

### Project Scope:

Great Northern Engineering provided a comprehensive Project Analysis Report and Peer Review Document evaluating the existing Supervisory Control and Data Acquisition (SCADA) and related radio communication systems for the Barrow Gas Field. Included were recommendations for upgrading the radio link equipment to an Internet Protocol (IP) network, which incorporated VOIP telephone and CCTV surveillance cameras to all of the well houses, manifold stations and generator shelters. Subsequent to these recommendations, GNE completed a turnkey design package and provided construction engineering support through to start-up and commissioning.

### Project Detail:

- Designed upgrades to the SCADA System with Wonderware In-Touch HMI software and an IP network.
- Designed independent field control systems for generator buildings.
- Designed RTU's, provided by Opto22, at each well head.
- Designed two LCP's, provided by Opto22, with AGA software, at each generator building and manifold station.
- Designed the integration of the generator systems into the HMI system.
- Designed the installation of security alarming hardware, monitoring software for methanol supply tanks with alarming at low-pressure or low-volume
- Provided all electrical/construction support services
- Provided submittal reviews, onsite inspections, daily technical support as well as record as-built drawings for the completed project.
- Ensured that the project was completed on time, within the construction budget, and in conformance with the design specifications.

