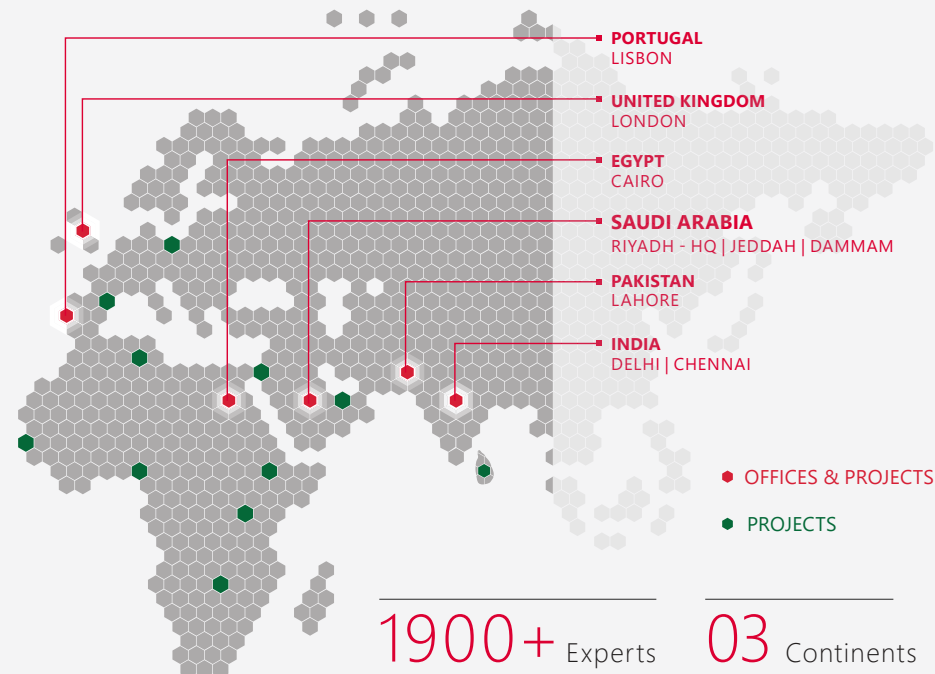


DAR Energy

Services

- Feasibility and Assessment Studies
- Architectural Design
- Electrical Engineering
- Power System Studies
- Cost Consultancy
- Equipment Planning
- Project Management
- Grid Automation and Solutions
- Renewable Energy and Sustainability
- Civil Engineering
- MEP Engineering
- 3D Modeling
- Construction Management
- Construction Supervision
- Government Approvals
- Procurement Support Services
- Energy Storage Solution



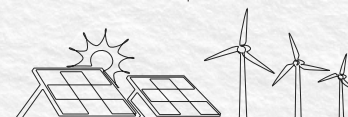
DAR is a leading multidisciplinary design engineering consultancy company with a global outlook, seamlessly aligning with national standards and regulations. We provide Owners' Engineering and Project Management services to major clients, along with pre-bid support and detailed construction design for EPC contractors—empowering them to achieve their strategic goals.

Our expertise spans comprehensive consulting and design services with end-

to-end solutions for power generation and transmission & distribution (T&D) infrastructure. From strategic power network reviews to critical infrastructure expansion, we specialize in the design and implementation of power generation and transmission facilities. By combining technical excellence with deep industry insight, we help clients set new benchmarks in operational efficiency, commercial success, and end-user experience—guiding projects from initial concept to full-scale deployment.

Energy Portfolio

9,900 MW Power Generation Plant Projects	1,500 MW Renewables (Solar and Wind)	3,000 MW BESS Projects	5 HVDC/ FACTS
1,300 KM HVDC OHTL (500kV)	5,000 KM OHTL (132kV/380kV)	800 KM U/G Cables (132/380kV)	620 Transmission Substations
75 Transmission Planning and Grid Integration Studies	71 Power System Studies (Utilities, O&G)	375 EMTF Power System Studies	3 EMS/ADMS



For further information, please contact communications@dar-engineering.com

f DarEngineeringConsultancy
 in darengineering
 X DarEngineering

DAR ENERGY

POWERING
THE FUTURE



Power System Studies

Generation and Transmission

- › Conventional/Renewable (Solar PV and Wind Farms) Energy
- › Transient Stability Analysis
- › Bus Transfer and PSS Tuning
- › Generation Rejection
- › Power Plant Auxiliary System Analysis
- › Protection Relay Setting including Pole Slip, Stator Protection, Loss of Field, Rotor Protection and Transformer Protection
- › Generator Capability For Transmission Lines Auto Reclose
- › Islanding Study
- › Black Start

Transmission and Distribution

- › Load Flow/Short Circuit
- › Transient Stability
- › Insulation Coordination/Ferro-Resonance
- › HVDC/FACTS
- › Shunt Reactor/NGR Sizing
- › Out-Of-Step Study
- › Load Shedding
- › Harmonic Analysis and PQ Analysis
- › Capacitor Bank Study/Filter Design
- › Protection Setting and Coordination
- › Transient Recovery Voltage (TRV)
- › Auto Reclose
- › Sub-Sea Cable Reactor Compensation Study
- › Grid Islanding and Load Shedding Study

Industrial / Oil & Gas

- › Load Flow/Short Circuit Study
- › Power Factor Correction Study
- › Relay Setting and Coordination Study
- › ARC Flash Study
- › Harmonic Measurement and Power Quality Study
- › Dynamic Motor Starting Study
- › Automatic Bus Transfer Study
- › Induced Voltage Study on Pipeline
- › Electrical Equipment Failure Analysis
- › Reliability Study
- › DG and Equipment Sizing
- › Grid Islanding and Load Shedding Study
- › Grounding Grid Design
- › Regenerative Drive Studies



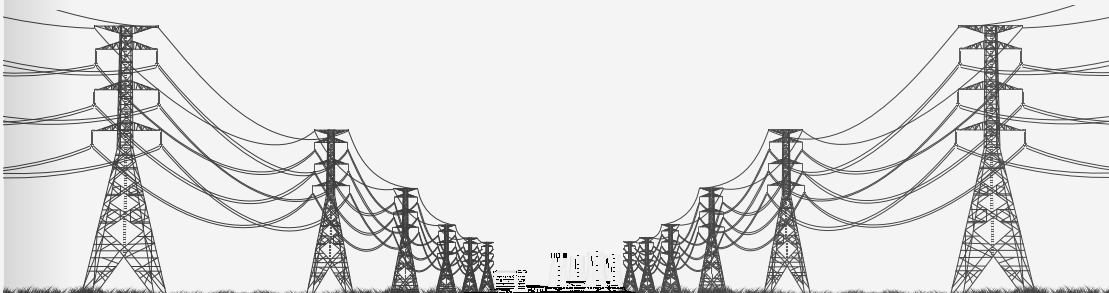
Power Generation: Conventional/ Renewables/ BESS

Detailed Design Stage

- › Detailed Engineering for PV Solar, WTG, BESS, Thermal, CCPP, CHP, and EDG
- › Land Assessment and Site Selection.
- › Electrical Equipment Sizing/ Layouts/ Protection Schemes
- › Thermal Simulation and Process Engineering
- › Yield and Layout Optimization for Renewable Projects
- › Long Lead Equipment Finalization, and Configuration of Inverter, Tracker, Modules, etc.
- › HMBD's, PFD's, P & IDs and SLD's
- › Pipe Stress Engineering
- › Plant Civil and Structural Engineering
- › Plant Instrumentation and Control Automation Design
- › Plant Layout, Equipment Technical Specification and Data Sheets.
- › BOQ and Detailed Cost Estimation
- › Project Management Services

Planning and Feasibility Stage

- › Land Assessment and Site Selection
- › Energy Yield Assessment
- › Rooftop PV Potential Assessment
- › Waste Management Study
- › Plot Development Study
- › Reliability Study
- › Power Evacuation Study
- › Financial Modeling
- › Tender Documentation for EPC Bidding (Specifications, Drawings, Simulations, and Calculations)
- › Cost Estimation



Transmission/Distribution and Grid Automation

Substation (HVAC, HVDC, FACTS and STATCOM)

- › Electrical Design Primary Engineering
- › Electrical Design Secondary Engineering
- › Mechanical Design
- › Civil and Structural Design
- › SCADA/ Telecom Design
- › Project Management and Construction Management Services
- › BIM

Grid Automation and Solutions

- › SAS & SCADA Design & Integration
- › EMS, ADMS & DERMS Solutions
- › WAMS & PDC Systems
- › Microgrid Design & Optimization
- › Battery Management Systems
- › Renewable Grid Integration (Solar, Wind, Hybrid)
- › Demand Response & Load Management
- › IoT-Based Smart Grid Optimization
- › Grid Communication (Fiber & Wireless)
- › Cybersecurity Design & Assessment
- › Smart Metering, AMI & MDMS
- › Grid Stability, Load Shedding & Reliability Analysis
- › Real-Time Data & Predictive Maintenance
- › Energy Transition Consulting & Feasibility, Smart Grid, Next Generation Connectivity

Overhead and Underground Transmission Lines: HVAC and HVDC

- › OHTL Design
- › UG Cable Routing Design
- › Tower Design
- › Civil and Structural Design
- › Project Management/Construction Management Services
- › Environmental Compliance
- › Subsea Cables