Transmission, Substation, Relaying Upgrades Fulton, Missouri



PROJECT EXPERIENCE

The City of Fulton, MO was experiencing substation and transmission system reliability problems. Fisher Arnold was brought in to work with the City's electric system personnel to diagnose problems, develop solutions and implement improvements. Our engineers worked day and night to install temporary relays to provide interim protection during design, demolition, and replacement of the City's Power Plant Substation control room relay panels, wiring and bus breakers in the yard.

Services provided for complete control and protection change out, including distance, overcurrent, and differential relays. Coordination was maintained from two different sources. Installation of four 13kV reclosers with Cooper controls, including sync check for existing 13kV generation. One recloser remotely switches in and out a 13kV capacitor bank. SCADA implementation for all SEL station protection relays existing and installed.

Next, to further increase reliability and flexibility, we designed a transmission switching station which was then constructed by City personnel. We also helped Fulton deploy a new transmission metering point, radio communications, and designed relay settings with DNP mapping to put the City's electric system on SCADA.

These services combined with our assistance on metering issues, midnight outage restorations, generation problems, and power supplier relations, have helped the City develop a great working relationship with MidSouth while improving the quality of service they supply to their electric system customers. Services have been continuously provided since 2006.

