



Vista Switchgear Disguises Its True Identity

S&C Featured Solution: Vista® Underground Distribution Switchgear

Location: Midwestern United States

Customer Challenge

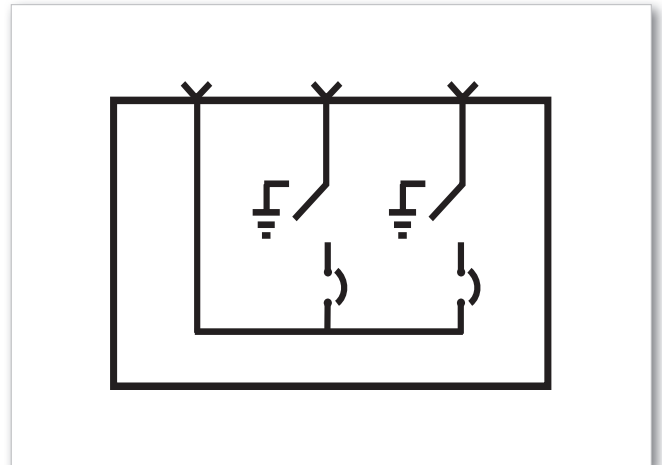
What do you do when you need to add two new feeders to an existing metal-enclosed switchgear lineup and there's only room for one bay? Well, you could build an enclosure matching the others in the lineup, and slip a unit of Vista Underground Distribution Switchgear inside.

This is exactly what S&C did for a new addition to a hospital in the U.S. Midwest. SF₆-insulated Vista switchgear is much smaller than conventional metal-enclosed gear. A typical 25-kV metal-enclosed gear feeder bay is about 52 inches (32 cm) wide. So the two bays needed for this application would require 104 inches (264 cm). But one three-way Vista switchgear unit can be housed in a bay about 58 inches (147 cm) wide, reducing the space needed by almost half.

S&C Solution

A new bay, shown in this photo, was constructed matching the existing lineup in size and color as closely as possible. Inside is a Vista switchgear Model 302 with one incoming way and two fault-interrupter ways. The three-pole, group-operate fault interrupters, rated 29 kV, 600 amperes continuous and 16,000 amperes RMS symmetrical short-circuit, feed the new loads as indicated in the single-line diagram.

The Vista switchgear unit is operated from a control panel that's completely isolated from medium-voltage components. The position of each fault-interrupter disconnect—open, closed, or grounded—is easily seen through large viewing windows in the Vista switchgear tank. With the disconnect in full view, the operator can verify the open gap and ground cables without having to remove elbows or T-bodies. And by using the optional pushbutton voltage indicator furnished, the operator can check voltage without ever moving the cables. A door at the rear of the bay allows access to the elbow connectors.





Vista switchgear offers unique benefits:

- Resettable fault interrupters eliminate the need to replace fuses, as required with metal-enclosed switchgear.
- Fault interruption is initiated by a self-powered over-current control, which is programmable in a variety of time-current characteristic curves.

Results

The new bay matches the existing switchgear lineup nicely, and the Vista switchgear unit as functioned well in the hospital's electrical distribution system.

