Agricultural Pumping Efficiency Program

Helping California…

"(The Program)… has helped reduce overall energy demand in the state."- Kevin Couch, Manager, Alpaugh Irrigation District

PROJECT SUMMARY

Client: Alpaugh Irrigation District
Tulare, California
Kevin Couch, Manager

Utility: PGE / Electric

Project: Retrofit of electric pumping plants to increase overall pumping plant efficiency

Contractor: Whitten Pumps, Inc.

Project Cost: $105,000

Incentive Grants from Agricultural Pumping Efficiency Program: $53,000

Annual dollar/energy savings: $120,000 / 1,200,000 kilowatt hours

Increase in Water Flow: 585 gpm on average

Simple Payback: 7 months (at current kilowatt hour pricing)

Contact the Agricultural Pumping Efficiency Program at (800) 845-6038 for information on how we can help your water district save money and energy.

They Say About the Ag Pumping Efficiency Program…

Serving an agricultural community in the heart of the San Joaquin Valley, the Alpaugh Irrigation District was formed in 1915 to delivery water to approximately 10,000 irrigated acres in Tulare County. The District differs from most water purveyors in that it has practically no surface water entitlement. Most of its water deliveries come from groundwater pumping. Its 13 wells deliver approximately 14,000 acre feet of water per year.

"Since most of our water comes from groundwater pumping, our pumps need to operate at peak efficiency or we can't compete," says Alpaugh's manager Kevin Couch. "If a farmer can pump water with his own pump cheaper than we can sell it to him, it makes no sense for him to take our water."

Monitoring pump output is the basis for deciding which pumps are functioning efficiently. "We have plans to install flow meters on every pump," says Kevin. "That way if we detect a drop in output, we will know that there is either a problem with the pump, the well, or a water table issue." Kevin will then call in a pump tester, who tests the equipment and performs a cost analysis.

In a two year period, Alpaugh decided to repair five 200 horsepower deep wells. These pumps, along with well cleaning, cost over $100,000 to bring back to peak efficiency. The energy savings for these pumps was over 1.2 million kwhrs (approximately $100,000) per year and the District received over $52,000 in incentive rebates.

Through the implementation of these repairs, Alpaugh Irrigation District has been able to control its operating costs and offer competitive rates for its customers. "This program has been very beneficial to AID" says Kevin. "In addition, it has helped reduce overall energy demand in the state."