

The Engineered Systems Group (ESG) has enabled customers to be more effective and gain market share by combining industrial gas knowledge with engineering solutions to design and implement pipeline billing networks. An example of one type of solution is described below.

Pipeline Billing Network

Project: 15 miles GOX and GAN pipeline feeding 6 customers, measured at 11 metering stations (GOX and GAN). Included a complex contract with multiple levels.

Activities:

- Project Management

Customer staff and Instrument contractors

- P&ID development
- Engineering Design

11 satellite panels and 1 central panel plus the required design, fabrication, installation, wiring termination for all. At each station, implementation included field device calibration / troubleshooting.

- Plant Control System

Procurement, design, configuration, installation and commissioning of the billing system (12 PLCs and two operator stations). Specification design and installation of telemetry system.