



A Rockwell Automation Company

Amoco Canada Petroleum Company Limited Rangeland Pipeline SCADA

The Client:

Amoco Canada Petroleum Company Ltd. operates the Rangeland Pipeline System which is approximately 1000 miles of trunk and gathering pipelines located throughout the province of Alberta. From various injection points along the numerous pipelines that comprise Rangeland Pipeline, multi-grade condensate,

butane, propane, conventional crude oil, high sulfur crude oil and heavy oil are delivered to storage terminals. Products from these storage facilities are then batched to major refining centers.

The Requirement:

The original SCADA system reached the end of its product life. Two DEC PDP 11/73 computers in a dual-redundant configuration were experiencing increasing failures and with the shortage of spares and the declining knowledge of the product, the decision was made to replace the hardware. Because the SCADA system software was DATAP IRIS 7500, the decision was made to upgrade the system software, adding to the system software products for pipeline monitoring, batch tracking and leak detection.

Because Rangeland is a group of pipelines that

perform transmission and gathering of multiple products and not a single pipeline, configuration of the system was a challenge. The communications structure is hierarchical with sub remotes below data concentrators. The ease of navigation from system to system and the separation of events and alarms were high priorities for Amoco. The configuration of specialized software for leak detection and batch tracking was also an important element to achieve the project's success.

The Design Solution:

Hinz was contracted by Amoco Canada to provide project management, engineering and integration services for the project. The contract included project management of the system, detailing systems design, implementation, testing, and commissioning.

The project commenced with refining the functional specification for the SCADA system vendor bids. An economic justification study was performed for the communications systems and a system configuration document was produced.

Valmet OASyS was chosen as the SCADA vendor. The integrated components of leak detection, pipeline monitoring and batch tracking were also selected from

Valmet for a complete system. Hinz configured and applied the OASyS system to meet the exact requirements of Amoco.

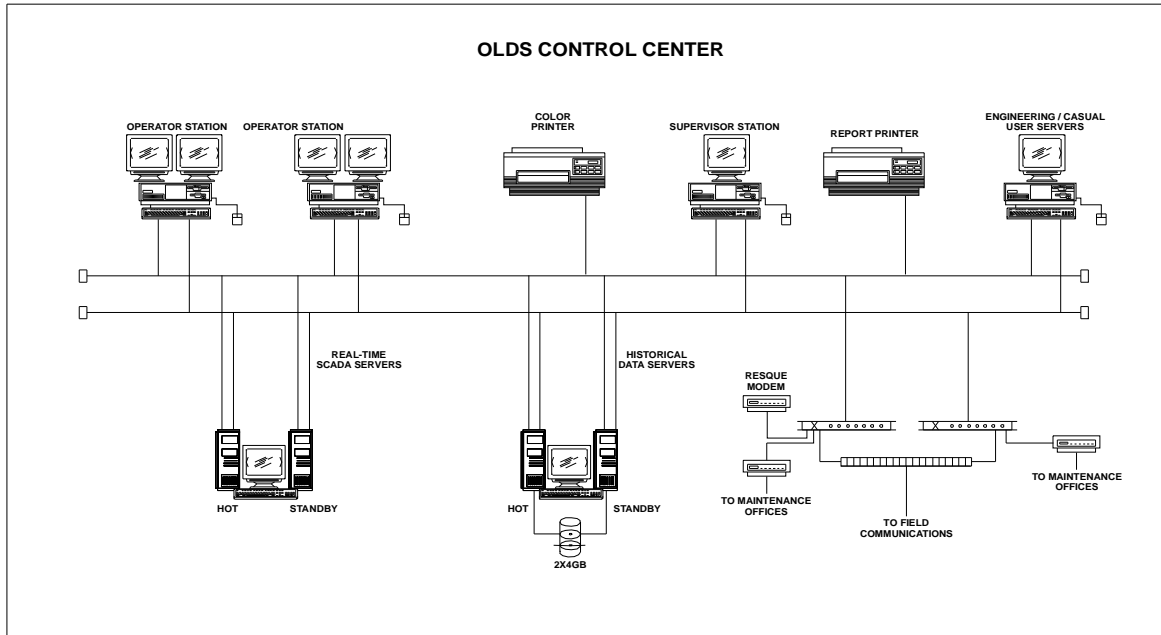
Project management included vendor communication, factory acceptance testing, and system installation. Configuration of all aspects of the SCADA system (from database, displays, leak detection, batch tracking, and I.S. integration) were included.

The project was executed on time and on budget, meeting or exceeding Amoco's expectations for the project.



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System Specifications:

- Valmet OASyS SCADA System
- DEC Alpha UNIX Platform
- Leak Detection
- Pipeline Modeling Software
- Batch Tracking
- Maximum Line Operating Pressure Monitoring
- SCADA reporting to Corporate Database

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

www.hinz.com