Section I: Where Do Pilot Programs Lead Us?

States commissions, state legislatures and electric utilities are pursuing pilot programs in a search for a mechanism to "test the waters" for retail wheeling. Pilot programs query a select group of customers, usually volunteers, their choice of electricity supplier for a period of time. On the surface, the merits of such a program are obvious - they allow policymakers to gauge the public's willingness to fully embrace retail choice. The pitfalls are less clear - the results demonstrate the opinions and willingness of only a small, perhaps biased, group of consumers; the technical and institutional problems of electricity do not appear on a small scale. What can pilot programs offer? Can the help utilities and policy makers understand the retail electricity market and consumer behavior in this market? Is a pilot program a necessary first step for unlimited retail access? Are pilots useful in demonstrating all the operational complications in retail wheeling? What are the results so far?

First Speaker:

As a representative from the gas industry, it's certainly interesting to be speaking to an electric forum about how and why I believe their pilot programs will work, but since there's a program just underway in New Hampshire called Freedom Electric, it's at least a timely departure from the norm. This issue has gained momentum much more rapidly than I had envisioned because of recent Rhode Island legislation which promises to deregulate the electric industry by 1998. Actually, I would argue that pilot programs have been around for a while, they've just existed under different names. There are many electric distributors in the United States who serve the same number of customers enrolled in the current pilots. Since most municipals are also
that size, the operational issues involved in handling the distribution of electricity to remote locations, relating with the customers, and coordinating the overall system have been encountered and dealt with by the electric industry ever since the first Northeast blackout. Until that time, each electric company had been essentially independent, but the blackout prompted a great deal of coordination.

Instead, this is more a debate about who gets to serve the customer and collect the costs. When we went to Iowa for the nation’s first "energy pilot," we discovered that pilot design is, by far, the most crucial factor in determining its success. The design should approximate the status quo as closely as possible to deter the unforeseen barriers. The pilot's goal is to benefit the customer. For many years after the deregulation of the telephone industry, customers did not capitalize on potential savings because of a lack of knowledge about their options. A pilot helps the customer understand the complexity of their decisions. The average American doesn't realize that when they flip a switch, turn a thermostat up, or fire up the stove they are making an economic decision.

The pilot program in Rock Valley, Iowa was successful in informing customers about their electricity options. As a result, 80% of the participants decided to choose an alternative supplier. Lower prices will enable a company to win these customers, but a too overzealous bidding war will negate its gains. We also proposed a relatively small pilot in Pennsylvania. The targeted community contained four gas companies and two electric companies, which resulted in a huge price disparity between neighbors, as much as 100% for electricity, and 25% for gas. These customers believe regulation has failed. It is remarkable that the largest industry in America, the electric and gas utility industry, is the most highly regulated. That situation needs to change, for most people estimate a $60-$100 billion per year reduction of costs upon deregulation.

We have seen pilots teach the utilities to compete better, which is an absolute necessity. Unfortunately, if pilot programs are improperly planned, they will yield negative customer feedback. The longer this process is delayed, the longer the rules are not defined, the more difficult the transition becomes.

Second Speaker:

I'll be talking about Central Illinois Light Company's pilot program, Power Quest. We worked with government officials to designate certain communities as open access areas. Every electric customer in that territory could either remain on the local utility system or select from another supplier. The program allows policy makers to gauge the public's willingness to embrace retail choice. However, the results demonstrate the opinions and willingness of only a small, perhaps biased, group of consumers. There is inherent bias in deregulation programs, primarily within existing institutions, which influence the results.

In a competitive electricity program, the technical issues are less crucial than what is essentially a financial agreement between the parties. Kilowatts will continue to flow on the wires regardless of ISO's, so a deregulation program naturally focuses on the economic. Can pilots help utilities and policy makers understand the retail electricity markets and consumer behavior in the market? Is a pilot program a necessary first step for unlimited retail access? A pilot doesn't create enough
customers to offset the marketing costs by itself, so unless the benefits of deregulation offset the costs of the transition to a competitive program, pilot programs cannot pay for themselves. Therefore, I caution against recent legislation which suggests that all utilities should undergo five or ten years of pilot programs. There are margins to be gained by selling new products, or existing products in different formats, but pilot programs will not be profitable.

Central Illinois Light Company is a combination electric and gas utility, the smallest of the four Illinois based electric utilities. CILCo has the lowest rates among the Illinois utilities, without an increase since 1981. We have been advocates of competition in the electric industry from the beginning, establishing a pilot program within our own service territory in August 1995. We began to flow power on a competitive basis to customers under that pilot program in May 1996. The program aimed to test the retail market for residential and commercial customers by allowing every customer, and the eight largest industrial customers, in three designated communities to buy from suppliers other than CILCo.

After five months of the pilot program, about 30% of the residential and commercial customers have transferred from the tariffed rates of Central Illinois Light Company to another supplier. They are leaving an extremely popular utility, one with rates significantly below the current levels of other utilities in Illinois. Residential customers able to buy under the pilot program, however, have achieved around 20% savings, industrial customers around 35%, commercial customers in the range of 25%. Given our popularity, we believed we had a fairly good chance of keeping our customers after deregulation, as long as we had were allowed to defend our own system. If we could apply CILCO's rates throughout Illinois it would result in customer savings in excess of $2 billion a year. If we open up the entire system prices will fall even lower. Prices go down because of new innovations, the necessity that suppliers introduce new efficiencies into the system. Thus far, customers have been pleased with the program. There hasn't been a technical problem that has caused unreliable service, and there have been significant price decreases to the customers. We have shown that a regulated utility can thrive in a competitive environment.

The program has demonstrated that special metering is not necessary. The same meters are in place, but penalties are assessed if the marketer fails to supply enough electricity. Marketers are initially required to provide a monthly supply, and are then charged for any additional kilowatt hours. We've proposed legislation that would implement a non-biased funding program before deregulation occurs. Revenue can be raised by a charge on kilowatt hours delivered on the state's distribution system or some other tax, as long as the funding is not biased.

I believe that several things are driving deregulation. Technological innovations in production have allowed us to build smaller, more efficient power plants run on deregulated natural gas. This development has lowered prices, and the consumers' demand for the reduced costs spurs more extensive deregulation. Independent power producers have solicited the major industrial customers of vertically integrated utilities, and our need to begin competing against them has been
another push for deregulation. The largest single factor compelling deregulation, however, especially for residential and small commercial customers, is the price disparities between the different utilities. When disparities for the same commodity product approach 50%, customers will refuse to pay the higher rate. Deregulation will change production a great deal, but will not substantively alter operation. The metering technology which measures what comes in and out of the system will remain in place. An important part of the system that will change under deregulation is marketing, since only the marketer, by arranging the transportation of the electricity, can bring the benefits of deregulation to the residential customer.

Third Speaker:

The focus of my presentation is on the implications of the New Hampshire pilot program for regulators and, specifically, on the rules that may be required to ensure competition. The past two or three months have allowed us to experience direct competition, and I will summarize what the New Hampshire pilot program has taught us so far. It must be acknowledged that a well-established industry structure insures that, for at least a few years after the onset of competition, most companies' revenues will continue to derive from regulated activities in terms of distribution, transmission charges, and stranded cost recovery. In that context, the transition rules will have a significant effect on competition. It is too early to draw definitive conclusions from the New Hampshire pilot program, for there are several reasons the program may prove not to be particularly illustrative. The program may not even predict the future of retail competition any better than the New Hampshire Presidential primary predicts the rest of the election!

Pilot programs around the country are attracting a large number of companies that are marketing at the retail level and reducing prices faster than anticipated. That success would seem to indicate an efficiently restructured industry. A new breed of competitive power supplier is emerging, as companies that own large amounts of generation bypass the wholesale market to sell directly at retail prices. This result may be perfectly acceptable, but it suggests that we monitor how the market is evolving to ensure that a robust, competitive market emerges. The goal we all envision under deregulation is to have a substantial number of companies selling power wholesale and a substantial number of retail marketers separately interacting.

The traditional model for deregulation rests on separating three major functions—distribution, transmission and generation—and requiring open access to distribution and transmission and the sale of power on a non-discriminatory basis. The faith in this model derives primarily from its success in the natural gas industry. However, with electricity there are limitations on the amount of power that can currently flow between regions. In many regions, including New England and New York, a large proportion of power is generated within the region's borders. Unless there is progress in overcoming transmission constraints, the amount of imports will continue to be small. The costs associated with transmission and line losses will hamper attempts to sell electricity even one transmission zone away, as a local producer will always hold a cost advantage within his region. A relatively small number of companies that own significant amounts of
generation in a specific area will dominate the market.

The retail marketers who participated in the New Hampshire program are reluctant to release any information about market share, even on a marketer blind basis. Though our knowledge is limited, I will still offer some conclusions about the program. First, choices between vendors were made almost entirely on price. One of the more sophisticated commercial users in the area, for example, chose his vendor because of a six-cent a month price decrease, $1.44 for the 24 months total. From a customer standpoint, assuming no difference in reliability or quality of electricity, why choose anyone other than the lowest cost vendor? Secondly, prices started very low and went still lower. Actual retail prices for firm power on a two-year basis were seven to eight mills per kilowatt hour lower than predicted. Thirdly, no vendor participating in the program charged customers even a penny of its administrative or marketing costs. Vendors accepted zero profit to compete effectively in the program. Not only were the price margins too low to cover economies of scale, the competition allowed no gross margin either. Fourth, the most successful companies already owned low-cost generation, usually in the region. Fifth, despite a universal acceptance that generation owners with retail marketing affiliates should sell power to non-affiliates on non-discriminatory terms, the companies with retail marketing affiliates wound up supplying power only to themselves. Finally, to compete effectively participants had to have both the ability and the willingness to spend a large amount of money, risking a large loss, in order to buy market share.

Therefore, most generation owners will market directly at retail, companies that own generation are going to be willing to invest to buy market share, and companies that control very low cost generation will possess a significant advantage. This advantage threatens retail competition. Companies may be able to enhance the amount of power they can sell on a low cost basis by adding combustion turbines and importing power. Most utilities have not had any incentive to maximize the value of their base load until now. As a result, requirements to sell power on a non-discriminatory basis to non-affiliates are necessary.

Fourth Speaker:

The Orange & Rockland pilot program is designed around minimum load constraints so that the costs of non-participating customers will not rise. The program currently serves only large customers, and there are five marketers selling to customers in the program. My company chose not to participate in marketing the program to avoid a conflict of interest. Those enrolling in the program use repurchased utility power, which could be provided directly to the customers at a much lower cost in a deregulated environment. Instead, the program charges an average cost and a fuel cost adjustment. It is unresolved whether the program participants or non-participants will pay these average costs. While our customers are saving between 5% and 20% on the energy portion of their bill, there is some risk involved, as the customer doesn't know the average price until the end of the month, after another marketer's price has already been accepted.

Every month, since the program's inception in July 1996, customers have seen their service interrupted by the marketers. The reason for the interruptions has been the
transmission purchased by the marketers. Their transmission capacity has been low-enough priority that it was interrupted along the line. The incremental price of obtaining that energy was eight cents a kilowatt hour, and the marketers are paying that cost.

A handful of our larger customers decided not to participate in our program, simply because corporate inertia made it inconvenient to switch. We sent out 12,500 direct mailings, but only 700 have expressed interest in enrolling. In order for the program to operate according to specification, 2050 customers must participate. Unfortunately, there isn’t enough interest out there yet. Many residential customers have resented the solicitation, and some have even taken exception to the option of choice, asking "Why are you wasting your time and money on giving us a choice that we don’t even want?" The program also took over 90 days, much longer than we predicted, before it ran fairly smoothly.

Virtually every rule in the original design of the pilot has been amended over the last three months. While the initial rule was usually sufficient 90% of the time, the pilot experience revealed situations which required some flexibility. These changes were implemented by general staff members, whom were authorized to react quickly to unexpected contingencies.

Three months into our pilot program, I believe it has been successful. The customers are happy with their options, as well as their savings. While the other utilities in New York are upset with us for opening up the market, I’d rather my customers be my friend than my competition.

**General Discussion**

: Does the local utility bill the marketers’ customers or can the marketer establish a direct relationship with that customer?

: Customers and marketers should be able to choose. If marketers want to bill customers that is fine. If, on the other hand, they would like the distribution company to bill, our utility would be glad to do that. Of course, there will be a charge imposed for this service.

: On balancing issues, meaning how much gas or electric shows up at the city gate versus how much the marketer’s customers need, gas marketers are finding it difficult to compete with host distribution utilities. If a marketer is off by a decatherm in gas or a kilowatt in electricity, what does it cost? Are the marketers’ profits thrown off for the month? What are the penalties imposed on the marketing companies for imbalance?

: As far as overruns and short supply are concerned, marketers have to cover themselves. If they are delivering to residential customers, and the delivery is on a monthly as opposed to a daily basis, and they are short, the marketer has to pay a fairly significant penalty. If, on the other hand, the marketer is over in the kilowatt hours they delivered, the host utility makes a modest payment to the marketer - a clearance center enabling the marketer not to end up short of power delivered to the system.

: Should penalties be imposed on the customer for leaving the program?

: The customer should be given as much flexibility as possible. Fees should not be imposed on customers who leave the pilot
program. Nor should automatic recovery for stranded cost be allowed.

Utilities cannot continue to adhere to the existing marketing model, but instead must realize that the marketplace will reach new levels of efficiency and innovation.

Less regulation will allow utilities to earn profits with financial creativity rather than with operational requirements alone.

Most recent sales to both industrial and commercial accounts have been on an interruptible basis. This winter demonstrated the risk involved in choosing that method, yet customers must have understood the potential ramifications as no complaints were registered against a marketer, despite the high cost customers had to pay when their electricity service faltered.

Any company that establishes a marketing affiliate should not be allowed to reuse the affiliated utility's name, because of the competitive advantage name recognition imparts. Complaints were registered against an advertisement in which a new affiliate promised the same reliable delivery as the original marketer. It was protested because it exploited the popularity of the parent company, and also neglected to mention that the parent company was still the deliverer, so continued reliability would not be surprising. It appears that companies owning generation in or immediately adjacent to a region marketed a high proportion of the power through their own retail affiliate, and were reluctant to sell power to other utilities that owned generation. Utilities are also selling to outside retail customers through a marketer at prices substantially below what they're selling to their own retail customers. The efficiency of some of the new smaller units that are emerging will insure some continued stranded transmission and distribution costs. A competitive market will inspire innovations far more quickly than a regulated market ever could. However, utilities will wait until an open market is assured before pursuing these innovations—a pilot program alone does not insure the degree of competition needed to warrant heavy investment.
Session 2: State Legislative Initiatives to Reflect or Effect Competition in the Electric Industry?

From coast to coast, state legislatures are increasingly taking an interest in the restructuring debate and a more activist role in setting the terms of the new market. Pennsylvania, California, Ohio, and Wisconsin are only a few of the states considering legislation to establish retail wheeling, restructure regulatory authorities, promote municipalization and address stranded costs. The Rhode Island legislature has already passed a law which introduced retail competition and established a stranded cost recovery charge. In an industry fraught with technical complexity, what issues are legislatures addressing? This detailed activity is unprecedented in the electric industry, which has traditionally been in the domain of regulatory agencies. What are the appropriate roles for regulators and legislators as they simultaneously strive to introduce competition?

Fifth Speaker:

It is desirable in a democracy that government's deliberations be open to public scrutiny whenever possible. While democracy doesn't guarantee proper decisions, a commitment to an open process is as valuable as a technical command of the issues. After an extraordinarily cooperative effort between our commission and the industry, our legislature passed, by unanimous vote, a public utilities commission reform measure. There was concern that the utilities, rooted in a system of command and control, would be reluctant to conform to the competitive demands of the new system, so we stressed the bill's fundamental departure from the regulated structure, and that the industry would have to change their approaches markedly.

The bill was not strictly a piece of deregulating legislation, but a larger attempt to protect California's interests in a changing economic climate. However, the residential consumer seems to resent the change, even though in California electric rates are 50% above the national average. People would rather avoid the solicitations and having to think about it at all than receive lower prices. We discovered that the average small consumer was far more interested in reliable service than price. They also doubted that competition alone would necessarily produce lower prices, and wanted some guarantees that the market would not be stacked so that the average consumer suffered. The constituency, far from clamoring for change, only gradually became aware of the discussion and then thought we were engaged in the silliest exercise they had ever heard of. Our foremost concern was to demonstrate our program to the small consumer without annoying him unduly. We persisted in trying to spark consumers' interest because of the legislation's huge economic benefits to the large consumer.

The legislation established the competition transition charge (CTC), a mechanism which we believe will pay our stranded costs. To enter California's four-year transitional market, non-California companies must pay the CTC, though they can receive a rebate if they decide to leave. California does possess some attractive features for investors. The size of the market, the novelty of deregulation, the huge overhang of stranded costs, and the disproportionately high cost of electricity per unit, all help to create an exciting long-term marketplace. Therefore, I believe California's stranded costs will be paid
largely by non-California companies whose only way to enter the market before the end of the transition period will be to buy off the CTC. The state's costly consumer rates suddenly become an advantage, since even if costs drop only to 25% above the national average, consumers perceive that they are getting a great deal.

Simply encouraging competition will not necessarily achieve the goals set out in the legislation. Winners and losers are inherent to competition, and some businesses will undoubtedly make money, but those savings will not always reach the average consumer. In drafting this legislation, the legislature listened to those who had the sophistication to negotiate their own interests, but also acted as the negotiators for those consumers who could not be expected to have either the expertise or the interest to negotiate on their own behalf.

Sixth Speaker:

The General Assembly of Pennsylvania is determined to make Pennsylvania a leader in electric competition. In electrical generation, Pennsylvania was once among the leaders, but since 1980 has lost almost 400,000 jobs in the manufacturing sector. Industry was recouping from Pennsylvania's high corporate net income tax, and high energy costs. To increase investment in the economy, in 1995 the corporate net income tax was reduced by 300 billion dollars. In 1996 the legislature has accelerated the process of creating a competitive electricity market. Pennsylvania's electric rates are 15 percent higher than the national average—lowering rates to that average would save Pennsylvania 1.5 billion dollars a year.

The legislature has relied on the Pennsylvania PUC's input to guide its reform efforts. The PUC endorsed the proposed legislation and recommended that the state move to a competitive climate in generation as soon as possible. House bill 2537 establishes an independent system operator for Pennsylvania, a universal service program, customer service protections, direct access, protections against market power, licensing of new entrants, a sliding scale for recovery of stranded investment, and a rate freeze for the period of transition. Since hearings began in June the Bill has been amended the bill over twenty times.

When California's electric reform bill was passed, we incorporated their solution to the stranded investment problem—using securitization bonds—into the legislation. Governor Tom Ridge of Pennsylvania, speaking at the Pennsylvania Electric Association dinner, endorsed the legislation and asked that it be passed by November 30. Utility executives were shocked by the aggressive nature of his talk and his timetable. The Governor has asked the legislature to accept the chairman of the PUC as his chosen delegate to forge a consensus between the legislature, the utilities, and various other lobbying groups. These groups all have competing interests. Not surprisingly, the two highest cost utilities have pushed for a long transition period with full stranded cost recovery. Two other utilities have been lobbying for full stranded recovery with a much shorter transition, and a major low-cost utility is asking for an immediate move to competition with no stranded investment recovery. The Office of Consumer Advocate and the small business board perceive the legislation as a consumer interest bill and support its passage. An environmental group
is concerned that competition will negatively affect the air quality, as states to Pennsylvania's west and south increase their electricity production.

Testimony aimed at protecting the poor people of Pennsylvania has also been heard and we are trying to get a universal service fund in the bill to satisfy their needs. The Bill's sponsors believe that electric competition is the best way to price generation, but are keeping transmission and distribution totally regulated under the PUC for the time being.

Seventh Speaker

In Rhode Island, the Task Force began the legislative reform process by inviting the electricity experts, the interest groups, and the legislature, to hammer out a compromise. Unfortunately, the part-time legislature didn't attend, which resulted in a bill containing very little input from the concerned parties.

The Task Force incorrectly believed that our consensus would be sufficient, and that the legislature would essentially accept our recommendations without significant debate or changes. We severely underestimated the political dimensions of the reform and were quickly reminded that the Public Utilities Commissions is closely linked to the legislators, and as soon as the legislation gained appeal for its potential savings, legislators insisted that technical and legal issues yield to political considerations, primarily fulfilling consumer demand for lower rates. The majority leader of the House had previously proposed a bill to allow the industrial parks to buy electricity at retail. Since there was no recognition in the bill of the stranded cost issue, the commission and the utilities defeated it. He then made certain that our bill contained very few of either the commission or the interest groups' recommendations.

With few exceptions, the legislators had a poor grasp of the issues, and the envisioned partnership between the legislature and the commissions degenerated into political partisanship.

The law does define the categories of assets that are to be recovered. The type of stranded asset referred to as a "contract termination fee" may have some future implications, as this definition differs from the traditional concept of recoverable investments.

I am relieved that the bill promises to link our electricity legislation with that of Massachusetts, so in all likelihood their reforms will be ours as well, which can only improve our situation. I do think that most of the large customers have good deals with their utility, and it will be interesting to see how many of them actually take advantage of the opportunity to move to choice.

General Discussion

: In California, we guaranteed all parties the opportunity to make oral arguments before the commission. We required the commissioners to be present as well.

: What was the intent behind the passage of legislation that changed the California Public Utilities Commission?
The bill's purpose was to introduce a cultural shift away from reliance on the written record to personal presence at hearings. In order to do this, the law guarantees parties an opportunity to make oral arguments before the Commission. It also is a shift from a litigative to a legislative environment. The law creates an equitable environment which greatly facilitates cooperation and compromise. The Commission will now sit in three circumstances, quasi-legislative, quasi-judicial and rate manager. The legislature wanted the PUC to become more user-friendly, more directly accountable for their decisions.

What has motivated legislators into action?

The greatest level of motivation for Californiato move to a competitive arena was to provide economic benefit to the large consumers, rather than the average customer. Jobs, not rates, were the primary emphasis. People might have a higher electricity bill, but a larger paycheck with which to pay it.

The same is true in Pennsylvania. In the past fifteen years nearly 400,00 jobs in manufacturing have been lost. The third highest expense for manufacturers next to corporate income tax and worker's compensation is energy costs. The impetus came from the need to reduce these costs.

While the PECO and PP&L merger of a few years ago did not propel the Pennsylvania legislature into competition, it did help them identify a few key issues that needed to be addressed. For example, there is a market power remediation piece in the bill. All of the stakeholders including utilities, environmentalists, consumer groups, etc. have reached a consensus on this provision which allows the legislature to take action if an anti-competitive monopoly emerges.

In Rhode Island, it was initially driven by a desire to reduce the electricity costs of large industrials. In particular it began from a failed attempt to pass a bill that would have allowed industrial parks to buy electricity at retail. The bill's sponsor then became determined to introduce competition to every customer in Rhode Island.

Restructuring will be a difficult sell in states were there are low rates and good service, such as North Carolina. We have interregional disparities but our rates are at or below the national average.

The initial decision to move towards restructuring is a political decision because it deals with issues of allocation and issues of power. In the near future, however, legislatures will be faced with very dynamic political decisions such as cost. At what point will legislators step back from overseeing the industry? Or will they continue to be involved?

The issues associated with restructuring are not electric utility issues. They are economic development issues and the public utility commissions exist to regulate a specific industry or industries and is not well-equipped to look at economic development questions associated with the change in market structure.

Electricity restructuring will not be a political issue unless costs rise dramatically or service under the new system proves unreliable. California's legislation is ideologically neutral on competition but
practically unapologetic in its intention of protecting California's interests given the assumptions about what changes will occur in the national marketplace.

The point of the public utilities commission is so legislators don't have to deal with disappointed parties and with decisions that have to be made in a balanced way.

From a legislator's standpoint, how do you defend the decision to allow your residential ratepayers to pay 50 percent above market rates and then allow the resulting cash flows or credit to fund investments in utilities' competitive investments?

The risk to residential rate payers and small users was that the market would move to retail competition without forcing large users to pay their stranded investments. The CTC was established to protect small rate payers from a dramatic rate increase caused by large consumers reaping the benefits of competition without paying their share of traditional costs.

The creation of the competition transition charge CTC and the quantification of stranded costs allows for transparency of this items which the customer would have to pay for the next four years.

Separating these charges out in a CTC creates an opportunity for them to become a commodity. The CTC will be bought, sold and traded just as the generation component of the bill is.

One of the ways new suppliers can compete for new customers is to buy off their CTC responsibility. Isn't this use of the CTC a barrier-to-entry for out-of-state suppliers?

On the contrary, the CTC is transparent, thus allowing out-of-state suppliers a means to participate in the market. The alternative was to not allow anyone into the market for four years - when we get the stranded costs reduced. At least the CTC provides opportunity.

The Governor of Pennsylvania is against state monies being used to guarantee any kind of bond issues because the state has so many bond issues on other projects. With securitization, the bond issue can provide part of the stranded cost investment recovery solution and it doesn't have to be guaranteed by the state.

Will actions taken by Congress, such as legislation that introduces retail competition, conflict with some of the states' objectives?

Congressional legislation which effects qualifying facility contracts could come into conflict with the provisions in the new California law. Under the law, utilities and other suppliers can buy down existing contracts and receive the benefit of buying it down. However, they can't assume a contractual right of a third party and collect the money from the consumer that was based upon higher cost and make money on the differential. Congress could do some real damage to this provision if it undertakes restructuring.

California started early because we realized there were tremendous benefits to being the first. It will be difficult for Congress to undo the statutory requirements of law that are already in place.
Session 3: Regulated Past and Competitive Future: What Role for Public Power?
Public power has long held a central place in the regulated electricity industry in providing an alternative to investor owned utilities. Public power constitutes a significant part of the electricity market. Although jurisdictional limitations may prohibit FERC from mandating open access on public power’s transmission facilities, through reciprocity requirements or their own initiatives, non-jurisdictional utilities may join in offering open access and non-discriminatory transmission services. How will public power’s historic role adapt to open access and an electricity market where competition replaces regulation? What are the characteristics of public power which give it a unique role to play in a competitive environment?

Eighth Speaker:

Kaiser has recently undergone some dramatic changes that may not have received much national attention but may foreshadow larger trends in the public power industry. Public power includes the following: the federal power marketing authorities, the state power authorities, the municipals, and the electric co-ops. Conversely, private power is engaged in the manufacture, sale and delivery of the commodity-product electricity, and is regulated so that it doesn’t acquire the power of a monopoly.

Public power consists primarily of government-owned or cooperative non-profit organizations that are usually either unregulated or self-regulated. They often receive subsidies, and are augmented by government-owned generation or transmission services. Public power is designed to provide affordable power in areas where market economics alone will not, and to facilitate economic development by generating, selling, and delivering electricity manufactured by the large government hydroelectric systems. Finally, public power exists simply as an ideological and economic alternative to private power.

Can public power in the United States stand still while private power systems undergo competitive restructuring and regulatory change? As the private power system evolves, public power entities will have to rethink their role, just as competition pressures and the restructuring of the public distribution system will affect the changes that are already underway in private power.

Ninth Speaker:

The restructuring of the industry must be done in a competitively neutral way so that the status of any particular entity, government or private owned, does not confer any competitive advantage. However, many of the public power entities which were once customers are suddenly competitors. This shift is causing the tension in this debate. Having to adapt to being service providers will affect very significantly the “uniqueness of public power.” Public power will begin to look more like IOU’s in their response to competition, their access to the regional transmission grid, their customers’ demands for new products and services. There have been fewer successful municipalizations than were predicted upon EPAct’s passage. FERC appears to be reading the transaction sections
ofEP Act fairly conservatively, and that hurdle to new municipalizations will remain. FERC's requirement that the retail-turned-wholesale customer pay the stranded costs to its former supplier will obviously have an impact on new municipalizations as well. However, given that there are between three and four thousand entities supplying electricity service, continued growth may be anti-competitive. From an economic stance, the industry structure is not optimal, which may lead to greater consolidation among investor-owned utilities. The same pressures that are driving investor-owned utilities to consolidate will similarly affect co-ops, and to a lesser degree immunities.

Privatization of the PMA's should be supported, for from a public policy perspective, a truly competitive market should not have that level of government ownership of generation assets. With such fiscal and budgetary restraint at the federal level, continuing to own the PMA's seems increasingly anachronistic. Whoever obtains access to the government-owned dams and facilities will be able to compete very effectively, and therefore property rights should not be granted to anyone class of customers. The low-cost hydro should be sold at market price, for the only way to answer the subsidy question is to subject it to the rigors of competition.

While that scenario is not politically feasible at present, the entitlement mentality of municipal preference must be phased out. There is some question concerning FERC's ability to implement open access over non-public utilities at the wholesale level. Emerging federal legislation must contain reciprocity provisions to establish open access for both publicly and privately owned transmission. Ownership would no longer confer benefits at the wholesale and retail level. There are many views concerning the future of the distribution function for investor-owned utilities. The distribution function may continue as a wire-delivery service, but with many of its traditional tasks redirected into a retail services division to compete with energy service providers. Many investor-owned utilities are diversifying since the traditional utility business has such little growth potential. Public power's waning interest in adding generating capacity signifies they will remain in the distribution business.

Tenth Speaker:

California public power has been receiving heightened scrutiny due to the public utility commission's concern that roughly 50 percent of the transmission transfer capability into California is controlled by publicly owned utilities, a reality which threatens the entire independent system concept. There are 2,000 public power systems in the United States, providing about 25 percent of the power consumed in the United States. By contrast, there are 250 investor-owned utilities which supply 75 percent of the electricity in our country. It is to be expected that public power is far more diverse, and correspondingly less unified. In California, public power's rates are 28 percent below the investor owned utility rates, without a rate increase for six years. The rates would be even lower if not for spending on energy conservation, despite the generally-held assumption that utilities are not interested in the environment or energy conservation. A great percentage of the cost of California's projects are financed with debt, through levelized bonds that are usually issued for 30 years. As a result, the PUC has to address significant stranded asset issues while
maintaining competitive prices and services.

Running a publicly-owned utility resembles life in a fish bowl. There are five board meetings a month, three televised, all open to the public. We have a full-time newspaper reporter that covers all of our meetings, and are regularly reported on by local television and radio media. This exposure results in a more conservative approach, a greater intolerance for potential downsides than a private company who assumes a certain amount of risk in recognition of the potential for higher rewards. Basing our decisions on good public policy rather than profitability alone does help cement community support for companies. Competition in and of itself is not the goal, but a vehicle to advance the interest of the consumer. By applying competition to the industry, we should be able to optimize efficiency and provide the benefits of supply, choice, and lower prices to the customer.

Public power will play three roles in a restructured industry. Aggregation and brokering, partnering, and yardsticking. A restructured industry promises municipalities the option to be an aggregate purchaser for customers in their community. Most municipalities have the necessary administrative infrastructure to support a role as aggregator, and they can provide an excellent forum for customers and community leaders to voice their opinions and comments. A traditional IOU-type merger or traditional annexations are unlikely to succeed under the new legislation. Public power's yardstick role will dissipate over time. Many public power entities will continue as vertically integrated utilities, and their rates and service will still serve as a benchmark for the investor-owned utilities as well as the emerging alternative generation suppliers. Public power historically has demonstrated that it can be responsive to the cost and service needs of its customers.

Eleventh Speaker:

There are many fundamental differences between public power and IOU's. Because their structures are inherently distinct, it is not only practically unfeasible that they operate on a "level playing field," but it is also not obvious that they should, given their incompatible goals.

Public power is better equipped to protect consumer interests, the public interest in the industry, and to move towards the goals of restructuring faster than the IOU's. The IOU's exist to pay the investors, and therefore run a traditional business to achieve with low costs and high profit margins. While profits are returned to the owners, public power's profit, if any, is returned to the customer, who would be better served by a rate cut in the first place. TVA is therefore obliged to charge the lowest rates possible.

Much of what is perceived as special treatment for public power is quite exaggerated. TVA does not receive government subsidies and tax breaks, nor is our debt secured by the federal government. While it does receive appropriations for flood control, and managing a national park and lab, TVA is not allowed to use those funds for any other purpose, so TVA gains no financial advantage.

Several key policy issues will arise as competition increases. Questions of how to insure reliability, how to regulate environmental concerns under the new structure, and how to provide equitable universal access, particularly for the rural
areas, must be answered.

TVA has almost no retail customers, but serves any industrial customer above a certain size indirectly off the transmission system. About 15% of its load goes to direct-serve customers. TVA recently announced revisions in its transmission service guidelines to comply with FERC Orders 888 and 889. TVA is providing transmission ancillary services, and will post the transmission capacity.

General Discussion

The Differences Between IOUs and Public Power

When public power entities have generating capacity that can be sold off-system, do they try to sell it at the lowest price/cost plus or do they try to sell that at market price in order to take in returns and lower your on-system costs? If they do, then how is public power any different from an IPP or IOU selling into an unregulated market at market price?

TVA's off-system generating capability is sold at market price. Any profits above the marginal cost are redistributed in order to keep our rates down. TVA differs from laUs because its sales are restricted to the fourteen utilities around the TVA territory.

Even though SMUD is resource deficient in terms or meeting its full load, SMUD makes a lot of sales, primarily with the Pacific Northwest, in the winter (SMUD buys from the Pacific Northwest in the winter). Excess capacity is sold at market price, provided that, at a minimum, we are meeting marginal costs. The revenues ITomthese sales are incidental to SMUD's business. It is more a question of making a little money and helping to lower the fixed cost for our customers. That is not the same approach as some laus for which wholesale power transactions are very much a part of their business.

IRS rules make SMUD different from laus. SMUD is subject to private use restrictions because its facilities were built with tax exempt bonds and power sales from these facilities are restricted to certain customers.

What are the distinctions between public and private power? What should happen to public power as the market moves toward restructuring?

An obvious distinction lies in the regulatory frameworks in which both operate. TVA and other federal agencies are regulated by Congressional acts which delineate how they can operate. In addition, public power entities do not fall under FERC jurisdiction.

While these distinctions will become increasingly blurred in the future, the characteristics of public power are so different historically than the characteristics of public power that some of the immediate search for symmetry loses its impact. In addition, the compact between the Congress and public power and that between the investor-owned utilities and state regulators will not disappear overnight.

Currently there are some distinct differences between laUs, cooperatives and municipal utilities. For example, municipal companies still have the power of eminent domain and access to tax- exempt financing. In the past each of these groups would throw sticks and stones over the fence and see where they
landed. With wholesale and retail competition, those fences are down, and IODs and public power companies are entering each other’s territory. They will have access to the same units and the same customers. Eventually there will be little management difference between public and private power—the only distinguishing factor will be financing. Those with the cheapest financing will win in the new market.

The Level Playing Field

The real interest that the IODs have in public power debate is symmetrical and regulatory and financial treatment, when and only when, customers become competitors. It’s only when they begin to move away from their historical function as a public power entity and begin to respond to competition do IODs worry about symmetrical regulatory and financial treatment.

The perceived inequity of access to lower cost financing is almost moot in the era of capacity surpluses. I forecast that neither municipal companies nor IODs will be building any new generation, that all of us are moving out of that business. Furthermore, innovative financing schemes for projects are able to surpass the benefits provided by tax exempt financing.

The question isn’t about the future of tax exempt financing, it’s about the embedded cost of existing debt. IODs are worried that the lower cost-debt of existing facilities owned by public power will hinder their ability to compete in the market.

Privatization of public power and the preferential sales offered by federal power marketing agencies should be treated as separate issues in this debate. The federal government should not continue to own large generating assets. Nor should it be in the business of marketing power.

Preference power, however, is a different issue. It will be very difficult politically to remove the preferences that municipal electric companies and cooperatives possess. Congress might consider doing this if there is a type of transition mechanism, a right of first refusal and a recognition of property rights. The reason for property rights is that in a competitive generation market there should not be anyone class of customer, whether municipal companies or cooperatives, that has a property right to a low cost generation source that has essentially been taxpayer funded. That creates a competitive advantage.

The bottom line in the future will be based on providing low cost but reliable power. The issue is whether there is a level playing field — do we want competition on the basis of efficiency or on the basis of tax funding and subsidies?

The federal budget will push the debate in the future. There are a lot of members from Congress from the Northeast who are very concerned that their tax dollar will subsidize preference power or the PMAs in other regions, while their area continues to lose jobs and citizens.

Public Policy and Market Structure

Is there a way we can separate the policy questions related to the design and organization of the institutions for the competitive market? Imagine there is an independent system operator which is coordinating a short term sport market and
everyone has the opportunity to buy and sell back and forth, coordinated through the spot market. In that framework we have two things that are germane to this discussion.

The notion of selling on or off the system becomes a non-question. There are no sales that are on or off the system. Second, the notion about arrangements with particular customers and the traditional things though about selling off or on-system translate into contractual arrangements and provide price and other kinds of guarantees to customers which could be defined and restricted.

In this world with the ISO and short term market, the arguments surrounding public power are not relevant. This structure doesn't solve any of the problems such as preferential power and taxes, but at least it would separate these issues from the really hard questions of how to set up the market structure.

As a customer, I think the on and off-system sales matter because of stranded costs. Publicly-owned utilities, as well as IODs, want to be able to construct new, cheaper generating facilities, compete in the market and use the return from these facilities to help cover the stranded costs.

There is a sharp distinction between the short term operations of a system and the rules and institutions that have to be created to support a competitive market. In this competitive market, stranded investments don't matter, both public and privately-owned power will be engaging with contracts with customers. Both will be better off not using their own plants when someone else's are run cheaper because of the lower marginal cost of running that plant. You could set up the rules for short-term operation so we wouldn't have to worry about what kind of power the system IS dispatching.

You can't put that system in place without at least addressing the other issues simultaneously because your ability to participate in that market and compete against other people bidding into the pool is directly related to a cost, debt, and cost of production profiles. The solutions can be divorced but you can't divorce the fact that they have to be resolved simultaneously.

This would work, assuming that when the trading system, the ISO is created, all entities in the region would have to be subject. For example, TVA would be a participate in the Southeast.

At this time TVA has deiced that an ISO is not appropriate for its region. An ISO would have to include more than just the TVA system and this makes it extremely difficult to determine what the right system is, who participates and what the rules are. Further, we think it is possible to achieve the same results without the existence of an ISO. Alliances, agreements and other mechanisms may do this without the ISO mechanism.