



The Regulatory Assistance Project

Green Power Newsletter

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Do businesses care about green power?

It is widely believed that businesses are bottom line-oriented, and given choices about electric power supply, businesses will search for the cheapest offer as long as reliability is not at risk. Experience shows that many small businesses, like residential consumers, care about other attributes of their power supply.

Larger companies may buy green power to reinforce a healthy, outdoorsy product image; out of an ethical responsibility to do the right thing for their workers, their communities and their planet; to demonstrate community leadership; to increase employee morale, especially with an environmentally-conscious workforce; or to improve a poor environmental image.

In **Traverse City, Michigan**, about two percent of the utility's business customers signed up to pay an average premium of 19 percent (\$27 per month) to buy energy from the wind. These small businesses support over one-third of the output of Traverse City's 600 kW wind turbine.

Traverse City small business participants bought clean power for a variety of reasons: a personal, environmental philosophy; to show business leadership in the community; and for resource diversity.

Portland General Electric, believing that a few large corporations would be interested in choosing a green option, recently received approval for a renewable energy tariff strictly for its largest customers. PGE chose this route for two reasons. First, a low participation rate can still have a significant impact on demand for renewables. Second, one-on-one marketing with existing account reps can be much more cost-effective than mass marketing.

About 200 customers are eligible by virtue of a one MW capacity. The price premium is about one cent above the standard tariff, resulting in an energy charge of 4.6 to 4.9 cents depending on the voltage service level. Participants must commit to purchase renewable energy for one year. The tariff contemplates wind, solar and geothermal resources, but wind is the first project being undertaken.

Large consumers may not want to pay a premium on every kWh, so PGE allows participants two options for purchasing a portion of their energy from renewables. They

can specify a percentage, minimum of three percent, or specify a monthly energy quantity, at a minimum of 20,000 kWh.

Although PGE is now talking to customers about the tariff, none are ready to announce a purchase. However, in 1995 the City of Portland, Oregon, as a customer of PGE, began purchasing 2.1 million kWh of new renewable electricity, or five percent of the load of its six largest accounts. And in March 1997 the City signed for an additional 1.9 million kWh as five percent of its street lighting load. Although the renewable premium adds to the cost, the City has been able to achieve *net* cost reductions by purchasing the remainder of its energy at market prices that are lower than what they had been paying.

While market price reductions may not be possible for every situation, the concept suggests a possible sales approach: Share the savings with renewable energy. For example, an energy marketer could offer a package of environmental control technology and energy efficiency, and use a part of the energy cost reduction to pay for the renewable supply.

Other businesses might be attracted by the offer of pollution reduction credits earned by their purchase of clean energy. In any case, most businesses value public recognition for their renewable energy purchases. Just follow the advice of the old Fats Waller song, "Find out what they want, and how they want it, and give it to 'em just that way!"

Traverse City: Steve Smiley (616) 386-9232

PGE: Doug Kuns (503) 464-7891

Massachusetts Electric Pilot Program for retail access began in January with a more controlled approach than the marketing free-for-all experienced in New Hampshire (see *Green Pricing Newsletter*, No. 4). The number of participants--about 4,500 residential and 269 small business customers--was smaller than in New Hampshire, but most important, the competitive suppliers were selected via an RFP process. Fifteen companies offered 42 bids. Six suppliers (nine offers) were selected by the program administrator to compete in the pilot program. Three bids were selected on the basis of low price, four on the basis of green generation or other green efforts, and two were "other options."

Mass Electric sent an information booklet including a menu of choices and a "ballot," to each of the participants.

One important result is that 31 percent of the residential consumers chose one of the green options. At 16 percent, Working Assets Green Power received the largest market share. It charged a premium of 24 to 46 percent compared to the three low price options. When taking into account the additional green benefits and the low price sign-up bonuses, the price premium ranged from ten to 54 percent. This supports years of market research that says that consumers are interested in environmental choices.

On the other hand, two of the green options were either cheaper than the so-called low price options or carried only a small premium. Also, regardless of which choice they made, consumers would save compared to their bill before the pilot program, just by participating. While choosing a green option might be more expensive than choosing the lowest price, it still delivered savings.

The green options were distinguished primarily by the add-on features such as donations to environmental groups, a raffle for an electric vehicle, retirement of SO₂ allowances, and energy conservation products. In terms of energy sources, one product was all hydro while the other green options offered various blends of fuels.

The lack of emphasis on *new* renewables is probably due to the short (one-year) duration of the pilot program, the need to contract for supplies quickly and the need to be price-competitive. Permanently open, larger markets and a better understanding of the green market segment may lead to greater innovation and more emphasis on the generating resource in the future.

Mass Electric: Maureen Hall Gatti

(508) 389-3036

Environmental Futures (prog. administrator): Steven Rothstein (617) 443-1300

Colorado Turns to Wind

A cluster of wind programs has recently been launched in Colorado. In February, the Colorado PUC approved a settlement agreement between **Public Service Company** and intervenors. PSCo will sell the wind energy to residential and small business customers in 100 kWh blocks, up to each customer's total load, for a premium of \$2.50 per month per block. The premium is based in part on market concepts and not specifically on the incremental cost of the wind energy.

Large business, industrial and governmental electric customers may buy wind energy in 1000 kWh blocks, at \$25 per month extra. They may choose a percent of their total electricity use, or purchase an amount representing all or a portion of the output of a wind turbine. Imagine a Coors wind cluster!

Small customers will be required to make one year commitments, and large customers will be asked to sign up for three years.

Sales made under the wind energy tariff will not be subject to the energy cost adjustment clause otherwise allowed by the PUC. This will insulate the wind energy sales from fuel price fluctuations.

PSCo has committed to develop about 10 MW of wind generation in Colorado if the demand is sufficient. This capacity may be expanded to 20 MW with the tentative award,

by the US DOE to the Colorado Office of Energy Conservation, of \$3 million to buy down the cost of wind energy, ensuring the \$2.50 per 100 kWh premium for all 20 MW.

PSCo's shareholders are responsible for all costs associated with the construction and operation of the wind project. None of the project risk will be borne by non-subscribing ratepayers. Subscribing ratepayers bear some risk of wind plant under-performance, but if the actual capacity factor falls below 95 percent of the expected capacity factor, PSCo will credit the participating customers proportionately.

The approval of the PSCo program has opened the gate to other smaller utilities in Colorado to follow suit. **Holy Cross Electric Association**, a rural electric cooperative serving 40,000 customers in western Colorado, will buy wind power from PSCo for resale to its customers on the same terms. **Aspen Municipal Electric Utility**, which serves about 2,000 customers, will do the same, and several other utilities have also expressed interest.

Colorado Springs Electric Department is another municipal utility that is interested in offering its customers wind energy at a premium price. It will negotiate for some of the output from the PSCo wind project, and is currently developing a marketing plan. Details are not yet available.

PSCo will join forces with environmental and community-based organizations and local governments to market the wind power. For example, the Land and Water Fund of the Rockies will help market *Windsource* initially to the city of Boulder. And Randy Udall, director of the Community Office of Resource Efficiency, a community based organization that is helping Holy Cross and Aspen market *Windsource*, recently sold 100 blocks of wind power (120,000 kWh for one year) to the Town of Snowmass Village.

PSCo: Steve Dayney (303) 329-1194

LAW Fund: Rudd Mayer (303) 444-1188

CORE: Randy Udall (907) 544-9808

Colorado Springs: Jay Francis

(719) 448-8634

Fort Collins Light & Power

The municipal utility of Fort Collins, Colorado, began marketing wind energy to its customers last September (see *Green Pricing Newsletter*, No. 4). Separate from the PSCo activity described above, Fort Collins has over 650 customers signed up (including 10 Fort Collins businesses), which is enough for two 350 kW wind turbines. Their development site is near Medicine Bow, Wyoming.

Fort Collins: Steve VanderMeer

(970) 221-6700

Sacramento Municipal Utility District, whose PV Pioneers program for customer-sited rooftop photovoltaics has been widely reported, will soon begin offering other renewable energy options to its customers. Beginning in June 1997, it will launch the SMUD Community Solar Program. The additional one to two cents per kWh that customers will pay will accumulate in a fund to support solar PV panels on community buildings. Eventually SMUD hopes to entertain project proposals from community groups. Customers may be able to direct their added payment to the project of their choosing.

A second new alternative, the renewable energy option, will be tied to specific contracts for renewable resources that are within two cents per kWh of the expected market price. Participating customers will select the premium: no less than 0.5 cents and no greater than two cents per kWh. Customers paying the full premium will be recognized as 100 percent renewable energy customers. Initially SMUD will use short-term purchases of existing renewable resources that would not be on the market but for the premium payment, while it seeks new renewable projects.

The PV Pioneers program, now with about 420 participants, will continue without changes. In addition, in 1998 SMUD will begin a voluntary contribution program linked to the public goods program fund required by California law. Some of this money may be used for PV Pioneers II--a new program for customer-owned PV panels. The public goods fund will buy down the cost of the rooftop PV and SMUD will finance the remaining cost.

SMUD: Bud Beebe (916) 732-5254

Cooperative Power (CP), a generation and transmission cooperative located in Eden Prairie, Minnesota, and several of its distribution cooperative members, are teaming up to bring a green rate for wind power to their members. The program will be similar to the PSCo tariff described above in that it is a subscription-type program, offers wind energy in 100 kWh blocks and is available to all customer classes. Customers may purchase as many blocks as they wish up to their normal monthly energy use. However, there is no differentiation between customer classes in terms of the length of the commitment. All participants will be asked to subscribe for 12 months.

The premium will be based on the actual incremental cost of the wind energy, estimated to be \$3-\$4 more per month. The incremental cost will be determined annually by truing up the difference between contract obligations and wind energy revenues, and will include O&M costs. In this way the performance risk will rest totally with participating customers.

CP serves 17 member coops. Any member system may elect to purchase a specified amount of energy and capacity from CP. So far, nine of the distribution coops, including

the largest, **Dakota Electric Association** (DEA) with 75,000 members, have agreed to market the wind power.

To select a wind project, CP issued an RFP. Three proposals will make the short list. The winner will be determined in part by the amount of energy subscribers sign up for. Turbines should be operating by early 1998.

CP: Tim Seck (612) 949-8264

DEA: Charlene Klein (612) 463-6178

Hawaiian Electric Company (HECo) on Oahu and its subsidiaries Maui Electric Company (serving Maui, Molokai and Lanai) and Hawaii Electric Light Company (on the Big Island), launched a two year pilot program in November called Sun Power for Schools. Contributions will help fund small photovoltaic systems at participating schools. Schools are chosen by the State Department of Education based on a commitment to develop a renewable energy education curriculum, as well as on physical criteria for the buildings. The three utilities are providing \$140,000 of R&D money into the fund to ensure that several school projects will be completed. UPVG TEAM-UP funds will also support additional installations.

The program offers customers a lot of flexibility in how they make contributions. The sign-up card suggests customers choose a monthly amount or \$1, \$2, \$5, \$10 (or a blank for "other"). It also suggests one-time contributions and quarterly or semi-annual contributions which will be billed separately from the electric bill.

Program literature contains considerable information about renewable energy in Hawaii. The utilities explain how electricity is produced and about renewable energy generally. These have been tailored to the different customer attitudes and issues on each island.

HECo: Art Seki (808) 543-7987

Austin Electric Utility Department has introduced its Solar Explorer program, one of the PV-friendly pricing programs supported in part by the Utility Photovoltaic Group. A Solar Explorer is an Austin Electric customer who is willing to pay \$7 per month for the installation and maintenance of a 100 Watt block of a larger solar PV power plant. It is similar to Detroit Edison's SolarCurrents program in that customers are buying a unit of capacity rather than energy. Participating customers are asked to commit for two years.

Austin Electric hopes to install ten PV plants in 1997, for 257 kW. This means that 2,570 100 Watt units must be sold. Austin Electric is seeking host sites for the PV plants on commercial buildings, parking garages or parking lots. The site owner may help sign up employees as well as customers.

Austin Electric: Leslie Libby (512) 322-6290

Arizona Public Service (APS) won approval last November of an experimental Solar Partner Pilot Tariff. Residential customers may buy capacity from a central station PV plant in 100 W blocks for a premium of \$2.64 to \$3.15 per month, depending on their current rate. Based on expected output, the added cost of the energy is 18 to 24 cents per kWh. The premium does not cover the full incremental cost, as the project enjoys partial funding from the Utility PhotoVoltaic Group's TEAM-UP Program, and an Arizona Corporation Commission requirement that APS spend at least \$3 million per year on renewables.

Customers are required to sign up for a minimum of two years. The tariff is available until January 1, 1999 or until 400 kW of solar capacity is installed.

Marketing trials began in Flagstaff at the end of April, and then will be expanded to a larger market by the end of the year.

APS: Cassius McChesney (602) 250-3124

Wisconsin Electric Power Company's Green Rate program has reached nearly 5,000 customers as WEPCo continues to do direct mail and telemarketing follow-up. Customers can choose between 25, 50 and 100 percent of their electricity from hydro and biomass energy. The 25 percent option has been the most popular (about \$2.75 per month extra), but there is strong interest in the 50 and 100 percent levels as well.

In the first year WEPCo offered a combination of hydro and biomass from out of state. For its second year, WEPCo will add several new suppliers to the program, all Wisconsin-based. These include new and existing hydro (some of which was at risk of being shut down), and a renewables aggregator looking at new landfill gas plants. The price structure (two cents per kWh premium) will remain the same.

WEPCo: Chris Schoenherr (414) 221-2798

Why the Newsletter Name Change

Those who read this newsletter closely will notice that its name has been changed from *Green Pricing Newsletter* to *Green Power Newsletter*. This name change reflects the changing ways that green electricity is being offered to consumers.

For the last several years, only regulated utilities, because of their monopoly status, could offer their customers a green choice. Green pricing is a regulated product offered by monopoly utilities to increase customer satisfaction and to gain marketing and technology experience. The utility charges a premium for renewably-generated electricity that it would not otherwise have developed, hence the name green pricing. Until recently, customers who wanted this kind of product could only buy it from their regulated utility.

That situation is changing. Deregulation will allow consumer choice of competitive providers, some of whom will market a product with a mix of attributes (dark green, light

green or green gimmicks). The price may be higher than the lowest market price, but will still be market competitive or the product won't sell.

Green Pricing Resource Guide

The Regulatory Assistance Project has recently published the *Green Pricing Resource Guide*, a manual intended both to educate utilities, marketers, regulatory commissions, renewable energy advocates and developers, and to provide "how-to" advice for program planners. It also includes a description of each of the green pricing programs on offer as of 1996. The *Green Pricing Resource Guide* was written by Ed Holt and supported by funding from the US Environmental Protection Agency, the Pew Charitable Trusts and The Joyce Mertz-Gilmore Foundations. It is available free from RAP by calling (207) 582-1135, or e-mail to <rapmaine@aol.com>

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