

PROJECT PROFILE ELECTRIC SUBSTATION ENGINEERING FOR GAS-PROCESSING PLANT



Client: **XCL MIDSTREAM** | Location: **CLEAR FORK, WEST VIRGINIA**

Audubon supplied **electric substation** engineering and design services for an XcL Midstream gas-processing plant in Clear Fork, West Virginia. Chapman Corporation contracted Audubon as a trusted partner for electrical and structural engineering, as well as project management, for the multibay substation.

The Audubon team routed two 138-kV overhead transmission lines entering into XcL Midstream's [electric substation](#) into independent 100-MVA transformers. The transformers stepped down the voltage to 13.8 kV before the lines were rerouted to a state-of-the-art, Audubon-designed power distribution center (PDC) via overhead bus ducts.

Our scope of responsibility included a full suite of [detailed engineering and design](#) services, including [utility interface](#) and interconnect, substation yard layout, structural design, ground grid calculation and design, [relay engineering](#), relay settings files generation, power factor correction and harmonic filtering, PDC design, RTAC programming, and equipment selection. With the electric substation engineering services provided by knowledgeable Audubon professionals, [XcL Midstream](#) ensured reliable power to process gas efficiently from the Appalachian Basin.

Project overview

- Multibay substation modifications
- 138-kV overhead lines
- 100-MVA transformer capacities
- Fully integrated PDC
- Utility interface & interconnect
- Power factor correction & harmonic filtering
- Relay protection

Scope of work

- Electrical & structural engineering & design
- [Automation & control](#)
- [Project management](#)
- Equipment selection

