

Summary of the Third National Green Power Conference:

Selling Green Power in Competitive Markets

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OVERVIEW

Green power is a market-driven product developed to meet expressed customer preference for electricity derived from renewable sources such as solar, wind, biomass, and geothermal. Over the last several years, more than 30 electric utility companies have designed green power service options for their customers as differentiated from the standard utility service. And now, as state electricity markets start to open to competition, a new industry is emerging to sell competitively priced green power products and services to discriminating consumers.

In June 1998, the **U.S. Department of Energy** (DOE) and the **Electric Power Research Institute** (EPRI), in association with the **Edison Electric Institute** (EEI) and the **Renewable Energy Alliance** (REA), organized the Third National Green Power Conference in Sacramento, California. The theme of the conference, "Selling Green Power in Competitive Markets," recognized that moving toward competitive electricity markets will have a significant impact on the green power industry's development. The **Sacramento Municipal Utility District** and the **California Energy Commission** (CEC) served as local hosts for the conference.

More than 120 conference attendees gained insight and perspective on emerging green power markets from representatives of the green power marketing industry as well as from regulators, utilities, public interest groups, and electricity customers. General consensus seemed to be that, as electric industry restructuring unfolds, market potential for green power services should expand substantially. However, the pace and extent to which the market develops will depend on supportive market rules and policies.

Several key messages emerged from the one and a half-day conference:

Consumers, when informed, will consider more than price in making electricity purchase decisions.

Market research shows that most consumers don't know where their power comes from and think that electricity generation is cleaner than it actually is. However, when consumers are informed and educated about the environmental differences among generation sources, they are willing to pay more for cleaner energy sources. A series of utility-sponsored "deliberative polls" in Texas reinforce these findings. Business customers also value clean energy choices and will be willing to make green power purchases either as a competitive business advantage or as a way of reinforcing the company's own environmental ethic.

Consumer information, education, and marketing will be key to the success of the green power marketing industry.

At the same time, consumers must be assured that the products they are purchasing actually result in environmental improvement. Several efforts are underway at the state and national levels to design and implement information disclosure, as well as to certify green power and to establish advertising and marketing guidelines.

The nature of rules adopted for the competitive marketplace will strongly influence the pace and development of green power markets.

Several green power marketers noted that new rules and mechanisms being established for restructured electricity markets are critical both to the development of competition in general and the success of green power markets in particular.

Attendees used the different rules that marketers face in California, Massachusetts, and Pennsylvania as examples. In California and Massachusetts, there is no retail energy price margin against which marketers can compete, so these markets will be “value-added” markets only. In these states, marketers must sell green power on its virtues at a premium to the retail price. Pennsylvania provides customers with a retail “shopping credit,” which creates a retail energy price margin. As a result it is expected that, at least over the short term, Pennsylvania will provide the best market environment for green power sales.

States can support emerging green power markets with appropriate policies.

Both California and Massachusetts restructuring legislation adopted the use of a system benefits charge (SBC) to support renewables during the transition to competitive markets. In California, the SBC will be used to support a combination of existing, new, and emerging renewable technologies in the state. In Massachusetts, the fund will be used to create incentives for change in the marketplace, rather than to subsidize existing technologies.

In addition, specific policies can be adopted to support developing green power markets. In California, a portion of the SBC funds will be used as customer rebates for green power purchases, as well as for consumer education. And in Texas, the Public Utility Commission is considering a rule that would require all electric utilities in the state to offer a green power tariff to their customers.

The number of utility green-pricing programs continues to grow.

More than 30 utilities now have either developed or announced plans to develop green-pricing programs for their customers. These programs differ in size, pricing, customer targets, and other factors. Key elements of successful green-pricing programs identified by panelists included the need for strategic partnerships to effectively drive the market, customer aggregation, well-designed tariffs, and focused, clear programs that can demonstrate environmental benefits.

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KEYNOTE ADDRESS

After a brief welcome and introduction from **Jan Schori**, general manager of the **Sacramento Municipal Utility District**, Commissioner **Michal Moore** of the **California Energy Commission** (CEC) presented an overview of the Commission's renewable energy programs under California's electric industry restructuring law (AB 1890). AB 1890 provides for a transition to a fully competitive retail electricity market by allowing the investor-owned electric utilities the ability to recover their "stranded costs" over a 4-year period. The law also includes provisions for renewables and other public benefits programs. The CEC is charged with implementing the renewables program.

The overall purpose of the renewables program is to make the renewable energy industry competitive in California's electricity marketplace by the end of the 4-year transition period. To accomplish this, the CEC has established incentive programs for existing, new, and emerging renewable technologies, along with a system of rebates for consumers who purchase green power in the competitive marketplace. Among the goals of the program are to reward the most cost-effective suppliers of renewable energy, to develop a certification program for renewable energy, and to maximize the overall effectiveness of the fund.

Commissioner Moore provided the following examples of the CEC's progress in implementing its renewables program responsibilities:

- Fifty-six separate project bids were received in response to the solicitation for the new projects incentive fund, representing more than 600 MW of new renewables capacity.
- Ten companies have registered to participate in the customer credits program, offering 24 different electricity products with renewables content.
- The CEC has developed a "power content label," which will enable consumers to better understand their electricity choices. With the label, consumers can see at a glance the fuel sources and technologies used to create the electricity products they are offered.

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OVERVIEW OF U.S. GREEN POWER MARKETING

Ed Holt, of **Ed Holt & Associates**, provided a detailed overview of the domestic green power market. He reported that more than 40 green-pricing programs are being marketed by utilities with an average market penetration of about one percent and average premiums of between \$1.82 and \$7.49 per month. Mr. Holt noted that in some states these programs mark the beginning of the transition to competition, while in other states green-pricing programs may offer the only alternative service choices to customers for the foreseeable future.

In those few states where competition is being introduced, about a dozen green power marketers are currently active. However, these marketers face many obstacles such as high customer acquisition costs, slim profit margins, and the customers' slow pace of switching suppliers. Mr. Holt stressed that the success of green power marketing will depend on a host of factors including conducive market rules, supportive renewable energy policies, public education, use of environmental partnerships, recognition of multiple market segments, and product innovation.

Mr. Holt surmised that as a new market product, green power would follow the typical "S-shaped" product diffusion curve, capturing niche markets in the earliest stages and penetrating mainstream markets over the next 10 to 20 years. The speed with which green power penetrates mainstream markets will depend greatly on the success factors described above.

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PANEL DISCUSSION—IS THE MARKET WORKING?

The California electricity market opened to direct retail access on March 31, 1998. Several companies are marketing “green power” to customers, in both wholesale and retail markets, with a handful of other companies poised to enter the market.

Panelists were asked to discuss their experience of selling green power in the California market. What are the products being offered? Has green power marketing been successful or is it still too early to tell? What are the important measures of success? What about the market is working well and what is not? What lessons are being learned that can aid the development of competitive green power markets in other states?

The panelists identified several market needs. Most importantly, new rules and mechanisms established for restructured electricity markets are critical both to the development of competition in general and the success of green power markets in particular. A coordinated effort is needed among policy makers, marketers, trade and advocacy groups, and consumers to ensure that the restructuring of the nation’s power markets leads to the increased use of renewables and, ultimately, to a cleaner environment. Also, absent a coordinated effort at the state or federal levels, it will be up to the green power marketers to change the way consumers perceive electricity generation and its environmental impacts for green power to be more than a specialty market niche. This means that a disproportionate amount of industry resources will be required for marketing and education.

Ryan Wisler, of **Lawrence Berkeley National Laboratory**, provided an overview of the green power market in California and products currently being offered. Approximately 100,000 customers, or 1% of all eligible customers, have requested to switch suppliers. While price competition is causing business customers to switch, residential customers have more limited choices because of the combination of high customer acquisition costs and low default electricity prices. Eleven of 16 residential marketers will offer green power products with prices ranging from 0.7¢/kWh to 3.4¢/kWh more than the California Power Exchange (PX) price, which represents the wholesale price.

The green power market has also spawned a new segment of industry intermediaries, such as wholesale suppliers, resellers, and a green power exchange. There are also a large number of green power products with high levels of environmental quality and marketing credibility. Mr. Wisler concluded that the success of California’s green power market will ultimately require the coordinated efforts of marketers, policy makers, trade associations, advocacy groups, and consumers.

Bud Beebe, Greenergy program director at the **Sacramento Municipal Utility District**, discussed the importance of marketing for green power. Most consumers do not know that they have power choices and view electricity as “something that comes with the house” rather than a product that they purchase. Since consumers do have a general sense of the environmental benefits of renewables, Mr. Beebe suggests avoiding lengthy descriptions of renewables and instead focusing on the development of marketing shorthand. The emphasis should be on getting customers comfortable with the fact that they do have a choice about how their electricity is created.

Julie Blunden, vice president of new markets for **Green Mountain Energy Resources**, emphasized that consumers consider more than price in their purchasing decisions. This point is central to the success of green power as a value-added electricity product. In fact, Green Mountain’s least expensive green-power product has been the least popular among California customers. At the same time, the rules under which competitive electricity markets are being developed will make or break the market for green power. To illustrate, Ms. Blunden described the different rules that marketers face in California, Massachusetts, and Pennsylvania.

In California, marketers must compete against the wholesale electricity price. Since there is no retail price margin, California is a value-added market only. In Massachusetts, the default electricity price to consumers was set *below* the wholesale price and thus alternative suppliers are generally avoiding this market altogether. Pennsylvania instituted a “shopping credit,” which provides for a retail energy price margin. Also, customers must actively switch suppliers to take full advantage of the price reductions available in the market, which will encourage a relatively high number of customers to switch. In both California and Massachusetts, all residential customers receive a guaranteed rate reduction, regardless of whether they switch suppliers.

Ms. Blunden also discussed the key marketing messages being used to attract customers in the California market. First, customers must understand that they have a choice for their power supply. Second, they must know that the reliability of their electricity service will be unaffected by switching suppliers. Finally, customers must make the connection between electricity generation and pollution and understand that they can positively affect the environment by choosing green power.

Jan Pepper, of the **Automated Power Exchange (APX)**, reported on the opportunities for both buyers and sellers of green power in the APX Green Power Market. APX operates a week-ahead, hourly market that matches buyers and sellers of 100% renewable power at any time based on the “brown-market” price of power plus a green premium that is determined by supply and demand in the green power market. Ms. Pepper reported that the green premium has been averaging about 1¢/kWh in the APX. The virtues of the APX Green Power Market include a diversified portfolio of sellers and buyers, ease of use without complicated auction rules, and prices that reflect market valuation of renewables.

In the future, Ms. Pepper envisions the market moving to a wholesale green ticket system in which green power is split into two components—energy delivered in real-time and a green ticket representing the actual greenness of the power. This will allow the green premium to be traded over longer periods than hourly and provide additional opportunities for generators of intermittent renewable power supplies.

Janel Guerrero, of **Enron Corporation**, spoke on behalf of the **Renewable Energy Alliance**, a trade association of green power marketers of which Enron is a founding member. The Alliance was formed to ensure that electric industry restructuring leads to increased use of renewable power sources and a cleaner environment. Ms. Guerrero endorsed many of the earlier comments about the importance of market rules in assuring the development of robust competition.

Ms. Guerrero also discussed some activities of the REA, which include testimony and other comments regarding disclosure requirements, customer credits, advertising, and education efforts in Massachusetts, Pennsylvania, and California. The group is also working on a position paper on information disclosure and a set of restructuring principles to support developing green power markets.

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PANEL DISCUSSION—WHAT IS THE MARKET?

Market research results consistently indicate that a high percentage of consumers prefer cleaner energy sources and are willing to pay more for these sources. Less well known is how these consumer preferences might translate into purchase decisions by larger customers, particularly among municipalities and businesses. To date, only a small number of California businesses and municipalities have made green power purchase commitments.

Panelists were asked to describe possible motivations, as well as barriers, for municipalities and businesses to purchasing green power. What types of green-power products and services are attractive to larger customers? To what extent can municipalities and businesses play a role in aggregating loads or otherwise facilitating green-power commitments by other electricity customers?

Burk Kalweit, of **EPRI**, described EPRI-sponsored market research on “green” customers. As with other studies, EPRI research has identified a core market segment of about 25% of consumers who are most inclined to purchase green, with somewhat larger segments (totaling 37%) having lesser interest. Surprisingly, EPRI found that *all segments* could be swayed with the right marketing messages. Commercial customers generally have a low awareness of green power but do understand that green-power purchase commitments can project a positive corporate image and be a useful marketing device. Mr. Kalweit believes that the commercial opportunities for green power are probably larger than generally believed and that the ultimate success of the business lies with customer segmentation and education.

Steven Kelly, of the **Independent Energy Producers Association**, described the **Renewable Energy Marketing Board (REMB)**—a new nonprofit organization formed to promote renewables and persuade customers to switch (to green power) in California’s competitive electricity market. The REMB has established a Renewable Energy Promotional Campaign to publicize the importance of renewables and the availability of choice in the marketplace and to facilitate customer switching. The REMB is talking with several California businesses to secure green power purchase commitments.

Jim Cooke, representing **Toyota Motor Sales, USA**, described Toyota's commitment to purchase approximately 12 MW (38 million kWh annually) of renewable energy to power several of its California-based corporate facilities. The purchase, totaling approximately \$1 million per year, grew out of a corporate commitment to “exist in harmony with the earth,” although it was necessary to educate management on green power. Mr. Cooke noted that the additional cost of the green power has probably already been paid back in favorable press reports. Toyota also views its green power purchase as a challenge to competitors and other corporate entities to make similar commitments, although Mr. Cooke suggested that one potential barrier to other large

corporate green power commitments could be the availability of renewable energy supplies in the market.

Toyota also negotiated a 10% discount from the supplier, Edison Source, for employees who wish to purchase green power for their homes. Toyota views the program as a way to reinforce environmental responsibility with its employees.

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PANEL DISCUSSION—PRODUCT CREDIBILITY AND CONSUMER INFORMATION

For the green power market to be successful, consumers must understand that electricity generation has important environmental consequences and that, through their power purchase decisions, they can make positive changes in the generation resource mix, which today is heavily weighted toward fossil fuels and nuclear. It is also important to assure customers who choose to purchase green power that their purchases will lead to the use of cleaner energy sources.

Panelists were asked to provide updates on activities underway to provide consumer information, education, and product credibility. What types of information do consumers need to make educated purchase decisions? Are states and the federal government moving to make this information available to consumers? What mechanisms have been developed or are under consideration to assure product quality and build credibility for the green power market?

Mary Engle, with the **U.S. Federal Trade Commission (FTC)**, addressed FTC guidelines and jurisdiction over the use of environmental claims in advertising materials. Advertisers must be able to substantiate all reasonable interpretations of claims made, whether expressed or implied. The FTC considers an interpretation of an advertisement to be reasonable if a significant minority of consumers interpret it in that way. Claims related to fuel mix and emissions in power sales would have to be substantiated. Green power marketers must comply with the Environmental Marketing Guidelines, or “Green Guides,” established by the FTC. The term “green” is considered a general environmental benefit claim, and marketers must indicate why their product is better for the environment and be clear about the basis of comparisons made.

The FTC also scrutinizes third-party certification claims to ensure that these claims are truthful and substantiated. Thus, even with third-party certification, individual companies remain subject to FTC scrutiny. The FTC staff supports “uniform universal disclosure.” According to Ms. Engle, uniform disclosure makes it easier for consumers to comparison shop, but also requires decisions about what type of information is disclosed and how and where it should be displayed. Most companies voluntarily comply with the FTC’s Guidelines, but the FTC can take action against those who do not.

Kirk Brown, of the San Francisco-based **Center for Resource Solutions (CRS)**, described the Green-*e* Renewable Electricity Program, a voluntary certification program for renewable energy-based electricity products. To be Green-*e* certified in California, a product must be at least 50% from “eligible renewable resource facilities,” must contain no contracted nuclear power, and the nonrenewable portion of the product, if any, must have air emissions less than or equal to the system power mix. The real strength of the Green-*e* program is a requirement that suppliers have their power sources audited on an annual basis.

As of the conference date, ten residential and five wholesale products had been certified under the program, which indicates that the green power market is quite broad. In California, CRS is working to define a Green-*e* content standard for new renewables and a standard for low-impact hydropower. CRS is also working with stakeholder groups to adapt the Green-*e* program to the Massachusetts and Pennsylvania markets.

David Moskovitz, of the **Regulatory Assistance Project** (RAP), discussed work on information disclosure performed for the National Council on Competition and the Electric Industry. Through surveys and focus groups, RAP concluded that most consumers don't know where their power comes from and think that electricity generation is cleaner than it actually is. The work has also revealed how consumers react to disclosure labels and how the labels can be designed to be most effective. Using the same research design methods as used by the Food and Drug Administration for nutrition label development, RAP found that customers respond more favorably when a label is simple and uniform with three or four pieces of information. From this research, RAP designed a standard electricity disclosure label with information on price, fuel mix, and emissions that is being considered by the New England states. Other key research findings are that information disclosure is more important to consumers than third-party product certification and that disclosure should be mandatory.

Stan Rhodes, of **Scientific Certification Systems** (SCS), discussed the company's activities in certifying low-impact energy. Utilizing a life-cycle analysis (LCA) method, SCS assesses technologies and fuel sources on a "cradle-to-grave" basis to develop an "eco-efficiency" measure. Using LCA, some renewables may not be considered low impact. For example, the flooding of large areas of land for a hydropower project can trap biomass, which generates large amounts of carbon dioxide and methane over time. Mr. Rhodes noted that a considerable amount of value judgement is used in developing assessment criteria.

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STATUS REPORT ON RENEWABLE ENERGY TECHNOLOGIES

Ed DeMeo, of **EPRI**, presented an overview of cost and performance trends for renewable energy (RE) technologies. Much of the information that Dr. DeMeo presented is contained in a joint EPRI and DOE technology assessment of RE, "Renewable Energy Technology Characterizations," that is available in hardcopy from EPRI (report number TR-109496) or electronically from DOE (<http://www.eren.doe.gov/utilities/techchar.html>). During the last 20 years, RE technologies have made great strides in cost and performance, with several being fully commercial today. Dr. DeMeo identified the following technologies as available now for supplying the green power market: wind energy, biomass (direct combustion and cofiring with coal), landfill gas systems, geothermal using hydrothermal resources, and building-integrated or grid-independent photovoltaics.

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PANEL DISCUSSION—STATE APPROACHES TO GREEN POWER

States have adopted different approaches to support renewable energy deployment in the electricity market, whether as a component of electric industry restructuring legislation or under continuing utility regulation.

Panelists were asked to describe renewable policy approaches being pursued in their particular state, including: background on past renewable policies and their success (or lack thereof), rationale behind the development of current approaches, the relationship between current policy and the development of green power markets, and strategies and timetables for implementation.

Marwan Masri, representing the **California Energy Commission**, detailed the CEC's Renewable Technology Program that was established in the state's electricity restructuring legislation. The program will be funded through a system benefits charge that will collect \$540 million over 4 years from customers of the three major investor-owned utilities. The fund is to be used to support existing, new, and emerging renewable technologies in the state.

The funding has been divided into four separate accounts: existing technologies (\$243 million), new technologies (\$162 million), emerging technologies (\$54 million), and customer-side activities (\$81 million). Distribution mechanisms include a production incentive for existing technologies, a bid auction for new technologies, a capital cost buy-down program for emerging technologies, and a customer rebate of up to 1.5 cent-per-kilowatthour for qualifying green power purchases. A small account was also created for consumer education.

Mr. Masri reported that the new technologies fund auction garnered 56 bids representing almost 600 MW of new renewables capacity for the state. He also described a new power content label adopted by the Commission that will inform customers of the energy resource mix contained in retail power products. In addition, 10 renewable energy providers are offering a total of 24 green power products that have been approved to receive customer credits.

Pat Larkin, of the **Massachusetts Technology Collaborative (MTC)**, described the renewables fund that was created in the state's electricity restructuring legislation. The MTC will manage the fund, which will be collected through a system benefits charge on the state's electricity customers. Mr. Larkin noted that the Massachusetts fund is thus-far unique in that it will be used to create incentives for change in the marketplace, rather than to subsidize existing technologies. The MTC intends to first identify constraints to renewables in the marketplace and then target investments that ameliorate those constraints. Potential funding areas include information and analysis, technical assistance and training, project development, and financing.

Gillan Taddune, representing the **Public Utility Commission of Texas (PUCT)**, described a rule under consideration that would require all electric utilities in the state to offer a green power tariff to their customers. {Editor's note: The rule was formally adopted on October 22, 1998} The genesis of the rule is a state legislative mandate to promote the development of renewable energy. The rulemaking is a direct outgrowth of a series of "deliberative polls" that found, in all cases, high levels of support for renewable energy and energy efficiency among customers as preferred utility resource options. The PUCT views the rulemaking as a means for supporting renewable energy development by giving customers the service choices that they want. Two of the more important elements of the rule include incremental cost-based premiums and consumer information and education to promote a greater understanding of resource options and their environmental impacts.

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PANEL DISCUSSION—GREEN PRICING STRATEGIES

The number of utilities that have developed or announced green-pricing programs for their customers has risen sharply over the last 3 years. Moreover, these programs differ in size, pricing, customer targets, and other key factors. Panelists were asked to provide a definition of what, in their opinion, constitutes a “successful” utility green-pricing program and to provide insight into factors that contribute to success such as program design, product pricing, and marketing approaches. Several themes emerged from the discussion, including the need for strategic partnerships to effectively drive the market, customer aggregation, well-designed tariffs, and focused, clear programs that can demonstrate environmental benefits to customers.

Terry Peterson, of **EPRI**, addressed the progress of green-pricing programs in the U.S. in terms of growth and added renewable resources. More than 50 programs are now being offered in 15 states with nearly 40 MW of new renewables capacity being developed. Dr. Peterson noted that these programs are distributed across the U.S. with their inception attributable more to resource availability than to electricity prices or restructuring activity. While noting that experience to date predicts early program adoption rates of approximately 1% of customers, Dr. Peterson recognized the difficulties of gauging market penetration of green-pricing programs over the long term.

Blair Swezey, of the **National Renewable Energy Laboratory (NREL)**, described work in progress on a green-pricing primer for utilities and regulators. Mr. Swezey noted that, while green-pricing programs can have several different measures of success, the size of the price premium is always an important determinant. On average, green-pricing premiums tend to range from 2 to 3¢/kWh. But premiums in some programs have been as low as 0.5¢/kWh and as high as 6¢/kWh. Factors that can affect price premiums include:

- the renewable technology selected for the program
- the size of the project
- the quality of the renewable resource
- financial variables, including debt/equity structures and the availability of subsidies or other incentives
- administrative and marketing costs, and
- the base (“avoided”) cost against which the renewable project is compared.

The NREL study will examine the sensitivity of the price premium to these different factors.

Steven Rothstein, of **Environmental Futures, Inc.**, spoke on methods for aggregating customers for green power purchases. An aggregator is a buyer’s agent who brings together individual electricity buyers to form a large pool that has greater market leverage to negotiate favorable terms and conditions of service. Aggregation can also result in more favorable

customer load profiles. As of the conference date, aggregation is rarely being used specifically for green power products though it is being used in evolving competitive energy markets. Mr. Rothstein did describe one active national aggregation offer that includes energy efficiency. He noted that the Massachusetts electricity restructuring legislation explicitly allows for customer aggregation by any number of means, including residential, geographic, municipal, and businesses. Given that low standard offers will discourage marketing to residential customers in the early years of competition, aggregation can offer some interim value and savings to customers.

Barrett Stambler and **Andrea Kelly** of **PacifiCorp** reported on the “portfolio access” program being offered to Pacific Power customers in the utility’s Klamath County (Oregon) retail pilot program. The program offers participating customers a choice from a portfolio of four different services: a standard utility price offer, a market price offer, a community-based offer that supports low-income customers, and a green power offer. The green power offer is priced at a 10% price premium for a 100% renewables product, which is a blend of 80% existing geothermal and 20% wind energy that will come from the company’s new Wyoming wind project. The green-power product was developed in consultation with regional environmental groups. In the first phase of the program, 15% of participants chose the green-power service.

Bob McRae, representing **Ontario Hydro**, described a pilot program being developed to market renewable generation to business customers. Dubbed the GreenChoice Generation program, it would allow customers to choose how their energy is made. All GreenChoice Generation is certified from green energy sources by Canada’s Environmental Choice program. Mr. McRae noted that successful green energy programs provide a range of features, including a transparent financial structure, a clear purpose and rationale, frequent updates on program activity and progress, and partnerships with environmental groups that lend credibility to the program. Mr. McRae urged the group to avoid such pitfalls as making vague promises and false claims, and pursuing programs that do not add new incremental renewables generation.

Rudd Mayer, of the **Land and Water Fund of the Rockies** (LAW Fund), emphasized the importance of using marketing partnerships spearheaded by environmental groups to create consensual and community-wide education, awareness, and outreach activities that promote broader public, private, and utility investment in clean energy options. Ms. Mayer argued that these partnerships are critical because costs to educate and inform customers may be too high for suppliers alone to undertake. Also, the environmentalist group can catalyze actions of governmental entities, businesses, and local organizations that the utility, by itself, may not be able to accomplish. According to Ms. Mayer, selling green power as an “ethic” opens certain doors to acceptance that “premium product” marketing does not.

Ms. Mayer used the example of the LAW Fund’s partnership with Public Service Company of Colorado (PSCo) to promote the utility’s *WindSource* program. Activities have included involving state and local governments in promoting wind power; using media to garner support; promoting a leadership role for businesses in the area; involving area schools, churches, and hospitals; working with green developers and builders; and other grassroots activities.

Ms. Mayer noted several unforeseen benefits of the grassroots marketing campaign. The success of PSCo's program has encouraged several other Colorado utilities to also offer green-pricing programs, with the result that almost 100% of Colorado electricity customers will have a green power option in 1999, even without restructuring in the state. Also, PSCo recently committed to retrofit several coal-burning power plants with environmental controls, partly because of the expressed public support for clean power.