Monitoring water level in a remote tank

APPLICATION A175

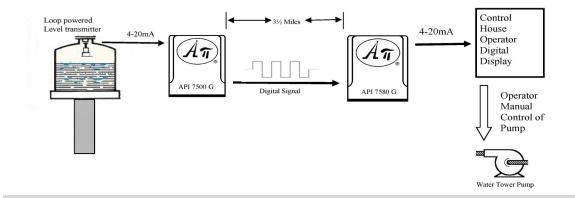
Type of Company: Public Utility Location: Alberta, Canada

Water towers are elevated structures supporting a water tank constructed at a height sufficient to provide potable water and emergency water storage. In rural communities, remote water towers run on much the same equipment as those in areas with large populations, but face different challenges. One small local utility company is using a standard cable-suspended loop-powered level transmitter to monitor level in a water tower tank.



The Engineering Issue

• The control house is over three miles away and the transmitter's signal must be monitored and the tower operated from this location.





The engineer used an API 7500 G to convert the 4-20 mA signal to a frequency and transmit it over "old" installed phone wires to the control house. An API 7580 G was used in the control house to convert the frequency signal back to a 4-20 mA signal. The signal is then displayed on a digital display to indicate the height of the water in the tower.

Problem. Solved.