



A Rockwell Automation Company

Husky Energy Inc. Lloydminster Pipeline SCADA System Upgrade

The Client:

Headquartered in Calgary, Alberta, Husky Energy Inc. is one of Canada's largest energy and energy-related companies. The Company has almost \$16 billion in assets and employs approximately 4,000 employees.

The company is a major heavy oil producer in both East-Central Alberta and West-Central Saskatchewan

with extensive untapped resources. These holdings are strategically enhanced by a 2,050-kilometer pipeline system and the location of Husky's heavy oil upgrader and asphalt refinery in the area.

The Requirement:

The SCADA system in use for the heavy oil pipeline and gathering system was nearing the end of its lifespan. A replacement project needed to be kicked off to replace the computer hardware and update the SCADA software. The replacement project would first need to be defined and justified to management to secure funding. Once approved, the procurement, configuration and deployment of the system should be performed by the same team as the design to ensure the overall success of the project.

Concurrently with the SCADA upgrade, lead detection, historical data and metering applications would need to be reviewed and upgraded.

The project team would need to be able to function as an extension of Husky's engineering group and not as a separate entity. Very close ties to engineering management in Calgary and operations in Lloydminster would be crucial to the success of this upgrade.

The Design Solution:

The first order of business was to complete the design basis. Once a good understanding was established on the existing system and the future vision, the project definition phase could begin. Functional requirements were compiled and an initial design completed. A bidder pre-qualification was performed to reduce the number of bidders to a short list. Budgetary estimates were created and included in the project justification.

When the project was approved, the AFE was developed and the bidding process was started. SCADA system specification was developed and potential bidders were invited to submit a proposal. The submitted bids were evaluated, demonstrations performed and contracts were negotiated and signed with the winning vendor. System configuration was then performed which included creating and validating

database and displays against the existing and field systems.

During the SCADA upgrade the leak detection project was also developed, approved and kicked off. The leak detection vendor was established and the configuration and interface to SCADA developed.

Installation and commissioning of the system was done in a very thorough fashion with the new system running in parallel, eavesdropping on the production systems communications. The systems were run in parallel until the full system was tested and confidence was established with the new system.



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System Specifications:

- Telvent SCADA Host OASyS DNA V7.5
- 15,000 points
- 90 RTUs
- Dual redundant hosts with multi-display Operator stations
- Dell PowerEdge 2650 servers
- Dell Precision Workstations
- Advantica leak detection

For further information or to contact a Hinz office near you, please check our website at:

www.hinz.com