

SPARKPOWER™ ENGINEERING SERVICES

HIGH EXPECTATIONS FOR RELIABILITY DEMAND HIGH QUALITY ENGINEERING

Your most important projects need to be defined, developed, and executed with care. With our full-service approach specializing in high and medium voltage systems, Spark Power delivers high-quality engineering services to large industrial, commercial, utility (ICU) and institutional customers across Canada and the United States.



Advisory services

- Project definition including Design Basis Memorandum (DBM)
- Performance & preliminary system modeling
- Site constraints, interconnection applications
- Front end engineering design including conceptual layouts & specifications
- Contracting & procurement support
- Project estimation & budgeting
- Contract administration



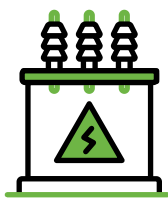
Detailed design services

- Electrical, P&C, civil/structural & mechanical
- Detailed drawing & specification packages
- power system studies
- Underground & above-ground cable studies
- Overhead pole line design
- Project management & coordination
- Drafting & document control



Field engineering services

- Relay setting & testing
- SCADA programming & commissioning
- Construction inspections & contract administration
- Equipment condition assessments
- Hands-on training
- Emergency support & system troubleshooting



High & medium voltage engineering

- Substation plans & elevations
- Single line & schematic diagrams
- Ground grid analysis & design
- Equipment specifications, selection & drawing review
- Structural steel, site civil & foundation design
- Site civil design
- Station condition assessment & renovation
- Distribution class (> 750V) to Transmission (500 kV)



Protection & control

- Protection single line and three-line diagrams
- Schematic, wiring diagrams and panel layouts
- Relay selection & design
- Plant, utility and generator protections
- Load flow, short-circuit and arc-flash studies
- Motor starting and transient analysis
- Manufacturer agnostic



Renewable asset services

- Performance modeling (PVsyst, helioscope, HOMER)
- Feasibility & economic advisory
- Utility coordination & interconnection management
- Dynamic system modeling
- Complete plant design
- Complex protection & teleprotection schemes
- Owner's engineering
- SCADA implementation (SEL & ignition)
- Construction inspections & system performance verification

HEALTH AND SAFETY

When it comes to safety, **only zero is acceptable. Zero** accidents at work.
Zero compromise to prioritizing safety.



Spark Power is a leading independent provider of end-to-end electrical services, operations and maintenance services, and energy sustainability solutions to the industrial, commercial, utility, and renewable asset markets in North America. We work to earn the right to be our customers' Trusted Partner in Power™. In the state of California, we operate under license #533593. In the state of Texas, we operate under license #TECL-34613.

FOR MORE INFORMATION, PLEASE CONTACT US AT 1.833.775.7697 | WWW.SPARKPOWERCORP.COM

SPARKPOWER™