# PROJECT PROFILE
# SUBSTATION DESIGN FOR NATURAL GAS DELIVERY

audubon

## Client: **DT MIDSTREAM** | Location: **LOUISIANA**

Audubon provided **substation design** and detailed engineering services for DT Midstream. Four substations were installed for amine plants and booster station sites for the pipeline operator in various locations across the state of Louisiana, including Vernon, Crossroads, Belmont, and Sabine.

Each project consisted of overhead transmission line reception into a privately owned industrial substation, with incoming voltages ranging from 138 to 230 kV. Substation design included transformer capacities up to 34 MVA. Transformers step down voltage to 13.8 kV before entering an Audubon-designed power distribution center (PDC) via an underground duct bank. Audubon's project scope encompassed the full range of detailed engineering and design services. These include substation yard layout, structural design, ground grid calculation and design, relay engineering, utility interface and interconnect, PDC design, and equipment selection.

Audubon's expert engineering team designed the four substations on time and on budget—meeting DT Midstream's objectives and enabling the construction phase to begin on schedule.

### Project overview

- Four substations servicing natural gas compressor station & cryogenic plants
- 230- and 138-kV overhead lines
- Transformer capacities up to 34 MVA
- Fully integrated PDC
- Relay protection

### Scope of work

- Electrical engineering & design
- Structural engineering & design
- Automation & control
- Equipment selection
- Project management