

# **APPENDIX EXHIBIT 10**

## Utilities Turn Their Customers Green, With Envy



Max Whittaker for The New York Times

A desire to keep up with neighbors is spurring conservation.

By **LESLIE KAUFMAN**  
Published: January 30, 2009

A frowny face is not what most electric customers expect to see on their utility statements, but Greg Dyer got one.

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Laura Rauch for The New York Times  
Patty Nolan and David Rabkin and their children, Alexis and Joshua, prize energy efficiency.

He earned it, the utility said, by using a lot more energy than his neighbors.

“I have four daughters; none of my neighbors has that many children,” said Mr. Dyer, 49, a lawyer who lives in Sacramento. He wrote back to the utility and gave it his own rating: four frowny faces.

Two other Sacramento residents, however, Paul Geisert and his wife, Mynga Futrell, were feeling good. They got one smiley face on their statement for energy efficiency and saw the promise of getting another.

“Our report card will quickly get better,” Mr. Geisert wrote in an e-mail message to the Sacramento Municipal Utility District.

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The district had been trying for years to prod customers into using less energy with tactics like rebates for energy-saving appliances. But the traditional approaches were not meeting the energy reduction goals set by the nonprofit utility's board.

So, in a move that has proved surprisingly effective, the district decided to tap into a time-honored American passion: keeping up with the neighbors.

Last April, it began sending out statements to 35,000 randomly selected customers, rating them on their energy use compared with that of neighbors in 100 homes of similar size that used the same heating fuel. The customers were also compared with the 20 neighbors who were especially efficient in saving energy.

Customers who scored high earned two smiley faces on their statements. "Good" conservation got a single smiley face. Customers like Mr. Dyer, whose energy use put him in the "below average" category, got frowns, but the utility stopped using them after a few customers got upset.

When the Sacramento utility conducted its first assessment of the program after six months, it found that customers who received the personalized report reduced energy use by 2 percent more than those who got standard statements — an improvement that Alexandra Crawford, a spokeswoman for the utility, said was very encouraging.

The approach has now been picked up by utilities in 10 major metropolitan areas eager to reap rewards through increased efficiencies, including Chicago and Seattle, according to Positive Energy, the software company that conceived of the reports and contracts to produce them. Following Sacramento's lead, they award smiley faces only.

"This is the next wave," said Todd Starnes, a residential energy efficiency manager with Puget Sound Energy, which started a pilot program in suburban Seattle with 40,000 customers in September.

The utility thinks behavior modification could be as effective in promoting conservation as trying to get customers to install new appliances is, Mr. Starnes said, and maybe more so.

Robert Cialdini, a social psychologist at [Arizona State University](#), studies how to get Americans — even those who did not care about the environment — to lower energy consumption. And while there are many ways, Dr. Cialdini said, few are as effective as comparing people with their peers.

In a 2004 experiment, he and a colleague left different messages on doorknobs in a middle-class neighborhood north of San Diego. One type urged the residents to conserve energy to save the earth for future generations; another emphasized financial savings. But the only kind of message to have any significant effect, Dr. Cialdini said, was one that said neighbors had already taken steps to curb their energy use.

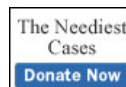
"It is fundamental and primitive," said Dr. Cialdini, who owns a stake in Positive Energy. "The mere perception of the normal behavior of those around us is very powerful."

Ms. Crawford, of the Sacramento district, said that many customers expressed gratitude for the feedback. For example, Tamara Kaestner, 36, who lives with her husband in nearby Folsom, Calif., said that since receiving her first personalized statement, she had

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bought a new energy-efficient washer and dryer, put her lights on timers and unplugged her kegerator — a cooler for draft beer. Her monthly electricity consumption is now on a par with that of her neighbors, Ms. Kaestner said.

Colleges have been using rivalry between themselves and even between dormitories to reduce energy use for over a decade, and they are refining their techniques.

At Central College in Pella, Iowa, students in a new green dorm can go to the school's Web site to find out how much power their suite is using and compare it with that of other suites.

"It gets pretty intense," said Michael Lubberden, director of facilities planning and management for the college. "The students even go off campus to charge their cellphones."

Competition among homeowners is still rare, but is becoming more widespread. In Massachusetts, the BrainShift Foundation, a nonprofit that uses games to raise environmental awareness, recruited towns to compete in a reality series, called "Energy Smackdown," which is shown on a local cable station.

At the start of this year's season, 10 families from Cambridge, Medford and Arlington formed teams and competed against one another in conservation categories that included waste, heating fuel, electricity and food. Patty Nolan, 51, who lives in Cambridge with her husband and two children, agreed to participate because, she said, although family members thought of themselves as "environmentally conscious," they knew they could be doing more.

But her motives shifted after eight months of trash weigh-ins and comparative meter readings.

"At the beginning, the competition wasn't what interested me," Ms. Nolan said, "but then when we lost a challenge to Arlington by one pound of carbon, I realized I really wanted to win."

Though keeping two cars, Ms. Nolan said, the family is now much more conscious about everyday choices. They use bicycles more often, they have cut down on eating beef (raising cows requires more energy than raising vegetables), and they argue about whether airplane travel is really necessary.

"It really blows your monthly carbon budget," Ms. Nolan explained.

Donald Kelley, executive director of the BrainShift Foundation, said the conservation outcomes of the competition had been far greater than he had predicted, with households reducing consumption up to 66 percent.

"As Americans, we are good at entertainment and competition," Mr. Kelley said. "It's why on 'American Idol' they get 40 million voters. It's the part of this culture that people really understand, and we should be harnessing it."

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