Oil wellhead shutoffs

RESULTS

- Lowered system and maintenance costs
- Reduced number of required solar panels
- Created new markets and business opportunities

APPLICATION
Remote oil wellhead shutoff system powered by solar panels/battery.

CHALLENGE
An oil field supplier specializing in remote wellhead telemetry was experiencing excessive manpower costs to service a network of hard-to-reach production sites. The company’s automation controlled critical wellhead shutoff systems at these sites, which were powered by solar panels and batteries.

The oil field servicer desired an effective explosion-proof safety shutoff package that operated with low power consumption. Selection of a solenoid valve was critical, since it controlled the shutdown of the well. The goal was to reduce maintenance and upkeep while maintaining reliable telemetry and safety shutdown capabilities.

SOLUTION
The oil field supplier turned to ASCO™ for its knowledge of solenoid valves and ability to support mission-critical telemetry systems. ASCO provided a package that included low power, three-way, Series 316 (8316) and Series 317 (8317) valves plus MU8262 magnetic latching valves. With the industry’s lowest power consumption, the 0.55-watt solenoid valves provided PLC compatibility, less battery drain, reduced wiring costs and heat rise, and overall energy savings. In addition, the low-power valves permitted the use of smaller solar panels, cutting system cost by 10%. An added benefit: the valves’ low power consumption enabled the oil field supplier to address locations with lower sunlight levels, opening up new markets and business opportunities.

Opening up new markets, Emerson’s energy-efficient, reliable, and robust solenoid valves increased environmental safety in remote oil fields. Optimized power consumption enabled the use of smaller solar panels for increased cost savings.