Introduction

On July 31, 1996, the Staff filed its Report On the Restructuring of the Electric Industry (Staff 's Report) in response to the Commission's September 18, 1995 Order in Case No. PUE950089¹. The Report attempted to define issues related to restructuring, identify and analyze the potential effects upon Virginia, and provide the Commission and General Assembly with a foundation to further address the current debate over restructuring the electric industry. It was recognized as an initial step to develop effective policy in response to a rapidly changing industry. Several recommendations were described in the Staff's Report requiring further evaluation and analysis², including continued monitoring of retail wheeling activities in other states³.

By Order entered November 12, 1996, in the same proceeding, the Commission directed Staff to continue monitoring developments in the electric industry. Specifically, Staff was to "file a report on the retail wheeling experiments of other states and make appropriate recommendations." Following is Staff's report on its monitoring of retail pilot programs throughout the country. The report also includes an overview of legislative and regulatory action regarding retail competition and electric restructuring in various states. This report is an extension of the Staff's Report of July 1996 and one of a series of additional reports anticipated as the industry continues to evolve. Staff welcomes any comments and solicits any additional literature or studies to assist its on-going investigation.

Electric utilities are currently jockeying for advantageous position in a changing environment. Amidst this movement, companies are rethinking business strategies to compete in the future while regulatory agencies reassess their responsibilities. The long-standing, traditional electric utility monopoly is transforming to a partially market-driven competitive industry. The ability of third party suppliers to sell power directly to end-use customers, known as retail wheeling, is advocated by some and would mark the most significant change in the traditional electric industry.

Many observers believe retail access is inevitable, it is just a question of when. This observation is premised, in part, on a robust and fluid wholesale market. ⁴ Marketing companies, and some utilities, foresee full access to retail markets occurring in the near future. Others recognize that a timetable beginning this year or next is ambitious and perhaps unattainable.

Two schools of thought appear to bound numerous opinions, editorials, industry activities and regulatory actions. Some advocate proceeding with retail choice quickly, jump-in with both feet and deal with problems as they arise. Others wish to take a more cautious approach, gather facts, analyze concerns and minimize problems before rushing into any wide-spread implementation.

States with high electric rates are willing to take more active and assertive measures to lower their power bills. Many of these measures may well be risky with uncertain consequences while others may be more deliberate and calculated to minimize uncertain or unknown results. States with lower electricity costs are addressing the circumstances they face, learning from those states with higher costs who succeed and avoiding the mistakes of those less successful. No single program can address and resolve all situations.

Several retail access pilot programs are underway and several more are planned. A few states have passed legislation to begin retail access as early as this year. The speed at which these transitions are occurring creates the desire and need for utilities and regulators to understand all the implications of retail access. For this report the Staff researched publications, legislation, and commission orders regarding retail activity in other states. The Staff has also surveyed and interviewed staff members of

utility commissions to receive a current update of activity within each state. The primary focus of this report is to describe and summarize the current and planned retail pilot programs throughout the United States.

Retail pilot programs should provide utilities, regulators, and customers with insights into the practical problems of direct access. Generally, the pilots proposed thus far are relatively small and simple compared to requirements for wide-scale implementation, but may indicate how well competition is likely to work. Knowledge gained from the experience may help address some of the many technical, administrative, and regulatory concerns anticipated with full-scale restructuring.

Following are summaries of the existing and planned retail pilot programs throughout the country. A few pilot programs have been operational for several months and are just now providing data to review and analyze. Other programs that are just getting underway or are in the design and approval stages, can not offer much insight. Nine states with active retail pilot programs as of June 1997 are California, Idaho, Illinois, Massachusetts, Missouri, New Hampshire, New York, Pennsylvania, and Washington. Plans to launch retail pilots are pending in seven states: Michigan, Montana, New Jersey, New Mexico, Ohio, Oregon, and Washington.

Additionally, this report presents brief updates of the states that have enacted legislation or have issued regulatory orders regarding retail competition. Regulators in two states have endorsed the concept of retail competition but have not yet declared how it should be implemented. Some states advocate immediate direct access to customers, some favor a phased-in approach to grant direct access, and others are simply preparing for retail competition, if and when it occurs.

This report concludes with observations noted by the Staff during its monitoring of retail activities throughout the United States.

Retail Pilots

California

The Sacramento Municipal Utility District (SMUD) received board approval to begin its retail wheeling pilot on June 1, 1997. Four scheduling coordinators were selected by lottery to allocate sales among SMUD customers participating in the 100 MW pilot. These coordinators must submit balanced generation and load schedules to SMUD operators on behalf of generators and multiple end-use customers. The coordinators will each handle between 8 and 25 MW of pilot load. Scheduling coordinators are needed because the independent system operator and power exchange, which will provide services for all of California, are not scheduled to do so until retail competition begins, tentatively in January 1998. The pilot will accommodate up to 6,000 customers in the first year with an allowed rate of up to 1,000 each month.⁵

Competitors to supply electricity to SMUD's area have chosen to ignore residential customers. Four private companies give several reasons for ignoring the residential market: 1) advertising is too expensive; 2) handling so many monthly bills is costly; 3) SMUD rules on calculating rates greatly increases financial risks; 4) SMUD charges penalties for inaccurately estimating power needs; and 5) SMUD's current residential rates are 25% to 30% lower than those of Pacific Gas and Electric Company. A spokesman of Power Resource Managers, a competing supplier, comments: "The economics on the direct-access program are so marginal. It's tough to even break even, let alone make money."

Idaho

Washington Water Power Company

Washington Power Company has filed and received approval to implement two retail pilot programs in its Idaho and Washington service territories. These programs are dubbed Direct Access Delivery Service (DADS) and More Options for Power Service (MOPS). DADS is currently underway while MOPS is deferred to late 1997. Both of these programs will be discussed later in this report regarding activities in the state of Washington. **Idaho Power Company**

On April 7, 1997, the Idaho PUC approved Idaho Power Company's December 19, 1996 application for a three-year market based pricing tariff for up to 10 of Idaho Power's large industrial customers. Eligible customers contracting for between 5 and 10 megawatts may choose between fixed or market-variable pricing. Participants in the pilot may choose from either the Dow Jones California-Oregon Border (DJCOB) index or futures contracts traded on the New York Mercantile Exchange for the California-Oregon Border delivery point to price their energy purchases. Customers enrolling in the pilot may have all or as little as one-third of their load priced at market prices. The portion of a customer's load not priced at the market will be priced at an embedded fixed cost rate.

The ID PUC has directed Idaho Power to submit a summary of the pilot's results after six months of operation, within eight months of implementing the program.

Illinois

Central Illinois Light Company

Central Illinois Light Company (CILCO) is an investor-owned utility providing electric service to central and east central Illinois, including Peoria, East Peoria, Pekin and Lincoln. CILCO is a subsidiary of CILCORP, Inc., a holding company formed in 1985. CILCO filed a petition on August 28, 1995 with the Illinois Commerce Commission (ICC) for approval of two pilot retail wheeling programs. The ICC approved the CILCO pilots on March 13, 1996.

CILCO expanded its pilot to include Peoria Heights as part of an October 25, 1996 settlement with the Citizens Utility Board (CUB). CUB charged that CILCO provided its marketing affiliate, QST Energy Trading (QST), preferential treatment. CILCO has adopted a goal of providing all electric consumers in the state of Illinois the freedom to choose suppliers in 1998.

CILCO currently has two pilot programs under the label "Power Quest" which began on May 1, 1996 and encompass the residential, commercial and industrial classes covered by two tariff schedules. Tariff Rate 33 includes eight eligible industrial customers for a total of 50 MW, and the newly expanded Tariff Rate 34 currently has over 5,500 eligible participants in designated "open access sites" that include residential, commercial and light industrial customers, also totaling 50 MW. Both pilots allow participants to purchase energy and capacity from off-system suppliers.

Rate 33, the retail wheeling program for industrial customers, will operate for two years and is available to CILCO customers that had a demand of 10 MW or greater any time during the twelve months ended July 31, 1995. Seven of the eight eligible customers are participating.

Rate 34, the pilot program for residential, commercial and light industrial customers, will continue for five years and is available to designated customers located within specified geographic areas called

"open access sites." Total off-system load expected to be served under Rate 34 was not to exceed 25 MW for the initial three "open access sites." The addition of Peoria Heights as another site doubled the load served under Rate 34.

Residential customers participating in the Rate 34 pilot are required to purchase all of their electric energy requirements from off-system suppliers. Other customers are not subject to the same requirements.

According to EEI's June 1997 Retail Wheeling & Restructuring report, about 35% of eligible residential and 45% of eligible commercial and industrial customers have signed up to participate. All participants in the Power Quest pilots are allowed to reduce or totally eliminate their level of participation upon 24 hours notice.

CILCO conducted extensive educational efforts prior to implementing the pilots, which included a letter describing the pilots to all eligible customers in the designated "open access sites." The letter also included frequently asked questions and answers regarding the Power Quest pilots and deregulation in general, as well as a list of participating suppliers. Customer education efforts included customer and power marketer fairs. CILCO's education efforts were supported by a hotline and training programs for local service personnel.

CILCO's affiliate, QST, played the dominant role in signing up customers. It conducted research on customers before the pilot began. QST guaranteed potential customers a \$100 a year savings (10 to 15 percent of their existing CILCO bill) when their research found that customers would switch to them if they were guaranteed a savings. As of March 1997, 96% of the customers that switched power suppliers chose QST.

CILCO placed no requirements on alternative suppliers and allowed customers to contract any available supplier. Suppliers were required to register with the ICC and provide information on their technical ability to obtain and deliver electricity, provide customer related services, and document their financial capability to deliver such services. Some suppliers are participating in both pilots. Six marketers are purchasing power from fourteen suppliers in seven states.

According to the March report by CILCO to the Illinois Commerce Commission concerning Power Quest, CILCO has experienced no reduction in the reliability of its electric service, either to participants or non-participants.

Illinois Power Company

Illinois Power Company (IP) is an electric and gas utility with a service territory covering 15,000 square miles in northern, central and southern Illinois. IP filed a retail wheeling pilot program with the ICC on September 15, 1995. The pilot was approved on March 13, 1996 and IP began the first retail pilot in the U.S. on April 25, 1996. IP's pilot, Direct Energy Access Service (DEAS), includes 21 eligible large customers. Eligible participants are those who had minimum loads of at least 15 MW during the 24 month period ended September 1, 1995 (or had at least 2 MW of firm demand) and took service at 34.5 kV or greater. A total of 50 MW of capacity are offered under DEAS which will continue through December 31, 1999.

Seventeen of the 21 eligible customers are participating in IP's pilot. These customers, whose total loads on the system range from 15 MW to over 100 MW, are allocated 2 to 4 MW of DEAS capacity each. Only firm demand is allowed to be placed on DEAS. Customers with installed cogeneration facilities are

eligible provided the MW and kV requirements are met. Pilot participants are regarded as wholesale customers for the portion of the load under contract for the pilot.

IP placed no requirements on suppliers. Suppliers participating in the pilot include: Enron Power Marketing, Wisconsin Electric, Cinergy Services, Inc., LG&E Power Marketing and Illinova Power Marketing.

IP account managers informed customers of their eligibility to participate in the program, and the company held a half-day informational session for eligible customers. Marketing data is not generally available.

According to IP's DEAS Evaluation Report to the ICC, DEAS customers and their power suppliers did not always understand, or did not adhere to, the power suppliers' responsibilities to provide adequate generation reserves to insure continued, uninterrupted service to the customer in the event of unexpected curtailment of the supplier's source of power. DEAS customers have lost their primary transmission path four times, their source(s) of power at least twice, and incurred energy imbalance charges 21 times. IP has had to supply back-up power needed to maintain service to the participants. The company points out that providing back-up service without compensation will not be possible with full competition.

According to Illinois Power's report to the ICC, IP invested significant efforts in preparing computerized systems for billing, accounting, monitoring and tracking to support their pilot. They had to modify existing commercial programs to meet the needs of the pilot. They add that this approach would not be efficient for a large number of customers. IP recently installed a new customer system designed to process all of IP's current customer accounts, requiring three years to build and two years to set up customer data.

Massachusetts

Massachusetts Electric Company

Massachusetts Electric Company (MECO or Company) is a part of the New England Electric System (NEES) holding company. MECO and its affiliates developed a plan called Choice: New England, consisting of two pilot programs to provide all customers choice in their power supplier. One is for residential and small business customers and the other is for large, advanced technology companies. On March 4, 1996, MECO submitted these two pilot programs to the Department of Public Utilities (DPU) for review and received approval on April 3, 1996. Residential and Small Business Pilot Program

The residential and small business pilot program is scheduled to run from January 2, 1997 (originally September 1, 1996) through December 31, 1997. The program is available to residential and small commercial and industrial customers in the communities of Lawrence, Lynn, Northampton and Worcester. Customers under the R-1, R-2, R-4, G-1, and G-2 rate schedules are eligible to enroll in the program. Total participation is limited to 10,000 customers. The program represents an annual electricity usage of 100 million kilowatt-hours, with 50 million dedicated to residential participants and 50 million to small businesses.

In order to assist with the planning and implementation of the pilot program, MECO hired Environmental Futures, Inc. of Boston (EF) as a Pilot Administrator. The Administrator was responsible for the bid process to determine which suppliers would be involved in the pilot program and for composing a menu of supplier options from which participants could choose. EF staffs the pilot's 1-800 telephone line for customer and supplier questions and advises MECO on marketing and outreach efforts

for the program. When the usage of residents and businesses requesting to participate exceed 50 million kWh for either group, the Administrator will perform a lottery to select participants.

During the summer of 1996, EF conducted a bid process to determine which suppliers would be involved in the program. Forty-two proposals from fifteen suppliers were evaluated by EF and a menu of supplier options was compiled. Six companies were chosen to participate. The companies are AllEnergy of Waltham, MA (an unregulated retail marketing affiliate resulting from the joint venture between NEES and Eastern Enterprises of Waltham), Enova Energy of San Diego, CA (an unregulated subsidiary of Enova Corp.), Northeast Utilities Wholesale Power and Northfield Mountain Energy (both affiliates of Northeast Utilities), Working Assets Green Power, Inc. (of San Francisco, CA, promising to supply only nuclear-free electricity), and WEPCO/Cinergy. Criteria used by EF to select electricity suppliers included price, generation source, financial stability, and reliability. Each winning bidder was required to be a member of NEPOOL, or have an agreement with a NEPOOL member to include the load served in the NEPOOL members' own load dispatch.

Electricity supply options were offered in three categories: 1) Price Options, aimed to offer the lowest price for electricity; 2) Green Options, aimed to be environmentally benign either in their generation source or through projects they support; and 3) Other Options, offering electricity supply combined with community donations or a variable pricing alternative.

Within these three categories, residential participants had nine supply choices (3 for Price, 4 for Green and 2 for Other) from six suppliers while small business participants had eight options (3 for Price, 3 for Green and 2 for Other) from five suppliers. The menu provided a diverse selection for customers.

The pilot program offers participants the opportunity to try different supply options. However, participants must meet the minimum term of commitment of their initial supplier option before switching. If participants are dissatisfied with the supply options or their participation, they may leave the program at any time. Customers who discontinue the pilot may return to MECO's service, but cannot re-enter the program.

Customers wishing to participate enroll through the Massachusetts Electric Pilot Brochure ballot or through ballots prepared by the participating suppliers. Numerous outreach efforts were conducted by MECO, the Pilot Administrator, and the participating suppliers since the early summer of 1996 to educate customers about the pilot program and encourage their participation.

The initial campaign, implemented from June through mid-September of 1996, was to educate customers about what the pilot was and how the customers could obtain participating information. By returning a reply card or calling the 1-800 line, customers could receive the related information.

The marketing methods used by MECO and EF during this initial campaign included newspaper and radio advertisements, newspaper inserts, interviews for radio talk shows and newspaper articles, presentations to community groups, attendance at home and business expositions, and distribution of flyers and posters throughout the four pilot communities.

Customers started subscribing to the program after the suppliers were selected and announced on September 19, 1996. MECO and EF continued their campaign, this time with the goal of enrolling customers. Suppliers, at the same time, also promoted their marketing programs (using newspaper advertisements, distribution of marketing materials, direct mailings, offering market aggregation incentives, etc.) to the potential customers.

Because of the customer education and marketing campaigns, the small business part of the pilot was fully subscribed by the deadline of October 31, 1996. However, the residential part lacked enough responses. The residential enrollment was extended until November 30, 1996, or until the 50 million kWh usage cap was reached, whichever came first. MECO and EF decided to target their efforts at residences in the four communities. Activities included visits to senior citizen housing complexes, miniexpositions, newspaper advertisements in all four community newspapers, door to door distribution of 20,000 ballots, distribution of 5,000 ballots at local shopping centers and supermarkets, etc. Suppliers also focused their marketing tactics on residential customers. By November 30, residential customers reached approximately 60 percent of the participation maximum. Thus, the residential enrollment was closed on November 30, 1996. Enrollment results for the pilot are summarized as follows:

- a) 5,292 accounts representing 4,727 customers enrolled in the pilot (a customer may have multiple accounts): split among residential (4,745 accounts / 4,458 customers) and small business (547 accounts / 269 customers) reflecting a 3.8% and a 3.3% enrollment rate respectively, across all communities;
- b) 80% of the available 100 million kWh usage load was enrolled among residential (30 million kWh) and small business (50 million kWh) customers;
- c) Price, Green, and Other options chosen by residential participants reflect 66%, 31%, and 3% of the total participation respectively;
- d) Price, Green, and Other options chosen by small business participants reflect 96%, 3%, and 1% of total participation respectively;
- e) participant account data by community as a percent of total participants;

	Small Business		Resid	dential	Total	
	Account Percent		Account Percent		Account Percent	
Lawrence	46	8	414	9	460	9
Lynn	99	18	813	17	912	17
Northampton	168	31	1157	24	1325	25
Worcester	234	43	2361	50	2595	49
Area Total	547	100%	4745	100%	5292	100%

f) and participant account data by supplier as a percent of total participants;

Small Business Residential Total

	Account Percent		nt Ac	count P	ercent	Account Percent	
Price Options	:						
Enova Energy	4	9	20	049	43	2098	40
NortheastUtil	381	69	9	79	21	1360	26
WEPCO/Ciner	95	18	1	25	3	220	4
	525	96%	3	153	66%	3678	70%
		Business		dential		Total	
	Account	t Percent	Accour	nt Percei	nt Acco	unt Percer	nt
Green options:							
AllEnergy	1	0	70	1	71	1	
Enova Energy	1	0	125	3	126	2	
Northfield Mt	16	3	418	10	497	9	
Working Asset	N/A	N/A	781	16	781	15	
	18	3%	1457	31%	1475	27%	
Other Options:							
AllEnergy	2	0.4	127	3	129	3	
WEPCO/Ciner	2	0.4	8	0	10	0	
	4	1%	135	3%	139	3%	

It is important to note that in addition to a lower price, some suppliers also offered financial incentives through aggregation to further reduce a customer's cost. In this pilot, suppliers seemed to focus their primary marketing effort on the Price Options. Approximately half of the suppliers offered aggregators incentives. These incentives included cash rebates and non-cash incentives. Allowing aggregators to participate was important, especially for small business accounts.

100%

4745

100%

5292

Comparing residential and small business participants, there are significant differences in the options selected. Approximately 66% of enrolled residents chose one of the three Price Options, almost a third (31%) chose a Green Option and only 3% chose an Other Option. One of the reasons for this difference

547

100%

Area Total

seems to be a correspondence to the marketing activities of the suppliers offering the green options. Working Assets, for instance, only offered a residential green option and was active in signing participants. Certain suppliers who were aggressively recruiting small business accounts were not as aggressive with residential participants.

Depending upon the selected supply option and usage for the customer, savings are expected to be approximately 5 to 18 percent per month for average residential participants; 11 to 21 percent per month for G1-rate small business participants; and 2 to 15 percent per month for G2-rate small business participants. In other words, an average residential customer using 500 kWh and paying \$56 per month, should see savings of approximately \$3 to \$10 per month. An average G-1 small business participant using 1,500 kWh and paying approximately \$180 per month, should see savings of \$20 to \$26 per month, while an average G-2 small business participant using 20,000 kWh and paying approximately \$1,750 per month, should see savings of \$36 to \$256 per month.

Large High Technology Pilot Program

The large business pilot program is scheduled to run from July 9, 1996, through January 1, 1998, or until direct access is available statewide. MECO worked with the Massachusetts High Technology Council (MHTC or Council) to implement this pilot program for large businesses. MHTC represents approximately 200 advanced technology businesses throughout Massachusetts.

The large business pilot program was available to MHTC members served by MECO on rate G-3. MHTC hosted a series of meetings to conduct customer education for interested members. Of 200 MHTC members, fourteen large businesses participate in the pilot program. The companies include: Allegro Microsystems, Inc., Data General Corp., Data Translation Co., Digital Equipment Corp., Dynamics Research Corp., EMC Corp., Fidelity Investments, Genetics Institute, Inc., Hewlett-Packard Co., Simplex Time Recorder Co., Stratus Computer, Inc., Sun Microsystems, Inc., Wang Labs, Inc., and Waters Corp. The program represents annual usage of approximately 200 million kWh.

A bid process was conducted by the Council to select the most favorable supplier for the 14 participating members. The Council had the opportunity to accept one supplier for the full 200 million kWh usage, or evenly split the members by usage and select a supplier for each group. During the bidding process, twelve suppliers submitted proposals. The bidders were: Boston Edison, Duke/Louis Dreyfus, Enron Power Marketing, Evantage (a division of VA Power), Montaup Electric, Global Petroleum Corp., Niagara Mohawk Power Corp., New England Power, Northeast Utilities, Unitil, Wheeled Electric Power, and Xenergy/NYSEG. The range of the bids for a total delivered price was 2.43¢/kWh to 3.50¢/kWh; representing an on-peak range of 2.10 ¢/kWh to 3.20¢/kWh and an off-peak range of 1.80¢/kWh to 2.89¢/kWh.8

The Council chose Xenergy of Burlington, MA, an independently operated, wholly-owned subsidiary of NGE Enterprises, and unregulated affiliate of New York State Electric & Gas Co. (NYSEG) as its sole supplier. The Council stated that Xenergy met its members' needs for economical and reliable power, notice requirements and flexibility in accommodating load and cost control efforts. In addition, Xenergy also offered access to demand-side management and energy conservation programs as well as options for multi-fuel contracts. The Xenergy offer contained a 14% reduction in electricity bills, representing an estimated annual savings of \$2.2 million.

During the pilot program, if any participant is dissatisfied with the supply option, they may leave the pilot and return to MECO's service. However, those who discontinue their participation cannot return to the program.

According to the guidelines for both pilots, MECO will continue to provide distribution service, customer service and support, response to outages, meter reading and billing services for the participating customers. Participating customers are required to pay MECO for the cost of transmission, distribution and access charges. The prices for transmission and distribution reflect estimates of the unbundled costs for those services. As for the alternate suppliers, they are responsible for billing and collecting their generation charges from their customers. Thus, the meter reading information of the participating customers' energy usage will be provided by MECO to the alternate suppliers. If an agreement has been arranged between the customer and the supplier, MECO can provide billing service for the supplier. MECO will include the supplier's charges in the company's bill, collect the payment and forward the amount to the supplier. As a result, some customers will receive one bill (an itemized bill for both alternate supplier and MECO), while others will receive two bills (one from MECO and one from the alternate supplier).

Reliability issues are not a major concern in the Massachusetts pilots since a supplier must either be a member of NEPOOL or have a contract with a NEPOOL member. Thus, NEPOOL's centralized structure and contractual rules minimize the reliability problems.

MECO and its consultant have noted that pilot programs provide valuable information in terms of implementing full competition: 1) both of the Massachusetts pilots illustrated that customers were interested in retail choice, business customers were eager to participate while residential customers did not fully utilize the amount of kWh available; 2) customer choice of suppliers can be coordinated with pooling functions with little or no disruption to reliability; 3) potential customer cost savings can be realized while treating the utilities fairly; 4) customer service is significant but is very time-consuming, despite the extensive customer education efforts, participants still had many questions regarding the pilots and industry restructuring; and 5) consumer confusion appears to grow as the number of available options increase.

Commonwealth Electric Company

On August 1, 1996, Commonwealth Electric Company (Commonwealth or Company) filed the Retail Choice Pilot Program (Pilot Program or Pilot) with the Department of Public Utilities for approval. On September 3, 1996, the DPU granted the Company's request.

The Pilot Program is scheduled to run from October 1, 1996 through December 31, 1997. Customers qualified to participate in the Pilot Program are those who are served under the Company's Service Extension Discount Rider (Rate G-3 SXD). This included customers served under the Company's economic development rates (Rate G-3 ED and Rate G-3 ED Rider). Customers under special contracts at rates equivalent to the economic development rates are also eligible for the program. A total of 18 customers (consisting of 20 accounts) were eligible for participation in the Pilot, representing an aggregate load of approximately 50 MW.

The Pilot consists of two alternative components, Subscription A and Subscription B. Subscription A allows participants to purchase their electric power from an alternative supplier and Subscription B is a real-time plan with day-ahead pricing provided by the Company. During the Pilot, a customer may return to the Company's service at any time, but may not re-enter the program. Commonwealth does not guarantee customers any price reduction as a result of participating in this program.

Subscription A

In order to administer Subscription A, Commonwealth hired KOCH Power Services, Inc., as the Retail

Pilot Coordinator (Coordinator) to work with customers and to select the alternative supplier for the program. It was required that the winning bidder must be a member of the NEPOOL or have an agreement with a NEPOOL member to include the load served in the NEPOOL member's own-load dispatch. Commonwealth and its affiliates did not bid for this pilot.

Subscription A was opened to a total of ten customers, with a limit of 15 MW of aggregate load. If more than 10 customers or more than 15 MW of load sought participation, the Coordinator would select participants through a lottery. As a result, 5 of 19 potential customers were selected for this subscription.

During the bid process, the Coordinator issued a request for proposals (RFP) to over seventy suppliers. Fourteen suppliers responded and submitted nineteen offers. The names of the bidders were: Peabody Municipal Light Department, Consolidated Edison Company of New York, Destec Power Services, Inc., Enron Power Marketing, Inc., LG&E Power Marketing, National Gas & Electric, Northeast Utilities Service Company, Plum Street Energy Marketing, Southern Energy, The Eastern Group, The MMV Group, Western/Energy Choice, Wheeled Electric Power Company and Xenergy. The bid prices ranged from $2.2\phi/kWh$ to $4.5\phi/kWh$. As a result, three potential suppliers were selected with an anticipated customer savings of 10% - 15%.

The customers then entered into negotiations with these suppliers but were not able to finalize terms. During the course of negotiations, the market prices for capacity and energy increased and the suppliers were not willing to maintain their bid prices. Consequently, the available supply options would not provide the customers with savings compared to the Company's rate. Thus, the Subscription A component of the Pilot Program was not implemented.

Subscription B

The Company did implement Subscription B. It is administered through the Company's internal resources and was opened to qualifying customers who did not select Subscription A.

Under this subscription, each customer will purchase power from the Company at a marginal production cost quoted on a day-ahead basis. The day-ahead price will be posted at 1:00 p.m. every business day and made available to each participant on the Company's electronic bulletin board service. Customers also may request to receive the prices by telecopy.

In order to promote Subscription B, the Company met with the eligible customers and provided them with the subscription information. Currently, seven customers are participating in this subscription. Since Subscription A was terminated, those five customers were invited to participate in Subscription B. To date, four of the five have decided to do so.

According to the terms for the Pilot, Commonwealth will continue to provide distribution services, customer service and support, meter reading and billing for the participating customers. These customers are required to pay the Company for transmission, distribution, and access at the prices specified in the Company's tariff rates, as well as an energy charge quoted by the Company.

Michigan

A tentative retail wheeling experiment mandated by the Michigan Public Service Commission in April 1994 was never implemented as it was superseded by a Commission order mandating a gradual implementation of retail access on a permanent basis.

The experiment was to be undertaken by the state's two largest investor-owned utilities, Detroit Edison and Consumer's Energy (formerly Consumer's Power), and scheduled to begin at the time of each respective utility's next capacity solicitation.

In December 1996, the staff of the Michigan Public Service Commission issued its report on electric industry restructuring, and in June 1997, the Public Service Commission ordered Detroit Edison and Consumer's Energy to implement a phased approach to retail access beginning in 1998.

Missouri

On November 21, 1996, UtiliCorp United Inc., d/b/a Missouri Public Service (MPS or Company) of Kansas City, Missouri, filed tariff sheets proposed to implement an Electric Transitional Aggregation Experiment (Experiment) with the Missouri Public Service Commission (Commission). MPS's request was granted by the Commission on January 31, 1997 and made available for service on February 19, 1997.

This Experiment is a two-year program and is not available for residential, standby, breakdown, supplementary, maintenance, or resale service. To qualify, an individual customer must have electric service at a minimum of 20 delivery points with similar loads and usage patterns. A combined, non-coincident demand for these delivery points is required to be at least 2.5 megawatts. The Experiment is limited to 10 customers for a total of 25 MW. Customers may purchase electricity from the supplier of their choice, other than MPS and its affiliates. Electricity will be delivered over MPS's transmission and distribution system. Currently, McDonald's is the only participating customer with a group of 23 franchises located in MPS's certificated territory in western Missouri. The alternate supplier is Enron and MPS will serve as the last resort provider to the 23 fast-food restaurants.

Billing and payment for electric energy sold and delivered under this Experiment is in accordance with the Company's Large General Service (LGS) rate schedule. Service under this rate schedule is subject to interruption by agreement, by advanced notice or by other causes beyond the Company's control. Each month, MPS will provide the customer a summary billing of the total charges for all delivery points. When MPS purchases energy from an alternate supplier for the customer's use, the customer is responsible for all energy charges from that alternate supplier. Simultaneously, MPS will give its customer a credit of 2.079¢/kWh for every kilowatt-hour consumed and recorded on the meters at each delivery point. This credit is a Commission approved rate based upon the allocation of energy costs to the LGS class in the Commission Staff's class cost-of-service study. The Company uses this credit because it best represents the cost of producing or procuring electric energy incorporated in the LGS rate schedule. When MPS is the energy provider, the customer is required to pay all charges, including the return of the energy credit. There is also a minimum monthly charge for each delivery point as provided in the LGS rate schedule. Under this Experiment, MPS estimates that McDonald's will save up to 10 percent on its power bills.

Since the purpose of this Experiment is to gather information about the aggregation of customer loads, about the infrastructure required to serve aggregated loads, and regarding the operation of the power market and electric power delivery service, the Commission has directed the Company to file an evaluation plan. Issues to be discussed include metering requirements, real-time data collection and load profiles, power balance among aggregated customers, customer education, customer interest, terms and conditions of the supply contract, reliability of alternate supply, customer information system programming changes, etc. The first report was anticipated to be submitted on August 29, 1997. In conducting its evaluation, MPS will not determine whether the results are "good" or "bad" or the program is a "success" or "failure". Its goal is to learn from this Experiment and to derive results that may be helpful to MPS and to the Commission in the changing electric utility environment.

Montana

The 1997 Montana legislature approved Senate Bill 390, (SB 390) and the governor signed it into law on April 23, 1997, establishing requirements to move toward a more competitive electricity market. SB 390 requires IOUs to file a transition plan to allow their customers to choose electricity suppliers. Customers having loads larger than 1000 kW, or loads larger than 300 kW per meter, that aggregate to 1000 kW or more, may choose electric suppliers by July 1, 1998. All other customers must have the option to choose suppliers before July 1, 2002.

The transition plans must include: (a) an outline of an orderly transition to choice for all customers; (b) a procedure to provide for customers that do not choose suppliers; and (c) a plan for implementing universal system benefits programs.

Section Four of SB 390 requires electric utilities to conduct pilot programs, beginning July 1, 1998. These pilots should be conducted using a representative sample of their residential and small commercial customers. The results of the pilots must be submitted to the Montana Public Service Commission (MPSC) on or before July 1, 2000. The utilities are ordered to conduct the pilots to, but are not limited to, determine the best methodologies under deregulation to benefit smaller customers. Two electric utilities in the state, Montana Power Company (MPC) and Pacific Corporation (Pacific), are expected to file transition plans that include pilot programs.

MPC filed its transition plan with the MPSC on July 1, 1997. On August 12, 1997, the MPSC found the plan incomplete and inadequate in two areas, namely customer education and pilot programs. By order dated August 13, 1997, MPC was directed to file a revised plan remedying the deficiencies by August 26, 1997. Pacific has yet to file its plan. The process to develop the required pilot programs is in its infancy. Additional details will not be known until late 1997 or early 1998.

New Hampshire

In 1995, New Hampshire legislature directed the New Hampshire Public Utility Commission (NHPUC) to establish a statewide pilot program to examine retail electric competition and its implications. The pilot began in May 1996 and is scheduled to last two years. The New Hampshire pilot was the first large scale pilot in the United States.

Approximately 17,000 residential, commercial, industrial, and government customers with a total load of about 50 MW are eligible to participate in this pilot. Customers from each utility were randomly selected from a pool of volunteers. Five of the six franchised electric utilities in New Hampshire have customers participating in the pilot: Granite State Electric Company (GSE), a subsidiary of New England Electric System; Public Service Company of New Hampshire (PSNH), a subsidiary of Northeast Utilities (NU); Concord Electric Company and Exeter & Hampton Electric Company, subsidiaries of Unitil Corp.; and Connecticut Valley Electric Company, a subsidiary of Central Vermont Public Service.

Franchised utilities under NHPUC jurisdiction were to allow suppliers access to 3% of their 1994 retail demand. Competitive suppliers were also permitted to access new large commercial and industrial customers entering the utility's service area after March 31, 1996. Approximately half of the customers selected to participate in the pilot would also be eligible to participate in the pilot through Geographic Areas of Choice (GAC). GAC was defined as groups of residential and small commercial customers within a defined geographic area. A local government authority could negotiate a package deal with a competitive supplier for a large number of participants within the town. The main purpose of the GAC

concept was to determine whether customer savings could be enhanced through aggregation.

Once customers were selected for the pilot, their names were sent to the NHPUC and made available to competitive suppliers. The NHPUC required every competing supplier to be a member of New England Power Pool (NEPOOL) or have a contract with a NEPOOL member. Currently, thirty-two suppliers are registered with the NHPUC to be allowed to compete. NU affiliated suppliers (NU Wholesale, PSNH Energy, and Northfield Mountain Energy) received the largest market share of all suppliers in New Hampshire.

Each utility was required to unbundle its retail service rates into a customer charge, a transmission service charge, a distribution service charge, a charge for conservation / load management programs, and a power supply charge. Rates offered under the pilot are based on costs currently embedded in retail rates. Exit fees for customers who switch are not allowed. The NHPUC specified a 50/50 sharing of stranded costs for the limited purpose of the pilot. PSNH objected to the 50/50 split so an agreement was reached between the utilities and the staff that each utility would provide a 10% discount off the customer's total bill in the form of a "participation incentive credit" to encourage customers to sign up for the program. On average, participants have saved 15 to 20%. However, 10% of the savings comes from the participation incentive credit provided by the utility.

Service quality and reliability are still regulated and the NEPOOL membership or affiliation requirement ensures that suppliers with firm load obligations have adequate power supply resources to meet both their firm load and their apportioned share of the NEPOOL required reserve. This requirement also ensures that competitive suppliers will gain access to NEPOOL scheduled and unscheduled outage service.

The Commission took responsibility for educating the general public on the pilot program through newspaper and radio advertisements. They maintained their website, published a brochure in state newspapers listing the policies and a list of suppliers, and posted the brochures at libraries and town halls. Some sources say the educational efforts were inadequate and not sufficient in length to educate customers.

Marketing activities included telemarketing, direct mail, radio, television, newspapers, and magazines. Many competitive suppliers used innovative marketing methods to attract residential customers. Potential suppliers offered everything from sign-up bonus checks to bird houses. Some suppliers presented themselves as environmentally sensitive. Enron Power Marketing offered the town of Peterborough, NH, a \$25,000 donation for town improvements and a 2.29 ¢/kWh energy price. Enron has used its selection as supplier for the town as a national advertising campaign to gain name recognition.

Residential participation in the pilot has been moderate compared to business interest. Price is the primary motivation for customers choosing a supplier. However, even with New Hampshire's extremely high rates and a guaranteed savings of at least 10%, the pilot is not fully subscribed.

New Jersey

On December 13, 1996, Jersey Central Power and Light Company, d/b/a GPU Energy (GPU Energy or Company), filed a Petition seeking the Board of Public Utilities' (the Board) approval of the Monroe Township pilot program for retail choice. On May 13, 1997, the Board granted the request. This pilot program was originally scheduled to begin on July 1, 1997, but has been postponed to September 1997.

Monroe Township's pilot program offers "energy supply only" for one year with an option to extend until full retail competition is phased-in for all New Jersey electric customers. The program is available for customers in the Township of Monroe in Middlesex County, New Jersey. The Company has about 11,990 customer accounts in the Township, with over 11,000 as residential accounts and the remainder as industrial and commercial accounts. The Township represents a load of approximately 20 MW. Customers under this pilot program can choose one of three options: 1) remain with the Company; 2) select an alternate supplier on an individual basis; or 3) be aggregated with other residents in a pool. Even though participation in the pilot is voluntary, if a customer does not return his Customer Participation Enrollment Form to the Township by a specified date, the customer will be automatically placed in the aggregated group. This default is to ensure that the potential energy savings will benefit as many Township residents as possible. However, the Board is troubled by the removal of ratepayers from the franchised utility without their authorization. The Board asserts that this default mechanism is different from the municipal aggregation concept envisioned in the Board's Electric Restructuring Plan. Monroe's leadership is responsible for developing and implementing a fair and legal enrollment process.

Additionally, the Board is also concerned with the selection deadline requirement for the ratepayers who choose to shop individually for a new supplier. Customers acting on an individual basis to negotiate their own contracts for energy must indicate this selection to the Township by a specified date. The customers will also need to pick a supplier within a specified period of time when the supplier information is available. If the customers do not make a choice within the specified time-frame, they will remain with the Company. The Board recognizes the shortcoming of customers being required to respond to the Township before having knowledge of potential marketers or likely contract terms. However, the Board states that it should not hinder the approval of the program, since the participating customers are allowed to opt out of the program at any time. Under the proposed program, customers opting out of the pilot may return to the Company's service, but cannot re-enter the program. Since the Board is not requiring the certification or registration of energy suppliers at this time, GPU Energy is working with the Township to prepare a request for proposals to solicit bids from responsible energy suppliers and to review the responses.

In regard to the maintenance and operation of the distribution system, as well as the meter reading and billing services, GPU Energy will continue to perform such services for its participating customers. Each month, the pilot participants will be billed in accordance with GPU Energy's existing tariff rates and charges. However, the Company will apply an energy credit to the customer's bill equal to the greater of (a) GPU's forecast value of the energy consumed by the customer or (b) GPU's actual cost of the energy consumed by the customer. Energy charges from the alternate supplier will then be added to derive the total power bill.

The Board is concerned that the above pricing formula will have a potential impact on rates for non-participating customers. As proposed, the pilot participants will be credited with the higher of either the forecast energy cost or the actual energy cost. If the actual energy cost is higher than the forecasted cost, the pilot participants are credited the actual energy cost. In this instance, there is no potential for subsidy by other ratepayers.

However, when the forecast energy value is higher than the actual energy value, there is a potential impact on rates for other GPU Energy's ratepayers. The Monroe Township participants will reap the benefit of the difference between the actual price and the higher forecast price, while all other GPU Energy's ratepayers may be burdened with the recovery of this differential amount. Although a potential exists for cross subsidization between participating Monroe Township ratepayers and other GPU Energy ratepayers, the level of subsidization is uncertain at this time. The issue of whether any potential cross subsidization should be recovered through the Levelized Energy Adjustment Clause (LEAC) will be deferred to the Company's next LEAC proceeding.

The Board believes that the Monroe Township pilot will provide the Company, the Board, and all ratepayers with useful information concerning retail competition. Specifically, information regarding municipal aggregation, customer enrollment processes, customer education, customer satisfaction, utility administrative processes, and power marketer/utility interaction will provide useful insight. In addition, the pilot will also offer the opportunity to provide needed relief to electric bills in the municipality, including many senior citizens.

Thus, the Board requests the Company to submit quarterly reports after the program is implemented. Issues to be discussed include estimated and actual energy rates, balancing charges, effect on LEAC, customer participation and enrollment details, marketer response to request for proposals, customer complaints, customer return statistics, etc. Information provided from the quarterly report will enable the Board to identify the specific challenges to implementing wide-scale retail choice in the state.

New Mexico

Texas-New Mexico Power Co. (TNP or the Company) voluntarily filed with the New Mexico Public Utility Commission (NMPUC) on June 21, 1996, an application for approval of its Community Choice Transition Plan (Community Choice Program).

This plan provided for, 1) recovering certain Company defined stranded costs without increasing customers' bills, during a transition period from January 1, 1997 through December 31, 2000; 2) allowing small customers to aggregate their loads to participate in the benefits of the competitive market; and 3) committing the Company to allow customers to choose electric suppliers by a specific date.

The NMPUC, the Company, the New Mexico Attorney General, and several large wholesale and retail users executed a Stipulation, providing for approval of the Company's application, subject to several changes and conditions. We note that the Stipulation has a provision allowing any of the parties to void it. The Stipulation was filed with the NMPUC on February 3, 1997. The NMPUC approved the Stipulation by Order dated March 27, 1997. On April 17, 1997, the NMPUC issued an Order granting rehearing on the procedures to void the Stipulation and Community Choice Program. The same Order changed the transition period to May 1, 1997 through May 1, 2000.

The Stipulation provides for an open access pilot program (the Transition Period Program) to commence two years before the end of the transition period (May 2000). Preliminary terms and conditions for this pilot program must be developed within ten months following the start of the transition period (May 1997). This pilot would cover at least one MW of TNP's load plus all new load in excess of TNP's forecast in its Community Choice Transition Plan application. The pilot will study numerous issues associated with retail access, including an ISO for transmission and distribution, billing and metering mechanisms, reliability criteria, service quality, load aggregation requirements, customer education, environmental protection, and customer choice of alternative suppliers. The pilot is currently being developed and is expected to be filed in early 1998.

New York

The New York Public Service Commission has approved two retail access electric pilot programs. One of these, that of Orange and Rockland Utilities, Inc. (Orange and Rockland or O&R) began in July 1996. The second pilot, proposed by Dairylea Cooperative, Inc., will not begin until November 1, 1997.

Orange and Rockland

The retail access pilot developed by Orange and Rockland (dubbed PowerPick) resulted from an electric rate case settlement approved by the New York Public Service Commission on May 2, 1996 and consists of two phases. The first phase began on July 1, 1996; phase two began on January 1, 1997.

The objectives of the pilot were to: 1) provide all classes of customers with the opportunities of selecting an energy supplier and realizing energy price savings; 2) provide the means for Orange and Rockland and its customers to gain experience with retail access without the creation of stranded investments; and 3) minimize the impacts on non-participating customers.

The initial phase of the pilot was restricted to large industrial and commercial customers taking power at high voltage and primary service levels. O&R reserved 12 MW of off-peak load for its high voltage customers and 18 MW of off-peak load for its primary voltage customers.

Out of a total of 63 customers in the two service levels, 54 applied to participate in the pilot. All nine of Orange and Rockland's high voltage customers opted to participate, and the 12 MW of load was allocated between them. Forty-five of the Company's primary service customers applied to participate, nine of whom were randomly chosen to be allocated the 18 MW reserved for customers at that service level.

The second phase of PowerPick included residential and smaller commercial and industrial customers. O&R set a target allocation of 10 MW for the small commercial and industrial customers and a participation level of 1,500 for its residential customers.

The participation of customers in Phase Two has been disappointing. Although O&R's target of 10 MW of off-peak small commercial and industrial load was met, the Company had to extend the application period and modify its rules of participation to meet its target. Only 133 of these customers were participating by February 15, 1997. Participation by the smallest commercial and industrial customers was negligible.

Participation by residential customers has been poor. As of February 15, 1997 only 283 residential customers had signed up for the program. This figure represents only about 3% of the residential customers who received a direct mailing from Orange and Rockland inviting them to participate.

As Orange and Rockland designed the pilot to allow customers to purchase only the energy portion of their generation, potential savings are available on only a small portion of a customer's total bill, and therefore, are relatively modest. Customers must pay their energy supplier as well as O&R's rate minus the Company's variable fuel and purchased power costs (about $2.5\ e/kWh$). Any savings on the part of commercial and industrial customers are subject to a shared savings mechanism whereby energy savings over 10% were to be shared with Orange and Rockland to be used to write down regulatory assets.

Savings for large commercial and industrial customers during the first six months of Phase I, on a monthly basis, averaged approximately 10.3% on the energy portion of these customers' bills and 2.67% of their total bill. Net savings for this period by Phase I customers totaled \$416,454.

Lacking detailed information for Phase II customers, the New York Public Service Commission staff estimates that based on the savings of Phase I customers, Phase II customers, i.e., residential and small commercial and industrial, will save about 1% to 2% of their total Orange and Rockland bill amounting to about \$1.00 to \$3.00 per month.

Anecdotal evidence on the price per kWh indicates that alternative suppliers have been supplying energy

at costs between 2.10 ¢/kWh and 2.65 ¢/kWh. O&R's average system energy cost is 2.5 ¢/kWh.

Marketing tactics appear fairly subdued. Alternative suppliers used direct mail flyers, but they did not use telemarketing. Orange and Rockland used newspaper advertising. (The small number of residential customers and limited profit potential may have influenced marketing tactics.) Fixed price offers are reported to be the most common form of pricing.

Customer education was not an issue in Phase I as large commercial and industrial customers oversubscribed for participation in that phase of the pilot. A more intensive and apparently less successful, education effort took place for the Phase II segment. Orange and Rockland initially announced the pilot through a press release and mailings to 5,000 randomly chosen residential customers and 5,000 small commercial and industrial customers. A disappointing level of response on the part of residential customers prompted a second mailing to another 5,000 of these customers. When interest remained low, O & R began promoting the program in local newspapers, employee newsletters, and on its World Wide Web site. Approximately, 1,200 residential customers and 576 small commercial and industrial customers expressed interest in the pilot. Two months before Phase II was to begin, Orange and Rockland held informational meetings with interested customers.

The Company's informational campaign has been generally viewed as inadequate. The enthusiastic response to Phase I led O&R to expect a similar response by residential customers in Phase II. Not wanting to disappoint residential customers by having to turn them away, Orange and Rockland was cautious in its promotional efforts. Orange and Rockland was also cautious in its mailings and informational meeting, explaining that potential savings might be small and that the possibility of losing money existed. It also appears that initially, potential Phase II customers did not understand that the savings would come only from the energy portion of their bill.

O&R has also been criticized for an excessively complex application process. For example, customers wishing to participate in the pilot were required to return three separate mail-back cards to Orange and Rockland at different points over a four month period. This procedure also resulted in confusion over the choice of suppliers and the coordination of customers' billing data among suppliers (for arranging delivery of power).

While the complexity of the application process very likely restricted participation, the potential savings level appeared to be an important consideration. In response to an Orange and Rockland survey, 25.3% of respondents replied that minimum total bill savings would have to reach 6% to 10% before they would participate. Almost 36% indicated that the minimum bill savings would have to reach 11% to 20%.

To attract alternative suppliers for the project, Orange and Rockland ran a solicitation in the New York Times in May of 1996. Seventy-five suppliers responded and 37 elected to participate in Phase I. Of this number, six signed contracts to deliver power in Phase I. Eleven suppliers participated in the residential portion of Phase II and 19 participated in the small commercial and industrial portion. Orange and Rockland's affiliate, Norstar, did not participate in the pilot. Supplier participation in Phase II was restricted by the small potential profit level (only several hundred dollars per month) available in Phase II.

In Phase II, eight suppliers signed contracts to deliver power. Two suppliers won about 75% of the residential market. Market share of the small commercial and industrial customers in Phase II was evenly divided although suppliers were forced to pair up to meet the 1 MW minimum load requirement.

Detailed supplier information is not available for Phase I. Suppliers signing contracts were: Cinergy Corporation, The Eastern Group, Northeast Utilities, Pan Energy Corporation, Texas-Ohio Gas, and Wheeled Electric Power Corporation.

For the first six months of Phase I, Orange and Rockland reported no measurable impact on its system reliability nor any incidents of on-system congestion. There were 56 interruptions in delivery during this period, but they were caused by constraints outside the O&R system and were ordered by the New York Power Pool or the PJM Interconnection. By one account, at least some of the service interruptions occurred because marketers failed to secure firm transmission service.

Dairylea Cooperative

Dairylea Cooperative, Inc. (Dairylea or the Cooperative) is a farmers' cooperative of approximately 3,500 upstate dairy farmers. In October 1996, Dairylea submitted a petition to the New York Public Service Commission calling for a retail electric access pilot program involving its members to be implemented in upstate New York over an area comprising the service territory of several upstate utilities. This petition was one of eleven such petitions considered by the NYPSC early in 1997. The Dairylea proposal, by an order dated February 12, 1997, was the only pilot program implemented by the Commission.

The Dairylea proposal was accepted because the Commission believed it to be unique in that it included multiple service territories and involved a number of rate classifications. The Commission also envisions the proposal as a test of a more developed retail access framework than was available in the Orange and Rockland pilot program.

On June 23, 1997, the NYPSC issued an order establishing the outline of the Dairylea pilot. The pilot will cover the service territories of four utilities: Niagara Mohawk Power Corporation (NMPC), New York State Electric & Gas Corporation (NYSE&G), Rochester Gas and Electric Corporation (RG&E), and Central Hudson Gas & Electric Corporation (CHG&E). Each utility will file tariffs and plans for its specific service territory, and deliveries for three of the utilities must begin by November, 1997. The fourth utility, RG&E, must begin deliveries by February 1, 1998.

The pilot will last two years and eligibility will extend to commercial farms with a gross annual income of at least \$10,000 and food processors meeting the Standard Industrial Code 20 definition. The NYPSC intends to move beyond the energy-only framework of Orange and Rockland's PowerPick program. Therefore, the utilities are required to back out their costs of generation and capacity from their bundled rates. In addition, the Commission established a uniform fixed amount for both categories of participants $(0.4\phi/kWh)$ for food processors and $1.0\phi/kWh$ for farm participants) that will also be deducted from bundled rates. These relative amounts are to represent avoided retailing costs and are also intended to encourage participation. ¹⁰

Details regarding marketing and customer education have not been formalized for the pilot. There appears to be general agreement among the parties involved that potential suppliers should market directly to customers. The suppliers will then present customer applications to the respective utility. Education plans for customers will be filed by the utilities when they file tariffs to implement the program.

Three of the four utilities were to file tariffs and revised program plans by August 4, 1997, whereupon the period for comment would remain open until August 18, 1997. Final Commission approval of the program details is, thus, pending.

Ohio

On December 24, 1996, the Public Utilities Commission of Ohio (PUCO) adopted guidelines to implement Conjunctive Electric Service (CES) and ordered the state's electric utilities to file compliance tariffs. Under CES, different customer service locations are aggregated for cost of service, rate design, rate eligibility, and billing purposes. As specified in the guidelines, CES would be available to all electric utility customers in the state of Ohio. The PUCO also developed a code of conduct for the CES pilot for suppliers and utilities to prevent any party from gaining an unfair competitive advantage in the formation and servicing of CES groups. The Commission's guidelines also create an informal review process to resolve disputes among the parties and enforce the code.

These guidelines were developed after two years of round-table discussions with all stake-holders in Ohio's electric utility industry. The PUCO's intention is to "promote increased competitive options for Ohio businesses that do not unduly harm the interests of utility company shareholders or ratepayers." The Commission expects that CES will be of interest primarily to commercial customers such as supermarket and restaurant chains.

Six of the state's eight investor-owned electric utilities appealed the PUCO's guidelines to the Ohio Supreme Court. Following the PUC rejection of most of the utilities' suggested revisions to the final guidelines in a February order on rehearing, the utilities challenged the rejection of a revenue neutrality provision, the scope of the pilot, and the inequitable reporting requirements. The Commission has indicated that the Ohio Supreme Court may decide to hear the case during its 1997-98 term and that the outcome of the litigation may or may not be favorable to the Commission.

The CES pilot program will, if permitted to implement, last for two years. The program has no limitations on the total MW of contracted capacity or the number of customer groups that may be served under CES because, at the present time, CES' anticipated impacts on the utilities are speculative. However, the Commission will consider limiting program participation at a later time, if the utilities document adverse revenue or other system impacts. Customers may form CES groups to receive service as a single entity from their local utility, but will be limited to customers within the Ohio service area of each utility. However, utilities may enter into reciprocal arrangements among themselves to permit CES groups that have members across their respective service areas.

Customers who join a CES group must inform the utility in writing and sign for a minimum one-year contract period. After completing the minimum contract period, a customer may switch providers or return to tariffed service by giving 30 days' notice to the utility. When a customer leaves a CES group, the utility may adjust the group's CES rate if that customer's departure affects the group's service rate.

CES permits customers to receive service as a group. If there is a rate case proceeding, the CES rates shall reflect the cost of service incurred by the utility to serve each group. If there is no rate case proceeding, the CES rates shall be negotiated between the group's agent and the utility. CES rates would reflect the cost savings and other benefits accruing to the utility, such as load growth or load retention, resulting from the provision of the load aggregation service, since now the utility is providing service to a group instead of to a single customer. In any case, the utility may include in the CES rates any direct incremental cost incurred in implementing the pilot program. Any rate designed for one group shall be made available to any other similarly situated group. The PUCO will review individual aggregation contracts to prevent unduly discriminatory, anti-competitive or unreasonable behavior. The utilities must file quarterly reports to allow the Commission to monitor the revenue impact of the program.

Rules governing CES participants allow for agreements among utilities to wheel power across their

territories for such participants. The group is not restricted to one particular service territory or supplier. As an example, all members of a franchised fast food chain located throughout Ohio, can form a CES group to receive power from their supplier(s) of choice if agreements exist to cross utility service territories.

There is no explicit discussion of marketing approaches in the PUCO's CES guidelines other than the utility notices discussed below under education. In these notices, the utility must announce the availability of the CES program and notify customers in a fair and non-discriminatory manner that some services included in the program may be provided by either the utility or other suppliers. The Commission indicated that suppliers are free to advertise but must be truthful.

The utility must provide annual customer notices describing the CES program and pointing out that a more detailed pamphlet is available on request. The notices must explain that joining the program does not guarantee savings, but that electric bills could instead increase for some customers.

Suppliers of aggregation services (aggregators) must register with the Commission. Utilities may also create a subsidiary business unit to provide aggregation services. Brokers and aggregators will serve as energy service companies and may (1) form groups to apply for CES; (2) negotiate CES contracts with utilities; and (3) initiate, implement, and coordinate energy management activities for the group.

Aggregators must waive the right to pursue criminal or civil penalties or damages to remedy any breach of the code of conduct. Aggregators must also show credit worthiness and financial viability to the utility before the utility is obligated to issue them a CES rate.

Reliability issues have not been explicitly discussed in the CES' guidelines. In their application to the PUCO for rehearing, some (unspecified) utilities argued that allowing other parties to install meters would produce unreasonable safety risks for their employees. The reliability of customer-owned and maintained equipment could be an issue for specific customers, but system-wide reliability would not appear to be affected since CES group members would still be receiving service from their utility.

The customer shall pay for all metering and local facilities required by CES. The customer shall have the option to purchase, own, install, and maintain all metering and local facilities required for CES, provided that (a) the equipment meets minimum industry standards; (b) the customer pays any utility expenses incurred to maintain the facilities; and, (c) the customer installs protocols to preserve the integrity and security of the billing information produced by the equipment. In any case, the utility shall have access to the meter for billing and testing purposes.

An aggregated group may ask the utility to mail the aggregated bill to an agent designated by the group. The utility may also present a consolidated bill to the group's designated agent. Both of these options are currently available in Ohio under existing tariffs.

Oregon

Portland General Electric

Portland General Electric (PGE or "the Company") announced July 9, 1997, that it would file August 1, 1997, with the Oregon Public Utility Commission (OPUC) its plan to conduct a retail competition program, dubbed *Customer Choice*, to "test the mechanics of direct access and to gauge customer benefit." The Company filed the plan as announced. We note that Portland General Corporation, PGE's corporate parent, merged with ENRON Corporation (Enron), and PGE is now a wholly owned

subsidiary of Enron. This merger was approved by the OPUC on June 4, 1997. The Company has indicated that within 60 days of its merger with Enron, it will file with the OPUC a plan for a fully implemented direct access program.

Subject to Commission approval, the program will cover about 50,000 customers in the cities of Hillsboro, St. Helens, Oregon City and Sandy, and large industrial and commercial customers in PGE's service area, comprising about 15 percent of PGE's total electric load. All industrial and commercial customers larger than 5 MW in the Company's service territory, and all residential and small customers in the four cities above are eligible to participate. The Oregon Commission is expected to approve the program by September 29, 1997. Proposed implementation date for large customers (> 5 MW) is October 1, 1997 and for other customers is December 1, 1997. The pilot program will end December 31, 1998.

There are no guaranteed or mandated price reductions in the program, but the Company offers to pay Energy Service Providers (ESP or providers) a monthly "start-up credit" for a limited period of time. This credit varies by customer class, by the number of customers served, and by customer use. The expectation is that competition will force providers to flow this credit to the customers. This assumption remains to be proven true as the providers are currently unknown and the Commission has not yet approved the proposal.

The Company filed experimental tariffs for the program on August 1, 1997 and Schedule 122 describes this "start-up" credit. PGE offers to pay \$4 per month per customer for the first 50,000 residential customers enrolled by the ESP, \$3 per month for the next block of 50,000 customers, and \$2 per month for any customers beyond 100,000. The ESP also will receive a credit of 0.144¢/kWh for energy delivered to general service end-use consumers. The credits will continue until full customer choice is implemented in the Company's entire service area, but not beyond December 31, 1998.

There is no information at this time on what marketing approaches will be chosen to implement the program. Most likely, ESP not PGE, will do the marketing effort to reach customers. All suppliers must abide by the conditions of the tariff for billing information and dispute resolution.

Customer education procedures are under discussion at this time and no decision has been reached on any measures to promote customer education.

The Company expects ESP as a group to include energy suppliers, aggregators, power marketers, power brokers, and also end-use customers. Providers will be certified by PGE under Commission oversight. Providers must show credit worthiness, scheduling capability, and must adhere to tariff requirements. In addition to energy, ESP may also provide their own billing services. We note that an Enron subsidiary company is expected to be among the suppliers, but the OPUC Staff was not aware of its identity at this time.

Reliability does not appear to be an issue for the pilot program. PGE will ensure reliable electric service to all customers within its service area. The ESP will provide for energy. PGE will provide capacity and energy as needed. PGE will also provide and charge for reserves, backup power and other ancillary services. There are no transmission constraints binding on the program.

There is no information at this time concerning any of the additional equipment purchases and administrative services that will be required to implement the program.

Pennsylvania

The Pennsylvania General Assembly enacted The Electricity Generation Customer Choice and Competition Act (the Act) on December 3, 1996. The Act revises the state's Public Utility Code to restructure the electric utility industry. It authorizes the Pennsylvania Public Utility Commission (PAPUC or the Commission) to provide guidelines and order electric utilities to submit proposals for retail access pilot programs scheduled to originally begin April 1, 1997.

The Act further mandates specific features to be contained within the pilot programs. Thus, the Act requires that the pilot programs for each utility 1) must last for a minimum period of one year; 2) must broadly include all customer classes in its jurisdiction, taking into account specific geographic, demographic, and socioeconomic characteristics of their customers in order to determine if all customer classes can benefit from competitive markets; and 3) must include approximately five percent of each customer class' peak load, which may be waived by the PAPUC to account for economic development needs or special circumstances facing the utility.

The Act also specifies requirements that must be met by suppliers. To promote safety and reliability, suppliers participating in the pilots must be certified by the Commission. Suppliers must also agree to pay annually all taxes imposed by the state's Tax Reform Code of 1971 and the Act.

By Order dated January 16, 1997, the PAPUC adopted guidelines related to retail access pilot programs and ordered all jurisdictional electric utilities to submit pilot proposals, consistent with the guidelines, by March 1, 1997. The following utilities submitted proposals to implement pilot programs: 1) Allegheny Power Company, 2) Duquesne Light Company, 3) Metropolitan Edison Company, 4) PECO Energy Company, 5) Pennsylvania Electric Company, 6) Pennsylvania Power & Light Company, 7) Pennsylvania Power Company, and 8) UGI Utilities Incorporated.

In a series of Orders dated August 21, 1997 the Commission approved each of the above Companies' pilot programs, as modified in their respective Orders, and further ordered compliance filings by September 22, 1997.

Retail Access Pilot Programs

The pilot program for each utility is designed around the guidelines adopted by the PAPUC to achieve a smooth transition to customer choice. The pilot programs will begin on November 1, 1997 and will continue through December 31, 1998, culminating in the beginning of a three year phase-in of full retail access.

Beginning in January 1998, the Commission will provide post-implementation hearings to address and correct any operational problems encountered during the implementation of any of the pilots, and will hear parties on any remaining issues to be resolved. The Commission will also provide for a reconciliation process, whereby the over- and/or under-collection of rates will be treated as a regulatory asset or liability, as deemed appropriate.

We note that the final form of the pilot programs will be specified in the compliance filings that the utilities were directed to file by September 22, 1997. Those filings were not available at the time of this writing.

The Act specified, and the Commission ordered, all utilities to include five percent of the non-coincidental peak load of each tariff class in its pilot program. This was done to maximize the number of customers and the amount of energy covered under the program. Defining the participation rate in terms of the non-coincidental peak of each tariff class assures that all classes participate, and also extends the

size of the pilot. The Commission desires high customer participation believing that a larger pilot program will attract a greater number of competitive electric generation suppliers and will expedite development of a robust, competitive, retail market for electric generation and capacity.

The Act authorizes the PAPUC to approve flexible prices and rates, including negotiated tariffs, and to use performance-based rates as an alternative to traditional rate-of-return ratemaking. Participating customers will receive both an energy credit and a Customer Participation Credit (CPC). The CPC will be applicable to utility charges after the removal of the energy credit. The energy credit is based on approximate state-wide utility energy and capacity costs. The CPC was added to the energy credit as an incentive to customers, to help reach the five percent participation rate specified by the Act.

Customers will continue to pay their Company's retail rates. Participating residential and commercial customers will receive an energy credit of 3.0¢/kWh and a CPC of 13 percent. Both credits will apply statewide to residential and commercial customers of all utilities, except UGI. Industrial customers will receive an energy credit and a CPC that varies by utility. The Table below contains the individual credits by utility and customer class.

	Residential		Commercial		<u>Industrial</u>	
<u>Utility</u>	Energy <u>Credit</u>	<u>CPC</u>	Energy <u>Credit</u>	<u>CPC</u>	Energy <u>Credit</u>	<u>CPC</u>
Allegheny, Duquesne, Penn Power	3.0¢/kwh	13 %	3.0¢/kwh	13 %	2.4¢/kwh	10 %
pjm utilities*	3.0¢/kwh	13 %	3.0¢/kwh	13	%2.7¢/kwh	10 %
ugi	3.0¢/kwh	8 %	3.0¢/kwh	8 %	2.7¢/kwh	5 %

^{*}pjm members: peco energy co., pennsylvania power & light co. (pp&l), pennsylvania power & light co. (penelec), and metropolitan edison co.

Each Company was scheduled to mail appropriate educational materials (not described) and an enrollment check-off during September 8-17, 1997 to inform customers of changes in the electric industry, and to hold an open enrollment period during September 15-29, 1997. Customers wishing to participate in the pilot must return the completed enrollment check-off to the Company. If any tariff class is over-subscribed, participating customers will be chosen randomly. If any tariff class is undersubscribed, the Company will again mail registration materials to all non-participating customers in that class. Registered suppliers may also distribute enrollment materials during this entire period.

The companies are expected to provide the participating customers' data to suppliers by October 3, 1997. The conclusion of the marketing period varies slightly by utility company, but all end in October, 1997. Power is expected to begin flowing under the pilot programs on November 1, 1997. Thereafter, each Company may continue to mail registration materials weekly to non-participating customers of any remaining under-subscribed class. Suppliers may also mail enrollment materials during this time. After full enrollment is attained in any class, customers and suppliers may continue to submit enrollment request choices to replace customers that drop out of the program.

Customers participating in the pilot program will be able to purchase energy from alternative suppliers, including other utilities' affiliates. Primary power customers will be chosen by lottery, but maximum loads per customer will be limited to no more than 10% of the load in that customer's class. However, this provision can be waived if fewer than 10 customers in any tariff class choose to participate in the

pilot.13 Customers may change providers or return to their Company's tariffed service at the end of each billing period. Customers may choose to be billed for generation services by either the alternate supplier or the current utility. The remaining charges will be billed solely by the current Company.

Consumer education will be the joint responsibility of the Commission, industry, and consumer organizations. The Commission has announced six goals of consumer education to make electric competition work in Pennsylvania. These goals require that customers be educated to understand the changes in the industry and the options available to enable them (consumers) to make informed decisions when choosing an alternative energy supplier.

The Commission has created a core curriculum and suggested approaches for its dissemination in the state. The Companies may add to the core curriculum if they so wish. The Companies must submit educational plans to implement the PAPUC's core curriculum, that include funding, staffing, content, and delivery mechanisms. The Companies' educational programs shall be evaluated by an independent consultant on a uniform basis. The Commission will monitor the progress of the educational programs.

The Act mandates that participating suppliers be certified or licensed by the Commission and pay the state's gross receipt tax. Any supplier certified by the Commission may participate in the pilot program of any company. Suppliers are required to follow a preliminary Code of Conduct specified by the Commission. Additionally, suppliers are expected to market their product in a clear and truthful way. The Commission will monitor the market and address any market abuses brought to its attention.

Reliability does not appear to be an issue in the programs. The Commission has directed one utility ¹⁴ to allow suppliers in its jurisdiction to correct energy imbalances consistent with FERC's Order 888, or to sell energy at cost to the supplier. Although this provision does not appear in any other Order, it seems logical that the same procedure would be applicable to all utilities. With respect to transmission, the Commission recognizes that transmission access is under FERC jurisdiction. The utilities will provide ancillary transmission services to suppliers as an agency function under FERC jurisdiction, until PJM is able to provide support to individual suppliers for unbundled retail wheeling. The Commission has warned that, although not expected, the Commission may withdraw its approval of a pilot program if the FERC makes any substantial changes to the program.

Each Company is responsible for the installation, reading, and calibration of meters, for energizing accounts, and for billing all transmission and distribution services. Customers may elect to have their own metering device or have an alternative supplier provide metering services, provided that the equipment is installed by their Company, and is compatible with the Company's other equipment. Each utility must maintain and support a catalogue of advanced metering to serve the needs of customers and suppliers. All utilities must cooperate with suppliers to minimize delays in establishing transactions between customers and suppliers.

Washington

Puget Sound Energy, Inc.

Puget Sound Energy, Inc. (PSE or the Company) filed a request with the Washington Utilities and Transportation Commission (WUTC) on July 1, 1997, for approval of a pilot program to test various operational aspects of providing open access to all customer classes. The program was approved by the WUTC on July 30, 1997.

The Company was ordered by the WUTC in a previous Docket, as a condition for having the

Commission approve market-based rates for its largest customers, to design and implement the pilot program, following guidelines recommended by a WUTC sponsored collaborative group. PSE has the highest rates in the region, and the WUTC's intention is to extend, as much as possible, the benefits of competition, as they may be, to all other customers, particularly residential and small commercial customers.

The guidelines specified that (a) all customer classes will have an opportunity to participate in the program; (b) participating customers will have the opportunity to purchase energy from other suppliers; and (c), the program will be offered to about 10 percent of PSE's customers, with an expected maximum participation rate of about 1.2 percent of all customers. The rather large program size was chosen in order to have a pilot program of sufficient size to provide both meaningful and useful information about real world issues raised by open access retail competition.

The program will last for about a two-year period, from November 1, 1997 through December 1999, and will be offered to about 85,600 eligible customers in PSE's service area. A maximum of about 10,300 will be chosen from those applying. As already indicated, this figure is about 1.2 percent of PSE's total number of customers. Residential and small commercial customers will be accepted when they apply, until the desired number is reached. If there is over subscription, customers needed to reach the desired maximum number will be chosen by lottery. Large load and industrial customers (> 50 kV) will be chosen by a system-wide lottery and invited to participate but will be restricted by class and by load. Customers may switch providers, or return to tariffed service on their billing day cycle, by giving 5 days' notice to the utility.

The program will provide price discounts to participating customers to encourage participation and to offset transactions costs. The Company estimates that discounts will average about 5% across all customer classes. Residential and small customer classes will receive an average discount of about 9%. Small demand customers will receive about 6%, large demand customers about 4.5%, and high voltage customers about 1.5%. Lower rates will account for about two thirds of the discounts while suppliers are expected to provide the remainder. The Company filed illustrative tariffs with its application. Formal tariffs will be filed once actual energy rates have been determined.

All eligible customers will be mailed information explaining the program. Suppliers may advertise in the mass media but will be restricted to selected newspapers, and television and radio stations within the program's target locations to avoid confusing non-participating customers. Telemarketing by suppliers will be subject to existing state regulations. Suppliers are required to provide typical bill comparisons to prospective customers in their advertisements.

Education is considered a critical variable in achieving small customer participation and the program is designed to test the effectiveness' of various approaches. Customer education will be done by suppliers and other interested parties. The program will include initial customer mailings by the Company containing a letter and a pamphlet describing the program, holding educational fairs, making presentations to community groups, home and business expositions, and the use of flyers and posters in the pilot areas. The educational program materials that will be mailed to eligible customers will be jointly developed by WUTC Staff, Public Council Staff and the Company.

The Commission will monitor the success of the campaign to recruit residential and small users. If minimum quotas have not been reached within six months after the initiation of the program, PSE will start an intensive program to recruit those customers.

Suppliers must register with the Company and provide general background information, credit

worthiness, a commitment to comply with general marketing rules and agree to the pilot program tariff schedules. Suppliers must also agree to reciprocity with the utility if their market share exceeds 10 percent of the participating customers and they fail to meet other conditions. Suppliers, whether utilities or their affiliates, that exceed the ten percent limit must allow PSE within six months to compete for their customers on terms comparable to this pilot program, unless they agree to market without using the supplying utility's name or brand name.

Reliability does not appear to be an issue for the pilot program. PSE will supply all required energy and capacity to maintain customer loads if any supplier fails to cover its commitments.

The pilot program development will require creating new power scheduling procedures, modifying bill and billing procedures, installing new meters, testing automated meter reading technology, developing customer service protocols, examining alternative customer aggregation schemes, and conducting load research. The pilot also is designed to investigate the participation of low income customers and multifamily housing.

Washington Water Power Company

Direct Access Delivery Service (DADS)

Washington Water Power Company (WWP) is an investor-owned utility which provides electric service to portions of eastern Washington and northern Idaho. WWP also provides natural gas distribution service in certain portions of eastern Washington, northern Idaho, California and Oregon. On May 6, 1996, WWP filed an experimental Direct Access and Delivery Service (DADS) tariff with the Washington Utilities and Transportation Commission (WUTC) and the Idaho Public Utilities Commission (ID PUC). The DADS pilot allows WWP's industrial electric customers on the company's extra large general service Schedule 25 the opportunity to purchase up to one-third of their electric requirements from an alternate supplier. The proposed Schedule 26 is available to 15 customers in Washington and 11 in Idaho.

The DADS pilot was approved by the WUTC on June 26, 1996 to be effective July 1, 1996, and by the ID PUC on September 19, 1996 to be effective October 1, 1996. WWP filed an amended DADS tariff with the WUTC on May 28, 1996 which was approved on July 17, 1996 to be effective September 1, 1996. The pilot will end on August 31, 1998.

In Washington, 10 customers (representing 11 accounts) are participating in the DADS pilot. Five out of the 11 eligible customers in Idaho are taking service from alternate suppliers.

The Schedule 26 rate is 1.547¢/kWh in Washington and 1.384¢/kWh in WWP's service territory in Idaho. This rate provides customers with transmission, distribution, scheduling, balancing, load following, and generating reserves. When alternate suppliers fail to deliver energy and capacity, WWP will charge \$2 per kW for capacity, plus WWP's incremental energy cost (based on non-firm purchases and sales), plus the Schedule 26 energy rate.

To educate customers, WWP maintained a website with information regarding the DADS pilot. The company also held a customer meeting and provided a booklet of information at the meeting and to other interested customers. Much of the customer education was developed through individual contact between WWP large customer account representatives and customers.

Suppliers are required to supply the following information: name, address and form of business;

certified copy of Articles of Incorporation; evidence of FERC registration and qualification; evidence of qualification to do business in Washington or Idaho, and name and address of the registered agent for service in Washington or Idaho.

According to the WUTC, there have been no significant operational constraints (regional transmission outages, failure to deliver, etc.) which have affected the DADS pilot. Customers participating in the DADS pilot already have hourly load meters, therefore, information systems have not been an issue under the experiment.

More Options for Power Service (MOPS)

On February 7, 1997, Washington Water Power Company filed a retail pilot program, More Options for Power Service (MOPS), in Washington and Idaho. WWP would randomly select 1% of its residential and small commercial load (approximately 2,500 residential and 300 commercial customers in Washington and Idaho) to participate in the MOPS. Approximately 1900 customers in Washington and 900 Idaho customers would be selected. In a supplemental proposal on March 18, 1997, WWP requested expanding the pilot to include all customers in the Washington towns of Odessa and Harrington, adding 1,000 more participants to the pilot. All customers in Odessa and Harrington would be solicited. The pilot was approved by WUTC on March 31, 1997 and on April 11, 1997 by the ID PUC. Direct retail access would begin July 1, 1997 and conclude June 30, 1999.

On July 1, 1997, WWP announced that it is deferring all but one component of its MOPS pilot due to lack of supplier interest. The application is now limited to only the two small Washington towns of Odessa and Harrington, which were able to secure two supplier contracts.

Only one supplier committed to the random portion of the pilot. More suppliers are needed to provide participating customers with more choices. "Last November Washington Water Power surveyed potential suppliers and five submitted letters indicating MOPS pilot participation interest." According to Kelly Norwood, Washington Water Power senior rate accountant, suppliers cited California's recent decision to provide direct access to all customers by January 1, 1998, limited staff because of other pilot participation, and the size of the MOPS pilot among reasons for not registering to participate. WWP is assessing the viability of the random portion of the program and considering other options.

Definitive Actions

Enactment of a Tennessee bill in June, 1997 to begin a study of deregulation, marked unanimity among the fifty states and the District of Columbia. All have now initiated or continue to pursue some legislative or regulatory process examining electric industry restructuring, deregulation, re-regulation and/or retail competition. Currently, eight states have passed legislation to implement retail choice and five states have regulatory approval for retail choice. Two additional states (New Jersey and Wisconsin) have endorsed retail choice but have not committed to implementation.¹⁷

A total of 43 states have both legislative and regulatory investigations of retail choice since early 1995. Kentucky, Michigan, West Virginia, Wisconsin and Washington D.C. have solely regulatory proceedings underway; while Nebraska, South Dakota, and Tennessee have only considered legislative action.

In addition to the eight states passing legislation, Illinois and Massachusetts are ironing-out details and are expected to act before year-end. New York and Ohio have legislative measures pending that are not expected to pass in 1997. Other comprehensive measures either perished or were held over as each

legislative session in Arizona, Connecticut, Kansas, Louisiana, Minnesota, Mississippi, North Carolina, Oregon, South Carolina, Texas, Vermont, and Washington neared adjournment for 1997. Colorado and Indiana killed comprehensive bills early in their 1997 legislative sessions.

Although some activity continues, a few states (Alaska, Florida, Iowa, Minnesota, and North Dakota) have decided that results of their investigations indicate restructuring is inappropriate or unnecessary at the present time. The Alaska Public Utilities Commission (PUC) is required to "find clear and convincing evidence that additional electric service is in the public interest" for allowing competition in existing territories. The PUC has taken no additional action since recommending an investigation regarding power pooling be opened. Florida continues to only informally monitor other state activities to stay abreast on restructuring developments. The Utilities Board of Iowa agreed with its staff that "there is no compelling reason to move quickly into restructuring." It also stated "there is no consensus at this time as to whether full retail competition would benefit Iowa's electric consumers." ¹⁹

It appears "that the governor, legislative leadership, and state regulators feel it is too early for restructuring of the industry in the state" as legislative bills died in committee in Minnesota. North Dakota's Public Service Commission (PSC) concluded its investigation declaring it "is not convinced that the electric industry is in need of an immediate and substantial overhaul." The Maryland PSC Staff concluded in 1995 that conditions needed to ensure a competitive retail market did not exist at the time. Recently, they recommended implementing full retail access by 2002 but concluded it is "impossible for staff, or anyone else, to say at this time, with certainty, that retail open access will benefit most or all Maryland customers." 22

Thirty other jurisdictions have elected to continue their studies and monitor activities across the nation. ²³ These statistics imply that 36 jurisdictions, 71% of the country, have deemed restructuring issues as important agenda items, but not necessarily as priority items. Such jurisdictions have decided to take additional time to gather facts and evaluate the potential ramifications before implementing any form of retail competition.

Recently, some of the more aggressive states appear to be facing stronger opposition to expedited restructuring. Leaders and affected parties in California, New Hampshire, Oklahoma, and Vermont are voicing growing concerns and advocating a slower pace or changes to existing restructuring laws and regulatory directives.

Comprehensive Laws

The following states have passed legislation regarding retail access which was later signed into law. State utility commissions are actively working with legislators, utilities, and other stakeholders to develop methodologies and schedules to implement the requirements of each respective law.

California

There are many bills pending in the legislature regarding various elements of the restructuring law passed in 1996. Most of these bills have uncertain dispositions at this time. However, legislation regarding consumer protection standards and competitive supplier requirements is expected to be passed in 1997. Currently there are no bills proposing significant changes to the restructuring law.

In May of this year, the Public Utilities Commission (PUC) elected to begin full retail access to all customers on January 1, 1998, rather than to phase in access over four years as originally planned. The

Commission found no significant technical constraints against making access available to all customers simultaneously. California's competitive electricity market will, however, find difficulty operating without a functional independent system operator (ISO) and power exchange (PX).

With only a few months remaining in 1997, it is doubtful the ISO and PX will be fully functional. A number of critical and complex scheduling and data processing systems need to be developed, tested, and debugged, all of which requires time. A Coopers & Lybrand memo of June 23, 1997 stated "Work on California's new Power Exchange is significantly behind schedule, and participants should expect the pool to be scaled down, significantly from what previously had been envisioned." Some observers consider this a major understatement while others dismiss the problem as a minor technical glitch. It does point out that problems exist and delays are likely. The approach now being pursued in California is to concentrate on the functions absolutely needed to be operational in January, even if in a limited sense. The remaining functions will have to wait and be addressed and completed at a later time.

"A significant amount of design work remains to be done and there remain large uncertainties regarding ISO interface issues." Similar hurdles have slowed the development of software for the complicated ISO. A consortium was just recently awarded the contract to supply scheduling and business systems to California's ISO. The goal is to have the ISO running on January 1, 1998, but it will likely be limited to essential functions only.

The PUC also ordered the unbundling of metering, billing and customer information services. These are also to be provided competitively on January 1, 1998. The PUC believes this "will promote the availability of access to competitive suppliers and reduce market power in the Power Exchange." All parties are directed to resolve the issues surrounding the unbundling of costs, the sharing of information and infrastructure standards. They are also directed to be prepared to handle requests and backlogs resulting from simultaneous access. The ISO is directed to deal with any system reliability issues and any other problems arising from implementing direct access all at once. This directive causes real concern as a fully functional ISO is unlikely to be ready to assume such duties in January.

Policies regarding treatment of transition costs; mechanisms for maintaining the "firewall" between customer classes eligible for the 10% rate reduction and recording sunk costs and revenues; and procedures for reconciling balances for competition charge revenues, divestiture proceeds and market price changes were issued in earlier Commission orders. Proceedings are underway concerning codes of conduct among utilities and their affiliates; securitization of transition assets and issuing rate reduction bonds; and divestiture of fossil generation assets.

Recently, Enron announced it "may not compete for energy customers as aggressively as it had planned in California because it believes the state's deregulation law will impede competition." Enron complains the provision allowing the state's IOUs to recover stranded investment from consumers creates a low incentive for the Company to offer a commodity product at a competitive price.

Maine

A comprehensive restructuring bill was signed into law on May 29, 1997 mandating retail competition. It allows customer choice and directs larger investor owned utilities to divest all generation and purchased power contracts by March 1, 2000. The Maine Yankee nuclear plant is exempted until January 1, 2009. Much of the law only affects the two larger utilities, Central Maine Power (CMP) and Bangor Hydro-Electric (BHE).

CMP and BHE distribution utilities are required by law to connect customers in their respective service territories to the supplier of choice. Additionally, "the law prohibits the distribution utilities from selling energy to anyone at retail, limits their retail marketing affiliates' sales to customers in their affiliated distribution utilities' service areas to one third of the total [customers], and limits affiliate sales to inservice-area standard-offer service customers to 20 percent of the total." The law also provides that an investor is limited to a 10% interest in either of the distribution utilities to market energy in the utility's service area. Also, if a purchase gives an utility affiliate an unfair advantage, the utility cannot market energy. Maine Public Service (MPS) is exempt from much of the law.

Utilities are permitted to recover legitimate, verifiable, and unmitigable stranded costs. All sellers are required to maintain a renewables portfolio of at least 30%. Metering and billing services are to be competitive by March 1, 2002. Legislature is expected to address securitization of stranded costs in its 1998 session. The Commission is required to promulgate all required rules and submit them to the legislature for review and approval.

Montana

On May 2, 1997, the governor signed into law a measure providing retail choice to large customers and pilot programs for smaller customers beginning July 1, 1998. Customers with loads exceeding 1 MW and customers over 300 kW who can aggregate loads to above 1 MW will be the first to have choice. All remaining customers must have the opportunity to choose by July 1, 2002.

Utilities were to file transition plans by July 1, 1997. The law freezes rates for all customers for two years and also freezes the generation component of bills for smaller customers for four years. It also provides for securitization to refinance utility assets.³⁰

Nevada

In July 1997, the restructuring bill was signed into law requiring the state's Public Utilities Commission to implement competition on December 31, 1999 for any electricity-related service deemed potentially competitive. The law authorizes, but does not mandate, the Commission to order phase-in of direct access; divestiture; licensing of alternative providers; full shareholder compensation for stranded costs deemed recoverable; and establishment of a renewable energy resource portfolio.

The law does not categorize any service as potentially competitive nor directs the Commission to make such a finding. The Commission is free to determine most of the details to implement competition or to delay competition indefinitely if it decides that no component of electric service can be properly provided by an alternative supplier.³¹

New Hampshire

The restructuring bill enacted in May 1996, directed the NHPUC to devise a plan to implement retail competition because the state had the unacceptably highest average electric rates in the nation. On February 28, 1997 the Commission issued its plan implementing the law addressing the collection of stranded costs. These orders call for retail choice for all customers to begin on January 1, 1998; require divestiture of all generation for state-based utilities; prohibit affiliation between distribution utilities and sellers of competitive services in the same service territory; and limit recovery of stranded costs to the level of the regional average rate of New England utilities.

During the second quarter this year, tax reform bills were signed by the governor. These bills replaced

the utility franchise tax with a consumption tax, applied the same tax obligations of public utilities to independent power producers, and subjected all generation assets, despite ownership, to local property taxes. A securitization bill was referred for study and consideration next year.³²

The Public Service Company of New Hampshire (PSNH) appealed to federal district court that the PUC's plan violated earlier rights and agreements. The court complied by issuing a temporary restraining order against the PUC's actions as they affect PSNH. The Commission suspended its plan to permit time for the stipulated mediation process to attempt to resolve the legal claims and deferred utility compliance filings which were due June 30, 1997.

Discussions began May 13, 1997, among the mediator, governor, state attorney general, and company representatives. Meetings may continue until a resolution is agreed upon if continued progress is reported by the mediator. The governor announced in early September that the parties failed to reach a settlement and the lawsuit will return to court for resolution. The PUC plans to hold public hearings on any resulting settlement to determine whether it is in the public interest. The Commission intends to begin retail wheeling by June 30, 1998, unless this case is still pending. ³³

Oklahoma

The State's Electric Restructuring Act of 1997 was signed into law on April 25, 1997. It calls for direct access for all retail customers by July 1, 2002. This date can be deferred if a more uniform state tax structure, including a consumption tax, is not in place or if the legislature's task force fails to endorse moving forward as a result of restructuring studies conducted by the Corporation Commission. Although granted considerable discretion in determining the details, the Commission cannot implement restructuring without the legislature's review and approval. Other issues to be considered by the Commission include market structure, market power, and financial topics.

The law allows government-owned utilities with owned generation to continue serving customers beyond its service territory. It also creates the Joint Electric Utility Task Force to oversee the restructuring process and to review the Commission's reports and studies. The Commission is charged with developing procedures to identify, quantify, and allocate stranded investments and developing a recovery mechanism. A transition charge may be imposed for up to seven years.³⁴

"A lot of critics are questioning the wisdom of an Oklahoma Senate bill to deregulate the electric industry when the state already has some of the lowest energy rates in the country." 35

Pennsylvania

The governor signed the Electricity Competition Act into law in December 1996. It required retail competition to begin April 1, 1997, with pilot programs for 5% of the load of each of the state's investor-owned utilities (IOU). Remaining load will be evenly divided (1/3 load each year) and permitted to choose suppliers resulting in full retail choice by January 1, 2001. The law provides for recovery of unmitigated stranded costs from departing customers and reduces rates through capital refinancing.

A legislator filed a court challenge asking that the law be voided because the legislature failed to follow its own procedural rules when adopting the measure. Although the claim is still pending, the PUC and the utilities continue to move forward. All six IOUs have filed retail pilot proposals to implement the first phase. The PUC generally found that none of the proposals adhered to their guidelines and varied too greatly. Since a wide disparity in rates throughout the state helped prompt an early consideration of

restructuring, the PUC prefers a "one size fits all" approach to retail choice.³⁶ Recent orders required utilities to provide compliance filings by September 22, 1997 and implement pilot programs on November 1, 1997.

All of the major utilities filed company specific plans for implementing restructuring.

Rhode Island

Enactment of the State's restructuring law on August 7, 1996, directed the start of retail choice on July 1, 1997; required divestiture of 15% of non-nuclear generation; and provided an opportunity to recover stranded costs. The law specified many of the details for retail competition to be implemented by the Public Utilities and Retail Licensing Commissions. Recent legislation was introduced to apply gross receipts tax uniformly to utilities and non-regulated power producers and to exempt small utilities and those not selling outside their service areas.³⁷ A securitization bill was also signed during the second quarter 1997.³⁸

"Rhode Island is the first state to begin implementation of retail customer choice under a state policy mandating full retail competition as a formal long-term option, as distinct from relatively short duration, pilot programs." Under the law, new customers exceeding 200 kW, existing large industrial customers over 1500 kW, and state government customers were granted retail access on July 1, 1997. All manufacturing customers exceeding 200 kW and all municipal customers will receive retail access on January 1, 1998. All remaining customers will have retail access on July 1, 1998.

Charges for such access have been approved, suspended, and made effective subject to refund by the Federal Energy Regulatory Commission (FERC). State law mandates access to alternative suppliers, the unbundling of rates, and determines the access charge to be levied; but the access charge itself must be approved by the FERC.

PUC approval of unbundled rates for Narragansett Electric paved the way to begin retail choice. The first block of 10% of load, consisting of major industrial and state government accounts, were given access on July 1, 1997. It was not until early August that two large industrial customers switched suppliers. These large customers comprise 2% of the State's total load and signed contracts with a Los Angeles based supplier. Reportedly, other customers are also in negotiations. Other state utilities are currently negotiating restructuring implementation settlement agreements with the PUC.

Although the New England Electric System (NEES) projected savings of 14% to 18%, assuming market prices between 2.0 and 2.5 ϕ /kWh, initial experience indicates that competitive prices may be higher. Aside from the fact that it took a month for any customer to switch suppliers, the Division of Central Services within the State's Department of Administration chose not to switch suppliers for the state-owned facilities. Upon receiving and analyzing proposals from five bidders, the agency found that none of the proposals offered the State a fixed-price energy supply option with sufficient savings compared to the unbundled utility rates. They elected to remain a full requirements customer of the local utilities. Such action implies that the energy savings anticipated in the state may be overstated.

The PUC Staff has expressed concern over the apparent customer confusion regarding provider offers and associated prices. This problem could significantly magnify next year when access becomes available to all customers.

Regulatory Programs

Alabama is the most recent state to undertake regulatory consideration. Since early 1995, Washington D.C. and a total of 47 states have addressed restructuring and competition through the respective utility commissions. Five of these states have issued regulatory commission orders to mandate retail competition. **Arizona**

The Corporation Commission issued its rules for restructuring in December 1996. Since the Commission's authority derives from the state constitution, and not from statutory law, the need for legislation to implement the rules is clouded. Even though earlier proposed legislation died in committee, additional recommendations are expected to be submitted before the end of 1997.

Two major utilities have challenged the restructuring rules claiming violation of due process rights, equal protection rights, taking property without compensation, and unconstitutionally impairing their franchise certificate contracts with the state. The Commission says the claims do not raise valid concerns and continues to proceed with its plans. Workshops to develop consensus solutions are ongoing and various reports are due in the fall. The rules call for customer choice for 20% of total load on January 1, 1999 and phased-in choice for all by 2003. Also, voluntary participation of publicly owned utilities is encouraged and the potential recovery of unmitigated stranded costs is permitted on an individual company basis. ⁴⁰

Massachusetts

A comprehensive bill is expected to be released by the Joint Committee on Electric Utility Restructuring by September 1997. This will be coupled with the governor's proposal by the Joint Committee on Government Regulations to develop a single legislative package for consideration.⁴¹ It is anticipated that any legislative package offered for consideration will remain consistent with the DPU rules.

The Department of Public Utilities issued rules to guide the changing relationships among distribution companies, competitive providers, and customers in December 1996. The rules called for retail access to all customers by January 1, 1998; corporate unbundling; divestiture of generation; potential recovery and securitization of non-mitigated stranded costs for utilities that divest; immediate 10% rate reductions; and standard-offer service. 42

Utilities have filed negotiated restructuring settlements with regulators.

Michigan

The Public Service Commission issued an order in April 1994 asserting jurisdiction over retail wheeling declaring an experiment limited to 60 MW of capacity on Consumers' Energy system and to 90 MW for Detroit Edison's system. Implementation was to be timed with the utilities' need for new supply-side capacity, but was never triggered as the need for capacity was delayed.

A PSC order was issued in June 1997 for direct access to customers of Consumers Energy and Detroit Edison beginning January 1, 1998 for 2.5% of the utilities' load. Additional load of 2.5% blocks will be phased-in annually through 2001 with full access to all customers by January 1, 2002. Access will be granted to customers willing to pay the highest transition charges or exit fees which will be used to mitigate stranded costs.

An alternative plan was proposed by a coalition comprising the state's Attorney General, ABATE, AARP, Michigan Retailers Association and others. This proposal was in the form of draft legislation and

called for phasing-in one third of the load each year beginning April 1998.⁴³

New York

In May 1996, the PSC issued an order for utilities to file restructuring plans by October 1996. It also directed the establishment of a wholesale power poolco in 1997 and the beginning of phased-in retail access for all classes by early 1998. The order required complete functional unbundling within utilities without mandating asset divestiture. It also provided for potential recovery of stranded investment through a nonbypassable charge. 44

The May order was challenged by the Energy Association of New York State (EA), including member IOUs. The EA claimed the PSC changed the regulatory rules by no longer assuring recovery of prudent investments; failing to protect reliability; not following proper procedures; and lacking statutory authority to order divestiture or retail wheeling. The state court rejected the EA's arguments and said the EA had no justiciable controversy. The EA has filed with the State Supreme Court noticing its intent to appeal the lower court decision. ⁴⁵ This case is still pending.

Electric utilities filed restructuring plans and the PSC had to reach settlement within 90 days, otherwise the case would go before the Administrative Law Judge. Full adjudication and expanded proceedings were ordered for most of the utilities (Consolidated Edison, Central Hudson Gas & Electric, Orange & Rockland, and Rochester Gas & Electric). Settlement plans for most utilities were rejected by the ALJ until mid-July 1997, when approval was recommended for Rochester Gas & Electric. New York State Electric & Gas was unable to negotiate a settlement and is under litigation. Niagara Mohawk recently filed a new proposal utilizing savings resulting from buyouts and buydowns of non-utility purchase power contracts to mitigate stranded investment. Long Island Lighting is expecting near-term approval of the partial takeover plan of the Long Island Power Authority. Additionally, the PSC has issued an order establishing the market rules to provide retail energy services and declaring that distribution utilities will become the supplier of last resort. 46

A comprehensive restructuring bill and several other related bills are under consideration by the Assembly. Proposals making low-cost power available for economic development, phasing-out of gross receipts tax over four years, and allowing securitization of stranded investment passed the Senate but are not expected to be approved by the House.

Vermont

The Public Service Board's restructuring mandate of December 1996 has effectively been placed on hold as the legislature failed to pass a comprehensive restructuring bill. Although passed by the Senate, the House kept it at committee level until next session. The plan called for direct access for all customers by 1998; functional unbundling of the state's largest IOUs; recovery of stranded investment through a CTC or PBR; and provisions for consumer protection, energy efficiency, renewable energy and environmental quality. It also supports the development of a regional ISO and PX.⁴⁷

Governor Howard Dean remains pessimistic about the chances of the state legislation passing a deregulation bill he could sign. He says, "he would only sign a measure that included across-the-board rate reductions for all customers." 48

Endorsement

Two states have endorsed competition, but as of July 1997, have not yet mandated or implemented it.

New Jersey

Regulators released their findings and recommendations regarding restructuring on April 30, 1997. The Board of Public Utilities called for the beginning of phased-in retail access in October 1998 and accelerated the date for full implementation to all customers from April 2001 to July 1, 2000. The Board supports the establishment of a power exchange and an independent system operator as a single entity. It also recommends permitting potential recovery of stranded investment, to be partially mitigated by state-sponsored bonds to refinance utility assets, through a special Market Transition Charge (MTC) during a 4 to 8 year transition.⁴⁹

The BPU also levels the playing field by replacing gross receipts tax on utility rates with a corporate business tax, retail sales tax, and transition tax for all users of the distribution system. Electricity services are also to be unbundled. The Board expects legislation will be needed to implement its plan and will cooperate with the governor and the public to develop such legislation.

PSE&G, GPU Energy and Atlantic Energy submitted their respective restructuring plans to the BPU in July. The three utilities estimate stranded costs at a combined total of approximately \$8.6 billion.⁵⁰

Wisconsin

The Public Service Commission endorsed retail competition, issuing a 32-step restructuring plan. It also states that legislation will be required to implement the entire plan. The legislature is not expected to consider the matter until 1999.

However, the PSC plans to introduce retail competition for all customers by 2001. The Commission altered its procedure for construction of new generation facilities, found it cannot authorize construction of merchant plants above 12 MW under current law, and streamlined its resource planning process. ⁵¹ The PSC also adopted final ISO standards and calls for the functional separation of transmission, distribution, generation and energy services. ⁵²

Findings

The first retail pilot programs were announced in Illinois and New Hampshire during the summer of 1995 and implemented in the spring of 1996. With less than 18 months of empirical data to analyze, it is premature to draw any definitive conclusions at this time. Information available at this point in time is preliminary and limited. However, a few observations can be noted about the current pilot programs.

Pilots currently underway encountered some initial problems. These problems generally revolved around legal disputes and challenges, the tight deadlines imposed for designing and implementing the pilot, inadequate customer education, and confusing marketing information from competitive suppliers. Though some of the problems appeared to lessen after implementation, others have lingered and some have magnified.

Legal Challenges

There have been several court challenges to passed legislation or commission orders in some states. While retail pilot programs in some of these states have started, such legal challenges add an air of

uncertainty to the industry restructuring. Investor owned utilities and the Utility Workers Union filed appeals with the Supreme Court of Ohio against the Public Utilities Commission of Ohio. They contend that the PUCO lacks a factual basis for and has overstepped its jurisdictional authority in ordering conjunctive billing.

Northeast Utilities filed in the U.S. District Court to block the New Hampshire PUC's restructuring order. NU alleges that the basis for the NHPUC's methodology to limit recovery of stranded investment is illegal and will force some of its affiliates into bankruptcy. NU also claims that the order violates a 1989 rate agreement approved by a federal bankruptcy court. Despite repeated attempts to negotiate a solution, no settlement was reached and the lawsuit will go back to court.

Pennsylvania State Senator Fumo (D.-Philadelphia) filed a court challenge to void the state's restructuring law. He claims the legislature violated its own procedural rules and certain provisions of the state constitution. Additionally, several consumer and environmental organizations near Philadelphia and Senator Fumo have separately challenged in Commonwealth Court the PUC's order approving securitization of some of PECO's assets. They argue that adding stranded cost expenses to customer bills violates the state restructuring law's standards and inhibits customers from switching suppliers.

Two electric utilities challenged the Arizona Corporation Commission's restructuring rules. They claim the rules unconstitutionally impair the franchise certificate contracts with the state, take property without just compensation, and violate their due process rights and equal protection rights.

Customer Issues

Short timeframes and tight deadlines to develop a pilot's framework, procedures, and rules contribute to initial confusion and disarray affecting all parties. Adequate customer and supplier education requires time to develop an effective program. Despite media attention, the general public (residential customers) knows little of the industry restructuring issues, much less understand it to the point of comparing offers and making informed choices.

New Hampshire's pilot was designed and implemented within six months. Customers were exposed to a significant amount of confusion and aggravation during the pilot's initiation. More time in the beginning to fully design and develop the pilot program may have eased the disarray.

Proposed pilots in Pennsylvania were to begin April 1997, three months following the PUC orders implementing the state's restructuring law. However, initial pilot proposals were rejected by the PUC and a settlement was not approved until August 20, 1997. The pilots are now expected to begin November 1, 1997, just in time to comply with the Act to be operational for at least a year prior to the first phase of retail choice in January 1999. Again, appropriate time in the beginning stage appears necessary to avoid confusion and missed deadlines.

Lack of education, confusing presentation of information, and short lead times often frustrated potential participants. Many customers did not understand the concept of retail access, their rights in the pilot, or the expected results from switching suppliers. Most did not appreciate the pressure to make important and sometimes uninformed or misinformed decisions within very short time frames.

According to two recent surveys, "many Americans remain either skeptical or ignorant of the impending deregulation of the energy market, despite the belief that it will bring huge benefits to consumers." The surveys suggest that the deregulation of other industries has "left consumers wary of the effects of free competition." ⁵⁴

The Electric Consumers' Alliance, a coalition of small business and consumer groups, determined from its study in New Hampshire that "many consumers were unaware of their new choices in electricity providers until contacted by a supplier." Another survey conducted in Connecticut by ICR Survey Research Group indicated 33% of consumers "know that the gas and electricity businesses were likely to be deregulated." This survey also indicates almost an even split as to expected electricity prices falling (45%) or rising (41%) in the future.

In most areas, industrial interest in customer choice has been aggressive while residential customer interest has been minimal. Some utilities were able to fully subscribe their pilot programs while others were not. Orange & Rockland, for example, had to use additional publicity and mailings to increase participation. Despite relatively thorough educational efforts, many customers (75% of residential) felt the estimated savings did not warrant taking the time and effort to compare and shop. ⁵⁷

This observation is further exemplified in New Hampshire. Although residential customers eligible to participate as members of Geographic Areas of Choice (GACs) were guaranteed at least a 10% savings on their total electric bill, significantly less than half chose to participate. It is reported that of the total number of customers eligible to participate in New Hampshire's pilot, about two-thirds are participating. The question left unanswered is whether the apparent lack of interest to exercise the opportunity to choose is reflective of public attitude in general, or whether it is the result of inadequate education. The level of participation by residential customers may be indicative of a lack of any real interest in "choice" by smaller users.

Other factors such as "environmentally friendly" energy or contributions to social programs, influenced some customers in choosing an alternative supplier. ⁵⁸ Generally a premium is associated with such items that some customers are willing to pay. However, there is concern regarding mandates for suppliers to include such items in their portfolios. Such requirements add premiums to the power bill of all customers that may outweigh any potential monetary savings resulting from competition.

Artificial Savings

Participants in New Hampshire's pilot did achieve noticeable savings, ranging between 15% and 20%. However, savings of 10% were guaranteed by the participation incentive discount provided by the utility and required by the NHPUC. The remainder of the savings came about because the NHPUC's estimate of the market price of energy, 3.5 ¢/kWh, proved higher than the prices offered. It appears that power marketers were willing to offer energy below their actual costs in an effort to assure success of the pilot. Also, customers have not been charged for the additional administrative costs incurred by the local utility.

There is some concern that current savings observed in retail pilots are short-term. Martin Murray of PSNH reinforced this concern by saying the pilot is "not a true indication of where the savings will be in the future." Providers may be willing to lose money now anticipating gains in the future. Also, most proposed transition periods appear to end just before the need to add generation capacity. This implies that following a transition period of declining rates or static rates, market prices will likely increase. This anticipated period of higher prices, coupled with power shortages, may continue until vendors decide to invest in new generation. Additional time would then be necessary to site, permit, design, construct, and start-up new facilities. The competitive market would be free to maintain high prices until sufficient capacity is again available. Retail pilots can not demonstrate the savings that may, or may not, result from competition in the long-run.

Short-term savings are likely if there is adoption of a less than full stranded investment recovery mechanism. In states ensuring utilities near 100% recovery of stranded investment or where the local utility is currently low cost and has little exposure to stranded investment, customer savings will depend on competitive supply efficiencies. Such efficiencies only develop over time and are unlikely to be demonstrated by any pilot.

Supplier Issues

Aggressive marketing tactics by some suppliers added to the confusion and dissatisfaction among some participants. Some customers actually chose not to participate because of the "hassle" factor. Information furnished by individual suppliers was inconsistent and inadequate, making it difficult for customers to compare offers. In some views, estimated savings did not warrant the trouble to switch. For others, the phone solicitations, the amount of mailings, and the offering of free gifts were poorly received.

Many observers suspected that alternative suppliers agreed to below-cost sale's to gain experience, to establish name recognition and to gain a foothold in the marketplace. Such suppliers used the opportunity to simply test the competitive market. Some alternate suppliers were also suspected of faulty claims about their generating resources and their ability to deliver.⁶¹ Questions also arose regarding claims of "green power" that were not as environmentally benign as touted.

Approximately 35 suppliers signed-up to participate in New Hampshire's pilot, but only 10 to 15 actively marketed their product. The others appeared to enter the arena to observe and learn. It is noteworthy that affiliates of the incumbent utilities captured the majority of the market share in New Hampshire. Name recognition and association likely played an important role in customer choice.

Commonwealth Electric Company introduced a pilot last fall allowing certain Massachusetts customers to choose an alternate supplier. Responses to a bidding process narrowed the field of suppliers from fourteen to three. During negotiations with these suppliers, the regional market prices for energy and capacity shifted upward. Suppliers were not willing to support their original bid prices and negotiations ceased. This phase of the pilot was not implemented.

Such an event causes concern as the electric market price can shift quickly in response to dynamic operating parameters, like power supply or delivery interruptions and fuel price volatility. Dependability of the supplier to honor a contract is as imperative to a competitive market as is the reliability of the power to be physically delivered. This concern is further enforced by the fact that after securing customers, several marketers left New Hampshire making it difficult for customers to contact the suppliers or to switch providers as entitled under the pilot. Suppliers, or assigned agents, need to be accessible to changing demands and complaints of its customers and to be obligated to perform as agreed. Additionally, suppliers must be able to support the commitment to deliver contracted power.

Pilots have demonstrated that competition is technically feasible on a limited scale. However, pilots only demonstrate short-run market responses. In the longer term, market prices will have to reflect the true resource cost of supply. Customers may benefit only to the extent efficiencies are attained over the long-run. Generally, the pilots indicate strong marketer interest but do not address market structure or long-run efficiencies.

Additionally, during enrollment periods, service departments were overwhelmed with questions. Utilities, suppliers, and marketers realize the need for new or improved customer service procedures, customer information systems and load settlement procedures. ⁶²

Reliability

Reliability is less of an issue in New England pilots as providers are required to be a member of NEPOOL or to contract with a member to provide backup service and reserves. However, reliability can be a potential problem in areas where local utilities are not members of a tight power pool. Illinois Power and Orange & Rockland reported increased power interruptions and inadequate generation reserves to ensure reliability. Direct Energy Access Service customers in Illinois lost primary transmission path four times, source of power at least twice, and incurred energy imbalance charges 21 times in 1996. The incumbent utilities served as the backup source for alternative suppliers during interruptions but most likely will be unwilling to provide such service without just compensation in the future.

Strong, and justifiable, concerns surround the reliability issue as the United States is envied for its highly reliable electric system. Generally, systems have been built to adequately serve a given territory and to support a neighboring region. When transmission and power interruptions occur today, local utilities are responsible to restore service and to plan for minimizing future occurrences.

A competitive retail market will broaden traditional boundaries and challenge the most sophisticated electric system. The responsibility and accountability to assure future reliability is yet to be assigned. An open access retail market will be more unpredictable not only by expected "erratic weather, problems with generation and transmission, and the fact that energy cannot be stored -- resulting in imbalances in supply and demand," but also by a barrage of suppliers vying for a share of the market and a substantially increased number of simultaneous transactions.

Current pilot programs charge the incumbent utilities, or local power pools, to be the backstop and maintain reliability to all customers. Since utilities are still regulated; they are asked, and obligated, to absorb the costs to provide such required services. Pilots are too short and too limited to develop long-term resolution of such issues for an open-access environment. However, some existing pilots have demonstrated that these concerns are legitimate and require further attention.

Summary of Benefits and Concerns

Several benefits can result from pilot programs. The pilot experience may indicate the complexity of retail choice and the need to maintain dependable information systems for system dispatch, load profiles, customer metering and billing, and customer response. Suppliers can learn customer preferences, community and regional differences and desires, the necessity for competitor and utility coordination, and the basic mechanics of developing a competitive system network. These benefits are gained in a controlled, manageable environment with little risk to customers. Major problems and limitations can be discovered and addressed prior to wide-spread implementation. Most observers believe a pilot program is a useful way of preparing parties for full-scale competition, but many stop short of saying it is essential.

The principal lesson learned to date from pilot programs is the need for caution in implementing open access on a wide scale. Most pilots encountered problems despite the fact that the programs generally involved the largest, most sophisticated energy users, only a fraction of total loads, and a relatively small number of transactions. Problems would be magnified exponentially under full retail access.

Additionally, the need for greater education and understanding by all participants is essential. Pilot programs have identified some of the necessary preparations by utilities, alternative suppliers, and customers to have direct access in a reliable and workable manner. Significant industry operating

practices, coordination, and monitoring activities must be revised to accommodate and manage new options and operating issues.

Provision of sufficient reserves must be coordinated and planned to maintain service reliability. There appears to be a current tendency, within existing pilots, for suppliers to depend upon the host utility's generation and transmission capacity to provide back-up service and reserves. Physically, this is not a major concern in the short-term, although financially it raises the issue of just compensation to the utility. Sufficient capacity is available to minimize this concern and currently all customers effectively have the same level of reliability. However, this issue is a large long-term concern with significant ramifications.

Additional long-term concerns that can not be addressed or demonstrated within a pilot program include: long-term reliability of supply, claiming responsibility for cost-effective system planning and coordination, and realization of long-term customer savings. These factors must be considered and addressed prior to implementing full retail access to all customers.

Most of the available information reviewed by Staff indicates that most pilot programs do not address the issue of stranded cost recovery. Generally, the stranded investment issues are being addressed separately. Most pilots rely on average customer load profiles and existing metering to determine alternative supplier energy bills. Reliability and load balancing issues typically were not addressed in the pilot programs and by default became the local utility's responsibility. Issues regarding customer non-payment and service cut-offs generally were not addressed within the pilots. To date, Staff's review shows that none of the pilot programs have introduced any new product or service anticipated through competition.

Observers and affected parties realize the current and proposed pilots allow for some customer choice, even though within a varied, but limited range of services and price. Although customer choice implies the opportunity for all customers to determine their supplier and the terms of their contract, a pilot program offering pre-determined or limited access permits the choice of some additional options, from which some customers can choose. Although a pilot program may help determine the appropriate roles and desires of participating parties on a small and manageable scale, its limited size and duration may not be truly indicative of wide-scale implementation.

¹ Commonwealth of Virginia , ex rel. At the relation of the State Corporation Commission, <u>Ex Parte</u>: In the matter of reviewing and considering Commission policy regarding restructuring of and competition in the electric utility industry, Case No. PUE950089.

² <u>Staff Report on the Restructuring of the Electric Industry</u>, July 1996, Volume I, pp. 375-400. A list of the recommendations put forth by Staff appears in Appendix I.

³ Ibid., pp. 383-384. A copy of Recommendation 5 put forth by Staff is attached as Appendix II.

⁴ Staff Report on the Developments in the Wholesale Electric Power Market, May 1997, pp. 45-46.

⁵ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June 1997, p. 54.

⁶ "CA Dereg", EEI Daily Energy News, September 9, 1997, p. 3.

⁷ <u>Massachusetts Electric Company, Choice: New England, Report on Pilot Program Enrollment,</u> Environmental Futures, Inc., Pilot Administrator, January 6, 1997.

⁸ "Competition Brings Choice for All Customers", Presentation from the Massachusetts Electric Company Pilot Coordinator, Ms. Maureen Hall Gatti, July 17, 1997.

⁹ Senate Bill 390, Electric Utility Restructuring and Customer Choice Act.

¹⁰ In practical terms, this appears to be a guaranteed price reduction rather than realistic avoided costs.

¹¹ Case No. 95-866-EL-UNC, Entry on Rehearing, April 11, 1996, p.1, (1).

¹² Response of the OPUC to data request.

¹³ Docket No. P-00971169, Penn. Elec. Co. (Penelec), Opinion and Order on Pilot Program Implementation, p. 37.

¹⁴ Docket No. P-00971170, PECO Energy Co., Opinion and Order on Pilot Program Implementation, p. 88.

¹⁵ "Washington Water Power to Defer Portion of Customer Choice Pilot." http://www.energycentral.com 30 June 1997. 16 Ibid. ¹⁷ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June 1997, p.2. ¹⁸ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.36. ¹⁹ Ibid. p.67. ²⁰ Ibid. p.96. ²¹ Ibid. p.136. ²² Ibid. p.79. ²³ Statistics aggregated from summaries included in EEI's State Activities Implementing Restructuring Policy, July 25, 1997 and IBEW Journal's "State Retail Wheeling Summary", August 1997. ²⁴ "California's ISO and PX Barely Functional by January", EEnergy Informer, August, 1997, p.3. ²⁵ Ibid. p.3. ²⁶ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.4. ²⁷ Ibid. p.4. ²⁸ "CA DEREG: Enron May Curb Plans to Compete", <u>EEI Daily Energy News</u>, September 10, 1997, p.1. ²⁹ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.5. ³⁰ Ibid. p.5. ³¹ Ibid. p. 6. 32 Ibid. p.6. ³³ Ibid. p.6. 34 Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.7. ³⁵ "OK DEREG: Low Costs Impair Desire for Competition", <u>EEI Daily Energy News</u>, September 10, 1997, p.2. 36 Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.7. ³⁷ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 3, Number 4, March, 1997, p.5. ³⁸ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.7. ³⁹ Ibid. p.158. ⁴⁰ Ibid. p.8. ⁴¹ Ibid. p.8. ⁴² State Activities Implementing Restructuring Policy, Edison Electric Institute, as of July 25, 1997, p.21. ⁴³ Ibid. pp. 21-23. ⁴⁴ Ibid. p. 34. ⁴⁵ Ibid. p. 37. ⁴⁶ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.9. ⁴⁷ State Activities Implementing Restructuring Policy, Edison Electric Institute, as of July 25, 1997, p.49. ⁴⁸ "VT DEREG: Gov. Asks Public to Pressure Lawmakers", EEI Daily Energy News, September 5, 1997, p.2. ⁴⁹ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.10. ⁵⁰ State Activities Implementing Restructuring Policy, Edison Electric Institute, as of July 25, 1997, p.31. ⁵¹ Retail Wheeling & Restructuring Report, Edison Electric Institute, Volume 4, Number 1, June, 1997, p.10. ⁵² State Activities Implementing Restructuring Policy, Edison Electric Institute, as of July 25, 1997, pp. 52-53. ⁵³ "Deregulation: Most Consumers are in the Dark", <u>EEI Daily Utility News</u>, September 5, 1997, p. 1. ⁵⁴ Ibid. p.1. ⁵⁵ Ibid. p.1. ⁵⁶ Ibid. p. 1. ⁵⁷ Public Utilities Fortnightly, "EEI Cites Problems with Retail Competition", July 1, 1997, p.10. ⁵⁹ "NH DEREG II: CNN Focuses on Pilot Project", EEI Daily Energy News, September 3, 1997, p.2. ⁶⁰ Public Utilities Fortnightly, "EEI Cites Problems with Retail Competition", July 1, 1997, p.11.

63 Illinois Power Company's first report on its DEAS program filed March 3, 1997 in compliance with the Illinois Commerce Commission's order in

http://www.scc.virginia.gov/news/retalwhl.htm

⁶⁴ "Power Marketing: Trading Wil Be Risky", EEI Daily Utility News, September 12, 1997, p.2.

⁶¹ Ibid. p.11. ⁶² Ibid. p.11.

Docket No. 95-0494.