XSeries G4
Valve control application

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XSeries
TOTALFLOW
MEASUREMENT & CONTROL SYSTEMS

Valve control
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 Flow Computers or Remote Controllers 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.

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; connect solar panel; connect wiring to sales valve.
- **Simple start-up:** enter initialization requirements with PCCU software or WinCCU software or SCADA Vantage.
- **Low power electronics:** helps extend battery life, reduces maintenance expense, allows for more run time.
- **Extendable:** the XSeries product can also provide flow measurement, alarming, data logging, level measurement, remote communications, plunger optimization, and nomination control while performing Valve Control.

Required equipment

XSeries flow computer or XSeries Remote controller with solar panel, PCCU laptop communication software.

Optional equipment

Radio for remote communications, WinCCU remote host software

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