



Modern Structure has along history in the successful management and construction of electrical substations and switchyards, within the most challenging of conditions and environments.

As one of the nation's largest and established electrical contractors, Modern Structure suite of electrical construction services provides clients with quality staffing and resources, as well as the ability to mobilize experienced teams and equipment throughout the nation.



SUBSTATION CAPABILITIES



CAPABILITIES

CONSTRUCTION/INSTALLATION

Modern Structure L.L.C has over a century of nationwide experience managing the construction and installation of these various substation elements related to new construction and upgrades:

- Surveying.
- Grading and site preparation.
- Foundations and Conduits.
- Fencing/surface rock.
- Grounding, Duct banks, oil containment systems, SWPPPs and site drainage systems.
- Power cable and Control cable.
- Structural steel.
- All types of high voltage equipment - circuit breakers, switches, transformers, Reactors and capacitor banks etc.
- Overhead cables, jumpers, Bus work, aluminum bus welding.
- Control buildings, AC/DC panels and Relay and control systems.
- Communications - fiber installation, splicing, SCADA, Coaxial cable.
- Testing and commissioning

Transmission Construction

Modern Structure L.L.C have constructed many of transmission projects and thousands of meters of transmission lines for public and private clients. From voltages up to 400kv, we have the experience to handle all aspects of the process from material procurement, structure erection, wire stringing and overall project management.

We have experience installing wood, steel pole, and steel lattice structures up to 40m height and constructing steel lattice towers and tubular steel poles using both direct embedment and steel reinforced concrete caissons in a wide variety of soil conditions.

While maintaining strong relationships with landowners and respecting and addressing environmental concerns on rights-of-way, our companies have completed projects in some of the most challenging conditions. From farmland to mountains, in solid rock or crossing bays, on flat sandy soil or on steep rocky inclines, our companies get the job done.

MATERIALS MANAGEMENT

We offer flexible capabilities to best meet client needs and preferences. Our ability to plan and control material disbursement increases schedule adherence and cost-effectiveness. Our Quality Control team is involved with these efforts to ensure compliance with engineering/client standards and schedule/cost control for accurate reporting. We have corporate-wide alliances with material vendors for preferred pricing and service.

Our experience and offerings include:

- Procurement.
- Expediting.
- Receipt inspection.
- Spare part recommendations.
- Materials witness testing.
- Storage.
- Security.
- Transportation and Materials Delivery.

Distribution Construction

Modern Structure L.L.C have constructed and maintained thousands of meters of overhead and underground distribution line projects and technologically-advanced solutions for a diverse range of clients throughout Jordan, working in a variety of energized and de-energized project conditions.

Modern Structure L.L.C have several long-term and established partnerships with a variety of clients to perform distribution line construction and maintenance services. These collaborative relationships comprise fully-integrated teams with members consisting of key personnel from both the client's and contractor's project management staff. Primary benefits of performance partnerships include the fostering and achievement of common goals, improved decision-making, reduced costs and increases in production and efficiency.

Offerings:

- Pole removal and replacement.
- Smart grid technology installation.
- Safety management.
- Ongoing maintenance.
- Joint trench.
- Wire stringing.
- Cable Laying.
- Cable Fault Location & Partial Discharge Testing.
- MV Cables fault analysis.

RENEWABLE ENERGY

Wind Projects



We have an established track record of cost-efficient and timely project completion on wind farm projects of all types and sizes.

Solar Projects



We have an established track record of cost-efficient and timely project completion on Solar projects of all types and sizes.



Modern Structure L.L.C have provided electrical construction and engineering services for wind farms and solar energy facilities throughout Jordan. This experience has provided us the expertise required to effectively engineer, procure and construct these fast-track, turnkey projects.

We manage all aspects of the process from conception/design to final acceptance.

Rooted in teamwork, our subsidiaries have established solid working relationships with engineering partners to provide engineer-procure-construct (EPC) solutions that focus on innovative engineering, timely procurement and quality construction that result in economically feasible projects delivered on-time and on-budget.

Our teams are well-versed in the latest technologies and familiar with the various utility requirements, offering the ability to streamline the connection process on utility scale projects. This experience has allowed us to develop and refine execution capabilities to meet the unique requirements that are common on these projects.

Services:

- Design and Engineering Services for Electrical Infrastructure and Solar Facilities.
- Construction/Interconnection.
- Transmission Infrastructure.
- Substations/Switchyards.
- Collection Systems.
- Solar Facilities.
- Energy Storage.
- Energy Efficiency.
- Procurement.
- Permitting.
- Environmental Services.
- Operations & Maintenance.

LAST PROJECTS

NEPCO Green Corridor - Construction of New 400/132kV Ma'an substation & Extension of Qatrana 400/132kV and Queen Alia 132/33kV AIS Substations.

Three projects were associated with the overall construction and operation of NEPCO Green Corridor. Substation construction was completed for one new 400/132kV station, New Ma'an substation. included all engineering, procurement and civil site works, plus installation of foundations, steel and busbar work, 2* 400/132kV 400 MVA from GE power transformers, 400kV and 132 kV circuit breakers, switches, Current Transformers, Capacitive Voltage Transformers, Line Traps, control buildings, relay & control panels, power and control cables plus testing and commissioning work.



Alsafawi PVPP – TSK

50 MW Solar substation construction was completed for one new 33/132 kV substation. included all engineering, procurement and Mechanical site works, plus installation of steel and busbar work, 2* 33/132kV 80 MVA power transformers from Siemens, 132 kV switches, Current Transformers, Voltage Transformers, control buildings, relay & control panels, power and control cables plus testing and commissioning work.



Alrajef Wind Farm

80 MW Wind farm substation Power Transformers installation was completed for one new 33/132 kV substation. included all electromechanical assembly works, Oil filling and Purifying, Oil Testing and Testing and commissioning for both two 33/132 kV 80MVA Power Transformers from Siemens.

