

Belcampo Farms

At a glance

Belcampo Farms

Gazelle, California

Projects:

Belcampo Farms has implemented irrigation pump upgrades through Pacific Power's wattsmart® Business program to cut costs and better control water resources.

Annual energy savings:

\$6,700 (56,800 kwh/year)

Project cost:

\$28,270 before incentives
\$ 7,300 incentive payments

\$20,970 after incentives

Simple payback based on energy savings:

4.2 years before incentives
3.1 years after incentives

Other benefits:

- Lower operating costs
- Enhanced control of water usage

Energy consultant:

Cascade Energy



Irrigation improvements at Belcampo Farms have cut costs and enhanced control of water usage. From left: Pacific Power's Todd Andres; Belcampo Farms' Scott Devine, vice president, operations, and Mark Klever, president; Pacific Power's Christina Kruger; and Rodney Dowse, Belcampo Farms' vice president, production.

Irrigation upgrades keep farm in balance

Cattle, sheep, goats, swine and poultry graze at a leisurely pace on Belcampo Farms' stunning Gazelle property with 800 irrigated acres at the foot of Mount Shasta in northern California. The farm, certified organic by California Certified Organic Farmers, raises these animals to provide humanely handled, superior-quality meat for Belcampo Meat Co.'s retail and restaurant operations.

"Belcampo Farms is invested in being good stewards of our environment and of the animals and resources that are part of it," said Christina Kruger, Pacific Power corporate account manager. "Energy efficiency goes hand in hand with environmentally responsible and sustainable work practices," she said.

The connection is especially evident in Belcampo Farms' management of precious water resources.

Needing a better match

"Historically, there's been more water available in this part of the valley," said Scott Devine, Belcampo Farms' vice president of operations, who is responsible for the farm's sprinkler irrigation systems, soil fertility management and pasture improvement projects. "For multiple reasons, water availability has been decreasing in the last few years," he said.

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Christina Kruger
Corporate Account Manager
Pacific Power

continued



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Scott Devine
Vice President of Operations
Belcampo Farms

Even in normal water years, there is a seasonal peak of availability in late spring, then a drop off in the summer. The farm needed the ability to better match irrigation pumping with available water supplies at all times, according to Devine.

Belcampo Farms looked to Pacific Power for help finding a solution. The utility's wattsmart Business energy efficiency program offers such services as irrigation system analysis as well as cash incentives for implementing the measures.

“With our smaller pumps, we downsized to match water availability, said Devine. “With bigger pumps, we added variable frequency drives. They allow us to slow those motors down so they're not pumping as much water. That does two things: it helps extend the life of the pump, because we're not pumping air, and it lowers our energy usage, which also lowers our power bill.”

Improved operations

According to Devine, the VFDs on bigger pumps also make it easier to manage the irrigation system. “One day we might be running 500 sprinklers, but the next day we might be running fewer. VFDs allow us to keep the same pumps running, but speed them up or slow them down automatically to reach a specific set pressure,” he said.

Savings

Belcampo Farms' irrigation upgrades are saving nearly 56,800 kilowatt-hours a year of electricity and more than \$6,700 in energy costs. The farm's efficiency improvements qualified for more than \$7,300 in Pacific Power incentives, shaving more than a year off the projects' simple payback.

“For operations facing conditions similar to ours, looking into VFDs and other upgrades can save energy and money,” said Devine.

About Pacific Power's **wattsmart** Business program

Pacific Power offers a variety of options to help our commercial, industrial and agricultural customers in California and Washington build energy efficiency into new construction and retrofit projects. The wattsmart Business program offers technical expertise and cash incentives for lighting, HVAC, industrial processes and more.

Let us help you get started

For more information on how we can assist your facility:

- Visit **bewattsmart.com** and inquire online.
- Email **wattsmartbusiness@pacificpower.net**.
- Call us toll free at **1-800-222-4335**.

Because there are requirements to qualify for an incentive, it is important to call us **before** you start your project.

bewattsmart.com



Let's turn the answers on.