Problem

Our energy infrastructure client acquired two companies in short time span with a large amount of pipelines, and needed to quickly integrate the data collection technology between the three merging companies. A competitor had been hired to complete the job but was not performing as expected.

Solution

AUTOSOL' s expertise with both gathering (upstream) and gas transmission (midstream) SCADA systems allows us to rapidly create the database framework and implement equipment to monitor thousands of miles to client's existing pipeline portfolio smoothly.

Large-Scale SCADA Modernization

Between 2011 and 2013, the largest energy infrastructure company in North America (our client) purchased a natural gas producer with about 20,000 miles of pipeline and a distributor and supplier with an additional 6,800 miles of natural gas pipelines. These transactions added thousands of miles to our client's existing pipeline portfolio across the entire United States. This pipeline system now supplies billions of cubic feet of gas to power plants and homes throughout the American Southwest, the Deep South, Chicago and New England.

To complicate matters, these pipelines utilized various SCADA systems including Telvent, ClearSCADA, and CygNet, as well as applications that were built in-house.

To assist in bringing these newly-acquired SCADA systems into the fold, our client called on AUTOSOL to modernize and improve the SCADA systems across all their new and existing pipelines.

Autosol Communication Manager (ACM) and Schneider Electric's ClearSCADA, used in conjunction with OneSCADA's mass-building technologies, were selected to be the primary software of all the client-operated pipe.

Throughout 2013 and 2014, AUTOSOL partnered with our client to refine and implement a new graphical and alarm standard for their natural gas pipelines. The goal was to make the SCADA system consistent, easy to read and accessible for all users, while incorporating modern guidelines such as API 1165 and PHMSA CRM. During this time, the natural gas transmission company and the North Texas systems (which already were using ClearSCADA) received a graphical update which demonstrated these improvements.

Building off of these enhancements, several projects were kicked off using AUTOSOL's OneSCADA software to rapidly build out the database framework. With support and guidance from AUTOSOL integrators, our client's SCADA team was able to transition almost 8,000 miles of pipe from Telvent to ClearSCADA and ACM within eighteen months. These bring the total to over 10,000 field

devices and 64,000 miles of natural gas and liquid pipeline for this series of projects. Within four years, several more projects were completed, converting lines from Telvent and the built-in-house epSCADA, to ClearSCADA and ACM.

This allowed our client a more immediate return on their investment, a smooth transition to an updated software system, more efficient remote data collection and succeeded in simplifying their accounting processes.

After two years of lackluster results from another vendor, AUTOSOL‘s support and guidance enabled one of the largest energy infrastructure companies in the country to plan, build, test and fully implement four pipelines totaling almost 8,000 miles within eighteen months.

Within four years, twenty-six systems have been converted to AUTOSOL‘s ACM polling engine, and twenty-eight have had new or redesigned ClearSCADA HMIs built for them, totaling over 10,000 field devices and 64,000 miles of operational natural gas and liquids pipeline.

With four of the nation's largest interstate gas transmission lines using ACM/ClearSCADA, our expertise proves that AUTOSOL can provide the tools and manpower needed to modernize SCADA systems in a timely manner.