

Motivational Awareness

Energy conservation boosts personal economy and helps the environment



By Mike Federman

Saving money and saving the planet are not always mutually compatible, but one area where these two ideas intersect is conservation.

Energy conservation helps preserve natural resources while producing a fatter pocketbook—

especially for consumers who find ways to use less energy around the home, at the office or in the field.

To help people be more energy efficient, local utilities offer incentive programs that reduce utility bills.

“You don’t have to suffer for conservation,” says Mary

Zimmerman, director of communications for Consumers Power Inc. based in Philomath, Oregon. “We can make it easy for people, and painless.”

While October is officially known as Energy Awareness Month, most utilities promote wise energy use year-round.

The most popular conserva-

Left, conservation rate credits from the Bonneville Power Administration allow utilities to offer irrigators incentives to replace old parts with more efficient ones, such as these flow control nozzles on wheel line sprinklers in use near Alturas, California. Photo courtesy of Surprise Valley Electrification.

tion program during the summer at Consumers Power was the sale of compact fluorescent light (CFL) bulbs. Because the utility receives credits from the Bonneville Power Administration (BPA), it sells CFLs at a competitive price, and the light bulbs are a big hit with members, Zimmerman says.

Technological advances in CFLs, which use less energy than incandescent bulbs, have produced a CFL for nearly any light fixture, which has increased their popularity.

Long-Term Efforts Effective

While saving a few cents per light bulb might not sound earth shaking, the cumulative effect of BPA's conservation programs over the past quarter century is noteworthy.

"They're trying to build a power plant through conservation by not building a power plant," Zimmerman says.

Since passage of the Northwest Power Act in 1980, BPA conservation programs have saved more than 1,000 average megawatts annually, equal to the generating capacity of a large nuclear plant, says BPA spokesman Scott Simms.

In 2007, BPA hopes to increase that number by as much as 57 average megawatts, a reduction equal to the amount of energy consumed by 35,000 average homes in the Northwest in a typical year, according to BPA statistics.

Conservation is important to BPA because the logistics of building new power plants—capital costs, fuel costs and environmental regulations—are formidable, Simms says.

"Energy efficiency used to be on the back burner," he says. "But I can't imagine it will ever be on the back burner again. ... We want to keep the drumbeat going."

Presidential Proclamation

The U.S. Department of Energy began promoting energy awareness in the early 1980s. The agency launched a monthlong observance in October 1986.

On September 13, 1991, President George H.W. Bush made it official by proclaiming October as Energy Awareness Month.

Bush called meeting the nation's energy needs a task of "immense proportions."

"To some American motorists, this challenge might be symbolized by long lines for gasoline and high prices at the pump," Bush said in his proclamation. "To others, it might be symbolized by lowering the thermostat during winter months. ... Safe, reliable, and affordable sources of energy are vital not only to our personal mobility and comfort but also to our nation's productivity and security." ■

Save a Drop, Save a Dollar

Energy efficiency also plays a role in the agricultural community.

Water conservation affects a user's electricity bill when more efficient irrigation methods reduce the amount of power needed to irrigate a field.

Through BPA's conservation rate credits, many utilities, such as Surprise Valley Electrification based in Alturas, California, offer incentives for replacing old irrigation parts, including motors, low pressure regulators, flow control nozzles and pivot sprinkler attachments.

It has been a dry year in the already arid northeastern corner of California, where forage crops, such as grass hay and alfalfa, are staples of the agricultural economy.

"We've been getting all sorts of requests for pump tests," says Lynn

Culp, member services manager for Surprise Valley. The utility does the tests as a free service to its members to determine the operating efficiency of a pump.

"A lot of irrigators are just tightening up their systems," Culp says. "They're saving water because it's not leaking out the main line and it's going where it's supposed to go."

Pivot system conversions, Culp says, have resulted in systems that produce larger drops of water that don't blow away in the wind. The drops are delivered closer to the ground and spread more evenly.

With a more efficient system, many irrigators can use smaller pumps that require less horsepower, reducing kilowatt demand.

Green Doesn't Mean Naive

Conservation programs are driven by consumers who have educated themselves about how energy consumption affects the environment.

Green power programs, where utility members pay a few dollars extra each month to help fund alternative energy production, have grown in popularity.

In Alaska, where BPA incentive programs are not available, members of Golden Valley Electric Association, based in Fairbanks, can participate in a sustainable natural alternative power (SNAP) program.

SNAP links members who want to produce energy from sources such as wind and solar power with members who want to buy part of their load from alternative sources.

In the Northwest, a coalition of utilities distribute green power from the Coffin Butte generating facility near Corvallis, Oregon, which converts landfill gas to electricity.

Because the Consumers Power service area is close to Coffin Butte, the utility distributes electricity generated at the facility directly to its members.

Zimmerman, the utility's communicator, says after an Earth Day promotion in April, requests to join the green power program "shot way up."

"Customers are really attuned to conservation," she says. ■