High Level Tank Shutdown using SCADALink DC100

The DC100 Modbus Data Concentrator is a powerful and easy-to-use device that can be configured for remote site monitoring and control. High Tank Level Shutdown and Monitoring of Production Pumps into an Oil Battery is an example where the DC100 can be effectively deployed.

At the oil battery, high-level switch input is monitored, and used to shutdown all remote production pumps on high level. It is sometimes also desirable to monitor the run status of each of the production pumps and transmit that information to the oil battery.

As shown in the diagram, a DC100 located at the oil battery is configured to send a "Pump Enable" command based on the high level switch input. This input is transmitted to a corresponding I/O module output located at the remote pump site(s). Remote pumps can only run when tanks are not in high-level state. The DC100 can also be configured to poll remote pump statuses which could be replicated as dry contact outputs at the oil battery or as Modbus registers which can be polled by the SCADA host or PLC. Allowing interface both by hardwire I/O and by Modbus protocol inputs enables maximum flexibility. The DC100 system handles all communication logic required.

The DC100 can also be used in conjunction with the SCADALink SMX-900 Radiomodem and Modular I/O to perform this function. With the modular design of the SCADALink DC100 system, the system can be easily expanded from one to many remote sites.

The DC100 supports both Serial and Ethernet connectivity and can also be utilized with unlicensed/licensed radiomodems, cellular modems, wireless Ethernet, or via corporate WAN as the communication media.