

About Us

As Faraday Technology and Engineering, we aim to carry out Technology and Engineering activities in the fields of Electric Energy Production, Transmission and Distribution, Industrial facilities.

Faraday Technology and Engineering offers a wide range of Project Design, Engineering and Design, Test and Commissioning Solutions, Turnkey Project Management, SCADA & Automation Solutions, Maintenance & Service Services and Training & Consultancy Services in its targeted sectors.

Customer satisfaction and Engineering principles are prioritized in the projects we target with our expert and experienced engineer staff in our staff.



Contact Us

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INVEST IN YOUR FUTURE

1. SECTORS

As Faraday Technology and Engineering, we offer Engineering solutions in the fields of Energy Generation, Transmission, Distribution and Industrial Facilities. The facilities belonging to the sectors where we offer our Engineering and Technical solutions;

1.1. ENERGY GENERATION FACILITIES

- Hydro Electrical Power Plants
- Thermal Power Plants
- Solar Power Plants
- Wind Energy Power Plants
- Geothermal Energy Power Plants
- Biomass & Biogas Energy Power Plants

1.2. ELECTRIC TRANSMISSION & DISTRIBUTION FACILITIES

- HV / MV Air Insulated Substation (AIS)
- HV / MV Gas Insulated Substation (GIS)
- MV MetalClad and Switchgear Substation
- LV Distribution Systems

1.3. INDUSTRIAL FACILITIES

- Sugar Factory
- Recycling Facilities
- Automotive Facilities
- Solid and Medical Waste Facilities

2. SOLUTIONS

As Faraday Technology and Engineering, we provide solutions with our qualified and expert engineers in accordance with National and International standards in the fields of Engineering, Technical Support and Project management that our customers demand.

Our solutions we offer in a wide range;

2.1. Engineering & Design

- Power Systems Design and Analysis
- Short Circuit Analysis
- Load Flow Analysis
- Relay Coordination and Selectivity Analysis
- LV, MV, HV Systems Design
- Design of Power Systems
- Electrical Single Line Diagrams
- Substations and Energy Generation Facilities Primary & Secondary Design
- Lighting and Grounding, Lightning Protection Systems
- Control, Automation and Protection Panel Manufacturing
- AC / DC Distribution and Compensation Systems Panel Manufacturing
- Projecting Generator Excitation & Synchronous Systems
- Projecting Generator Protection Systems
- RTU, Automation Systems
- Projecting Mobile Substations Design and Manufacturing

2.2. Turnkey Project Management

We provide turnkey project management services for Energy Facilities to be newly established or planned for rehabilitation services.

- Project Preparation Studies and Site Exploration
- Creating Offer Forms
- Engineering Design and Project Design
- Preparation of Method of Statements
- Preparation of Inspection and Test Plan
- Material and Equipment Supply
- Factory Acceptance Tests and Pre-Project Trainings
- Disassembly and Assembly operations of field operations
- Construction Project and Field Studies
- Mechanical Projecting and Field Studies
- Electrical Project and Field Studies
- Testing and Commissioning Operations
- SCADA & Automation Operations
- Communication Systems Installation
- Camera Systems Installation
- Fire Alarm and Fire Extinguishing System Installation
- Post-Project Training Services
- Facility Maintenance and Service Planning

2.3. Test and Commissioning Services

We offer Test and Commissioning solutions for all Energy Facilities that are Newly Projected or Activated. Our Testing and Commissioning operations are carried out with our test devices that are periodically calibrated in accordance with the International Test Procedures prepared by our Expert Engineers.

Following our Testing and Commissioning operations, the test results are evaluated and the necessary information about the Equipment or Equipment's Safe Energization and Operational life is presented with the Test Report.

2.3.1. HV/MV/LV Substation Primary & Secondary Tests

Primary & Secondary Tests

- Power Transformer Tests
- Circuit Breaker Tests
- Disconnecter Tests
- Earthing Switch Tests
- Current Transformer Tests
- Voltage Transformer Tests
- Surge Arrester Tests
- Post Insulator Tests
- GIS Equipment and Compartment Tests
- Battery, UPS and Charger Tests
- Earthing Specific Resistance Measurement Tests
- SEL-VAZ Earthing Resistance Measurement Tests

Protection & Control Relay Tests

- Overcurrent Protection Relay Configuration and Tests
- Distance Protection Relay Configuration and Tests
- Line Differential Protection Relay Configuration and Tests
- Transformer Protection Relay Configuration and Tests
- Busbar Protection Relay Configuration and Tests
- Reactor Protection Relay Configuration and Tests
- Earth Fault Protection Relay Configuration and Tests
- Metering & Energy Analyzer Tests

2.3.2. Energy Generation Facilities

Generator & Motor Primary Tests

- Generator %pF, Tan delta, Capacity Tests
- Winding Resistance Tests
- DC Insulation Tests, Hipot Tests
- AC Insulation Tests, VLF Tests
- Rotor Winding Impedance Tests
- Stator Pole Voltage Tests
- Winding Discharge Tests

Generator & Motor Secondary Tests

- Generator Excitation & Synchronization System Performance Tests
- Generator Protection System Tests
- Motor Excitation & Synchronization System Performance Tests
- Motor Protection System Tests
- Generator Protection Relay Configuration and Tests
- Motor Protection Relay Configuration and Tests

3. SCADA & Automation Services

With the developing technology, we offer SCADA & Automation solutions in order to increase efficiency and reliability in energy facilities. With our SCADA & Automation solutions, Energy Facilities can be monitored and controlled remotely in the systems that we install and test & commission.

- PLC Control Systems
- DCS Control Systems
- SCADA Systems
- RTU Systems
- Reactive Power Control Systems
- Monitoring and Reporting
- Load Taking and Load Shedding Automation

4. Maintenance & Services

As Faraday Technology and Engineering, we provide Maintenance & Service in Energy Facilities in order to increase the operational life of the equipment and to prevent energy interruptions that may occur. With the Maintenance & Service services we perform periodically, we keep the projection of the operational life and keep the Energy outage times and Equipment failures that may occur during the operation to a minimum.

- Electrical & Mechanical periodic maintenance of Power Plants
- Electrical & Mechanical periodic maintenance of Substations
- Electrical & Mechanical periodic maintenance of Industrial Facilities
- 24/7 Emergency Technical Services

5. Training & Consultancy Services

Faraday Technology and Engineering offers its knowledge and experience to the end user service with Engineering or Operator based trainings. Our training and consultancy services are provided by our Expert Engineers Theoretically & Practically Face-to-Face or Distance Education (Online).

After our Training and Consultancy Services, Certification for Training is provided.

5.1. Substation Training Services

- Primary Equipment Training
- Secondary Equipment Training
- Line Protection Relay Theoretical & Practical Training
- Transformer Protection Relay Theoretical & Practical Training
- Feeder Control Relay (BCU) Theoretical & Practical Training
- Substation Operator Trainings

5.2. Power Plant Training Services

- Primary Equipment Trainings
- Secondary Equipment Trainings
- Generator Protection Relay Theoretical & Practical Training
- Motor Protection Relay Theoretical & Practical Training
- Excitation Systems Theoretical & Practical Trainings
- Synchronous Systems Theoretical & Practical Trainings

5.3. SCADA & Automation Training

- IEC61850 Communication Protocol Training
- GOOSE Communication Protocol Training
- Communication Protocol Systems Training (MODBUS / TCP, Profibus)
- RTU Training
- MicroSCADA User Training