Qatar Petroleum's 200 MW Submarine Power Project, the Sharjah Waste-to-Energy and Gas Processing Plant (5BMC) in Uzbekistan, and commissioning operations at DEWA's power plant. These landmark endeavors sharpened their capabilities in engineering precision, project management, and innovative system design, forming the cornerstone of Fission Grid's mission.

Since its inception, Fission Grid has swiftly emerged as a leader in the UAE's energy landscape, specializing in modular microgrid systems, advanced electromechanical services, and sustainable infrastructure development. By integrating cutting-edge technology, data-driven smart monitoring, and a client-centric ethos, the company has built a reputation for delivering precision, reliability, and operational excellence. From industrial complexes to remote installations, Fission Grid continues to empower communities and industries with smarter, greener energy solutions, carrying forward its founders' legacy of transformative leadership and technical excellence.

Our Ownership Structure

Fission Grid Electromechanical Services L.L.C., established as a Limited Liability Company (L.L.C.) under the regulatory framework of the United Arab Emirates, embodies a streamlined and founder-centric ownership model designed to foster agility, innovation, and long-term growth. This structure aligns with the company's vision of pioneering decentralized energy solutions, ensuring decisive leadership while mitigating risks through diversified equity distribution. As a UAE-based entity, Fission Grid adheres to the Commercial Companies Law (Federal Law No. 32 of 2021). Since Fission Grid is a services-oriented firm in the electromechanical domain, it has benefited from 100% foreign ownership allowances under the UAE's progressive business environment.

Key Principles of Ownership

- **Founder-Driven Governance:** Ownership is concentrated among the founding leadership team, leveraging their collective 35+ years of expertise in power, oil & gas, and MEP sectors to drive strategic decisions.
- **Scalability and Flexibility:** The structure supports phased equity infusions from strategic investors, enabling rapid expansion into regional markets without diluting core control.
- **Risk Mitigation:** Liability is limited to the contributed capital, protecting personal assets while emphasizing ethical, transparent practices.
- **Sustainability Focus:** Future ownership evolutions prioritize partners aligned with green energy initiatives, reinforcing Fission Grid's commitment to eco-conscious infrastructure.

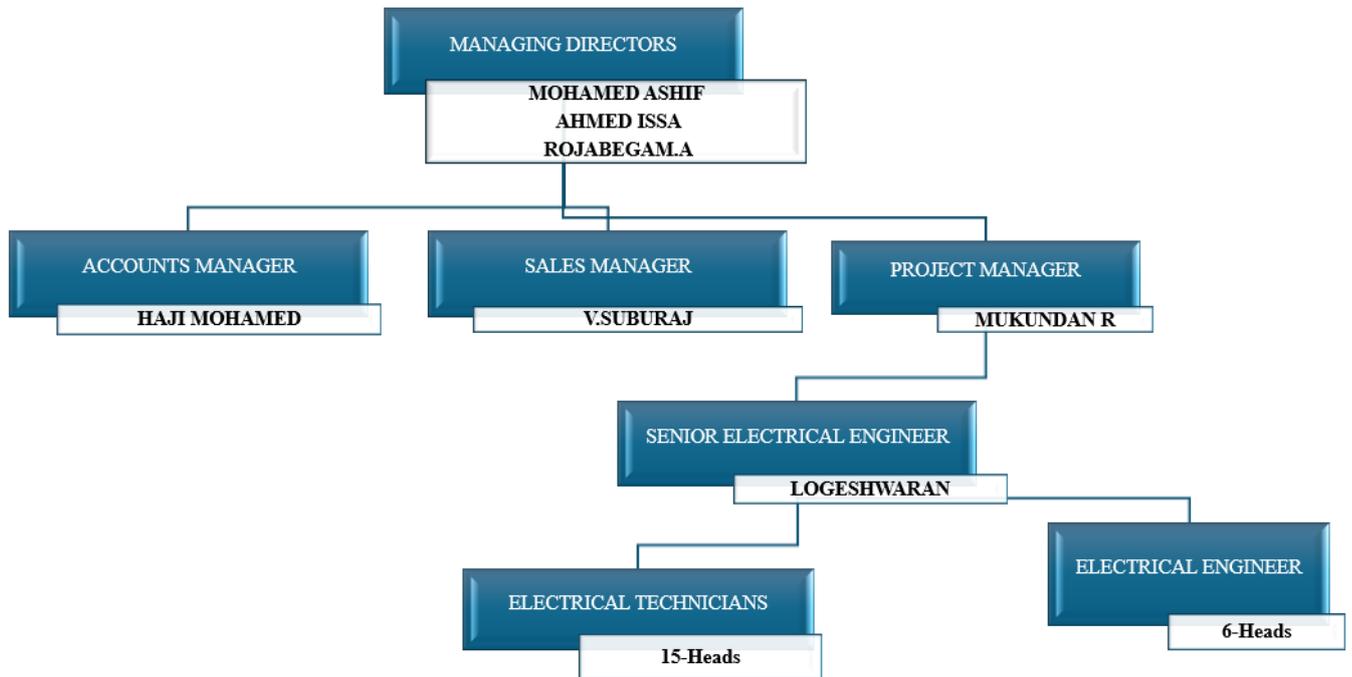
Governance and Decision-Making

- **Board of Directors:** Composed of the founding partners, convening quarterly to oversee operations, with unanimous consent required for major decisions.
- **Shareholder Agreements:** Include right-of-first-refusal clauses, drag-along/tag-along provisions, and anti-dilution protections to safeguard founder interests.
- **Capital Structure:** Initial capital of AED 500,000 (fully subscribed by founders), with growth funded through retained earnings and project revenues. No debt financing at inception to maintain lean operations.

This ownership framework positions Fission Grid for sustained excellence, empowering its experienced leaders to deliver "Energy with Intelligence" while attracting collaborators who share its pioneering spirit. As the company matures, periodic reviews will adapt the structure to emerging opportunities in the UAE's dynamic energy landscape.

Our Organizational Structure

FISSION GRID ELECTROMECHANICAL SERVICE L.L.C ORGANIZATION CHART



Our Business Model

1. Value Proposition

Fission Grid Electromechanical Services L.L.C. delivers scalable, decentralized, and sustainable energy solutions, specializing in smart microgrid systems and comprehensive electromechanical services. By integrating cutting-edge technology, sustainable engineering, and a client-centric approach, the company ensures reliable, efficient, and eco-conscious power infrastructure for industries, communities, and remote environments across the UAE and beyond. Key differentiators include:

- **Reliability and Precision:** End-to-end services (supply, installation, testing, commissioning, maintenance) backed by rigorous quality control and compliance with IEEE/IEC/UAE standards.
- **Sustainability:** Modular, future-proof designs and EPC solar projects up to 1 MW promote green energy adoption.
- **Innovation:** Data-driven smart monitoring and advanced tools like ETAP software and Fluke Power Quality Analyzers optimize system performance.
- **Expertise:** A leadership team with over 35 years of experience in high-profile projects

2. Customer Segments

Fission Grid serves a diverse clientele, targeting:

- **Industrial Clients:** Manufacturing plants, oil and gas facilities, and industrial parks requiring robust power infrastructure.
- **Commercial Entities:** Developers of multi-storey buildings needing MEP, HVAC, Electrical and fire protection systems.
- **Public Sector:** Government bodies and utilities (e.g., DEWA, SEWA) for substation, transformer, and earthing system projects.
- **Remote Communities:** Rural and off-grid areas seeking scalable microgrid solutions.
- **Renewable Energy Stakeholders:** Clients investing in solar projects up to 1 MW, including private firms and municipalities.

3. Revenue Streams

Fission Grid generates revenue through multiple channels, leveraging its comprehensive service portfolio:

- **Project-Based Contracts:** Turnkey solutions for transformer, switchgear, and distribution board installations, testing, and commissioning (40% of revenue).
- **EPC Solar Projects:** Engineering, procurement, and construction for solar installations up to 1 MW (20% of revenue).
- **Maintenance and Support Services:** Recurring contracts for preventive maintenance, diagnostic testing, and thermography (25% of revenue).
- **Specialized Analysis and Consulting:** Power quality analysis, ETAP studies, and line impedance/touch/step voltage assessments (10% of revenue).
- **HVAC and Fire Systems:** Design, installation, and maintenance of MEP and fire protection systems for buildings (5% of revenue).

Our Business Model

4. Cost Structure

Fission Grid operates a lean yet scalable cost model to maximize efficiency:

- **Fixed Costs:** Salaries for a multidisciplinary engineering team (30%), office and operational facilities in the UAE (10%), and software/tools (e.g., ETAP, Fluke analyzers) licensing (5%).
- **Variable Costs:** Procurement of equipment (transformers, switchgear, solar panels) (35%), subcontractor fees for civil works and specialized labor (15%), and travel/logistics for remote projects (5%).
- **R&D Investment:** 5% of revenue allocated to developing smart monitoring systems and sustainable technologies.
- **Compliance and Training:** Investments in certifications, safety training, and regulatory adherence to maintain industry standards.

5. Channels

Fission Grid reaches its clients through:

- **Direct Sales:** Dedicated account managers engaging with industrial and government clients for bespoke solutions.
- **B2B Partnerships:** Collaborations with contractors, architects, and renewable energy firms for integrated project delivery.
- **Tenders and RFPs:** Competitive bidding for public sector contracts in the UAE and GCC region.
- **Digital Presence:** A professional website and LinkedIn showcasing expertise, case studies and certifications.

Industry Events: Participation in energy and MEP expos to network and secure leads.

6. Customer Relationships

Fission Grid fosters long-term client relationships through:

- **Customized Solutions:** Tailored designs and scalable systems addressing specific client needs.
After-Sales Support: Comprehensive maintenance contracts, detailed commissioning reports, and 24/7 troubleshooting services.
- **Transparency:** Clear documentation, regular project updates, and ethical practices build trust.
- **Training and Handover:** Operator training and as-built drawings ensure client self-sufficiency post-commissioning.

7. Key Activities

- **Engineering and Design:** Conceptual and detailed designs using ETAP for load flow, short circuit, and arc flash studies.
- **Project Execution:** Supply, installation, testing (e.g., BDV, SFRA, Tan Delta), and commissioning of transformers, switchgear, and earthing systems.
- **Specialized Testing:** Power quality analysis, thermography, and solo run tests for motors to ensure reliability.
- **Solar EPC:** Site surveys, procurement, and grid integration for solar projects up to 1 MW.
- **Maintenance and Diagnostics:** Periodic assessments, predictive diagnostics, and oil filtration for sustained performance

Our Business Model

8. Key Resources

- **Human Capital:** A highly skilled team with experience in landmark projects
- **Technological Assets:** Advanced tools (Fluke analyzers, infrared cameras) and software (ETAP) for precision diagnostics.
- **Infrastructure:** Modular grid designs and smart monitoring systems for rapid deployment.
- **Financial Capital:** Initial AED 500,000 seed funding from founders, supplemented by project revenues.

9. Key Partnerships

- **Equipment Suppliers:** Collaborations with global manufacturers for transformers, switchgear, and solar components.
- **Subcontractors:** Local firms for civil works and specialized MEP installations.
- **Regulatory Bodies:** Compliance with UAE authorities (e.g., DEWA, ADNOC) and international standards (IEEE, IEC).
- **Technology Partners:** Providers of ETAP software, Fluke analyzers, and renewable energy solutions.

10. Competitive Advantage

Fission Grid stands out in the UAE's electromechanical sector through:

- **Proven Expertise:** Leadership with 35+ years in high-stakes projects ensures unmatched technical proficiency.
- **End-to-End Solutions:** Comprehensive services from design to maintenance under one roof.
- **Sustainability Focus:** Emphasis on green energy and modular systems aligns with global and UAE net-zero goals.
- **Rapid Deployment:** Scalable, data-driven designs enable quick project turnaround without compromising quality.
- **Client-Centricity:** A "people-first" ethos, transparent reporting, and tailored solutions drive client loyalty.

11. Growth Strategy

- **Market Expansion:** Penetrate GCC markets (e.g., Saudi Arabia, Qatar) leveraging founder experience with SEC and QP.
- **Portfolio Diversification:** Scale solar EPC projects and explore energy storage solutions by 2027.
- **Strategic Alliances:** Partner with renewable energy funds to finance larger projects (1-5 MW solar farms).
- **Digital Transformation:** Invest in AI-driven monitoring systems to enhance predictive maintenance offerings.

Fission Grid's business model is built on delivering "Energy with Intelligence," combining technical excellence, sustainable innovation, and client-focused execution to redefine energy infrastructure in the UAE and beyond.

Our Products/Services

Transformer Scope of Work

Our scope covers the supply, installation, testing, commissioning, and ongoing maintenance of transformers, ensuring full compliance with all applicable industry standards and project specific requirements.



Services

- Complete installation and site testing of power transformers.
- Tan Delta and Capacitance measurements for insulation health.
- Sweep Frequency Response Analysis (SFRA) for winding integrity.
- Transformer Turns Ratio (TTR) and Winding Resistance measurement.
- Vector Group verification and polarity checks.
- Insulation Resistance (IR) testing.
- Short Circuit Impedance measurement.
- Control panel functionality and protection scheme verification.
- OLTC (On Load Tap Changer) inspection and testing.
- AVR TAPCON Relay testing and configuration.
- Breakdown Voltage (BDV) testing of transformer oil.
- Dissolved Gas Analysis (DGA) and Furan content testing.

Support

- High-efficiency oil filtration and dehydration.
- Periodic diagnostic testing and preventive maintenance.
- Troubleshooting and fault localization.
- Detailed commissioning reports and handover documentation.

Our Products/Services

Switchgear Scope of Work

The scope of work includes the design, supply, installation, testing, and commissioning of LV and MV switchgear systems, ensuring maximum safety, operational reliability, and compliance with relevant national and international electrical standards.



Services

- Complete installation, testing, and commissioning of Low Voltage (LV) and Medium Voltage (MV) switchgear systems.
- Visual inspection for physical damage, moisture ingress surface tracking, and contamination.
- Verification of mechanical interlocks, isolators, and earth switches for operational integrity.
- Contact resistance testing for busbars and circuit breakers.
- Infrared thermography to detect abnormal heating and hotspots.
- Insulation Resistance (IR) testing for busbars, terminals, and internal wiring.
- Functional testing of control wiring, indicators, and annunciation systems.
- Earthing system continuity checks to ensure safety and compliance.

Support

- Periodic condition assessment of switchgear components.
- Predictive diagnostics for early fault detection.
- Maintenance of auxiliary systems and protection relays.
- Comprehensive reporting and test documentation for client records.

Air Circuit Breaker (ACB) Scope of Work

Comprehensive testing and maintenance of Air Circuit Breakers (ACBs) to ensure operational reliability, safety compliance, and protection system accuracy.



Services

- Insulation resistance and contact resistance testing to assess electrical integrity.
- Trip unit calibration and settings verification (MicroLogic, etc.).
- Mechanical operation and lubrication check for smooth breaker performance.
- Functional testing of charging motors, closing and tripping coils.
- Secondary injection testing for trip units to verify protection relay performance.
- Breaker timing test to ensure accurate open/close response.
- Inspection of interlocks, arc chute, and mechanical components for wear or damage.

Our Products/Services

Vacuum Circuit Breaker (VCB) Testing Scope of Work

Thorough inspection and testing of Vacuum Circuit Breakers (VCBs) to ensure safety, performance reliability, and adherence to industry standards for medium-voltage systems.



Services

- Visual inspection and integrity check of vacuum interrupters.
- Timing tests for open, close, and trip operations.
- Contact resistance and insulation resistance testing to verify circuit integrity.
- High Voltage (HV) withstand testing to assess dielectric performance.
- Mechanical operation check, including bounce and over-travel measurement.
- Relay coordination and trip circuit functionality verification.

Distribution Board (DB) – Scope of Work

The scope includes the supply, installation, and wiring of Distribution Boards (DBs), with a focus on circuit integrity, safety, and full compliance with applicable electrical codes and project specifications.



Services

- Visual inspection for loose terminations, signs of overheating, and physical damage.
- MCB, RCBO, and ELCB functionality check for proper protection response.
- Tightness check of terminals and busbars to prevent arcing or failure.
- Insulation resistance testing for feeder circuits and outgoing cables.
- Load balancing and phase sequencing to ensure optimal distribution.
- Functional testing of built-in metering units and protection devices.
- Clear labeling and circuit identification for ease of maintenance and safety.
- Earth continuity test to verify grounding of all metallic enclosures.

Our Products/Services

Cable Testing Scope of Work

The scope covers the testing, commissioning, and quality verification of power and control cables to ensure safety, insulation integrity, and long-term operational reliability.

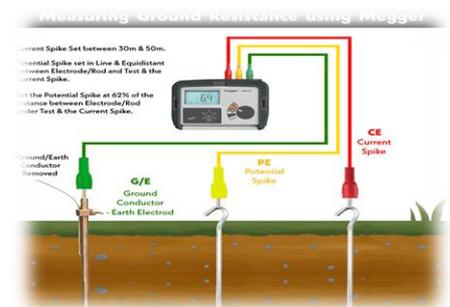


Services

- Insulation resistance testing using Megger to detect degradation or moisture ingress.
- High Voltage withstand testing VLF / AC / DC HiPot for MV and HV cables.
- Continuity and phase sequence checks to validate correct cable interconnections.
- Sheath fault location to identify insulation damage or earthing issues.
- Tan Delta and Partial Discharge testing for medium/high-voltage cable diagnostics.
- Joint and termination inspections for workmanship and connection reliability.
- Cable tray route checks physical alignment, bend radius, and tray integrity.

Earthing System – Scope of Work

The scope involves the installation and testing of earthing systems, including electrodes, conductors, and terminations, to ensure effective grounding, safety, and regulatory compliance.



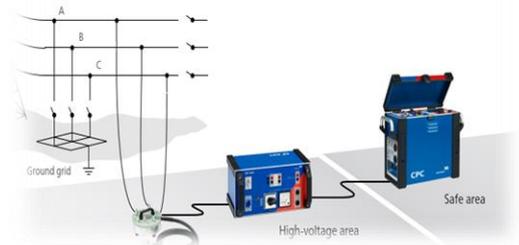
Services

- Installation of substation earthing systems up to 400kV.
- Earth rod driving and connection validation.
- Soil resistivity measurement using Wenner or Schlumberger methods.
- Grid earth resistance testing to ensure low-impedance fault paths.
- Step and touch potential assessment to evaluate human safety levels.
- Compliance with IS/IEC standards for earthing infrastructure.

Our Products/Services

Line Impedance, Touch, and Step Voltage Measurement for transmission line

Our specialized service focuses on measuring line impedance, touch, and step voltages using state-of-the-art test equipment to assess grounding effectiveness, ensure personnel safety, and comply with international standards in electrical installations.



Services

- Precise line impedance measurements to evaluate system performance and fault levels.
 - Touch and step voltage assessments to identify potential hazards in substations and grounded areas.
 - Utilization of advanced tools such as earth loop impedance testers and voltage gradient probes.
 - Analysis of results to recommend grounding improvements and mitigation strategies.
 - Compliance checks against IEEE, IEC, and local UAE regulations.
- Detailed reporting including data visualizations and actionable insights

Capacitor Bank – Scope of Work

The scope includes the supply, installation, testing, and commissioning of capacitor banks and Power Factor Correction (PFC) panels to improve energy efficiency and maintain system power quality.



Services

- Installation and maintenance of PFC panels and capacitor banks.
- Visual inspection for capacitor bulging, oil leakage, or swelling.
- Harmonic filter component testing, including reactors and detuned filters.
- Insulation resistance measurement to ensure dielectric integrity.
- Contactor, fuse, and resistor functionality check.
- APFC controller testing with stepwise switching operation validation.
- Load measurement and thermal scanning for early fault detection.
- Grounding and earthing continuity check for safety and performance compliance

Our Products/Services

Power Quality Analysis

Our power quality analysis service ensures your electrical system operates efficiently, reliably, and within compliance standards. Using precision instruments like Fluke Power Quality Analyzers, we identify and diagnose disturbances affecting your system's performance.

- Measurement of voltage, current, frequency, and power factor.
- Detection of harmonics, flicker, sags, swells, and transients.
- Load analysis and balancing recommendations.
- Compliance verification with IEEE/IEC standards.

Comprehensive power quality report with corrective action plan.



Thermography Service

We provide professional thermal imaging inspections to detect hotspots, loose connections, insulation failures, and overloaded components in electrical systems. Using advanced infrared cameras, we identify potential issues before they cause costly downtime or safety hazards.

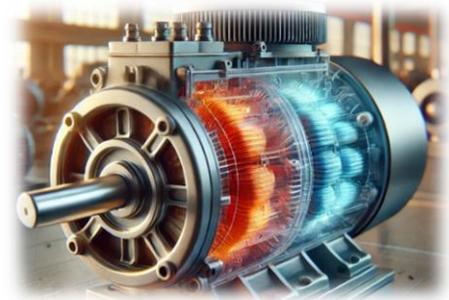
- Inspection of transformers, switchgears, panels, and cables.
- Identification of abnormal temperature rise and load imbalances.
- Detailed thermographic report with images and recommendations.

Preventive maintenance support to reduce unplanned outages



Solo Run Testing for Rotating Machines

We perform solo run (no-load) tests on large and small rotating machines and motors to verify mechanical and electrical integrity, ensuring smooth operation and early detection of issues before full-load commissioning.



Services

- Set up and execution of no-load run tests in controlled environments.
- Monitoring of key parameters including vibration, bearing temperature, rotational speed, and no-load current.
- Alignment and balancing checks to prevent premature wear.
- Noise level analysis and insulation resistance verification.
- Comprehensive test reports with performance benchmarks and maintenance recommendations.
- Applicable for induction motors, synchronous machines, and other rotating equipment.

Our Products/Services

Detailed Engineering Design and ETAP Studies

Our engineering team delivers detailed design services and advanced power system studies using ETAP software, optimizing electrical networks for efficiency, reliability, and safety across various projects.



Services

- Conceptual and detailed engineering design for electrical systems and infrastructure.
- Load flow analysis to balance power distribution and voltage profiles.
- Short circuit studies to determine fault levels and equipment ratings.
- Protection coordination and relay settings for seamless fault isolation.
- Arc flash hazard analysis to enhance workplace safety.
- Transient stability and harmonic analysis for system robustness.
- Customized reports and simulations to support project planning and compliance.

EPC Contracts for Solar Projects up to 1 MW

We offer complete Engineering, Procurement, and Construction (EPC) services for solar photovoltaic projects up to 1 MW, delivering turnkey solutions that promote renewable energy adoption with high efficiency and minimal environmental impact.



Services

- Site survey, feasibility studies, and customized solar system design.
- Procurement of high-quality solar panels, inverters, mounting structures, and balance of system components.
- Professional installation including civil works, electrical connections, and grid integration.
- Performance ratio testing and optimization for maximum energy yield.
- Project management from inception to handover, including permits and approvals.
- Post-installation monitoring and warranty support.

Our Products/Services

Testing and Commissioning of Substations and Power Projects

Our expert services encompass all aspects of testing and commissioning for substations and power projects, ensuring systems are fully operational, safe, and compliant before energization.



Services

- Pre-commissioning inspections and functional tests of all equipment.
- High-voltage testing, relay protection calibration, and interlock verifications.
- Load testing, synchronization, and stability checks.
- Commissioning of control systems, SCADA integration, and communication networks.
- Documentation of test results, as-built drawings, and training for operators.
- Troubleshooting during commissioning to resolve any issues promptly

Protection Relay – Scope of Work

The scope covers testing, calibration, and functional verification of protection relays to ensure accurate fault detection, reliable system protection, and seamless communication with control infrastructure.

- Functional testing and calibration of numerical and electromechanical relays
- Secondary injection testing for Overcurrent, Earth Fault, and Differential protection schemes
- Verification of tripping logic, protection settings, and coordination curves
- Communication setup for IEC 61850, Modbus, and other supported protocols
- SCADA signal verification for accurate event mapping and remote monitoring
- Trip circuit continuity and auxiliary contact health check
- Event log and disturbance record analysis for fault traceability
- Generation of detailed periodic test and maintenance reports



Our Products/Services

Fiber optic cable splicing and OTDR testing

Our expert services encompass all aspects of cable splicing, termination and testing like OTDR, and commissioning for substations and power projects, ensuring systems are fully operational, safe, and compliant before putting in to service.



Services

Fiber Optic Cable Pulling and Glanding Work

This service involves the professional pulling and glanding of fiber optic cables to ensure secure and efficient installation across various project sites, including substations and power infrastructure. Our skilled technicians manage cable routes, tension control, and glanding processes to protect fiber integrity. This includes proper alignment, securing cables within trays or conduits, and fitting gland kits to prevent environmental ingress, ensuring long-term reliability in challenging environments.

Splicing and Termination for Fiber Optic Cable

Fission Grid provides expert splicing and termination services for fiber optic cables, utilizing precision fusion splicing techniques and high-quality connectors to maintain signal integrity. This includes mechanical and fusion splicing methods, followed by meticulous termination at junction boxes or panels. Our process involves pre-splicing inspections, alignment verification, and post-splicing testing to guarantee compliance with project specifications and standards, delivering seamless connectivity for data and communication networks.

OTDR or ORL Testing as per IEC 61746 or TIA/EIA-526-7 Standards

This service encompasses comprehensive testing using Optical Time-Domain Reflectometer (OTDR) or Optical Return Loss (ORL) equipment to assess the performance and quality of spliced and terminated fiber optic cables. We conduct detailed measurements of attenuation, splice loss, and reflections across specified wavelengths (e.g., 1310 nm/1550 nm for single-mode), ensuring compliance with IEC 61746 and TIA/EIA-526-7 standards.

Our Products/Services

Electric drives – VFD & SFC installation, commissioning, repair, and maintenance.

We deliver comprehensive solutions for Electric Drives, VFDs, and SFCs covering everything from site surveys and drive supply to installation, commissioning, training, and lifecycle support.

Our services include feasibility studies, integration with control systems (PLC, SCADA, DCS), preventive maintenance contracts, breakdown diagnostics, retrofit upgrades, and spares management.

Whether it's LV or MV applications, we ensure optimized performance, minimal downtime, and long-term reliability through tailored engineering and support.



Services

Our Comprehensive Services for Electric Drives, VFD & SFC

- **Site Survey & Feasibility Study**
 - Pre-installation assessment of electrical infrastructure, load requirements, and environmental conditions.
 - Recommendations for optimal VFD/SFC sizing and compatibility.
- **Supply of VFDs, SFCs & Electric Drives**
 - Procurement and delivery of high-quality drives from reputed brands (Siemens, ABB, Danfoss, Schneider, etc.).
 - Customized solutions for LV/MV applications.
- **Installation & Integration**
 - Mechanical mounting, cabling, and termination as per IEC/IEEE standards.
 - Integration with PLC, SCADA, DCS, and BMS systems.
 - Harmonic filter and reactor installation (if required).
- **Commissioning & Startup Support**
 - Parameter configuration, drive tuning, and load testing.
 - Functional testing with motor under no-load and full-load conditions.
 - Synchronization with process control systems.
- **Training for Plant Personnel**
 - Operator-level training on HMI operation and basic troubleshooting.
 - Maintenance team training on preventive checks, fault diagnostics, and safe handling.
- **Preventive Maintenance Contracts (AMC)**
 - Scheduled inspections, cleaning, and thermal imaging of drives.
 - Firmware updates, parameter backup, and performance logging.
 - Spare parts inventory management and criticality analysis.
- **Breakdown Support**
 - On-site fault diagnosis using advanced tools (oscilloscope, drive analyzers).
 - Component-level repair (IGBT modules, control cards, capacitors, fans).
 - Drive replacement with minimal downtime.
- **Retrofit & Upgradation Services**
 - Replacement of legacy drives with energy-efficient modern VFDs/SFCs.
 - Retrofit with regenerative and low-harmonic solutions.
 - System efficiency audits and energy-saving reports.
- **Spares & Obsolescence Management**
 - Stocking of critical spares and long-lead items.
 - Support for discontinued drive models through reverse engineering or equivalents.

Our Products/Services

Testing Equipment Rental Services

Our specialized rental solutions support all phases of testing and commissioning for substations, industrial plants, and power infrastructure.

We provide calibrated, reliable, and ISO 17025-certified test equipment to ensure every system is verified, safe, and compliant before energization.



Major Equipment:

- OMICRON CMC 310
- OMICRON CPC 100
- OMICRON CT Analyzer
- OMICRON TESTRANO 600
- OMICRON CIBANO 500
- Megger MIT525
- Megger DLRO200
- Megger TTR330
- Fluke 1770 Power Quality Analyzer
- Fluke DMM / Clamp Meter / Process Calibrator
- FLIR T540 Thermal Camera
- Double SFRA Test Kit
- Oil Bath Calibrator
- 3-Phase Variac (28A)
- Transformer Test Board Set

Flexible Rental Options:

- Daily/Weekly/Monthly

Our Target Market

Fission Grid's target market includes:

Industrial clients: Manufacturing plants, oil & gas facilities, and industrial parks needing robust power systems.

Commercial clients: Developers and contractors of multi-story buildings requiring MEP, HVAC, and fire protection systems.

Public sector: Utilities and government bodies (e.g., DEWA, SEWA) for substation, transformer, and earthing projects.

Remote/off-grid communities: Seeking scalable, modular microgrid solutions.

Renewable energy investors: Entities pursuing solar projects up to 1 MW, including private and municipal clients.

Geographically, the focus is **the UAE**, with expansion plans across the **GCC (Saudi Arabia, Qatar)**.

The niche emphasis is on **sustainable, decentralized microgrid systems** and **green energy solutions**.

Our Marketing & Sales Strategy

Fission Grid employs a B2B marketing and relationship-driven sales approach, including:

- **Direct sales:** Account managers engage directly with industrial, commercial, and government clients.
- **Partnerships:** Collaboration with contractors, architects, and renewable energy firms.
- **Tenders & RFPs:** Competing for public sector contracts in the UAE and GCC.
- **Digital marketing:** Website, LinkedIn presence, and participation in energy expos to showcase expertise.
- **Customer retention:** After-sales service, training, and transparent communication to ensure repeat business.

Revenue is generated mainly from:

- Turnkey EPC projects,
- Maintenance contracts,
- Consulting and diagnostic services.

Our Market Position

Fission Grid positions itself as a **pioneer in intelligent, sustainable, and decentralized energy infrastructure** in the UAE.

Key differentiators include:

- **End-to-end electromechanical services** under one roof (from design to maintenance).
- **Sustainability focuses** with modular, green energy systems aligned to UAE's net-zero goals.
- **Data-driven precision** using advanced tools like ETAP and Fluke analyzers.
- **Highly experienced leadership** (35+ years in power, oil & gas, and MEP).

Competitors include established electromechanical firms in the UAE, but Fission Grid's **flexibility, rapid deployment, and technology integration** set it apart.

Our Strategic Plans

Long-term strategic goals include:

- **Market Expansion:** Entering GCC markets leveraging the founders' regional experience.
- **Portfolio Diversification:** Scaling solar EPC operations and exploring energy storage by 2027.
- **Strategic Partnerships:** Aligning with renewable energy funds and global technology partners.
- **Digital Transformation:** Implementing AI-driven predictive monitoring and smart diagnostic tools.
- **Human Capital Growth:** Expanding its multidisciplinary engineering team and leadership capacity.

These strategies support the vision to become the leading electromechanical service provider in the UAE and the wider region.

Our Future

Fission Grid envisions a future of **sustainable, intelligent energy networks** empowering industries and communities.

It aims to lead the **transition to green infrastructure** in the GCC, offering **customized, modular, and smart power solutions**.

The company invites collaboration with clients, partners, and investors who share its commitment to innovation and sustainability — guided by the motto “**Energy with Intelligence.**”