



# *The Regulatory Assistance Project*

## *Green Pricing and Restructuring*

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Does electric industry restructuring affect green pricing? The short answer is green pricing is compatible with any industry structure. Indeed, green pricing was initially developed to bring the power of customer preference to an industry with no retail choice.<sup>1</sup> If green pricing could be made to work in a regulated, retail monopoly world, it should be an easy fit in a wide variety of restructuring models.

The question raised by electric utility green pricing experience thus far is whether the product and marketing innovation that many envision in a competitive retail model can be matched in either a traditional cost-of-service or competitive wholesale model.

### **Green Pricing in a Range of Models**

One restructuring model limits competition to wholesale markets in which utilities continue their supply and distribution monopoly, but they own no generation. All generation is purchased in a competitive market where bids are evaluated based on price and non-price factors.

Green pricing under this model offers customers an optional, environmentally preferred service. Customers who opt to participate affect a utility's purchasing choices. Any added cost is reflected in a price premium.

Another wholesale model might limit utility recovery of generation cost to the spot market price. In this case, utilities would probably avoid the risks inherent in long-term contracts and rely fully on the spot market. Not only would electricity prices be more volatile, but without long-term contracts, capital intensive renewables would probably suffer.<sup>2</sup> In this situation, green pricing would become an optional service that allows customers to accept *some* market price risk in return for price stability and environmental benefits from renewables.

Under a retail access model, customers choose their supplier directly. Green pricing becomes a product offered by one or more competitors with the price of green power set by market forces. Customer demand will be influenced by both price and the value customers attach to the environmental and other qualities of the green product offered.

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<sup>1</sup> David Moskovitz, "Green Pricing: Why Not Customer Choice?" *The Electricity Journal* 6:8 (October 1993).

<sup>2</sup> See "Wholesale Competition" and "Renewables in a Competitive Environment" in *Perspectives in Electric Utility Restructuring*, published by The Regulatory Assistance Project (February 1996).

Suppliers will offer new products and services in an attempt to distinguish themselves from competitors and to appeal to customer interests. In a competitive market, the price of green products will reflect the cost of meeting customer demand.

Being *compatible* with any conceivable industry structure, however, does not mean green pricing will be equally *successful* under any model. Experience to-date shows that product design and marketing strategies of existing vertically integrated monopoly utilities typically falls far short of what we observe in competitive consumer markets.

### **How Is Green Pricing Being Marketed?**

Some utility news releases and program literature emphasize things that can undermine consumer confidence. Stressing that “participation is voluntary” obscures the point that consumer purchasing decisions are always voluntary. Stating that any agreement with a renewable developer “will contain performance guarantees” suggests that renewables are less reliable than other energy sources. “Funds collected” (not the term a retailer uses to describe revenue) will be held “in a separate auditable account,” unintentionally hints that perhaps scoundrels are in charge! Green pricing “will not raise other peoples’ bills.” Does Ford Motor Company need to tell consumers that selling a Taurus will not raise the cost of an Escort?

There is a lot of emphasis on the extra amount that must be paid. Today there is a cost premium; tomorrow there is just a price. Cellular services don’t advertise how much more they cost over a standard telephone service. They emphasize value and features.

Utilities with fossil-based generation have an internal conflict with the marketing message of green power. They are unlikely to say, “Buy more renewable energy and help displace our dirty power plants!” Because they own the base product, they want it to continue to be seen in a good light. As a result, the message is likely to be much fuzzier: “We’re already cleaner than we need to be, but if you’ll pay a little more we will develop renewable resources.”

We haven’t seen the sharp messages developed to compare Pepsi and Coca-Cola, but what would an independent green marketer say about the utility’s product? In a truly competitive market, the green marketer would undoubtedly appeal to consumers’ environmental values.

### **Competitive Products**

In a competitive retail market, will customers buy from one supplier because it gives them a chance to donate to a renewables fund?

Will consumers buy a more fuel efficient electric vehicle if they must pay into a fund, and only when there is enough money in the fund, will the manufacturer build it?

Will paper companies allow consumers to buy recycled paper only if they first promise--even sign a contract--to continue buying for two, three or ten years?

Will Post *Raisin Bran* compete with General Mills *Wheaties with Raisins*, based on rounding up the price to the next whole dollar (even if the extra pennies are used to feed starving children)?

These are concepts currently used in the design of utility green pricing. Ben & Jerry's Ice Cream offers a tasty product, and the company is well known for donating a portion of pre-tax earnings to social and environmental causes. Perhaps some people buy Ben & Jerry's because of the company's charitable orientation, but Ben & Jerry market their product as simply being good.

It can be argued that electricity is not food, cars or paper, but that argument misses the point: A competitive product must be designed primarily to appeal to consumer interests, not to protect the supplier against risk. The introduction of any new competitive product involves risk. If it can be designed to mitigate risk to the supplier, so much the better.

### **What to Do Absent a Retail Market?**

Green pricing is still in need of product innovation and aggressive marketing. The uncertainty and duration of the restructuring transition make it difficult to think outside the traditional box. Although we are not yet in a competitive retail market, utility planners need to learn from other industries. Product innovators must begin thinking they are in a retail world in order to develop products that can be differentiated and promoted like other consumer products and services.

### ***Green Choice or Green Scam?***

Stockholm Energi offered customers the opportunity to "choose" electricity from hydro, nuclear or locally-cogenerated power for an annual charge of 240 SEK (about \$35). In Sweden, 45 percent of existing electricity resources is hydro, 50 percent is nuclear and most of the remainder is combined heat and power. Since these resources are already being supplied, Stockholm customers saw no reason why they should pay more for the right to choose. Stockholm Energi would not guarantee that the chosen resource would actually run any more than normal. Following a public outcry, Stockholm Energi will let customers "choose" their power resource without the annual charge. Customer choice, they say, will influence what resources the utility develops next. The lesson? If customers are going to pay more, they must get something for it.

### ***Green Pricing Program Updates***

#### **Traverse City Light & Power**

TCL&P's 600 kW wind turbine will begin producing energy this spring. Once it is commissioned, 245 residential customers and 18 commercial customers will begin paying

the green rate of 1.58 cents/kWh. Several things are significant about TCL&P's program. First, the average monthly residential premium of \$7.58 (23 percent of the average residential bill) is the largest of any of the US green pricing experiments to date. Second, the customer participation rate is 3.3 percent, perhaps the best overall participation level seen so far. Third, the participation by commercial customers shows that some businesses will be willing to pay more for cleaner energy. TCL&P's experience shows that with the right combination of features, product design, credibility and tangibility, consumers find added value in environmentally-preferred renewable energy.

### **Niagara Mohawk Power Corporation**

NMPC launched its GreenChoice<sup>SM</sup> program in late summer 1995. It followed up with targeted mailings in November, from which it received a response of 0.6 percent. Dissatisfied with these results, NMPC may put program implementation on hold for several reasons: possible confusion of GreenChoice<sup>SM</sup> with PowerChoice, NMPC's restructuring proposal; their 1996 emergency and 1997 rate cases; the New York State economy and customer satisfaction issues. These factors, together with high rates (one-quarter of NMPC customers are in arrears) have led to public trust and credibility problems. Also, shareholders were paying for program marketing at the same time that NMPC did not pay a dividend. A decision about the program is expected later this month. If implementation is put on hold, NMPC will refund the money paid by participating customers.

Despite these problems, NMPC's program is uniquely designed to handle the risk of customers dropping out. Other programs either must find replacement customers to continue paying for projects already committed to, or they require customer commitments for up to ten years. To avoid this risk, GreenChoice was designed so that all kWh are paid for in advance. The energy that a customer's premium buys each month will be received over a ten year period instead of all of it being delivered within one year. The amount received in any given year is smaller, but in addition to reducing the risk of "overhang," each payment is buying *new* renewable energy rather than picking up the slack from a former participant.

### **Detroit Edison Company**

In September 1995, Detroit Edison announced SolarCurrents to give customers an opportunity to buy a share of capacity of a 28.4 kW photovoltaic system installed at company facilities near Ann Arbor, Michigan. For \$7.30 per month, residential customers may purchase 100 watt increments of capacity. In addition, customers pay 4 cents per kWh for the energy output of their share, estimated to be 140 kWh per year. Because this displaces energy purchases at the usual price of approximately 10 cents per kWh, the net monthly cost is estimated to be \$6.59 for each 100 W increment purchased.

Charges for the solar energy service and kilowatt-hours produced will be itemized on the regular electric bill. It will show the customer's total electricity consumption and the amount produced by solar energy.

Residential customers who participate must sign a two year contract. Commercial customers may also participate.

As of February 1996, Detroit Edison had about 200 subscribers, enough to go ahead with the project. The PV system is expected to be on-line by May 1996, and will cost \$250,000, of which \$113,600 is covered by a grant from the Utilities PhotoVoltaic Group (UPVG).

### **Public Service of Colorado**

In August 1995, PSCo added a new option to its green program. Customers can request that their bills be rounded up to the next whole dollar and the extra amount, averaging \$.50 per month, is donated to the renewables fund. They also re-named the program The Renewable Energy Trust, made it tax deductible, and will send year-end statements to contributors. The bill round-up has made a big difference to PSCo's program. In 1995 the Trust accumulated \$113,000, of which \$110,000 came from customers who accepted the round-up option. The round-up option nearly doubled the number of participants to 12,000-13,000, about 1.4 percent of residential customers.

### **Gainesville Regional Utilities**

GRU in Florida will complete installation of a 10 kW PV system in late summer 1996. GRU operates a green donation program similar to PSCo's, and like PSCo's it has been in operation since October 1993. GRU ratepayers will donate \$60,000, with additional funding coming from the state, UPVG and U.S. DOE.

Customers may make a one-time donation, or they may elect an amount to be added to their monthly bill as a separate line item. About 63 percent of participants have selected the monthly donation, and the average amount donated using this option is \$3.27. The one-time donation averages \$40.25. Cumulative participation to February 1996 is about one percent of residential customers.

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Comments and suggestions are welcome.