UPGRADED CONTROL TECHNOLOGY

Application Sheet #27

SITUATION

- A customer in the Texas panhandle was using traditional timer (on/off) technology, supplied by a couple of the major solar pump providers.
- They felt the amount of methanol they were injecting was significantly higher than what was required.

SOLUTION

- Sirius Fusion controllers were installed replacing older technology (timers), permitting the competitors pump to be controlled in continuous injection mode.
- Other significant improvements included:
 - Voltage compensation provides autonomous local control eliminating the day/night rate variation typical of all solar pumps, due to changes in battery voltage.
 - The Fusion controller can be interfaced to SCADA and other communications including InSight flow measurement which is planned for future upgrades.
 - Once calibrated, you can dial in a rate directly in Q/day.

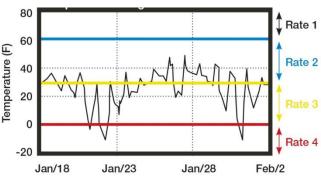
RESULTS

- Fusion will run the pump continuously and provide a 3:1 Variable speed turndown before injecting intermittently giving you more frequent injection at lower rates and better chemical coverage.
- Multiple temperature zones were programmed allowing different injection rates at different ambient temperatures (see sample graph to the right). This option eliminates the need for operators to have to manually turn up rates as the temperature

REAL TIME BENEFIT

Methanol reduction of 25 to 30 percent.





decreases; or over inject for fear of the rates being too low in the event of unexpected cold weather.

- The customer has 24 controllers installed and love their inhibited methanol savings with turndown and temp zones.
- Estimated savings are 25-30%.

