Valve control
XSeries and *XCORE* applications

In natural gas production, gathering, transmission and delivery systems it is often important to maintain a consistent gas flow rate or pressure.

Measurement made easy

—
01 Totalflow applications can be used with etiher a Totalflow XSeries device, or a Totalflow *XCORE* device.

Automation objective

In natural gas production, gathering, transmission and delivery systems it is often important to maintain a consistent gas flow rate or pressure; for example, to honor a nominated delivery or to maintain a pressure into a gathering system. At times it is advantageous to primarily control the flow rate but also be able to revert to pressure control as an override, to insure that required, safe operating conditions occur.

Automation solution

The Totalflow XSeries FCU/RTU or *X*CORE RTU can be supplied with a standard Valve Control Application. The Application positions a control valve to maintain control of either, Differential Pressure (DP), Static Pressure (SP), or Flow Rate.

Additionally, an override function can be selected which will limit a secondary parameter to a user defined limit. For example, while primarily maintaining flow rate, a pressure override can be used to ensure pressure entering a pipeline system.

This same scheme can be used at a wellhead to shut-in/bring-on flow based on a compressor on-off state. The Valve Controller has the option to be used with a Digital Valve Actuator or an Analog Valve Actuator.

Recommended equipment

Qty 1 – XSeries FCU/RTU or *X*CORE RTU with solar panel
Qty 1 – LevelMaster level sensor
Qty 1 – PCCU Laptop communication software

Options – Radio for remote communications; WinCCU remote host software

Solution benefits

Consistent production
Valve control allows for steady state production and insures more flow time for the well.

Safe environment
Control override prevents unsafe delivery of pressures and flow rates into the gas system.

Easy installation
Mount XSeries/*X*CORE; connect solar panel; connect wiring to sales valve.

Simple start-up
Enter initialization requirements with PCCU software or WinCCU software or SCADAvantage™.

Low power electronics
Helps extend battery life, reduces maintenance expense, allows for more run time.

Extendable
Any XSeries/*X*CORE product can also provide flow measurement, alarming, data logging, level measurement, remote communications, and plunger optimization, and nomination control while performing valve control.