In-chassis, wireless improvements help oil and gas company increase ROI

By Lauren Robeson Menting

Slawson Exploration has a rich history of dynamic growth in the oil and gas industry. Dating back to 1957, the private firm has been a leader in petroleum exploration and production, with its operations spanning from California to Texas. The company’s timeline includes work in the Bakken oil field, for which it debuted techniques for horizontal drilling.

A culture of innovation permeates the company. Its oil and gas gathering arm, Pelican Gathering, was in need of a novel solution to make their facilities in New Town, North Dakota, more efficient. Their production systems required automation and measurement solutions, ideally with streamlined integration into the Rockwell Automation® CompactLogix™ control system.

Pelican Gathering’s applications involved building platforms to be used in oil and gas extraction, and the development of midstream hydrocarbon transportation. Some equipment that needed to be monitored communicates with Modbus®, requiring a network interface with the Rockwell Automation PAC. Meanwhile, given the size of their operation, remote access via wireless communications was also a priority – this capability would save the company and its personnel valuable time.

Through research and discussions with a specialist from Border States Electric & ProSoft sales, the company found a trio of ProSoft Technology solutions that would allow for hydrocarbon measurement, remote access, and communication with its equipment across its LACT application. These solutions were:

- A CompactLogix Modbus communication module to interface with instrumentation.
- An in-chassis flow computer for CompactLogix that could perform both hydrocarbon liquid and gas calculations.
- An industrial cellular gateway to enable wireless communications and secure remote access via Belden Horizon™, a platform that could be accessed anywhere by authorized users.

The Pelican Gathering team appreciated the assistance provided by ProSoft’s sales and product management teams in making sure the combination of these solutions was the right fit for their application. Pelican sought implementation assistance from Northland Industrial Specialties LLC., a Gilette, Wyoming-based skidded facility manufacturer. Northland assembled the control panels and production skids for the application from approved designs.
“The flow computers helped Pelican decrease the number of components, minimize their panel space, and streamline integration,” said Brett Gartner, Director of Global Sales at ProSoft.

The streamlined approach doesn’t just apply to data integration, either.

Additional ROI was also achieved thanks to the resources provided for the solutions. Software for configuring communication and flow computing modules are available as free downloads from the ProSoft web site with no licensing or keys required. With the CompactLogix flow computer, each meter may be independently configured for gas or liquid measurement to improve meter density per module and application flexibility.

The module also generates a data archive that can be uploaded to the company's SCADA system, making it easier for Pelican Gathering to keep track of production volumes and document regulatory reporting.

In comparison to dedicated flow computers for measurement, the ProSoft integrated flow solution provides value by reducing required hardware, software, and inter-device networking.

The complete ProSoft solutions allowed Pelican Gathering to realize several other gains.


That return on investment and the promise of technical support when needed were key as the company looked to the future. With a secure, efficient system in place, Pelican Gathering and Slawson Exploration will continue to expand their historic operations.