

SUBSTATION CAPABILITIES

Expanse Power Services provides Engineering, Procurement, and Construction (EPC) of electrical substations and switchyards, within variable conditions and environments. Our team has a long and successful history in the High Voltage market delivering value to the Utility and Industrial markets. Our significant experience translates to successful project execution.





SUBSTATION CAPABILITIES



ENGINEERING

ExpansE delivers engineering services in support of an owner's substation and power needs, including:

- FEED
- Conceptual engineering
- Specifications
- Substation design and engineering
- Engineered equipment procurement
- Bill of material



PROCUREMENT & MATERIAL MANAGEMENT

ExpansE's professional procurement staff offers capabilities that meet client needs. Planning, procurement, and control of material increases schedule adherence and cost outcomes. ExpansE's alliances with material and equipment vendors allow for preferred pricing and service levels in relationship to:

- Procurement and expediting
- Factory acceptance testing (FAT)
- Storage and security
- Receipt inspection



PROJECT MANAGEMENT, CONTROLS & REPORTING

Project management begins with experienced personnel along with established processes and controls. With this in mind, ExpansE focuses on getting it right the first time. Strong management and corrective action are key elements in delivering successful projects. This starts with strong project plans that include:

- Master schedule, staffing, and budgeting
- Experienced project management and field personnel
- Health and safety, QA/QC, subcontracting, and equipment



PRE-CONSTRUCTION

Our pre-construction services are based on years of industry experience, skills, and knowledge to effectively provide:

- Conceptual budgeting/estimating
- Multiple cost estimates at various stages of design
- Constructability reviews
- Schedule analysis
- Advance purchase of long lead items
- Construction optimization and value engineering
- Analysis and implementation of optimal pricing models



EPC

ExpansE provides complete Engineering, Procurement and Construction (EPC) services thus offering turnkey substation project execution. Our single-source capabilities offer opportunities to reduce schedule and cost overruns, while also improving overall project management.

Expanse delivers a wide range of solutions to our clients, from turnkey EPC to construction-only projects. Our focus goes beyond producing a successful project that simply meets our clients' requirements. At Expanse, the safe execution for our employees and partners throughout a project is paramount. A keen focus on quality of workmanship and protection of our environment is also critical.

SUBSTATION CAPABILITIES



SAFETY

Project safety is more than a requirement. That is why we work safely or not at all. Working safely is an Expanse core value and we understand the importance of looking out for each other. Safety is ingrained in our culture. Every action we take centers around operating in a manner that places the highest priority on the health and safety of our workforce and protection of assets, communities, and the environment. We use tools such as behavior-based safety and human performance as a means to protect all stakeholders.



ENVIRONMENTAL

Expanse team members are expected to exercise the highest standards to protect the environment and comply with applicable laws and regulations. We work closely with owners on the following:

- Hazardous materials management
- Waste management
- Employee training and orientation
- Waste management
- Storm water pollution prevention plans (SWPPP)
- Dust control
- Spill prevention control and countermeasure
- Wildlife and biological protection
- Land preservation and restoration
- Reporting, documentation and record keeping



QA/QC

Expanse's Quality Assurance/Quality Control (QA/QC) program encompasses all project-related activities. Expanse ensures our program matches contract requirements and provides for all project components in strict compliance with applicable specifications and requirements.

We typically include:

- Constructability reviews
- Procurement and procurement performance
- Materials management
- Installation and construction



CONSTRUCTION

At Expanse, we manage the construction and installation of these various substation elements related to new construction and upgrades:

- Surveying
- Grading and site preparation
- Foundations
- Fencing/surface rock
- Grounding
- Duct banks, oil containment systems, SWPPPs and site drainage systems
- Conduits
- Power cable
- Control cable
- Structural steel
- All types of high voltage equipment - circuit breakers, switches, transformers, etc.
- Reactors and capacitor banks
- Overhead cables and jumpers
- Static VAR compensator (SVC) systems
- Bus work, aluminum bus welding
- Control buildings
- AC/DC panels
- Relay and control systems
- Fault recording equipment
- Communications - fiber installation, splicing, SCADA, coaxial cable
- Restoration services
- Testing and commissioning
- Solutions for modernization of substation protection and control assets