



Pumping Profit Back into the Pipeline

When Valero's pipeline group wanted to be able to more accurately account for energy usage, they looked to Schneider Electric's local Square D® team for a solution, which revealed that the refinery was over-billing them to the tune of \$200,000 a year!

At the beginning, their goal was merely to track electrical usage more accurately, but what Valero discovered in the process was far more impressive.

Based in San Antonio, Texas, Valero offers an extensive network of pipelines for transporting products such as conventional gasoline, jet fuel, diesel and asphalt. Refined products are transported from refineries to established and growing markets throughout the United States. Their McKee refinery in Sunray, Texas, is a 170,000-barrel-per-day operation transporting these products via Valero's pipelines.



At the McKee refinery site, the Valero pipeline motors are powered by the refinery's power system. During the years, the electrical usage of these large motors (ranging in size from 400 to 2000hp) has been allocated using a formula based on horsepower and barrel throughput.

The Valero pipeline group decided it was time for a more accurate means of accounting for energy usage. Due to the many positive experiences their refinery counterparts had had with Schneider Electric and its Square D® PowerLogic® power monitoring systems, the Valero pipeline group called on Schneider Electric to provide a solution.

Schneider Electric's Square D team recommended an extensive metering system. In all, 24 pump motors were selected for sub-metering. In addition to installing PowerLogic Power Meters, the plan included medium voltage CTs and PTs. Circuit monitors were also slated to be added at intervals to selected pump stations along the pipeline.

Once Valero was able to meter energy usage directly, they determined that the refinery was over-billing the pipeline group approximately \$200,000 every year. This stunning discovery helped justify the decision that had been made to upgrade to a Square D PowerLogic power monitoring system.

The PowerLogic system paid for itself within six months of installation. Applying this simple application at other refineries within the Valero network may open up additional opportunities to assist the company.