API-Cecomp Group n'fo

Technical & Application Note A134

Application: Controlling water level in a tower

Type Of company: Public Utility

Location: Illinois

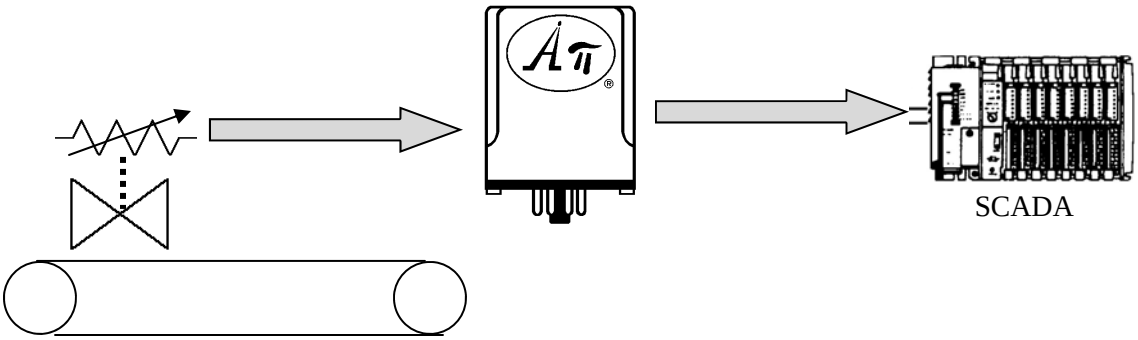
Problem: The customer is a water commission that supplies water to many communities. The water is stored in standard water towers in the various communities. The levels and control are handled at the main distribution / pumping facility about 20 miles west of the main pumping station and 20 to 40 miles further west the water commission control room . They must determine the exact position of the valves in the community water towers for precise control. The customer has already replaced the standard linear position feedback potentiometer on the valves with a precision 10 turn potentiometer and needs to convert this position signal to a 4-20 mA input signal to an RTU card on an HSQ Technology SCADA system.

Note: for additional information on this process see http://en.wikipedia.org/wiki/Water_tower

Solution: Since the customer requires "hot swap-ability" it was recommended that they use an API 4003 GI D EXTSUP. This allows the customer to use a common power supply for all of the various inputs to the RTU card on the HSQ Technology SCADA system and since it is a "plug-in" module it gives the customer the "hot swap-ability". An alternate solution for a customer would be the APD 4008.

API 4003 G I

Potentiometer to DC Isolated Transmitter



SCADA