



A Rockwell Automation Company

## Colorado Interstate Gas Company Young Storage Station

### The Client:

Colorado Interstate Gas Company (CIG), a subsidiary of the Coastal Company, operates gathering, distribution, and storage services to Denver, Colorado Springs and the surrounding communities. In 1994 CIG constructed a grass roots storage and compression station.

The details of the station are as follows:

Three Superior 2000 HP engine driven compressors to perform injection to storage, processing of production gas, and withdrawal from storage.

One TEG dehydration and Joule-Thompson expansion Plant.

### The Requirement:

The Young Gas Storage Company, Ltd. was constructing a natural gas and processing facility in conjunction with the development of a storage field in northeastern Colorado. The storage field was to provide storage for seasonal peak demands.

Daily operation of the station was to be performed locally; however, off-shift operation was to be performed remotely over a microwave wide area network. The station is designed to operate in one of

eight modes of inject, recycle, or withdrawal. Standard CIG equipment was chosen and programmed to take into account these eight modes of operation and the selected process equipment. Required capabilities include remote operation from a central SCADA control room, on-line system changes, historical trending, reporting, and programmed safety shutdowns.

### The Design Solution:

Hinz initially prepared a Functional Requirements Document which finalized the control system configuration. The project scope included all control software, integration, and networking.

Hinz worked closely with CIG personnel to define the control strategies, selection of a DCS vendor for control of the Process Plant, and control system architecture.

The project scope of Hinz included the design and implementation of the following tasks:

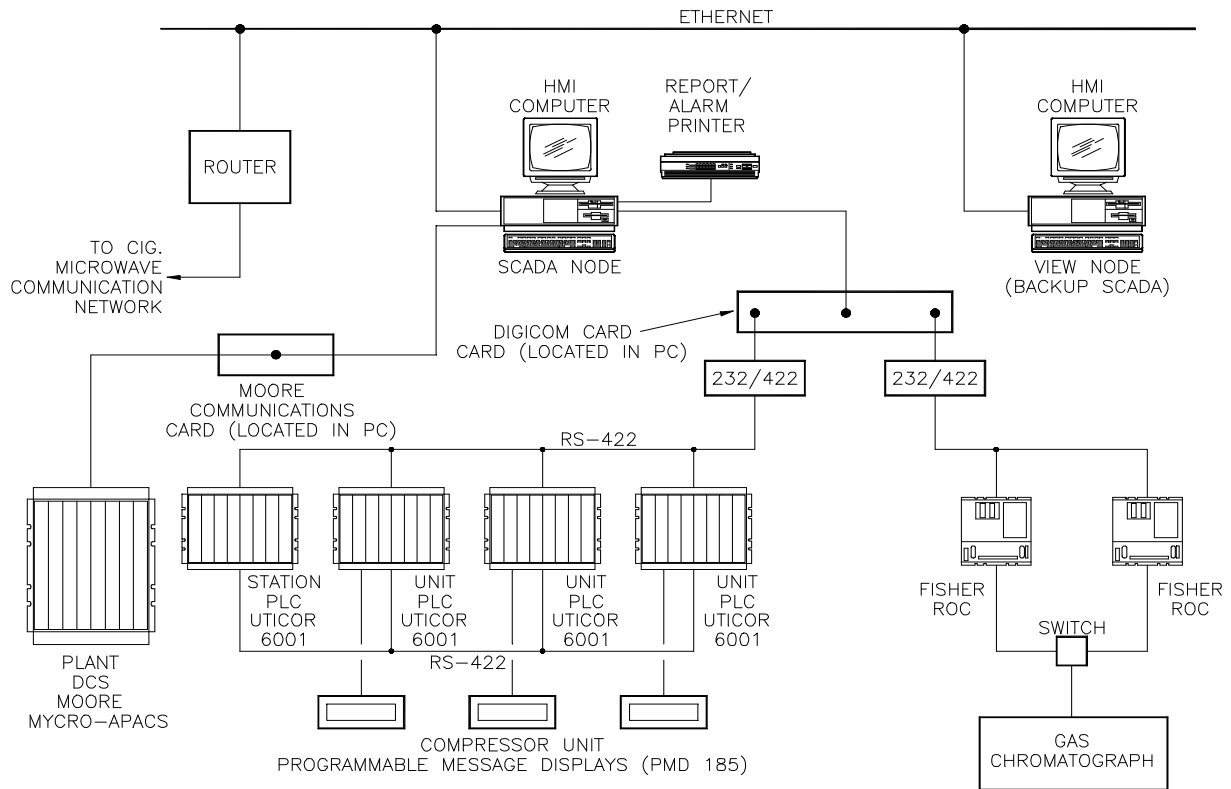
- Summarization of requirements for a DCS to control the process plant and a technical review of DCS vendor proposals.
- Software design and programming for the station and three unit PLCs and local operator panels.
- Control strategy develop and generation of SAMA diagrams.

- Software design and programming for the process plant DCS.
- Software design and programming for the facility Intellution DMAPCS HMI.
- Integration testing of the control system to prove function prior to site commissioning.
- Assistance to CIG during the site commissioning of the facility.
- Preparation of an Operators Manual specific to the control system.
- Training for CIG staff.
- Budget and schedule control throughout the project.



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### System Specifications:

- Moore APACS DCS
- Uticor 6001 PLCs
- Uticor PDM180 programmable displays for local monitoring
- DECNET wide area network (WAN) connected over microwave to Gas Control dispatching Teledyne Vector SCADA Master
- Fisher ROC RTUs connected to a common gas chromatograph.
- Intellution DMAPCS HMI with multiple heads

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

[www.hinz.com](http://www.hinz.com)