

Pipeline Station Electrical Upgrades

Project Details

Client: Confidential

Industry: Oil & Gas

Scope of Services: Engineering

Governing Body: NEC, State and Local Codes

Customer Benefits

Reliability and Savings:

Similar equipment experienced failures at pipeline stations causing extensive downtime on the pipeline. Due to equipment age, parts were difficult to find making repair time consuming and expensive. Reliability savings were estimated at \$400,000-\$700,000 for a one time failure.

Operational Savings:

The installation of the variable frequency drives on the 3,500 HP booster pumps reduces power consumption while controlling pipeline operation. Previous control was via a downstream pressure control valve. The client's energy utilization group estimated annual savings of \$285,000.

The LeanTrak Advantage:

LeanTrak has earned high praise from our client for responsiveness, intensity, communication and consistency. Utilizing LeanTrak for the entire program has brought uniformity across three different operating regions. Constructability feedback has been positive with strong alignment between estimated costs and actual costs.

Let's Get in Touch

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Program Description

Due to aging infrastructure, a pipeline operator was experiencing numerous electrical power equipment failures at multiple pump stations. A multiple year capital program was put in place to address this situation which was impacting pipeline operations. LeanTrak assisted our client in the development of cost estimates to establish an overall capital plan. In 2015 LeanTrak began engineering and design on the first of the pipeline station electrical upgrades. We continue to perform engineering, design, project management, commissioning and start-up services, with six stations complete and three additional stations in progress.

LeanTrak Solution

- LeanTrak begins each project by evaluating facility electrical information which includes field visits and historical records. The team meets with all stakeholders including operations, maintenance and reliability, technicians, and engineering.
- Power and motor starting studies are completed for all major equipment at the facility.
- LeanTrak prepares all major equipment specifications, leads the equipment bidding/procurement process, and makes equipment selection recommendations.
- A variable frequency drive system for the largest pump (3,500 HP motor) is an integral part of the upgrade design. LeanTrak manages the design relationships, coordinating the electrical equipment integration to the power equipment building.
- LeanTrak is an active participant in equipment field acceptance tests, during the installation and as part of the commissioning and start-up team.

