

# Oil & Gas Industry Expertise

We have decades of experience working in the oil & gas industry, with experience in upstream, midstream, and downstream applications. That experience includes working for some of the most notable firms in the field, including Kinder Morgan, Williams Midstream, and Phillips 66.

As an independent integrator, we have expertise in most major automation platforms, allowing us to serve a wider variety of customer needs and preferences. And our electrical construction capabilities allow us to deliver complete turnkey solutions using a design-build delivery method.

The industry faces numerous challenges. The hazardous nature of the products makes safety of paramount importance. We understand that and put safety first in our approach to project execution. Additionally, market conditions place utmost importance on solutions that provide more efficiency in production and handling, while maintaining adherence to environmental regulatory compliance, all at an affordable cost.

In an industry roughly partitioned into three major sub-categories, upstream production, midstream, and downstream refining, there is a wide variety of applications for which our customers our services. An abbreviated list follows.

## Industry Applications

### Upstream

- Well monitoring
- Lift stations
- Pump stations
- Custody transfer
- Frac sand processing

### Midstream

- Pipeline SCADA
- Compressor stations
- Storage & terminals automation
- Pump stations
- Wireless communications
- Emergency shutdown



*Upstream experience includes extensive work in frac sand and other drilling-required minerals extraction and processing.*

### Downstream

- Refining
- Gas processing
- Petrochemical



*Pipeline applications make up a significant part of our experience in oil & gas.*

## Project Examples

Following is a sampling of representative projects within the oil & gas industry:

- **Emergency shutdown system:** replacement program upgrading obsolete systems. This included redesigning the ESS using new processor hardware and providing a new panel. Installation was performed during a 48-hour shutdown and included installing new cable trays and conduit, and pulling new cables.
- **Liquid handling expansion:** a gas processing facility needed to expand their liquids handling system. Project involved new MCC design, new RIO panel, new ESS panel, conduit/cable tray design, PLC and HMI programming, testing and commissioning.
- **Sand plant:** greenfield plant for extraction and processing of frac sand. Included MCC, switchgear, control panels, fiber converters, thermal oxidizer breakers, junction boxes, and field disconnects.
- **Eagle Ford Shale** (10 projects completed): projects included remote compressor stations, emergency shutdown systems, control SW, HMI, instrument package, panels, FAT, and commissioning.
- **Large scale LNG DSC conversion:** included FEED study, site audit, site plan, installation management, and commissioning support.
- **Wireless monitoring and reporting system:** for natural gas distribution utility; implemented cellular technology platform for multiple sites, with some requiring solar power configurations.
- **Pipeline station:** XIO cabinet for distillate controls

## Capabilities

We offer our clients a formidable array of capabilities and services for their automation needs. These include the following:

- **Engineering Services**
  - FEED+ Studies
  - Industrial network design & security
  - Grounding & power studies
  - Migration planning
  - DCS/PLC automation
  - Radio path studies
  - Electrical automation
  - Equipment upgrades and additions
- **Compliance Services**
  - Arc flash training
  - Arc flash studies
  - Machine safety solutions
  - Regulatory compliance reporting
- **Maintenance & Troubleshooting Support Services**
  - Calibration support
  - Equipment upgrades
  - Network assessment
  - Commissioning support
  - Breakdown support, controls & drives
  - Outage/turnaround support

Clients praise our breadth and depth of expertise, our responsiveness to their needs, and our reliability—doing what we say we're going to do, when we say we're going to do it.

