Application: Automatically select pH transmitter
Type of Company: Chemical Plant
Location: Texas

**Problem:** The customer is a Chemical manufacturer that produces several different types of chemicals for many different applications. The process uses a primary pH transmitter and a redundant secondary (backup) pH transmitter due to this being a critical process variable. Since there is only one available analog input channel on the analog input card for the Siemens PLC there is a need to automatically choose which pH transmitter (4-20 mA output) to use for controlling the process.

**Solution:** API furnished the customer two API 1000 G’s. Since the primary pH transmitter is configured to have an output of 22 mA in the event of electrolyte loss or removal from the process a cost effective solution is to use two API 1000 G’s to automatically select the secondary pH transmitter output as the Siemens PLC input when the primary pH transmitter goes to 22 mA. *(An alternate solution would be to use the APD 1000)*

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