

***BDP Project Description:*****Benedum Gas Plant – Phase 1 Control System Upgrade with Advanced Cryo Controls*****End User / Location:*****Western Gas Resources, Benedum, Texas*****Client / Location:*****Western Gas Resources, Benedum, Texas*****Control System Platform:*****Matrix Total Control by Standard Automation and Wonderware HMI*****BDP Scope:*****Full-scope control system upgrade to replace panel board instruments and local controls, from equipment selection through control system commissioning, with design and commissioning of Advanced cryo control strategies.*****BDP Services:*****Front End Design Package:**

- Control system evaluations.
- Instrument Index development.
- Equipment procurement.

**Detailed Design & Configuration:**

- Custom panel design and assembly.
- Control loop and display configuration.
- Modbus configuration for serial interfaces.
- Industrial SQL Historian configuration.
- Drawing package for installation scope.
- System integration and test.

**Installation and Commissioning:**

- Craft labor and materials for field instrument installations.
- Control system installation with fiber communication networks.
- Engineering and craft support for loop check and commissioning.
- Operator training and start up support.

**Advanced Control Solutions:**

- Design, configuration, operator training, and commissioning of Advanced C1/C2 Composition Control, Gas Plant Rate Control, and enhanced Chiller Level Control.

***Accomplishments:*****First phase of a control system upgrade to enhance product recoveries, improve plant reliability, and prepare for unmanned operation.**