A simpler, more compact, and economical way to reliably switch and protect circuits at 46 kV.



Figure 1.A typical 46-kV S&C Custom Metal-Enclosed Switchgear lineup.

S&C Custom Metal-Enclosed Switchgear, available in voltages through 46 kV, can satisfy the most complex switching and protection requirements of a power distribution system.

With its dependable, field-proven construction and finish, S&C Custom Metal-Enclosed Switchgear brings simplicity, reliability, flexibility, and economy to circuit switching and fault protection.



## S&C Custom Metal-Enclosed Switchgear offers major benefits at 46 kV:

- Eliminates Need for an Open-Air Substation. Unlike open-air substations, which require significant civil and structural work, S&C Custom Metal-Enclosed Switchgear only requires a level concrete pad. Your cost savings are very significant. And installation of S&C Custom Metal-Enclosed Switchgear can be completed in days, not weeks.
- Industry's Highest Security. With S&C Custom Metal-Enclosed Switchgear, there's no need to enclose equipment inside a safety fence, and no ground grid is required. Comprehensive access controls and security measures guard against unauthorized entry. A key interlock prevents each fuse compartment door from being opened while the interrupting device is in the Closed position.
- High Reliability, Low Maintenance. S&C Custom Metal-Enclosed Switchgear components have been exhaustively tested and field-proven to provide unequaled performance and operational dependability. The only necessary maintenance is an occasional exercising of the interrupter switches and a simple cleaning of the insulators.



Switching and protection alternatives at 46 kV

Figure 2. An open-air substation. Footprint: 50 feet  $\times$  50 feet (15 m  $\times$  15 m). Requires a safety fence and ground grid.



Figure 3.A three-bay S&C Custom Metal-Enclosed Switchgear lineup. Footprint: 28 feet  $\times$  22 feet (8.5 m  $\times$  6.7 m). No safety fence or ground grid needed.

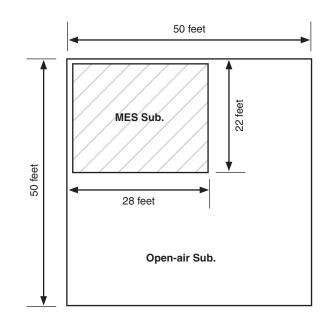
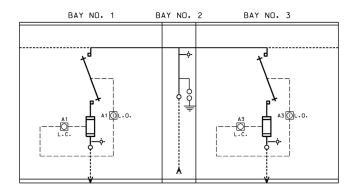


Figure 4.A comparison of substation-type footprints.

## S&C has been designing and manufacturing metal-enclosed switchgear for nearly 80 years. You can be confident that we'll provide the right solution for your needs.

Three-pole live circuit-switching is provided by double-break style Alduti-Rupter® Switches. Fault protection is typically provided by single-pole tripping S&C SMD-2C Power Fuses. Three-pole tripping fault protection, if desired, can be provided by Trans-Rupter II® Transformer Protectors or S&C Series 2000 Circuit-Switchers.



## Figure 5.A single-line diagram of a typical manual switch and fuse lineup.

Three-pole live circuit-switching is provided by doublebreak style Alduti-Rupter Switches. Virtually any user-specified current transformers, voltage transformers, and metering devices can be accommodated.

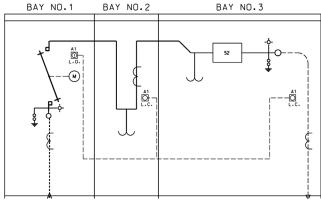


Figure 6.A single-line diagram of a typical service entrance lineup.

Contact a local S&C Sales Office for more information, or visit our website, sandc.com.